

Nippon Shokubai Group

# Sustainability Report 2024

## Contents

Sustainability TOP .....	4
Message from the President .....	7
Group Mission Framework / Safety Philosophy	
Group Mission Framework / Safety Philosophy .....	11
Code of Conduct .....	14
Nippon Shokubai's Sustainability .....	49
Sustainability Management .....	50
Materiality .....	52
Stakeholder Communication .....	56
External Evaluation .....	58
Responsible Care Initiatives .....	61
RC Initiatives .....	63
RC Basic Plan and Results .....	68
Production/R&D Site Reports .....	70
Himeji Plant .....	71
Kawasaki Plant .....	75
Suita Research Center .....	79
Providing Support for Group Companies .....	82
Initiatives of Group Companies .....	86
Group Companies in Japan .....	87
Group Companies outside Japan .....	93
Initiatives for Environment .....	99
Environmental Management .....	100
Environmental Impact of Business Activities .....	102
Tackling Climate Change .....	103
Efforts for Eco-Friendly Logistics .....	108
Development and Expansion of Environmental Contribution Products .....	110
Chemical Substance Control .....	116

Waste Reduction .....	118
Air Pollution Prevention .....	120
Water Resource Conservation .....	121
Biodiversity Preservation .....	124
Biodiversity Risk Assessment _ attached table .....	127
Environmental Accounting .....	128
Initiatives for Society .....	130
Respect for Human Rights	
Policy .....	131
Structure & Initiatives .....	136
Human resources management	
Human resources management system .....	139
Talent acquisition .....	144
Talent development .....	146
Diversity & Inclusion	
Diversity & Inclusion .....	151
Work-life balance .....	160
Process Safety and Disaster Prevention .....	164
Occupational Safety and Health .....	170
Chemical Safety .....	174
Quality .....	178
Supply Chain Management .....	181
CSR Procurement Guidelines .....	184
Corporate Citizenship .....	190
Community Co-Creation .....	194
Developing the Next Generation .....	196
Realization of 'Leave No One Behind' .....	199
Governance .....	202
Corporate Governance .....	203
Compliance .....	212
For Compliance with Anti-Bribery Laws (Nippon Shokubai Group's Code of Conduct) ....	215
For Compliance with Competition Laws (Nippon Shokubai Group's Code of Conduct) ....	216
Risk Management .....	217
Tax Policy .....	219
Information Security .....	221
Intellectual Property Activities .....	223

Sustainability Data .....	225
Policies .....	226
Editorial Policy .....	228
Third-party Verification Report on Greenhouse Gas Emissions .....	231
Initiatives and Organizations .....	232
Status of Certification Acquisition .....	238
ESG Data .....	241
ESG Data Sheet FY2023 .....	242
Sustainability Library .....	251
CSR Reports Back number .....	254
GRI Standards Comparison Table .....	255



## Message from the President

We harness the “power of chemistry”  
to increase our corporate value  
and facilitate the realization of a sustainable society.

Learn more



## Latest News on Sustainability

2024.11.29

Nippon Shokubai Published “TechnoAmenity Report 2024,” and “Financial Report 2024.”

2024.05.29

Nippon Shokubai Begins Manufacturing and Marketing Halal-certified and Biomass-derived Acrylic Acid, Acrylates, and Superabsorbent Polymers in Indonesia -Contributing to Reducing the Environmental Impact of Paints, Diapers, etc. throughout the Product Supply Chain-

2024.02.15

Nippon Shokubai’s Newly Developed Material Contributed the Successful Demonstration of Groundbreaking Renewable Seawater Desalination Plant in Hawaii

2024.01.18

Development of novel marine biodegradable plastics in the NEDO’s project -Marine biodegradable materials with high gas barrier properties for packaging and agricultural applications-

2023.11.30

Indonesian Subsidiary Enters into Purchase Agreement for Electricity Derived from Renewable Energy and Installs Solar Power Generation System -Toward Carbon Neutrality by 2050 -

View List





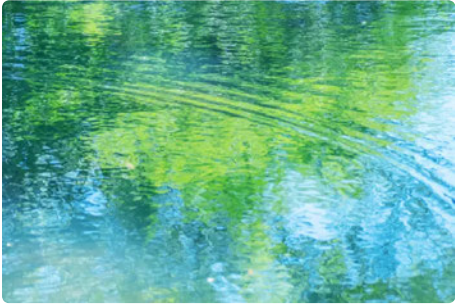


### Nippon Shokubai's Sustainability >

- > Sustainability Management
- > Materiality
- > Stakeholder Communication
- > External Evaluation

### Responsible Care Initiatives

- > RC Initiatives
- > RC Basic Plan and Results
- > Production/R&D Site Reports
- > Providing Support for Group Companies
- > Initiatives of Group Companies



### Initiatives for Environment >

- > Environmental Management
- > Environmental Impact of Business Activities
- > Tackling Climate Change
- > Efforts for Eco-Friendly Logistics
- > Development and Expansion of Environmental Contribution Products
- > Chemical Substance Control
- > Waste Reduction
- > Air Pollution Prevention
- > Water Resource Conservation
- > Biodiversity Preservation
- > Environmental Accounting



### Initiatives for Society >

- > Respect for Human Rights
- > Human Resources Management
- > Diversity & Inclusion
- > Process Safety and Disaster Prevention
- > Occupational Safety and Health
- > Chemical Safety
- > Quality
- > Supply Chain Management
- > Corporate Citizenship



### Governance

- > Corporate Governance
- > Compliance
- > Risk Management
- > Tax Policy
- > Information Security
- > Intellectual Property Activities

## Sustainability Data

Policies >

Editorial Policy >

Initiatives and Organizations :

Status of Certification  
Acquisition



ESG Data



Sustainability Library



GRI Standards Comparison  
Table



## Message from the President



We harness the “power of chemistry” to increase our corporate value and facilitate the realization of a sustainable society.

President & CEO  
Member of the Board

*Kazuhiko Nada*

### To realize TechnoAmenity

We are said to be living in an era of rapid change and uncertainty, and even since I became president in June 2022, we have witnessed a variety of changes including rising inflation, increasing geopolitical risks, and the rapid depreciation of the yen. Through it all, I feel that people’s awareness of and interest in sustainability and global warming countermeasures are rising more than ever before.

Nippon Shokubai’s Group Mission is “TechnoAmenity: Providing prosperity and comfort to people and society, with our unique technology.” Our aim is to contribute to the realization of a sustainable society, one in which people can live comfortably and with a sense of security.

Protecting the global environment is our mission. We believe that technology, our strong suit, is what can make a difference in this day and age, when people truly desire to protect the global environment. The power of chemistry is essential to realizing a carbon-neutral, hydrogen-based society in the future. We intend to demonstrate our strengths so as to facilitate the realization of a sustainable society.

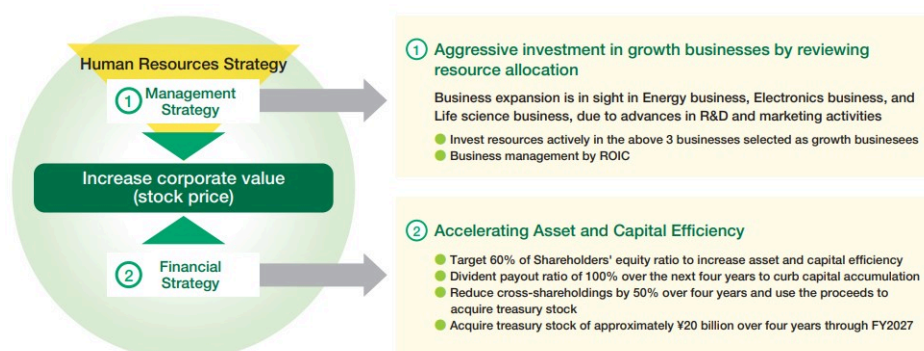
### Adding new strategies to achieve our Long-term Vision

Under “TechnoAmenity for the future” which describes the long-term vision for FY2030 goals, Our Company has set the FY2022-2024 Mid-term Management Plan “TechnoAmenity for the future- I ,”

with this year being the final year of the plan.

The Mid-term Management Plan struggle to “Business Transformation,” “Strategic Transformation for Environmental Initiatives,” and “Organizational Transformation.” We are making steady progress with respect to “Strategic Transformation for Environmental Initiatives” and “Organizational Transformation,” but it appears we are unlikely to achieve the objective for “Business Transformation” within FY2024.

Given this situation, we have decided to review our management and financial strategies this fiscal year, without waiting for the start of the next Mid-term Management Plan. In terms of our management strategy, we have decided to select business areas with potential for future growth, and to direct our resources to these areas in a concentrated manner. Additionally, with regard to our financial strategy, we have set new targets and policies so as to improve our capital efficiency.



## Management Strategy —Accelerating “Business Transformation” by concentrating resources on growth businesses

In the Solutions Business, we will concentrate our resources on three business areas with high future growth potential: Energy, Electronics, and Life Science. In the Energy business, we will work to globally expand our lithium-ion battery electrolyte (IONEL™) in line with the familiarization of EVs, and will also develop a range of products that support the production, transportation, and use of hydrogen. In the Electronics business, we will introduce next-generation optical materials and high-added-value products for semiconductors. In the Life Science business, we will expand our contract manufacturing services to oligonucleotides and peptides, which are medium-molecule APIs. In other businesses, we will also accelerate the expansion of businesses by proactively investing in specialty products, construction-related products, and others that are expected to see increased demand as products that contribute to the environment.

In the Materials Business, amid the ongoing restructuring trend of the chemical industry, we will review individual strategies for acrylic acid, superabsorbent polymer (SAP), ethylene oxide, and other products, to increase profitability as our core business that continues to cash-generate. We aim to stay ahead of the future trend toward decarbonization and low carbonization, and transition to a sustainable business model.

## Financial Strategy —Improving asset and capital efficiency

We have reviewed our previous financial strategies and set new policies and targets so as to improve our asset and capital efficiency. Specifically, with the intention of optimizing our leverage levels, we have set a target of reducing our shareholder equity ratio to around 60% by the end of FY2027. Therefore, for the four years from FY2024, we will implement a dividend payout ratio of 100% (or a dividend on equity ratio of 2%, whichever is greater). Additionally, we will reduce our cross-shareholdings by 50% over a four-year period, and at the same time proceed with the acquisition of treasury stock. We will conduct ROIC-based business management to improve the profitability and capital efficiency of each business division.

## **Solving social issues through Environmental Contribution Products**

### **—Strategic Transformation for Environmental Initiatives**

---

Through energy conservation measures, the introduction of renewable energy, and other efforts, we have achieved a 15% reduction in greenhouse gas (GHG) emissions in FY2023 compared to that in FY2014. We also started producing bio-based acrylic acid and SAP using the mass balance system. To achieve our FY2030 GHG reduction objective (a 30% reduction compared to FY2014), we will not only improve our catalyst performance to reduce CO<sub>2</sub> emissions during production, but also expand our use of renewable energy and continue to switch to biomass raw materials. We are committed to solving social issues through businesses and products that contribute to reducing environmental impact by utilizing our catalyst technology and other resources.

## **Achieving sustainable growth through active participation of diverse human resources —Organizational Transformation**

---

For a company to grow and evolve sustainably, it needs human resources possessing a variety of skills and perspectives. To unlock the full potential and growth of individual human resources, Our Company is undertaking various measures including expanding our educational options such as e-learning and implementing improvement activities at each workplace based on the results of engagement surveys. At the same time, it is increasing the number of mid-career hires so as to enhance its organizational diversity.

In an environment with a high degree of uncertainty, we cannot evolve if we continue to think along the same lines as before. In addition to developing human resources from a long-term perspective, we would like to bring together the power of diverse human resources who empathize with our Group Mission in order to transform this company.

## **To improve corporate value**

---

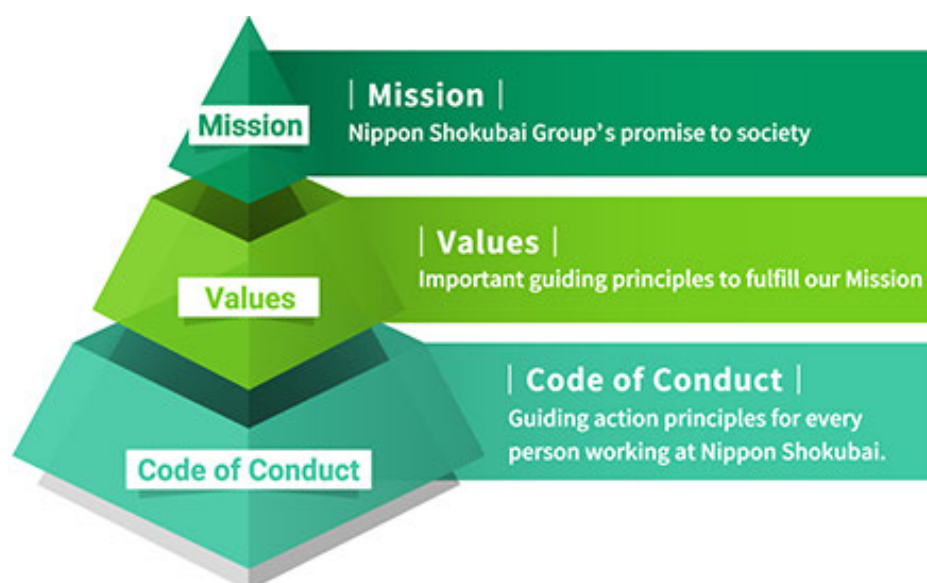
Going forward, Our Company will actively invest in growth businesses and product groups that help solve social issues. We intend to increase our corporate value by adding new management and financial strategies to our current “three transformations” endeavor, and by swiftly implementing these initiatives. Furthermore, we will continue to contribute to the realization of a sustainable society through the power of chemistry.





# Group Mission Framework / Safety Philosophy

## Group Mission Framework



### Mission

# TechnoAmenity

Providing prosperity and comfort to people and society,  
with our unique technology.

### Values

#### Respect Diversity

We will create new value by respecting the unique traits of each person.

#### Pioneer New Possibilities

We will courageously provide solutions to customer challenges and social issues.

**Contribute to Global Environmental Preservation**

We will work to ensure a better global environment is passed down to the next generation.

**Code of Conduct**

Every person working at the Nippon Shokubai Group will carry out business activities with commitment to the guiding principles below.

- 01 Realizing a sustainable society**

We will contribute to the realization of a sustainable society by putting the Group Mission into practice.
- 02 Safety first**

We will execute our business activities by always ensuring both internal and external safety.
- 03 Compliance**

We will enforce thorough-going compliance in every area.
- 04 Respect for human rights**

We will support international human rights standards and respect the human rights of all people touched by our business activities
- 05 Fair and honest business dealings**

We will engage in fair and sincere business activities with all of our stakeholders.
- 06 Providing value to our customers**

We will provide materials and solutions needed by customers
- 07 Preserving the environment**

We will help reduce our environmental impact and help tackle environmental issues through technology.
- 08 Communicating with stakeholders**

We will actively disseminate information and dialogue with stakeholders.
- 09 Promoting active participation of diverse human resources**

We will recognize and respect diversity so that every person and organization reaches their full potential.
- 10 Contributing to local communities**

We will contribute to the development of local communities as a member of those communities.

[Code of Conduct \(2.4MB\)](#) 

**Safety Philosophy**

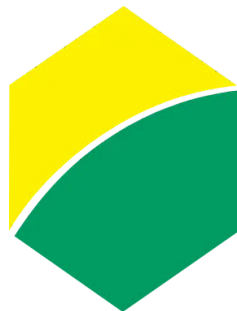
**Safety takes priority over production.**



# Meaning of the Corporate Symbol

---

Our corporate symbol represents the spirit of TechnoAmenity.



Hexagon: One of the fundamental symbols used in chemistry



Cosmo yellow: Represents the hidden energy of the sun



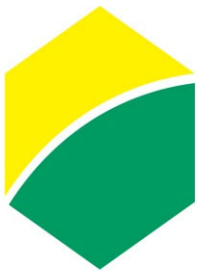
Earth green: Represents the life-supporting nature of the earth



Horizon between two colors: Represents the future we always seek

# NIPPON SHOKUBAI Group

## Code of Conduct



**NIPPON  
SHOKUBAI**  
Group

September 2022



# Message from the President

## Nippon Shokubai Group Employees

In April 2022, we revised our Group Mission Framework to fulfill our Mission, “TechnoAmenity: Providing prosperity and comfort to people and society, with our unique technology.” Our Values and Code of Conduct embody the mindset and behaviors we hope each employee of the Nippon Shokubai Group will hold in high regard. Previously, it was only our Group Mission we shared within the internal group. However, having unified our group initiatives, we decided to implement this revision to share our Group Mission Framework companywide to respond to the stakeholder demands that accompany the changing times.



Kazuhiro Noda, President

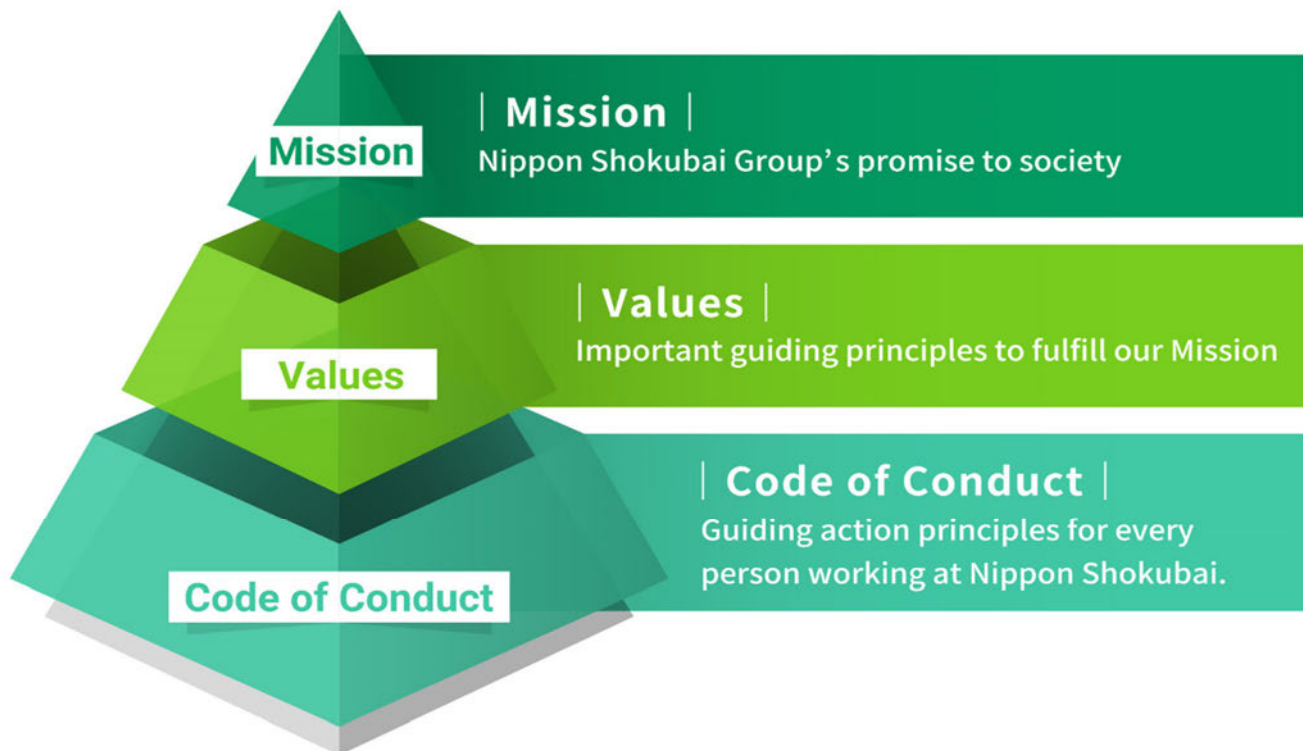
In today’s drastically changing external environment, support from our stakeholders is indispensable to the ongoing business activity of the Nippon Shokubai Group. Therefore, in addition to pursuing economic profits, earning the trust of our stakeholders by fulfilling our corporate social responsibilities and meeting the demands of a global society while complying with the applicable laws and regulations is fundamental to our business.

However, merely complying with societal demands results in a passive stance. For Nippon Shokubai to demonstrate its purpose, everyone working for the Nippon Shokubai Group must share our Group Mission Framework and apply themselves to fulfilling our Mission.

Thus, our Code of Conduct outlines the conduct that each employee should adopt and implement for the Nippon Shokubai Group to satisfy its corporate social responsibilities and move toward achieving its Mission.

I ask everyone at the Nippon Shokubai Group, including myself, to join forces in using this Code of Conduct as a guideline for daily work to allow us to carry out our Group Mission.

# Group Mission Framework



The Nippon Shokubai Group's Mission Framework is shared by the entire Nippon Shokubai Group. To realize the Mission, the Nippon Shokubai Group has established a set of Values that every employee of the Nippon Shokubai Group (all executives and employees) should focus on as well as a Code of Conduct as a standard for daily business behavior and decision-making.

## Mission

## TechnoAmenity

Providing Prosperity and Comfort to People and Society,  
with Our Unique Technology

Prosperity and comfort are not only economic and material but harmonious with the global environment as well as social and spiritual, such as diversity, fairness, and safety.

We will keep contributing to the realization of a sustainable society by practicing our TechnoAmenity mission in the future.

# Group Mission Framework



## Values

### **Respect Diversity**

We will create new value  
by respecting the unique traits of each person.

### **Pioneer New Possibilities**

We will courageously provide solutions  
for customer challenges and social issues.

### **Contribute to Global Environmental Preservation**

We will work to ensure that a better global environment  
is passed down to the next generation.

## Code of Conduct (Summary)

Every person working at the Nippon Shokubai Group will carry out business activities with a commitment to the guiding principles below.

1. We will contribute to the realization of a sustainable society by putting the **TechnoAmenity** Group Mission into practice.
2. We will execute our business activities by always ensuring both internal and external safety.
3. We will enforce thorough-going compliance in every area.
4. We will support international human rights standards and respect the human rights of all people touched by our business activities.
5. We will engage in fair and sincere business activities with all of our stakeholders.
6. We will provide the materials and solutions needed by customers.
7. We will help reduce our environmental impact and help tackle environmental issues through technology.
8. We will actively disseminate information and dialogue with stakeholders.
9. We will recognize and respect diversity so that every person and organization reaches their full potential.
10. We will contribute to the development of local communities as a member of those communities.

# What Is the Code of Conduct?

The Code of Conduct is a document that presents our guiding principles for the specific conduct that all executives and employees of the Nippon Shokubai Group should practice earning the trust of all our stakeholders and promoting our business activities with an eye toward fulfilling our Mission.

Each of us should act in a manner that represents Nippon Shokubai Group's guiding principles. In sharing these guiding principles, each employee will demonstrate their individuality and capability to enable us to fulfill our Mission.

Everyone working for the Nippon Shokubai Group is expected to adhere to the Code of Conduct in their daily work.

## Roles and Responsibilities of Executives and Managers

While the Code of Conduct indicates the behavior that everyone should practice during regular work, the actual desired behavior varies depending on the type of job. Therefore, practicing the Code of Conduct during daily work requires an understanding of the content of the Code of Conduct and how it applies to each job.

Furthermore, daily management at each workplace is central for implementing the Code of Conduct into everyday work.

Therefore, executives and managers in supervisory positions have the following major roles and responsibilities in ensuring that everyone is following the Code of Conduct:

<b>Act as a model</b>	Lead by example to encourage associates to follow the Code of Conduct.
<b>Help instill the Code of Conduct</b>	Instill the Code of Conduct by applying it to each job performed. Hold discussions to share how associates can implement the Code of Conduct in their daily work.
<b>Provide a safe environment</b>	To prevent behavior that violates the Code of Conduct, provide an open atmosphere for associates to be able to speak up when they do not know what to do or when a problem has arisen.





# Steps to Take When Unsure of What to Do

Please go through the following steps when you are not sure what to do or when you have questions about how to proceed.

## Step 1

Is this conduct in accordance with the applicable laws and regulations, the Mission, Values, and Code of Conduct of the Nippon Shokubai Group, and other corporate policies and internal rules?

## Step 2

Would this be described as proper conduct to other people around the world?

## Step 3

Would you engage in this same conduct if it affected your family or close friends?

If you are unable to answer yes to any of the above questions, the conduct in question is not what the Company expects. Talk to your supervisor or the relevant department to devise a better alternative.



## If You Discover a Violation of the Code of Conduct

Everyone working at the Nippon Shokubai Group must comply with the applicable laws and regulations, internal rules, and Code of Conduct. Violating them will cause us to lose our stakeholders' trust and keep us away from fulfilling our Group Mission. In addition, violators will be subject to disciplinary action based on our employment rules.

The company's profit or following the orders of a superior do not justify such violations. If you discover questionable behavior or behavior that violates the laws and regulations, internal rules, or Code of Conduct, please inform your boss and discuss it with them. If that course of action is not feasible, please contact the whistleblower desk at each Group company for a consultation.



Furthermore, we will protect the privacy of reporters/whistleblowers. Information given to any in-house whistleblower desk will be treated as confidential unless otherwise required by law. In addition, the whistleblower will not receive any disadvantageous treatment for having reported or discussed the matter providing that consultations and reports are not carried out with dishonest intent.





# Code of Conduct (Full Version)

## 1. Realizing a sustainable society

**We will contribute to the realization of a sustainable society by putting the **TechnoAmenity** Group Mission into practice.**

### (1) Contributing to the future for people and society

- a. We will use our unique technology to provide economic, physical, as well as social and spiritual prosperity and comfort to people and societies throughout the world. By doing this and proactively tackling social issues and customer challenges, we will help bring about a sustainable change.



## 2. Safety first

**We will execute our business activities by always ensuring both internal and external safety.**

### (1) Comprehensive process safety and disaster prevention

- a. Recognizing that safety is the foundation of our existence, we will observe all laws, ordinances, and regulations concerning security and disaster prevention.
- b. We will ensure the safety and well-being of workers, their families, and society through comprehensive implementation of programs to prevent explosions, fires, leakage of hazardous materials, and accidents and disasters that may harm the environment and people.



## 2. Safety first

### (2) Workplace health and safety

- a. We will strive to eliminate work-related disasters, and we will observe all laws, ordinances, and regulations concerning workplace health and safety.
- b. We will consider our health as well as the health of those working with us and will strive to maintain and enhance a workplace environment in which everyone can be assured of safety and comfort.

### (3) Business continuity

- a. We will formulate a business continuity plan and take other appropriate organizational initiatives and measures to ensure our workers' safety and maintain our business activities in the face of threats, such as earthquakes, floods, and other natural disasters, pandemics and cyber-attacks.
- b. In the event of an actual threat, we will take the appropriate steps in accordance with our predetermined guidelines and procedures for response.

### 3. Compliance

**We will enforce thorough-going compliance in every area.**

#### **(1) Observance of the applicable national and local laws, ordinances, and regulations and business ethics**

- a. We will observe the applicable laws, ordinances, and regulations in the countries and regions where we do business, and our codes of conduct and in-house rules. We will behave with integrity, fairness, goodwill, in a self-directed fashion, and law-abiding spirit.



**“Integrity” is doing your best for others without telling lies.**

**“Fairness” is taking actions that anyone would find just and convincing.**

**“Goodwill” is observing social etiquette.**

**“Self-directed” is seeing everything as relating to you.**

**“Law-abiding” is taking actions based on the purpose, intent, and context of the rules.**

## 3. Compliance

### (2) Thorough-going compliance

- a. We will diligently collect information about the laws, ordinances, and regulations that govern our business activities.
- b. We will implement thorough-going compliance, including formulating in-house rules and manuals and offering opportunities, such as educational and training sessions.

### (3) Reporting and review of behavior that violates the Code of Conduct

- a. When we learn of behaviors that violate laws, ordinances, regulations, our in-house rules or our Code of Conduct, we will promptly report and discuss it with the relevant supervisor. In cases where this is not feasible, we will discuss the incident and report it to the company's consultation desk or internal whistleblower desk.
- b. The internal whistleblower desk will protect whistleblowers' identities and promptly conduct an investigation of the relevant facts.
- c. We will not condone reprisals against persons who reported incidents in good faith or who cooperated in our investigations but will treat them fairly to avoid putting them in an unfavorable position.



## 4. Respect for human rights

**We will support international human rights standards and respect the human rights of all people touched by our business activities.**

### (1) Respect for human rights

- a. We will respect everyone's human rights and will not engage in any conduct that unfairly discriminates or harms the dignity of an individual, regardless of the reason.
- b. We will prevent human rights violations by respecting international human rights standards and the laws and ordinances of each country and region. In the event of a violation, we will respond appropriately and with fairness.
- c. Recognizing that our business activities have an impact on human rights, we will not provide products to firms or groups that commit or promote human rights violations, and we will not take part in purchasing any products or services from such firms or groups.

## 4. Respect for human rights

### (2) Prohibition against forced labor and child labor

- a. Under no circumstances will we ever engage in forced labor or child labor, and we will not allow forced labor or child labor to take place in our supply chain.

### (3) Prohibition against discrimination

- a. Under no circumstances will we ever engage in discrimination based on gender, age, nationality, race, ethnicity, social status, place of origin, beliefs, creed, religion, physical characteristics, sexual orientation, sexual identity, or disease or disability.



## 4. Respect for human rights

---

### (4) Prohibition against harassment

- a. Under no circumstances will we ever engage in sexual harassment, abuse of power, pregnancy discrimination, or other discriminatory behaviors against another person or do anything that threatens them or makes them uncomfortable, regardless of whether such threat is physical or emotional.



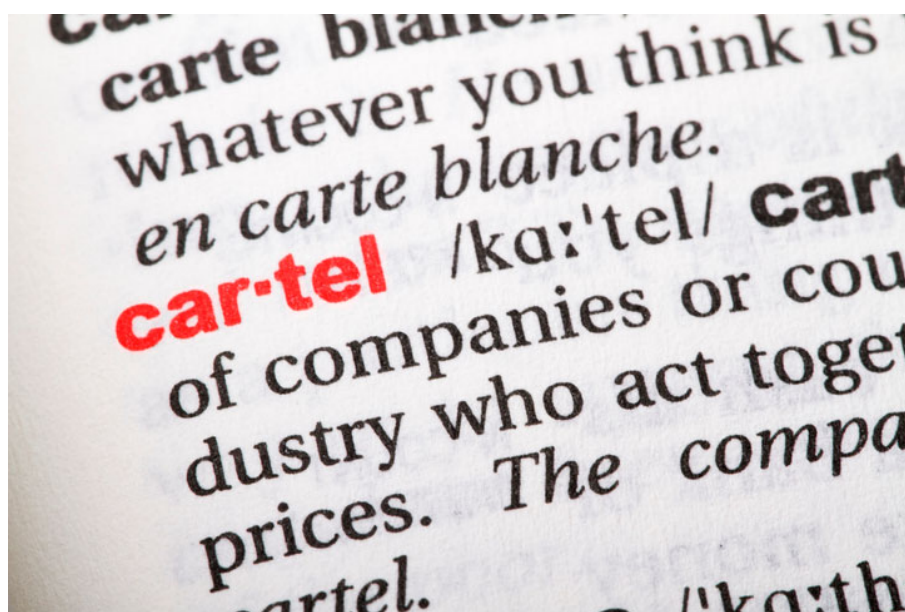


## 5. Fair and honest business dealings

**We will engage in fair and sincere business activities  
with all of our stakeholders.**

### (1) Fair and free dealings

- a. We will observe the applicable laws, ordinances, and regulations concerning fair and free competition and business activities in other countries and regions where we do business. We will avoid any conduct which restricts free and fair market competition (abuse of market dominant position, cartel, and unfair trade practice) in every business activity including sales, procurement, research and development, and manufacturing, in order to ensure free and fair business activities.



## 5. Fair and honest business dealings

### (2) Prevention of bribery and corruption

- a. We will not commit any violation of anti-bribery laws of any country, including making inappropriate payoff, offering or promising to pay money/anything of value to public officials or will not make any illegal facilitation payment (small payments for speeding up bureaucratic procedures).
- b. We will not aid, abet, or authorize any of such illegal conduct by any third party.
- c. We will not provide with or accept any entertainment and gifts, which go beyond the bounds of socially accepted limits, to/ from clients, customers, and other business partners.

### (3) Respect for trade-related laws and ordinances

- a. In trading raw materials and products, we will follow proper trade procedures in accordance with the applicable laws and ordinances and will not trade in contraband.
- b. We will not export technology that will be used as information, materials, or products in the production of weapons of mass destruction that would interfere with the preservation of international peace and safety, including nuclear, chemical, and biological weapons.

## 5. Fair and honest business dealings

### (4) Responsible procurement

- a. Because our business activities are dependent on the cooperation of the many people and companies in our supply chain, we will promote responsible procurement practices and engage in transactions that are honest and proper.
- b. We work with our business partners so that they understand and relate with our Code of Conduct as we engage with them.

### (5) Proper management and use of corporate assets

- a. We will not use the company's tangible and intangible assets, including its products, equipment, supplies, information, and intellectual property, for personal or inappropriate purposes; we will manage and use these assets so as to prevent their loss, theft, or improper use and ensure their effective use.



## 5. Fair and honest business dealings

### (6) Respect for and use of intellectual property

- a. We will strive to protect our intellectual property rights and use them in effective way as we believe that patents, trademarks, designs, knowhow, trade secrets, and publications are key corporate assets and the source of our competitive strength.
- b. In the manufacture and sale of our products, research and development, provision of service, and other business activities, we will respect the intellectual property rights of others and will not infringe on them.
- c. We will proactively use our intellectual property in open innovation and other external partnerships, and we will develop and provide innovative and effective products and services for solving the problems facing society and our customers.



## 5. Fair and honest business dealings

### (7) Information security

- a. We will closely control access to our information assets and data systems in order to prevent unauthorized access, loss, leaks, manipulation, destruction, and hacking.
- b. We will formulate measures to counter threats to our computer network and endeavor to minimize any damage to ourselves and others.
- c. On an ongoing basis, we will review our framework for responding to incidents should they occur.

### (8) Management of confidential information

- a. We will strictly manage the confidential information of others obtained in the course of business.
- b. We will not allow unauthorized disclosures or leaks, and we will not permit such information to be used for purposes other than those intended, nor will we permit viewing by uninvolved parties.

## 5. Fair and honest business dealings

### **(9) Proper accounting practices and tax compliance**

- a. In accordance with the laws and ordinances concerning accounting standards in the countries and regions where our Group does business, we will work to build effective systems of internal control and use accurate and proper accounting practices.
- b. We place great importance on tax compliance, and we will observe each country's and region's laws and ordinances concerning corporate taxation, etc., as well as tax treaties and international taxation rules.

### **(10) Protection of personal information and privacy**

- a. We respect individuals' privacy and collect personal information to the extent necessary and appropriate. Also, we strictly manage the personal information that we collect and will not disclose it to third parties or use it for other than its intended purpose, except in cases required by law or where we have received advance permission from the individual in question.

## 5. Fair and honest business dealings

### **(11) Prohibition against individual conflicts of interest**

- a. We will not commit any act that uses information gained in the course of business to seek personal profit, or that is contrary to the company's interest.
- b. We will not abuse our corporate position or authority, nor will we seek personal profit or cause the company to lose money in violation of our job responsibilities.
- c. We will not engage in any personal transactions that compete with the Group, nor will we engage in any conduct that competes with the Group, such as becoming a manager or key investor at a competitor.

### **(12) Dealing with antisocial forces**

- a. We will have absolutely nothing to do with antisocial forces that threaten public order and safety or the stable business of the company, whether it is through business relations, money laundering, and other means of providing profits to those involved in such forces.
- b. We will take a firm stance in rejecting improper demands from antisocial forces.



## 6. Providing value to our customers

**We will provide the materials and solutions  
needed by customers.**

### (1) Providing solutions to our customers' problems

- a. We will provide products and services that are responsive to our customers' needs and solve their problems.
- b. We will innovate to drive forward with solutions to the needs of society and our customers.





## 6. Providing value to our customers

### (2) The “three actuals” principle

- a. In all of our tasks, we will relentlessly observe the actual locations, actual objects, and actual realities that underlie all of our work. The resulting ideas allow us to take judgments and actions that are free of preconceptions.

### (3) Providing safe and reliable products and services

- a. We will meet our customers’ needs and specifications, ensuring safety and quality so that our customers can confidently use our products and services.
- b. We will respond promptly and sincerely to our customers’ inquiries and feedback and incorporate their feedback into enhancing and developing our products and services.



## 6. Providing value to our customers

### (4) Providing safe, high-quality information

- a. When providing products and services, we will properly furnish the necessary information regarding quality and safe usage in an easily understandable way.
- b. We will not falsify any of our business data or falsely represent that we have acquired data that we have not.

### (5) Dealing with product-related accidents

- a. In the event of a problem with the safety or quality of a product that we have provided to a customer, we will respond promptly and sincerely and will take the appropriate steps to find the cause and prevent recurrences.



## 7. Preserving the environment

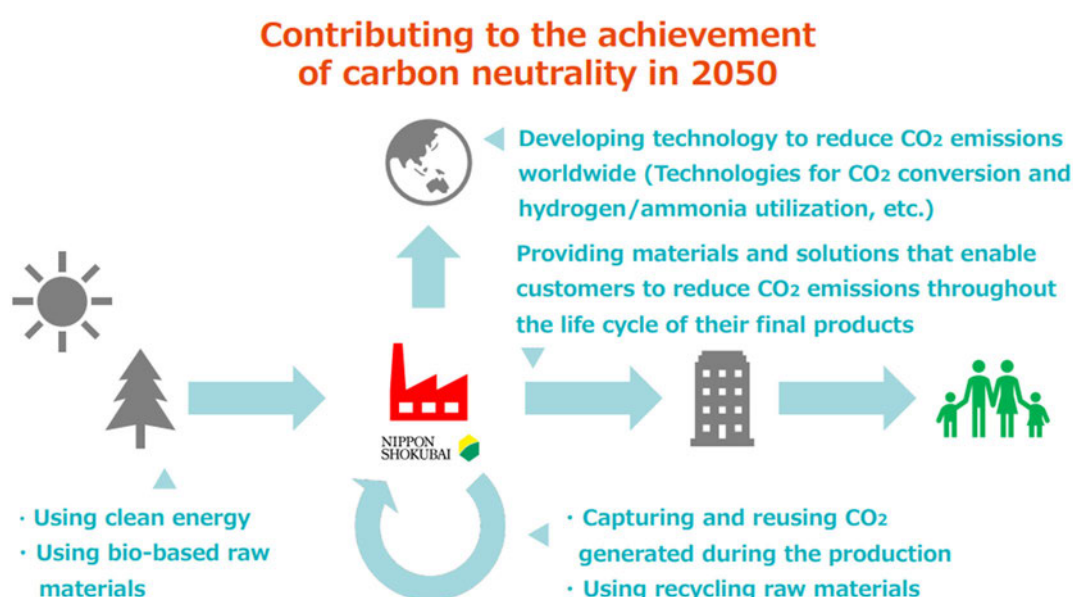
**We will help reduce our environmental impact and help tackle environmental issues through technology.**

### (1) Harmony with the global environment

- a. Based on the desire to leave a better global environment to the next generation, we are controlling emissions of hazardous materials and are taking initiatives to address environmental issues.

### (2) Climate change initiatives

- a. Besides reducing emissions of carbon dioxide and other greenhouse gases in our business activities, we are helping to reduce emissions throughout the supply chain by creating environmental contribution products, thus contributing to bringing about carbon neutrality.



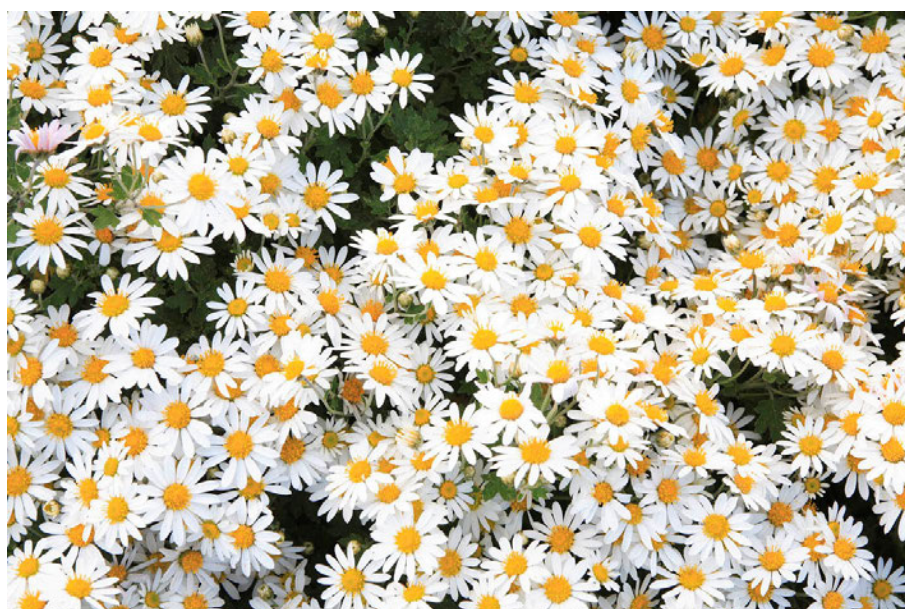
## 7. Preserving the environment

### (3) Efficient use of resources

- a. We are actively involved in resource conservation, waste reduction, and recycling efforts so that our limited and precious resources can be used more efficiently.

### (4) Preserving biodiversity

- a. Recognizing that our business activities do affect biodiversity, we are promoting a deeper understanding and awareness of preserving biodiversity and biodiversity-friendly programs.



## 8. Communicating with stakeholders

**We will actively disseminate information  
and dialogue with stakeholders.**

### (1) Fair disclosure of information

- a. We disclose timely and accurate information about ourselves in accordance with the applicable legislation, and we are transparent in our explanations.
- b. We take the initiative to actively disclose our financial information as well as such non-financial information as our mission, policies, business performance, environmental programs, and stakeholder relations, the better to deepen understanding about our Group among shareholders, investors, and other stakeholders.





## 8. Communicating with stakeholders

### (2) Communicating with stakeholders

- a. We will actively engage in dialogs with our various stakeholders, including customers, business partners, employees, local communities, government bodies, shareholders, and investors, and strive to build and maintain long-term relationships of trust with them and to gain their support for the Group's business initiatives. So that we will increase our corporate value.
- b. We appreciate both positive and negative feedback from those outside the Group, and we strive for two-way communication.

### (3) Prohibition against insider trading

- a. We will not buy or sell shares or other securities or recommend their purchase or sale to others based on material non-public information (information that would significantly affect the share price if disclosed) about our Group or its business partners gained in the course of business.
- b. If we possess material non-public information, we will not leak such information prior to its disclosure.

## 9. Promoting active participation of diverse human resources



**We will recognize and respect diversity  
so that every person and organization reaches  
their full potential.**

### (1) Respecting diversity

- a. We will create a working environment and culture where employees can work with diversity and mutual respect and can grow together.
- b. We, as professionals, will make every effort to show his or her individuality and ability, which will lead to innovation.





## 9. Promoting active participation of diverse human resources



### (2) Fair hiring, labor, and compensation

- a. We will treat everyone fairly in accordance with their work skills and performance.
- b. In assigning work locations, we will take into consideration our employees' ability and track record in performing their jobs well and getting their work done, their childcare and care-giving responsibilities, and their orientation.
- c. We will maintain sound hiring and labor practices, and our treatment of employees regarding wages, work hours, vacations, and the like will conform to the applicable laws and ordinances of the respective countries and regions.
- d. In accordance with the applicable laws and ordinances of each country and region, we will respect the right to form or participate in labor unions, the right to engage in collective bargaining, and the right to assemble peacefully. We will also build healthy management-labor relations through dialog.



## 9. Promoting active participation of diverse human resources



### (3) Promoting work–life balance and developing skills

- a. We will enhance each person's job satisfaction and skills by allowing them to have a balance between their job and their personal life, which may entail child-rearing, care-giving, and medical treatment, thus creating a work culture that engenders high performance.
- b. We will respect each individual's orientation and will work in cooperation with them, taking into consideration their family situation, including childcare, care-giving, and other personal circumstances.
- c. We strive to develop everyone's skills and build their careers through a variety of training opportunities, including on-the-job training, in-house and off-site training sessions, and self-study courses.
- d. We will offer ample opportunities for our employees to develop their skills and advance their careers and will support them so that they can take responsibility and pride in proactively tackling and solving the problems they face at work.



## 10. Contributing to local communities

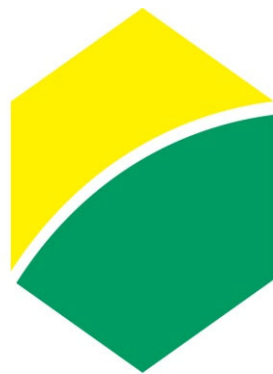
**We will contribute to the development of local communities as a member of those communities.**

### (1) Respecting local culture

- a. We will respect the natural surroundings, culture, traditions, and customs of the countries and regions where we do business, and we will work together with local communities and contribute to their development.
- b. We will work to participate in and contribute to local communities by means of local procurement and hiring.







NIPPON  
SHOKUBAI  
Group

September 2022 Version 1

# Nippon Shokubai's Sustainability

<a href="#">Sustainability Management</a>	<a href="#">Materiality</a>
<a href="#">Stakeholder Communication</a>	<a href="#">External Evaluation</a>

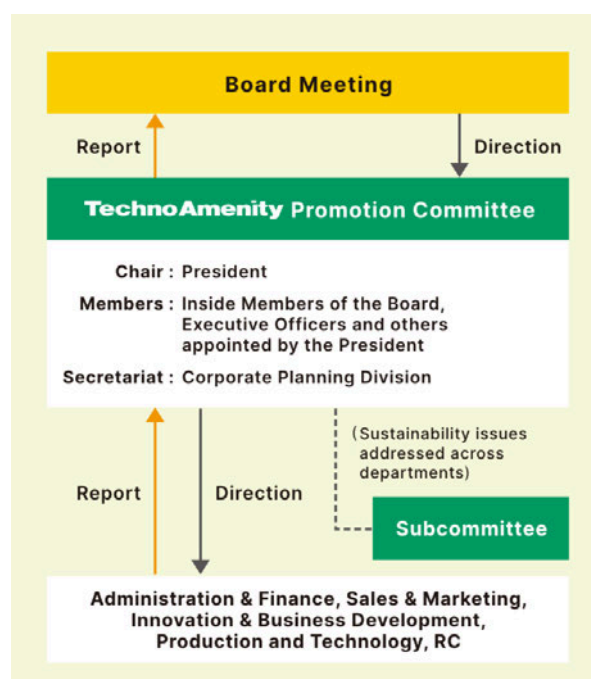
# Sustainability Management

## Sustainability Policy

We conduct business activities with the determination to contribute to society, under the Group Mission “TechnoAmenity: Providing prosperity and comfort to people and society, with our unique technology.” We believe that promoting sustainability activities is equivalent to practicing the Group Mission. Based on this belief, we take a comprehensive view of our corporate behavior that encompasses the economy, society and the environment. We therefore prioritize corporate governance, compliance, Responsible Care, risk management, human rights and labor, social contribution, and information disclosure. In implementing actions to increase our corporate value, we emphasize dialogue with our customers, business partners, employees, the communities we serve, public administrators, shareholders and investors, and all other stakeholders. We also endeavor to solve social issues through business activities, thereby contributing to the realization of a sustainable society.

## Management System for promoting sustainability

TechnoAmenity Promotion Committee chaired by the president has been organized to implement sustainability initiatives.





## **Roles of TechnoAmenity Promotion Committee**

- Determine group's policies and strategies relating to promote sustainability initiatives.
- Direct each department to formulate plans and measures and evaluate their performance and progress.
- Consider other significant matters relating to promote sustainability initiatives.
- Disseminate information about the initiatives to stakeholders.

## **Operation for TechnoAmenity Promotion Committee**

- In principle, the committee meets at least twice a year.
- When it is necessary to consider and adopt measures for important sustainability issues across departments, the committee will establish a subcommittee to assume responsibility for them.

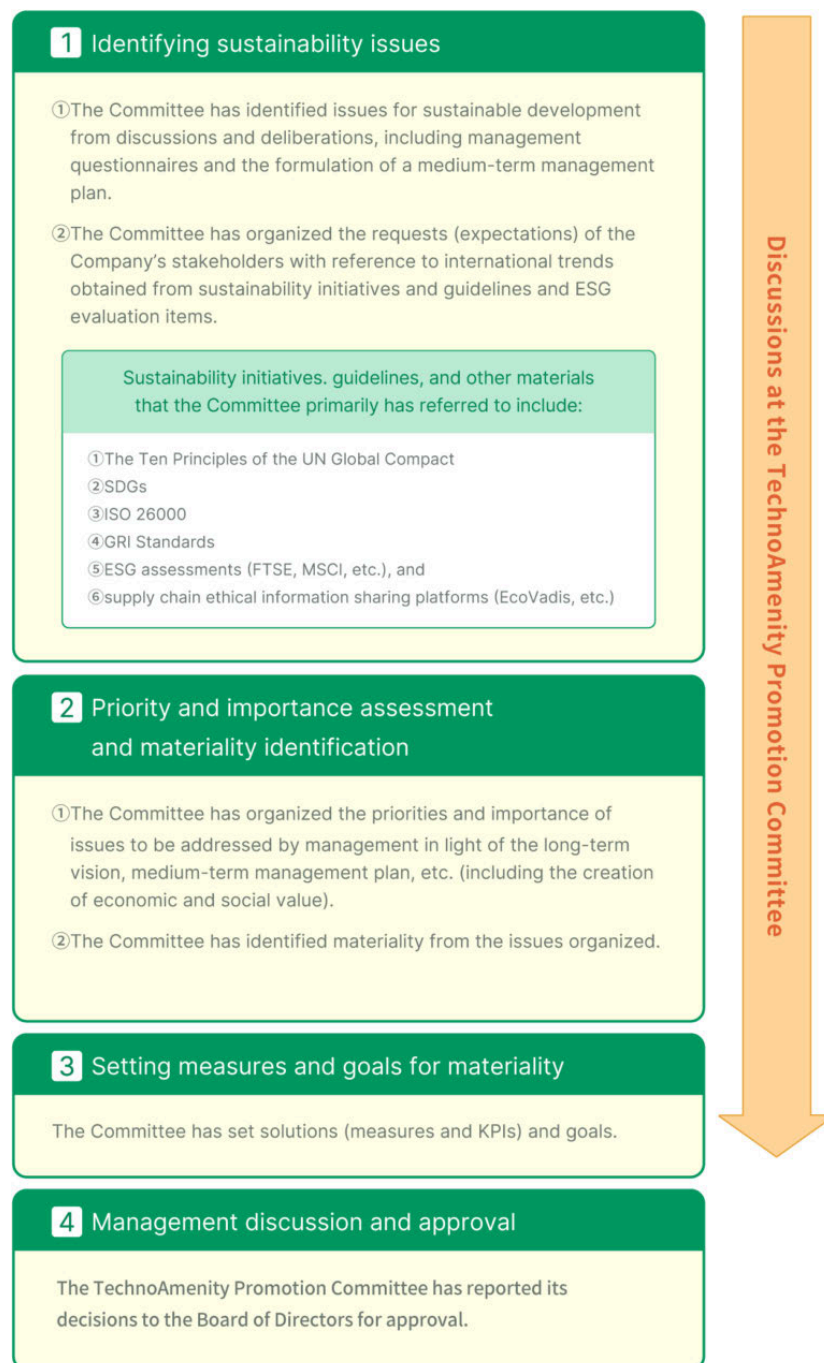
# Materiality

To achieve the FY2030 Goals set forth in the Long-term vision “TechnoAmenity for the future,” the Nippon Shokubai Group is currently working on “Three transformations” under the Mid-term Management Plan “TechnoAmenity for the future- I .” We will appropriately manage the progress of initiatives for the “Three transformations” by identifying materiality (material issues) and clearly setting KPIs (key performance indicators), specific goals and target years.

For the identification of materiality, we determined the scope of challenges to be tackled through discussions at the TechnoAmenity (TA) Promotion Committee, narrowed down the scope by reference to the Group’s long-term vision and “TechnoAmenity for the future- I ,” and obtained approval from the Board meeting after repeated deliberations in the TA Promotion Committee.

## Materiality Identification Process

---



## Materiality and Initiatives

### Promote climate change response

Contribution to SDGs :



Initiatives	KPI and their ideal state	Year of achievement	Actual performance in FY2023
Contribute to carbon neutrality	• Scope 1, Scope 2: reduce CO <sub>2</sub> emissions by 30% from the 2014	End of FY2030	Reduced by 15% (including an offset equivalent to 7.3%)

	level (Nippon Shokubai and Group Companies in Japan)		through the purchase of carbon-neutral city gas)
Contribute to the circular economy	・ Develop and socially implement technologies for resource use reduction and recycling	—	
Promote the development and sales of Environmentally Contribution Products	Environmental Contribution Products Revenue: (1) 55 billion yen (2) 135 billion yen	(1) End of FY2024 (2) End of FY2030	45 billion yen

\* CO<sub>2</sub> emissions : Our Group's emissions reduction targets are for greenhouse gases, but since they are mostly carbon dioxide (CO<sub>2</sub>), they are referred to as CO<sub>2</sub>.

## Contribute to solving customer issues

Contribution to SDGs :



Initiatives	KPI and their ideal state	Year of achievement	Actual performance in FY2023
<ul style="list-style-type: none"> <li>Strengthen the company's ability to understand issues and propose solutions</li> <li>Strengthen the supply chain management</li> </ul>	(1) Develop a platform to strengthen solution proposals (2) Expand the Solutions business to achieve the dual focus of the Materials and Solutions businesses (Sales ratio of 50% each, revenue of the 500 billion yen level)	(1) End of FY2024 (2) End of FY2030	(1)-1 Strengthened the experimental environment and equipment with the aim of, for example, promoting commercialization (1)-2 Strengthened European functions with the aim of, for example, expanding the development and sales of products that address environmental issues

## Promote safe and stable production activities

Initiatives	KPI and their ideal state	Year of achievement	Actual performance in FY2023
<ul style="list-style-type: none"> <li>Strengthen the safety foundations</li> <li>Foster a culture of safety</li> </ul>	<ul style="list-style-type: none"> <li>Third-party evaluation: maintain above industry standards for the petroleum and petrochemical industries</li> </ul>	—	<ul style="list-style-type: none"> <li>Conducted a third-party evaluation at the Kawasaki Plant in FY2022 → Confirmed the maintenance of levels above industry standards</li> <li>Planned to conduct a third-party evaluation at the Himeji Plant in FY2025</li> </ul>


## Developing/Promoting the Active Participation of Talent

Contribution to SDGs :



Initiatives	KPI and their ideal state	Year of achievement	Actual performance in FY2023
Develop autonomous talent	<ul style="list-style-type: none"> <li>Improve the employee engagement score (transformation and growth of people and workplaces through early establishment of a new personnel system, linkage with multi-layered measures, and organizational improvement)</li> <li>Increase in the number of applicants for solicit publicly proposed autonomous learning programs (e-learning, skill development training, online English conversation classes, etc.) and make these programs better known within the company</li> </ul>	End of FY2024	<ul style="list-style-type: none"> <li>Began to conduct engagement surveys in FY2022, and they are still ongoing</li> <li>Began to conduct Company-recommended training named “autonomous learning programs” (with an attendance rate of about 20%)</li> </ul>
Promote the active participation of diverse talent	<ul style="list-style-type: none"> <li>Improve the employee engagement score (promotion of suitable assignments, individual motivation, and diverse and autonomous work styles through various systems such as self-assessment and the continuity of work location)</li> <li>Increase the ratio of female employees hired in the clerical and chemical fields to at least 30%</li> <li>Increase the ratio of females in managerial position to 6% or more</li> </ul>	End of FY2024	<ul style="list-style-type: none"> <li>Began to conduct engagement surveys in FY2022, and they are still ongoing</li> <li>Rate of female employees hired in the clerical and chemical fields: 28.6%</li> <li>Rate of females in managerial positions: 5.4%</li> </ul>

## Strengthen corporate governance

Initiatives	KPI and their ideal state	Year of achievement	Actual performance in FY2023
Enhance the effectiveness of the Board meeting	<ul style="list-style-type: none"> <li>Improve the effectiveness of the Board meeting by enhancing its decision-making of anagement policy and strategy, and supervisory functions</li> </ul>	End of FY2024	Confirmed with a third-party evaluation that the effectiveness of the Board was ensured
Ensure the knowledge, experience, skills, and diversity of the Board meeting	<ul style="list-style-type: none"> <li>Disclose a skills matrix of the Board meeting</li> <li>Satisfy the skills matrix of the Board meeting</li> </ul>	End of FY2024	<ul style="list-style-type: none"> <li>Clarified each specialty and Experience in the skills matrix and the reasons for selection (please refer to <a href="#">the Notice of the Shareholders Meeting</a>  for details)</li> <li>Discussion ongoing at the Board meeting</li> </ul>
Enhance medium- to long-term incentives for corporate officers	<ul style="list-style-type: none"> <li>Introduce stock-based compensation for internal Members of the Board, etc.</li> </ul>	End of FY2022	Introduced the plan at the end of FY2022 (Effectiveness being monitored on an ongoing basis)

# Stakeholder Communication

The Nippon Shokubai Group undertakes various initiatives to help stakeholders better understand the Company so that cooperation-oriented dialogue is more meaningful and geared toward achieving the Group Mission.

Stakeholders	Our approach	Main opportunities for communication
Customers	Create innovation that are responsive to our customers' needs and solve their problems, and provide safe and reliable products and services.	<ul style="list-style-type: none"> <li>• Communicating and providing support during sales and marketing</li> <li>• Appearing at exhibitions</li> <li>• Providing information through our product pamphlets, corporate website and other avenues</li> <li>• Responding to inquiries made on the telephone/through our corporate website</li> </ul>
Business partners	Establish trust-based relationships with our business partners through fair and impartial business dealings, and promote sustainable procurement initiatives.	<ul style="list-style-type: none"> <li>• Communicating and providing support during purchasing</li> <li>• Distributing CSR Procurement Guidelines</li> <li>• Providing information through our corporate website and other avenues</li> <li>• Administering and gaining feedback from CSR supplier surveys</li> </ul>
Employees	Create workplaces where everyone respects and accepts each other's differences and can work free of worry, and help each and every employee find motivation and optimal work styles.	<ul style="list-style-type: none"> <li>• Labor-management council meetings</li> <li>• Safety and Health Committee meetings</li> <li>• Talent development measures</li> <li>• Evaluation consultation, Career consultation</li> <li>• Company newsletters, portal site</li> <li>• Company events</li> <li>• Internal reporting system</li> </ul>
Local Communities	Engage in proactive dialogue and establish trust-based relationships with local communities, and work with them to help them develop.	<ul style="list-style-type: none"> <li>• Environmental preservation-activities</li> <li>• Local cleanup campaign</li> <li>• Interactive activities with local communities</li> <li>• The community dialogue undertaken by the JCIA's Responsible Care Committee</li> <li>• Developing the next generation</li> </ul>
Public administrators	Fulfill our corporate responsibility by complying with laws and regulations, participating in policymaking, and more.	<ul style="list-style-type: none"> <li>• Participation in committees and councils associated with governments and public agencies through industrial associations and other avenues</li> </ul>
Shareholders and investors	Make efforts to improve corporate value by establishing trust-based relationships with shareholders and	<ul style="list-style-type: none"> <li>• Shareholders meetings</li> <li>• Briefings for institutional investors/analysts</li> <li>• 1 on 1 meeting with investors</li> </ul>

	investors through fair disclosure and proactive dialogue.	<ul style="list-style-type: none"><li>• Briefings for individual investors</li><li>• Facility tours</li><li>• Publishing TechnoAmenity Report (integrated report), Reports to Shareholders, etc.</li><li>• Providing information through our corporate website and other avenues</li></ul>
--	---	--



# External Evaluation

(As of July 2024)

## Inclusion in ESG indices

### FTSE4Good Index Series

Created by the global index and data provider FTSE Russell, the FTSE4Good Index Series is designed to measure the performance of global companies demonstrating strong Environmental, Social and Governance (ESG) practices. The series are used by a wide variety of market participants to create and assess responsible investment funds and other products.



**FTSE4Good**

[FTSE4Good Index Series](#) 

### FTSE Blossom Japan Index

Created by the global index and data provider FTSE Russell, the FTSE Blossom Japan Index is designed as an industry neutral benchmark that reflects the performance of companies demonstrating strong Environmental, Social and Governance (ESG) practices in Japan. The Index is used as an important criterion in ESG investment, with the Government Pension Investment Fund (GPIF) adopting it as one of the general indices for Japanese equities.



**FTSE Blossom  
Japan Index**

[FTSE Blossom Japan Index Series](#) 

## FTSE Blossom Japan Sector Relative Index

Created by the global index and data provider FTSE Russell, the FTSE Blossom Japan Sector Relative Index is designed as a sector neutral benchmark that reflects the performance of companies demonstrating strong Environmental, Social and Governance (ESG) practices in Japan. The index selects companies with higher ESG Ratings within the top 50% of each sector and supports climate transition to a low carbon economy by evaluating companies' climate governance and climate change efforts via the Transition Pathway Initiative's Management Quality Score. The Index is used as an important criterion in ESG investment, with the Government Pension Investment Fund (GPIF) adopting it as one of the general indices for Japanese equities.



### FTSE Blossom Japan Sector Relative Index

[FTSE Blossom Japan Index Series](#)

## MSCI Japan Empowering Women Index (WIN)

Created by MSCI Inc., which is based on data such as the ratio of women among new hires, employees, and managers, as well as disclosed information such as policies on promoting diversity. The index selects companies that are leading the way in promoting the advancement of women in their sectors. The index is used as an important criterion in ESG investment, with the Government Pension Investment Fund (GPIF) adopting it as one of the indices for Japanese equities.

### 2024 CONSTITUENT MSCI JAPAN EMPOWERING WOMEN INDEX (WIN)

[MSCI Japan Empowering Women Index \(WIN\)](#) (Japanese only)

\* The inclusion of Nippon Shokubai in any MSCI Index, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement or promotion of Nippon Shokubai by MSCI or any of its affiliates. The MSCI Indexes are the exclusive property of MSCI. MSCI and the MSCI Index names and logos are trademarks or service marks of MSCI or its affiliates.

## S&P/JPX Carbon Efficient Index

An index created by S&P Dow Jones Indices and the Tokyo Stock Exchange. The S&P/JPX Carbon Efficient Index is designed to measure the performance of companies in the Tokyo Stock Price Index (TOPIX), while overweighting or underweighting those companies that have lower or higher levels of carbon emissions per unit of revenue.



[S&P/JPX Carbon Efficient Index](#)

### Sompo Sustainability Index

An index selected by Sompo Risk Management Co., Ltd., consisting of companies with excellent ESG (environmental, social, and governance) initiatives. Sompo Asset Management builds and manages portfolios that follow this index.



[Sompo Sustainability Index](#) (Japanese only)

## ESG-related evaluation

### DBJ Environmentally Rated Loan Program

The DBJ Environmentally Rated Loan Program is the world's first financing menu to select outstanding companies by evaluating their environmental management by means of the environmental rating method developed by Development Bank of Japan Inc. (DBJ). Nippon Shokubai has received the highest rating, which is given to companies with "excellent advanced environmental initiatives," for 4 times in a row.



[DBJ Environmentally Rated Loan Program](#)

## Responsible Care Initiatives

Corporate members of the chemical industry that work with chemical substances undertake and publish the outcomes of voluntary initiatives to ensure excellence in environmental matters, safety, and health in all processes from the development to the manufacturing, distribution, and industrial and consumer use of chemical substances to their disposal and recycling in an effort to engage in dialogue and communication with society.

The initiatives are collectively known as Responsible Care (RC), and have been promoted around the world since they were announced by the International Council of Chemical Associations (ICCA) in the RC Global Charter in 2006 and revised in 2014.

Nippon Shokubai is one of the charter members of the Japan Responsible Care Council (now known as the Responsible Care Committee of the Japan Chemical Industry Association [JCIA]) founded in 1995, and has since introduced and continues to promote efforts under several systems, including an environmental management system (ISO 14001), quality management systems (ISO 9001 and GMP\*), and an occupational safety and health management system (OSHMS).

The Nippon Shokubai Group intends to continue to fulfill its corporate social responsibility by contributing to society through Groupwide RC activities.

\* GMP : Good Manufacturing Practice



The Company President's signature on the RC Global Charter (2014 revised version)

[RC Initiatives](#)



[RC Basic Plan and Results](#)



**Production/R&D Site Reports** >

**Providing Support for Group  
Companies** >

**Initiatives of Group Companies** >

## RC Initiatives

Nippon Shokubai proactively implements RC initiatives based on environmental protection, process safety and disaster prevention, occupational safety and health, chemical safety, quality, and communication with society.

### RC Policy

This Policy has been approved by the TechnoAmenity Promotion Committee (which is chaired by the President and composed of inside Members of the Board, Executive Officers and others appointed by the President).

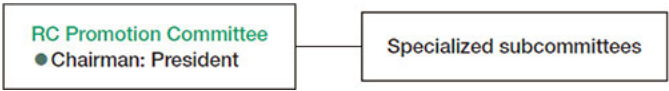
In order to achieve our Group Mission and put our Values, Code of Conduct, and Safety Philosophy into practice, the Nippon Shokubai Group takes the priority actions listed below with regard to the environment, safety, and quality. In doing so, we consider contributing to society by providing technologies and products that facilitate environmental protection to be a key management strategy; our actions are guided by the principle of Sustainable Development, and we work conscientiously to achieve harmony with environmental conservation on a global scale.

1. We consider environmental impact and take steps toward environmental protection throughout the entire lifecycle of our products, from development to disposal.
2. We strive to ensure safety for our employees and society at large by striving to completely avoid accidents and injuries based on our Safety Philosophy of “Safety takes priority over production.”
3. We consider the health of our employees, logistics partners, customers, and others by verifying the safety of the raw materials, intermediate goods, products, and other chemical substances we work with.
4. We consistently provide reliable, high-quality products and services that satisfy our customers.
5. We publish the outcomes of the aforementioned activities in an effort to ensure that our message is understood properly.

### RC Promotion System

Our RC Promotion Committee chaired by the Company President reviews basic and overall matters to make concrete progress in implementing the RC Policy and guidelines set out in other company regulations in all activities: environmental protection, process safety and disaster prevention,

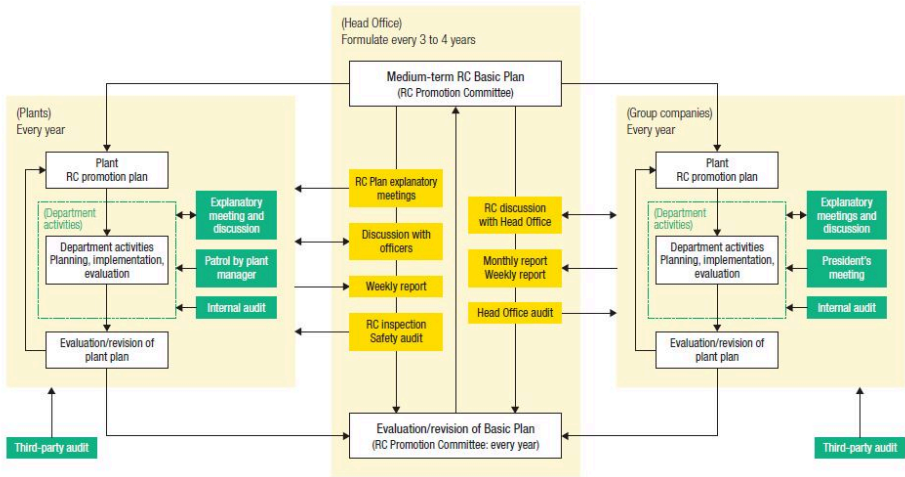
occupational safety and health, chemical safety, quality, and communication with society. We have also established specialized subcommittees under the RC Promotion Committee to promote company-wide RC initiatives.



## Promotion Cycle for RC Initiatives

To put the RC Policy into practice, the Group makes efforts to contribute to society and fulfill its corporate social responsibility by undergoing the PDCA cycle each year within the promotion cycle for RC initiatives in collaboration with each plant and Group company.

### Flow of RC Initiatives



### Flow of promotion cycles

[Head Office]

Every three to four years, the RC Promotion Committee chaired by the Company President formulates a Medium-term RC Basic Plan to coincide with the duration of the company's Medium-term management plan. Additionally, each year the council selects the focuses of inspections, conducts RC inspections and safety audits to check and evaluate the status of activity implementation at our plants, and revises plans as necessary.

[Plants]

Each year, the RC Committee at each plant chaired by the plant manager formulates a Plant RC promotion plan based on the Company-wide Medium-term RC Basic Plan and evaluations of the previous year's activities. Each department formulates their department activity plan that outlines specific activities to be implemented in consideration of important issue that department faces. The progress of these activities is checked not only through plant manager patrols, discussions at



departments, and internal audits of ISO and other management systems, but also through discussions and RC inspections conducted by Head Office officers as well as third-party audits. In light of the results, department activity plans are revised as necessary to undergo the PDCA cycle in pursuit of continuous improvement.

[Group companies]

Like Nippon Shokubai, Group companies formulate plans based on the Medium-term RC Basic Plan each year; however, their respective RC promotion plan are formulated in consideration of their business activities and the laws and regulations in their country.

They show the progress of their activities with the Head Office through weekly and other regularly scheduled reports and online meetings, and the Head Office also conducts regularly scheduled discussions and audits to check on the progress. In light of the results, the activities are revised as necessary to undergo the PDCA cycle in pursuit of continuous improvement.

The Head Office also encourages Group companies to interact with each other in an effort to enhance each other's activities.

**Key Terminology**

**PDCA cycle: Plan-do-check-act cycle**

A method of continuous improvement for quality control and other aspects of process technology. Operations are continuously improved by repeating the four steps: Plan, Do, Check, Act.

**RC Inspections**

We organized an RC Inspection Committee led by Company officers and chaired by the Member of the Board in charge of Production & Technology to conduct annual RC inspections for continual improvement of RC initiatives at the Himeji and Kawasaki Plants.

We strive to continuously improve RC initiatives by sending reports containing concerns, suggestions for improvement, and other information to the plants.

**What are RC inspections?**

Our RC inspections date back 49 years to February 1974, soon after we established our Safety Philosophy of “Safety takes priority over production” in 1973.

We referred to them as “safety inspections” until 2003, and have continued conducting them in an effort to put our Safety Philosophy into practice. Now, we conduct them based on the key topics set out each fiscal year and the implementation status of RC initiatives at each plant. The following are the key topics for RC inspections over the past several years.

Medium-term Plan*	Fiscal year	Priority theme
10th FY2017 to FY2020	FY2017 (45th)	Initiatives for environmental protection

	FY2018 (46th)	Prevention of quality issues and ensuring quality governance
	FY2019 (47th)	Prevention of recurrence of similar occupational injuries
	FY2020 (48th)	Prevention of process safety accidents
<b>FY2021</b>	FY2021 (49th)	Chemical substance management
<b>11th FY2022 to FY2024</b>	FY2022 (50th)	Initiatives to foster a safety culture and revisions toward more effective safety activities
	FY2023 (51st)	Environmental Impact Reduction Activities

\* The FY2021 plan is a single-year plan.

## FY2023 RC inspections

We conducted the RC inspection for FY2023 in person for the first time since FY2019, on October 31 for the Kawasaki Plant, and November 2 for the Himeji Plant, to check the implementation status of RC initiatives. The key topic was “Environmental Impact Reduction Activities”.



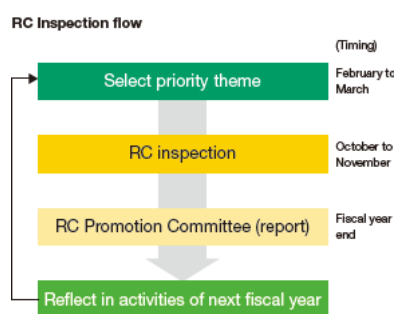
RC inspection

## RC inspection procedure

RC inspections are conducted by the RC Inspection Committee from October to November each year after the key topic or topics for the year are selected from February to March of the previous fiscal year based on information such as problems outside the company and the results of internal RC initiatives.

The results are reported to the plants as well as the RC Promotion Committee chaired by the Company President, and are reflected in the activities of the following fiscal year.

The diagram below shows the procedure of RC inspections.



## RC Training

---

We have continuously trained employees about RC initiatives to improve their overall understanding and mastery.

In FY2023, we provided trainings for new hires and for employees who promoted to assistant manager and manager based on RC training curriculum.



Training for new employees

## RC Basic Plan and Results

### The 11th (FY2022–FY2024) Medium-term RC Basic Plan and FY2023 Results

---

We formulated the 11th Medium-term RC Basic Plan, in which objectives and priority initiatives were set by reflecting ongoing activities from the 10th plan and the plan for FY2021, the results of analyzing the issues encountered, and external needs, including revisions to laws made in response to technological progress.

By steadily implementing the 11th Medium-term RC Basic Plan and continuously making improvements, we will continue our safe and stable production activities and move toward the Goals for 2030, which have been set in our long-term vision “TechnoAmenity for the future.”

# The 11th (FY2022–FY2024) Medium-term RC Basic Plan and FY2023 Results

[Ratings] Achieved Nearly achieved Unachieved

## Environmental Protection

### Objectives for FY2022–FY2024

- Energy saved: 8,000 kl, (over 3 years)
- Energy consumption intensity: 5% reduction from FY2019 levels (annual reduction of 1%, 96.9 L/t-production)
- CO<sub>2</sub> emissions<sup>1)</sup> for FY2030: 30% or greater reduction from FY2014 levels (including Group companies in Japan)
- Fuel consumption intensity for road transport: 4% reduction from FY2020 levels (annual reduction of 1%, 33.7 L/t,1,000 t-km)
- Promote modal shifts
- Water use intensity: reduction to at least FY2020 levels (8.45 m<sup>3</sup>/t-production)
- Maintain zero emissions<sup>2)</sup>: (Quantity of final off-site landfill) ≤ (Total amount of waste generated) × 0.1%
- Emissions of substances subject to the PRTR Law<sup>3)</sup>: 99 t/y<sup>4)</sup> or less

### FY2023 Actual Figures

- Energy saved: 8,703 kl<sup>1)</sup> • Energy consumption intensity: Increased 15.3%<sup>1)</sup>
- CO<sub>2</sub> emissions: Decreased 15.2%<sup>1)</sup>
- Fuel consumption intensity for road transport: Increased 1.7%
- Modal shift promotion ongoing • Water use intensity: Increased 9.1% from FY2020 levels
- Zero emissions maintained
- Emissions of substances subject to the PRTR Law: 90.1 t/y

### Priority Initiatives

1. Promoted energy-saving activities and technical investigations to reduce emissions of waste/PRTR substances
2. Promoted reduction in CO<sub>2</sub> emissions toward achieving carbon neutrality
3. Currently considering building a system that totals up product-specific CO<sub>2</sub> emissions
4. Ensured appropriate management of equipment that uses fluorocarbons and strove to control fluorocarbon emissions
5. Promoted certification of Environmental Contribution Products, including those manufactured by Group companies

<sup>1)</sup> The emissions reduction target is in fact for greenhouse gases (GHG), but most GHG is actually carbon dioxide (CO<sub>2</sub>). Therefore, it is referred to as CO<sub>2</sub> here.

<sup>2)</sup> Zero emissions: Reducing the quantity of waste subject to final disposal at off-site landfills to 0.1% or less of the total amount of waste generated.

<sup>3)</sup> PRTR Law: Act on the Assessment of Releases of Specified Chemical Substances in the Environment and the Promotion of Management Improvement

<sup>4)</sup> Due to amendment of the PRTR Law, this objective was re-set.

<sup>5)</sup> Each coefficient has been revised due to act (Act on the Rational Use of Energy, Act on Promotion of Global Warming Countermeasures, and Act on Rational Use and Appropriate Management of Fluorocarbons) amended in FY2023.

<sup>6)</sup> Due to the amended Act on the Rational Use of Energy, waste oil used as fuel is treated as energy, but calculations exclude waste oil for comparison with the base year.

<sup>7)</sup> Including a carbon credit offset of 7.3% due to the purchase of carbon-neutral city gas.

## Process Safety and Disaster Prevention

### Objectives for FY2022–FY2024

- Zero Class A<sup>1)</sup> or Class B<sup>2)</sup> process safety accidents (aiming to completely avoid serious process safety accidents)

### FY2023 Actual Figures

- Class A process safety accidents: 0 • Class B process safety accidents: 2

### Priority Initiatives

1. Strove to strengthen the culture of prioritizing safety through monthly safety efforts, safety behavior checks, and more.
2. Implemented systematic risk assessment and other activities to prevent trouble.
3. Systematically implemented deterioration countermeasures, seismic countermeasures, and more.
4. Strove to continuously improve safety management systems.
5. Systematically implemented and enhanced training provided by outside entities and education/training/drills at plants and research centers.

<sup>1)</sup> Class A: Level 9 or higher according to the Nippon Shokubai method on the Japan Petrochemical Industry Association chart

<sup>2)</sup> Class B: Level 3 to 8 according to the Nippon Shokubai method on the Japan Petrochemical Industry Association chart

## Occupational Safety and Health

### Objectives for FY2022–FY2024

- Zero injuries with loss of workdays<sup>1)</sup> (including contractors)
- Zero injuries without loss of workdays<sup>1)</sup> (including contractors)

### FY2023 Actual Figures

- Injuries with loss of workdays: 7 • Injuries without loss of workdays: 9

### Priority Initiatives

1. Promoted basic safety activities and implemented other activities to prevent troubles.
2. Implemented systematic safety measures through efforts such as persistently sharing cases of occupational injuries throughout the company.
3. Verified the status and strove for continuous improvement of various safety activities.
4. Systematically implemented workplace safety training and enhanced training/drills.
5. Supported contractors' safety activities through safety training, patrols, and more.

<sup>1)</sup> Injury with loss of workdays: Injury requiring at least one lost workday for medical treatment

<sup>2)</sup> Injury without loss of workdays: Injury requiring no loss of workdays for medical treatment

## Chemical Safety

### Objectives for FY2022–FY2024

- Completely avoid (legal/social) problems with chemical products

### FY2023 Actual Figures

- Cases involving problems with chemical products: 0

### Priority Initiatives

1. Systematically conducted internal training and held explanatory meetings concerning laws and regulations for management of chemical substances both inside and outside of Japan.
2. Revised SDS on time in accordance with the requirements of relevant laws and regulations, including amendment to the Industrial Safety and Health Act of Japan.
3. Submitted notices and information before the prescribed deadlines based on legal obligations under domestic and foreign laws and regulations, and when required by the authorities.

## Quality

### Objectives for FY2022–FY2024

- To achieve zero serious quality complaints
- To improve customer satisfaction by strictly complying with quality-related laws and promoting priority initiatives regarding quality

### FY2023 Actual Figures

- Serious complaints about quality: 0
- Accomplished quality priority initiatives designed to improve customer satisfaction

### Priority Initiatives

1. Continuously made improvements by effectively using the quality management system through audit, inspection, quality meetings, and the like.
2. Promoted activities to prevent quality complaints and issues, as planned.
3. Implemented quality education and quality awareness-raising activities to foster a quality-first mindset, as planned.

## Communication with Society

### Objectives for FY2022–FY2024

- Engage in dialogue with and disclose information to stakeholders

### FY2023 Actual Figures

- Published the RC Report and published and revised the TCFD Report

## Expanding RC initiatives to Group Companies (Common Items with Group Companies)

### Objectives for FY2022–FY2024

1. Environmental protection:
  - Reduce energy consumption intensity
  - Set a CO<sub>2</sub> emissions reduction objective (Group companies outside Japan)
  - Reduce the volume of waste sent to off-site landfills for disposal (Group companies in Japan)
  - Reduce the total volume of waste (Group companies outside Japan)
2. Process safety and disaster prevention:
  - Completely avoid disasters and accidents (equivalent to Class A and Class B process safety accidents on the Nippon Shokubai scale)
3. Occupational safety and health:
  - Reduce emissions of substances subject to the PRTR Law (Group companies in Japan)
4. Chemical product safety:
  - Completely avoid (legal or social) problems with chemical products
5. Quality:
  - Completely avoid serious complaints about quality
6. Communication with society:
  - Engage in dialogue with and properly disclose information to stakeholders

### FY2023 Actual Figures

- Energy consumption intensity: Decreased at 7 out of 12 companies
- Volume of waste sent to off-site landfills for disposal: Decreased 31% YoY (Group companies in Japan)
- Volume of total waste: Increased 2.7% YoY (Group companies outside Japan)
- Emissions of substances subject to the PRTR Law: Decreased 12% YoY (Group companies in Japan)
- Disasters: 0 • Accidents: 0 • Injuries with loss of workdays: 3
- Cases involving problems with chemical products: 0 • Serious complaints about quality: 0
- Published environmental reports, and participated in local community events

### Priority Initiatives

- Conducted RC discussions and audits of Group companies in an effort to improve the Group's overall quality of RC initiatives

PDF Download



## Production/R&D Site Reports

Himeji Plant



Kawasaki Plant



Suita Research Center



# Himeji Plant

<b>Plant Manager</b>	Tokihiro Yokoi, Executive Officer
<b>Location</b>	992-1 Aza-Nishioki, Okinohama, Aboshi-ku, Himeji, Hyogo
<b>Number of employees</b>	1,258 (including research center)
<b>Products</b>	Acrylic acid, acrylates, maleic anhydride, superabsorbent polymers, resin modifiers, electronic information materials, De-NOx catalysts, dioxins decomposition catalysts, and other products
<b>Contact</b>	TEL+81-79-273-1131 FAX+81-79-274-3723

## FY2023 Results of RC Activities

<b>Occupational safety and health</b>	One injury with loss of workdays, five injuries without loss of workdays (including contractors)
<b>Process safety and disaster prevention</b>	Zero Class A process safety accidents, one Class B process safety accident
<b>Environmental protection</b>	Implemented measures for energy conservation amounting to about 4,800 kL/year (crude oil equivalent)

In terms of occupational safety and health, we began a new near miss analysis that incorporates a Safety II approach that focuses on what is currently working well. We are also developing a compliment activity, which includes voting for employees who take safe behaviors such as thinking before you act, pointing and calling, and holding the handrail when stepping on stairs. These initiatives aim to promote positive awareness of safety action throughout the plant to help establish a safety culture.



Tokihiro Yokoi, Plant Manager

In terms of process safety and disaster prevention, in light of the repeated occurrence of accidents such as leakage of hazardous materials, all employees at the Himeji Plant are taking this issue personally, and we are promoting an initiative called “Safety Reform 2025” with the aim of reforming safety awareness and the safety culture. We will combine the thoughts and actions of all employees to build a safe and stable plant by learning from past accident within the Company and from other companies, reviewing procedures for handling hazardous materials, promoting speaking up, asking



questions, watching over others, and holding interdepartmental meetings.

Regarding environmental protection, in response to the Plastic Resource Circulation Act, we have added product residues and plastic pallets, which were previously disposed of as waste, to our list of items for material recycling, and we have repurposed over 200 tons of waste plastic for new uses. We will continue to respond flexibly to changes in society and work together to think and act in order to build a manufacturing plant that is trusted by society.

### Education using an explosion safety simulation equipment

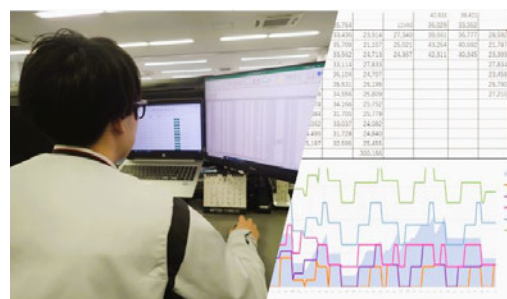
Incorrect handling of organic solvents and powders used at the Himeji Plant could lead to a serious accident. However, traditional education on how to prevent such accidents was mainly classroom learning, which had not always been sufficient. Therefore, in order to enhance hazard prediction skills and safety awareness, we introduced an explosion safety simulation equipment, which simulates an explosion caused by static electricity, allowing trainees to experience the fear and danger of an accident firsthand. During new employee training, all employees took part in the simulation training with a serious attitude, and some even commented that they could feel the danger of the substances handled in their work. It even received a great response in environment and safety exchange meetings with Group companies in Japan. We will continue to enhance education to improve safety awareness and promote daily activities to ensure safe and stable production.



Education using an explosion safety simulation equipment

### Using an AI scheduler to optimize SAP production plans and reduce waste

SAP production plans are formulated taking into account sales volume, inventory volume, and productivity, but because there are many types of products and it is heavily dependent on the experience of the person in charge, optimization has been very difficult. In addition, reducing production loss has been a significant challenge, because this loss is inevitably caused by changing product type and is treated as waste. Therefore, we introduced a system using AI to automatically generate optimal production plans based on data science. This enables us to accurately predict the product shipping timing and inventory volume, thereby reducing the number of product type changeovers and a significant amount of waste. In addition, we were able to save energy and reduce CO<sub>2</sub> emissions.



Working with AI scheduler

### Topics

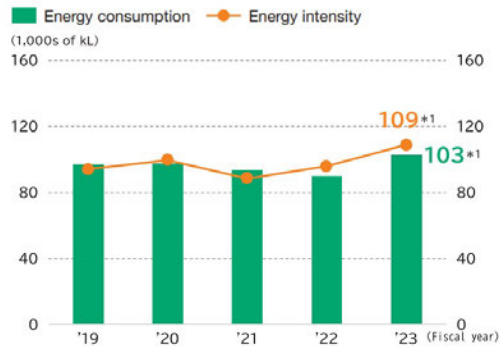
## Participation in “Demand Response” contributes to stabilizing the balance between supply and demand of electricity

“Demand Response (DR)” has been attracting attention as a method of adjusting the supply-demand balance of electric power as the introduction of renewable energy sources, which are unstable in terms of power generation, expands. As one of its social contribution activities, Himeji Plant has concluded a contract with a DR aggregator\* and has been participating in DR on an ongoing basis since FY2021. When the supply-demand balance of electric power becomes tight due to extreme heat, severe winter, or bad weather, the plant will contribute to stabilizing the supply-demand balance of electric power by reducing the amount of power received from the power grid based on requests from the DR aggregator, utilizing excess power generation capacity.

\*DR aggregator: A business operator that aggregates multiple consumers and adjusts supply and demand

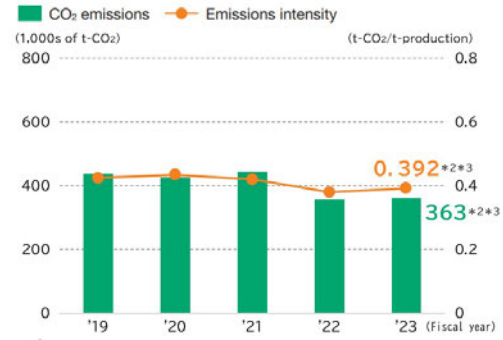
## Plant Data

## Trends in Energy Consumption and Intensity



<sup>\*1</sup> Due to the revision of the Act on Rationalization of Energy Use and Shift to Non-fossil Energy (Energy Conservation Act), the calculation method has been revised from the fiscal 2023 results.

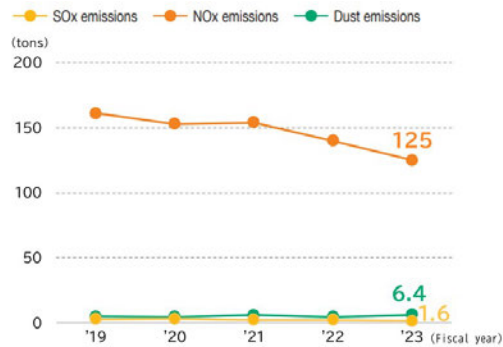
## Trends in CO<sub>2</sub> Emissions and Intensity



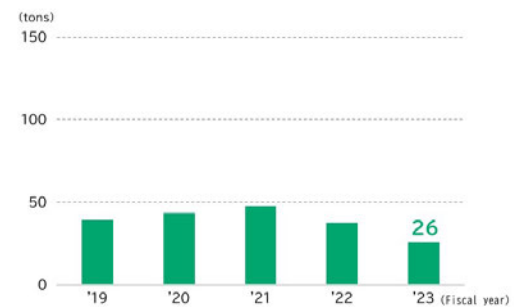
<sup>\*2</sup> Including emissions offset by buying carbon-neutral city gas

<sup>\*3</sup> Due to the revision of the Act on Promotion of Global Warming Countermeasures (Global Warming Countermeasures Act), the calculation method has been revised from the fiscal 2023 results.

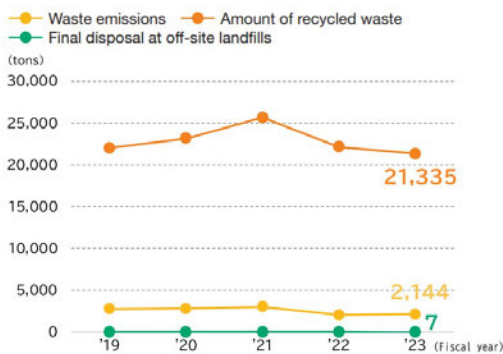
## Trends in Emissions of SO<sub>x</sub>, NO<sub>x</sub>, and Dust



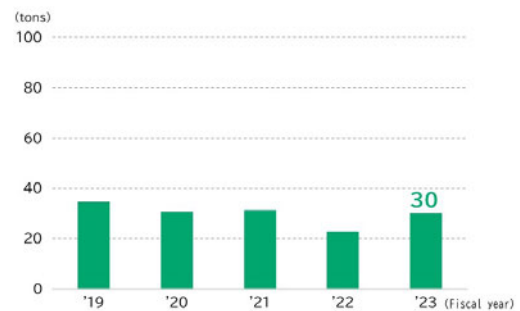
## Trend in COD of Wastewater



## Trends in Amount of Waste, Recycled Waste, and Waste for Final Off-site Landfill Disposal



## Trend in Emissions of Substances Subject to the PRTR Law



[Production/R&D Site Reports TOP →](#)

# Kawasaki Plant

<b>Plant Manager</b>	Yoshihisa Oka, Executive Officer
<b>Location</b>	Chidori Plant 14-1 Chidori-cho, Kawasaki-ku, Kawasaki, Kanagawa Ukishima Plant 10-12 Ukishima-cho, Kawasaki-ku, Kawasaki, Kanagawa
<b>Number of employees</b>	367
<b>Products</b>	Ethylene oxide, ethylene glycol, ethanolamine, polyethyleneimine, secondary alcohol ethoxylates, polymers for concrete admixture, acrylic acid special ester, and other products
<b>Contact</b>	TEL+81-44-288-7366 FAX+81-44-288-8492

## FY2023 Results of RC Activities

<b>Occupational safety and health</b>	Six injuries with loss of workdays, one injury without loss of workdays (including contractors)
<b>Process safety and disaster prevention</b>	Zero Class A process safety accidents, one Class B process safety accident
<b>Environmental protection</b>	Implemented measures for energy conservation amounting to about 2,000 kL/year (crude oil equivalent)

In terms of occupational safety and health, due to the occurrence of five employee injuries with loss of workdays (including chemical burns and cuts), we reviewed the safety activities at our plant during the period, identified areas where near miss analysis reports or those countermeasures related to the injuries were insufficient, implemented these additional countermeasures, and conducted thorough safety checks before work at actual job sites. As individual countermeasures, we implemented thorough prevention of similar problems by correcting issues in work management and work methods.



Yoshihisa Oka, Plant Manager

In the area of process safety and disaster prevention, although one Class B process safety accident (leakage) occurred, we implemented thorough prevention of similar problems by ways such as increasing the number of devices for detecting equipment abnormalities.

In terms of environmental protection, we promoted energy-saving measures such as introducing an advanced process control system to predict fluctuations in each process and provide simultaneous control (refer to the [Employee's Voice](#)). We also continuously made our efforts in response to the PRTR Law such as with boron recovery.

We intend to continue promoting RC initiatives to incorporate cutting-edge technology and make our plant safer and more trustworthy.

## Supporting training of younger operators at group companies

The Kawasaki Plant hosted a two-day face-to-face group training for younger operators in their first to fourth years at Nippon Shokubai Group companies in Japan. This was started as a part of Nippon Shokubai educational support activities in response to common issues regarding training system and a shortage of instructors among Group companies in Japan. The instructors, who are training center staff with extensive experience in plant operations and regularly provide operator training, used DVD footage and cutaway models of equipment to provide classroom training on safety, equipment, and past issues as well as hands-on training on-site to verify the operation of safety devices on a tank.

We will continue to enhance the skillset of younger employees in cooperation with Group companies in a training setting.



Classroom training on safety



On-site training for safety device operation

## Introduction of HAZOP-LOPA

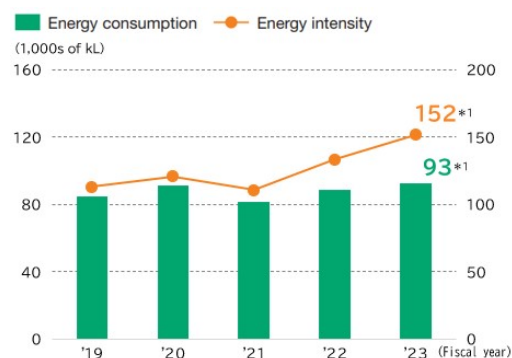
In an effort to further enhance risk assessment related to the hazard identification in processes at the Kawasaki Plant, we are introducing the HAZOP-LOPA procedure. LOPA is a method used to quantitatively determine whether sufficient measures are in place for scenarios where accidents can occur and whether a risk is acceptable. Specifically, it reduces the probability of an accident to an acceptable level by putting various safety measures into place. To achieve this, we formed an in-house working team. First, as preliminary education necessary for consideration, we asked Professor Takagi of Systems Safety Consulting Ltd. to act as a consultant, and took a safety engineering lecture. In the future, members who mastered the LOPA risk assessment method will act as promoters and will assess risks in each production section with the aim of introducing LOPA in FY2026.



Training session on HAZOP-LOPA

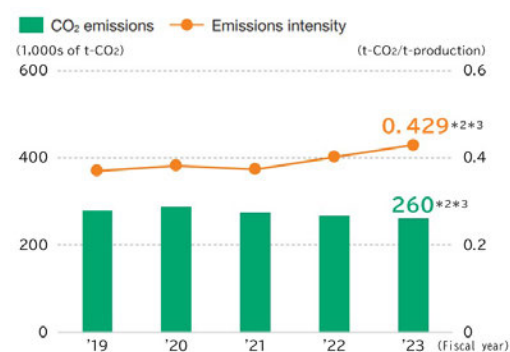
## Plant Data

### Trends in Energy Consumption and Intensity



<sup>\*1</sup> Due to the revision of the Act on Rationalization of Energy Use and Shift to Non-fossil Energy (Energy Conservation Act), the calculation method has been revised from the fiscal 2023 results.

### Trends in CO<sub>2</sub> Emissions and Intensity

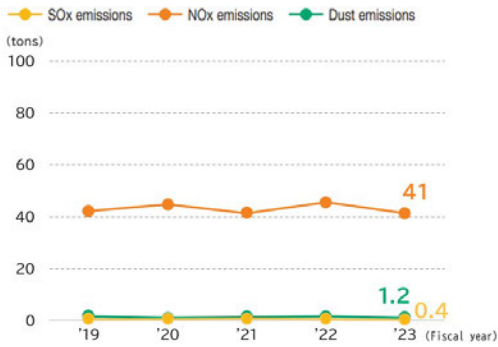


<sup>\*2</sup> Including emissions offset by buying carbon-neutral city gas

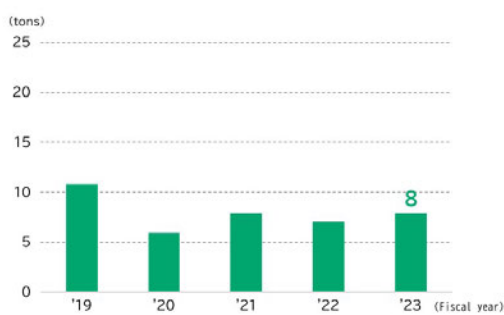
<sup>\*3</sup> Due to the revision of the Act on Promotion of Global Warming Countermeasures (Global Warming Countermeasures Act), the calculation method has been revised from the fiscal 2023 results.



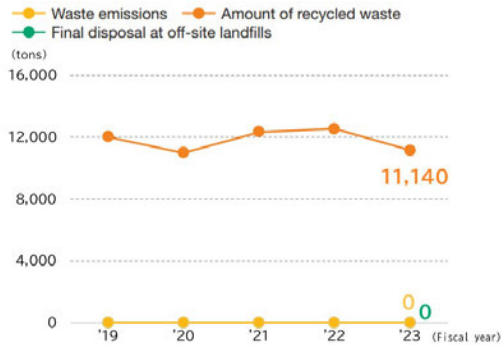
Trends in Emissions of SOx, NOx, and Dust



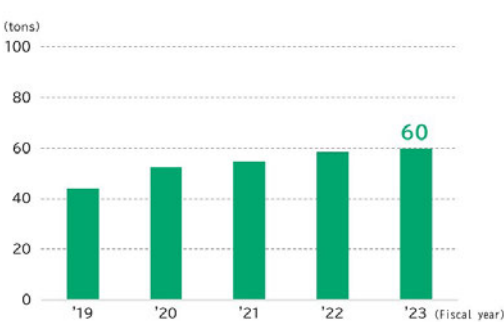
Trend in COD of Wastewater



Trends in Amount of Waste, Recycled Waste, and Waste for Final Off-site Landfill Disposal



Trend in Emissions of Substances Subject to the PRTR Law



[Production/R&D Site Reports TOP →](#)



# Suita Research Center

<b>Representative</b>	Yasutaka Sumida, Member of the Board, Managing Executive Officer
<b>Location</b>	5-8 Nishi Otabi-cho, Suita, Osaka
<b>Number of employees</b>	419
<b>R&amp;D organizations</b>	Corporate Research Division, GX Research & Development Division, Industrial & Household Chemicals Research Department, Battery Materials Research Department, Electronics & Imaging Materials Research Department, Process Technology Center, Health & Medical Business Division, Cosmetics Materials Research Group, IONEL Research Department, IONEL Technology Department, IONEL Domestic Location Preparation Department, Water & Environment Solutions Business Department, Printing Materials Business Department, R&D Management Department, General Affairs Research Department, Responsible Care Research Department
<b>Contact</b>	TEL+81-6-6317-2202 FAX+81-6-6317-1578

## FY2023 Results of RC Activities

<b>Occupational safety and health</b>	Zero injuries with loss of workdays, three injuries without loss of workdays <sup>*1</sup>
<b>Process safety and disaster prevention</b>	Zero Class A and Class B process safety accidents
<b>Environmental protection</b>	Recycling 100% of waste

<sup>\*1</sup> Total number for Suita Research Center and Himeji Research Center

In the area of occupational safety and health, there were three injuries without loss of workdays that included heat stroke, a fall during office work, and liquid exposure during an experiment. Some of these incidents could have been avoided with hazard prediction, and we plan to incorporate this in future efforts.



Yasutaka Sumida, Member of the Board, Managing Executive Officer

In process safety and disaster prevention, we planned and implemented initial response emergency drills that cover all steps from initial firefighting to reporting and evacuation, overall drills, and joint drills with the fire department. Each year, we change the assumed departments where fire occurs and implement the PDCA cycle to improve our disaster and accident preparedness.

In the area of environmental protection, through our thorough efforts to sort waste, we sustained our 100% waste recycling rate, and in energy saving, we are promoting measures to review our method of operations and update outdated equipment.

We intend to continue promoting RC initiatives in an effort to achieve sustainable and safe research activities.

## Participation in New Year's Ceremony

On January 7, 2024, the Suita Fire Fighting New Year's Ceremony was held under clear skies at the nearby banks of the Kanzaki River.

For Suita Research Center, it was the first time to participate in this activity in four years since FY2019 due to the COVID-19 pandemic.

Numerous organizations, including fire departments, fire brigades, and corporations, participated in the event, which was observed by a large crowd and involved fire-fighting drone shooting and new vehicles as well as demonstrations of rescue drills performed by firefighters. During the simultaneous water discharge display, our team of four new employees demonstrated the results of their pump operation training guided by firefighters, showing off their skills with impressive agility. Participating in such events is an excellent opportunity to work with the community in preparation for large-scale disasters, and we plan to continue participating in future events.



New Year's Ceremony of the fire department

## GMP<sup>\*2</sup> activities

SGP plant in Suita Research Center started operation as a GMP controlled plant in 2019. In SGP plant, we manufacture active pharmaceutical ingredients (APIs) of middle molecule drugs for commercial and investigational use. Middle molecule drug is a new modality expected to be applicable for various diseases, due to its high specificity to the target molecule. It is considered to have significant potential in various area.

As a manufacturer of API for this promising modality, we pursue reliable high quality of our products as well as operational safety in the manufacturing plant, so that reliable pharmaceuticals can be provided which can be used with peace of mind. We will continuously work for further improvement and stabilization of the quality of our products under compliance of GMP on the basis of our underlying RC activities.

\*2 GMP: Good Manufacturing Practice



GMP controlled facilities (SGP plant)

[Production/R&D Site Reports TOP →](#)

# Providing Support for Group Companies

In the interests of strengthening group management, we are providing active support for the RC initiatives of our Group companies.

## Support for Environment and Safety Activities

### RC discussions

The RC Division holds RC discussions every year to promote and improve RC initiatives for Group companies both inside and outside Japan.

In FY2023, discussions were held in-person with six Group companies in Japan and one Group company outside Japan.

In these discussions, the companies in Japan reported on the planning and achievements of their RC initiatives. And the company outside Japan reported on the planning and achievements of its RC initiatives, as well as the status of operation of its management systems. We provided them with advice and support.



RC discussion with Nippon Nyukazai Co., Ltd.



RC discussion with Nippon Shokubai Europe N.V.

### Environmental and safety audits

Environmental Safety Department at the Head Office conducts environmental and safety audits at our Group companies in Japan each year to check the environmental safety management structure and system operation status.

In FY2023, audits were conducted at four Group companies in Japan, and we were able to confirm the status of compliance with legal requirements as well as the status of the establishment and operation of necessary standards for environmental safety. We also confirmed that environment and safety management systems are properly implemented. Environment and safety personnel from Group companies in Japan also participated as observers, providing an opportunity to learn about the management system operations of other companies as a reference for their own activities.



Environmental and safety audit of Nisshoku Techno Fine Chemical, Co., Ltd.

## Environment and safety exchange meeting

Environment and safety personnel of our Group companies in Japan gather to introduce their RC initiatives and share information with each other to improve the level of their initiatives.

In FY2023, the meeting was held at the Himeji Plant of Nippon Shokubai to introduce and share information about the content and facilities for hands-on training at the Himeji Plant. In addition, views were exchanged on the initiatives of each company in response to the new chemical substance regulations of the Industrial Safety and Health Act.



Environment and safety exchange meeting for Group companies in Japan



## Support for Quality Activities

### Support for quality assurance initiatives

For Group companies in Japan, in FY2023, we continued to provide advice and support on their quality activities and quality issues through quality roundtable meetings. For SAP manufacturing sites of Group companies outside Japan, to ensure high quality at the same level at our all sites for our core businesses, we have a quality meeting every year with the members in charge of quality of each site.

In FY2023, all site quality personnel met face-to-face at the Houston Plant of Nippon Shokubai America Industries, Inc. (NAIL) for the first time in four years. Periodical meetings with each site are held at not only SAP manufacturing sites but also other sites. We also provide more intensive support for efforts such as further enhancing quality-related databases for global sites.



QA manager meeting at NAIL Houston plant

## Quality audits



As well as in FY2022, quality audits for the Group companies in Japan for FY2023 were conducted focusing on products that had caused issues in the past. Through a Lot traceability exercise, the auditors checked whether day-to-day operations had been conducted in accordance with established procedures, and whether countermeasures against the recurrence of the issues had been taken on an ongoing basis. The audit findings were shared within the Group companies to raise the level of their initiatives.

In FY2023, internal audits for Group companies outside Japan were conducted on-site at all manufacturing sites except for NAI Houston plant. (The audit of the NAI Houston Plant will be conducted in FY2024 due to scheduling.) At Sino-Japan Chemical Co., Ltd., the audit was conducted focusing on the same topics as Group companies in Japan, while at other sites, the audits were conducted focusing on prevention of contamination with foreign material. We confirmed that the quality management system is functioning effectively at each site, for some sites it was conducted for the first time in four years since the end of the COVID-19 pandemic.



Quality audit of PT. Nippon Shokubai Indonesia

## Quality exchange meeting

The FY2023 quality exchange meeting—the annual gathering of quality personnel at the Company and Group companies in Japan held at a different company each year—was held at Tokyo Fine Chemical Co., Ltd. Based on the theme of “raw materials management,” a prior survey was conducted, and participants shared their current status and challenges to be tackled. The participants had an active exchange of views on how to manage expiration periods of raw materials and green procurement, and it provided an excellent opportunity for all companies.



Quality exchange meeting 2023 for Group companies in Japan at Tokyo Fine Chemical Co., Ltd.



# Initiatives of Group Companies

[Group Companies in Japan](#)



[Group Companies outside Japan](#)



# Group Companies in Japan

## NIPPOH CHEMICALS CO., LTD.

### Principal business

Manufacture and sale of iodine, iodine compounds, raw materials for pharmaceuticals and pesticides, and natural gas

In FY2023, we promoted activities for the second year of the 1st Medium-term RC Three-Year Plan and strengthened the RC promotion system.

In terms of occupational safety and health, we worked to thoroughly implement basic safety behaviors and raise safety awareness and have made pointing and calling obligatory. Unfortunately, due to a fall from a fixed ladder, there was one injury without loss of workdays. We are making efforts to prevent a recurrence by implementing three-point support ascending and descending training and displaying caution signs.

In terms of process safety and disaster prevention, we implemented scenario-less annual emergency drill to make it more practical.

In the area of environmental protection, we investigated the methane released into the atmosphere from a well that extracts groundwater (brine water) containing iodine and natural gas in order to study how to reduce greenhouse gas emissions. As a result, we are on track to reduce the amount of methane generated at the well by approximately 50%. In FY2024, we will formulate specific measures to reduce greenhouse gas emissions, including from other sources, to achieve a 30% reduction compared to FY2014.

We intend to further enhance and promote RC initiatives with the participation of all employees.



Well for extracting brine water and natural gas

### Interview

#### Promoting efforts to reduce environmental impact

As part of our activities to reduce environmental impact, we are actively promoting transactions with buyers of valuables. In FY2023, we were able to sell a portion of plastic pallets that used to be disposed of as waste for value. Only a small percentage of the industrial waste we generate can be traded as valuables. Although



this is a modest activity, we will contribute to further reducing our environmental impact while exchanging information with buyers of valuables.

In addition, we will promote examining improvements to the BOD treatment capacity at wastewater treatment facilities. A review of the microbial control method has confirmed further improvements to the treatment rate. As a result, we are able to stably process high-load BOD wastewater and handle BOD load fluctuations based on production conditions. We will continue studies to further improve our treatment capacity in the future.

Nobuaki Seki  
Assistant Manager  
Security Environment  
Department  
NIPPOH CHEMICALS CO.,  
LTD.

## TOKYO FINE CHEMICAL CO., LTD.

### Principal business

Manufacture and sale of antiseptics, antifungal agents, disinfectants, brine, stabilizers of vinyl chloride resins, etc.

In FY2023, the second year of the 8th RC Promotion Plan, we continued to implement RC activities based on “safety taking priority over production” from the previous fiscal year. As part of these initiatives, we displayed signage on staircases as shown in the picture to encourage the use of handrails throughout the Group. In addition, in areas at production sites with steps, we installed caution tape in an effort to prevent injuries.

As part of our environmental protection efforts, we are continuing to reduce and sort waste, and we have been able to achieve results such as processing waste containers that were previously incinerated into valuables for recycling.

We intend to continue companywide RC initiatives to further enhance our activities.



Encouraging the use of handrails



Caution tape

## NISSHOKU TECHNO FINE CHEMICAL CO., LTD.

### Principal business

Manufacture and sale of (meth)acrylic acid derivatives and photo/electro chemicals

In FY2023, due to injuries without loss of workdays caused by younger employees, we reviewed our standard operation procedure, shared this information, and conducted training to prevent a recurrence. To prevent occupational injuries, we are continuing hazard prediction and near miss analysis. In addition to hosting an environmental and safety convention in July and a health convention in October, we provide educational opportunities by employees who have worked for a

long time to pass on their skills and make efforts to improve safety awareness.

As an environmental protection effort, we are working to improve the operational efficiency of production equipment to reduce the volume of total waste, emissions of substances subject to the PRTR Law, and energy consumption to FY2022 intensity levels or lower. We are also planning and promoting a conversion from the use of heavy oil as steam boiler fuel to city gas to reduce greenhouse gas emissions, and in FY2023, we renewed one of four units to reduce our environmental impact.

In the area of process safety and disaster prevention, we conducted a comprehensive emergency drill with the Ichikawa City East Fire Station and Ichikawa Joint Disaster Prevention Center and implemented water discharge training, confirming our cooperation in the event of an accident. We also participated in a disaster prevention hands on experience and general lifesaving course of the Honjo Life Safety Learning Center at the Tokyo Fire Department, mainly for our younger employees, in an effort to improve our emergency response capabilities.



Environmental and safety convention



Comprehensive emergency drill

## CHUGOKU KAKO CO., LTD.

Principal business	Manufacture and sale of adhesive-processed products and fine sphere particles
--------------------	---

In FY2023, we experienced an injury with loss of workdays resulting from a fall and overturn from the stepladder while working in a storehouse of the 2nd production section, ending our continuous record of zero injuries with loss of workdays at 2,040 days. The main factor was non-compliance with our basic safety behavior of three-point support, and we took corrective actions by revising the work method and adding equipment.

In terms of process safety and disaster prevention, 19 employees took part in the lifesaving course that had been suspended for seven years due in part to the COVID-19 pandemic, bringing the number of employees who completed the course to 34.

As part of our environmental protection activities, we were able to reduce greenhouse gas emissions by updating outdated equipment such as the chiller for air conditioning at a coating plant and converting to LED lighting.

We will continue to promote RC initiatives with the aim to completely avoid injuries and accidents and reduce environmental impact.



Updating chiller for air conditioning



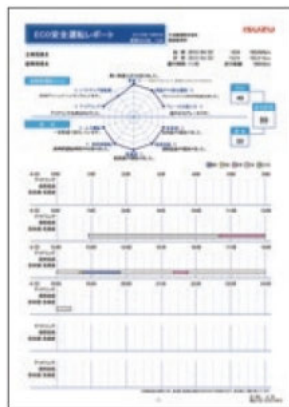
Lifesaving course

## Nisshoku Butsuryu Co., Ltd.

<b>Principal business</b>	Logistics of chemicals
---------------------------	------------------------

The Nisshoku Butsuryu Group positions “providing environment-friendly, safe, and high-quality logistics services for chemicals and contributing to society through its RC initiatives” as its key management policy. Under this policy, we have been working on the reduction of GHG emissions as an initiative to reduce environmental impacts and promoting risk prediction as an initiative to achieve zero accidents and injuries. We also promote proper operation of advanced operation information systems and the introduction of vehicles equipped with Advanced Emergency Braking System as priority tasks.

We also worked on the following priority issues: prevention of environmental disasters and accidents, promotion of energy consumption reduction and resource conservation, prevention of accidents with vehicle equipment, prevention of chemical transportation/handling issues, and promotion of white logistics.



“Mimamori-kun” advanced operation information system



Advanced Emergency Braking System

## NIPPON POLYMER INDUSTRIES CO., LTD.

<b>Principal business</b>	Manufacture and sale of acrylic resins
---------------------------	--

In FY2022, we suffered five occupational injuries with and without loss of workdays (including one at a contractor), which is the most in recent years. In FY2023, we responded by implementing near miss

analysis, enhancing follow-up training for new employees, and expanding the installation of on-site warning signs (using universal design displays). (One injury occurred for this period.)

In terms of process safety and disaster prevention, we have focused on updating outdated equipment and have started renewal of fire hydrant piping (1st phase), which is planned to be completed in FY2025.

In terms of the environment, we are updating aging raw water tanks and sludge dehydration treatment equipment as part of preventative maintenance of wastewater treatment facilities. As a companywide effort, we have started activities this fiscal year to solicit all employees for various feedback (areas of improvement) on the company and push forward reforms based on this feedback. We will continue our RC initiatives throughout the company in the future.



Renewal of fire hydrant piping



Newly installed raw water tank

## NIPPON NYUKAZAI CO., LTD.

Principal business	Manufacture and sale of surfactant and other chemicals
--------------------	--

Regarding activities in FY2023, in the occupational safety and health area, employees who have worked for a long time conducted safety training for younger employees in response to multiple occupational injuries with youngers in recent years. This effort has been made to enhance sensitivity to hazards and prevent similar injuries; and it is creating certain positive effects. We will maintain and expand these activities in the future.

In terms of quality, in response to numerous incidents during the filling process for raw materials and products in past cases, we implemented corrective action this year to prevent recurrence of filling issues by setting “measures against quality problems in the filling processes” as a priority action item.

In the area of process safety and disaster prevention, in addition to performing annual comprehensive emergency drill, we revised procedures and conducted training for responding to power outage because the gap was confirmed between what happened and what was expected through two regional power outages experienced at the Kashima Plant since FY2022.

As part of our communication with society, 21 people, including employees of the Kashima Plant and their family members, joined in helping clean up Nikkawahama Beach in FY2023.

We will continue to promote RC initiatives in an effort to ensure safe operations.





Kashima Plant: Cleanup activity on Nikkawahama Beach

[Initiatives of Group Companies TOP →](#)



# Group Companies outside Japan

## SINGAPORE ACRYLIC PTE LTD

### Principal business

Manufacture and sale of acrylic acid

SMAG\*<sup>1</sup> Safety Promotion Month is an annual event dedicated to emphasizing the importance of safety practices and raising awareness about potential risks in our surroundings. Due to Covid-19 pandemic, HSE\*<sup>2</sup> safety month promotion activities were held online from 2020 to 2022 which consisted of online safety video messages, online safety bulletin, safety slogan and quiz. However, in 2023, we were able to return to usual onsite safety promotion activities. The month started off with HSE month opening ceremony, whereby Deputy Director from Ministry of Manpower was invited to give a keynote speech, and followed by participation of activities at safety exhibition and game booths. SMAG employees participated in various onsite safety talks, such as Workplace Fatigue, Workplace Stress, Effect of Shift Work to promote risk awareness of employees and contractors. A safety video and HSE bulletin on the topic “Risk Awareness and Procedure Compliance” were launched. In addition, safety quiz and safety slogan competition were initiated and the winning slogan is “Vigilance Avoids Hazards, Compliance Eliminates Risks Be vigilant, Stay Compliant”. The month ended off with a closing ceremony to distribute prizes to winners from the safety quiz and safety slogan competition.

\*<sup>1</sup> SMAG : a conglomerate of four Japanese companies in the same complex

\*<sup>2</sup> HSE : Health, Safety, Environment



Safety Promotion Month



Award ceremony for Safety Slogan Competition

### Interview

## Implementation of ISO 50001 energy management system

In 2022, to meet the National Environment Agency enhanced energy management regulation, we have decided to implement ISO 50001 energy management system to better address our energy management shortcomings and to also improve our overall energy consumption and have successfully obtained the ISO 50001 certification in November 2022. The external consultant conducted ISO 50001 awareness training and internal auditor training course for our employees. Example of objective and target of the energy management system includes optimizing of compressor system. With energy management system in place, we hope to reduce energy consumption and improve energy efficiency for our plant.



Yap Zuo Xian  
Senior Process Engineer  
Process and Engineering  
Section  
SINGAPORE ACRYLIC PTE  
LTD

## NISSHOKU CHEMICAL INDUSTRY (ZHANGJIAGANG) CO., LTD. (China)

### Principal business

Manufacture and sale of superabsorbent polymers

Through the efforts of all departments of the company in 2023, we successfully completed the renewal of the safety production license and obtained a new safety production license, which is valid from January 2024 to January 2027.

In April 2023, the Emergency Management Department of Jiangsu Province issued a notice stating that we meet the classification criteria for Level 2 safety production standardization and is a Level 2 safety production standardization enterprise. The validity period is from April 2023 to April 2026. We will continue our RC initiatives throughout the Company in the future.



Safety production license

### 关于全省二级安全生产标准化定级企业的公告 (2023年第7批)

浏览次数: 427 信息来源: 安全生产基础处发布日期: 2023-04-13

根据《省应急管理厅关于印发〈江苏省企业二级安全生产标准化定级实施办法(试行)〉的通知》(苏应急〔2022〕1号)规定,现将材料审核符合直接定级条件的太仓市索立洋行有限公司等263家企业和符合直接定级条件经抽查通过的江苏艾森半导电材料股份有限公司等16家企业(名单见附件),予以公告。有效期自公告之日起3年。

附件: 二、二级安全生产标准化定级企业名单.docx

江苏省应急管理厅  
2023年4月13日

18	晶瑞电子材料股份有限公司 <sup>1</sup>	危险化学品	苏州 <sup>2</sup>
19	吴江市龙联化工经营部 <sup>3</sup>	危险化学品	苏州 <sup>2</sup>
20	苏州市鑫利来化工有限公司 <sup>4</sup>	危险化学品	苏州 <sup>2</sup>
21	苏州市瑞豐化工有限公司 <sup>5</sup>	危险化学品	苏州 <sup>2</sup>
22	兰科化工(张家港)有限公司 <sup>6</sup>	危险化学品	苏州 <sup>2</sup>
23	日触化工(张家港)有限公司 <sup>7</sup>	危险化学品	苏州 <sup>2</sup>
24	苏州西园新材料股份有限公司 <sup>8</sup>	危险化学品	苏州 <sup>2</sup>
25	张家港立宇化工有限公司 <sup>9</sup>	危险化学品	苏州 <sup>2</sup>
26	索立洋行有限公司 <sup>10</sup>	危险化学品	苏州 <sup>2</sup>

Certificate of level 2 safety production standardization company

## NIPPON SHOKUBAI EUROPE N.V. (Belgium)

<b>Principal business</b>	Manufacture and sale of acrylic acid and superabsorbent polymers
---------------------------	--

Improving the safety awareness and consequently the safety culture:

The behavior of employees is always a reflection of the company culture as it is the majority of all employees who define the behavior as good or as desired. For that reason, we made it our goal to further improve the overall safety behavior of our employees with the purpose of building a more sustainable safety culture within the coming years.

We will achieve this goal by working on two fronts:

- Firstly, several initiatives started with the involvement of our employees, like the introduction of “the PPE\*<sup>3</sup> of the month”, like the story of a person involved in a serious accident with the consequence of a permanent disability, like witnessing the behavior of employees during unexpected emergency exercises, like introducing life-saving actions and even the road-safety at our company will be improved using the ideas of our employees.
- Secondly, while employees are getting more vigilant for safety, we will implement a risk based process safety approach using the guidelines, developed by the “Center for Chemical Process Safety”

Working on both fronts, our safety awareness and consequently our safety culture will increase making our company more mature to reduce major accidents and improve process industry performance.

\*<sup>3</sup> PPE: Personal Protective Equipment



Hands-on activities based on “the PPE of the month”



## Nippon Shokubai America Industries, Inc.

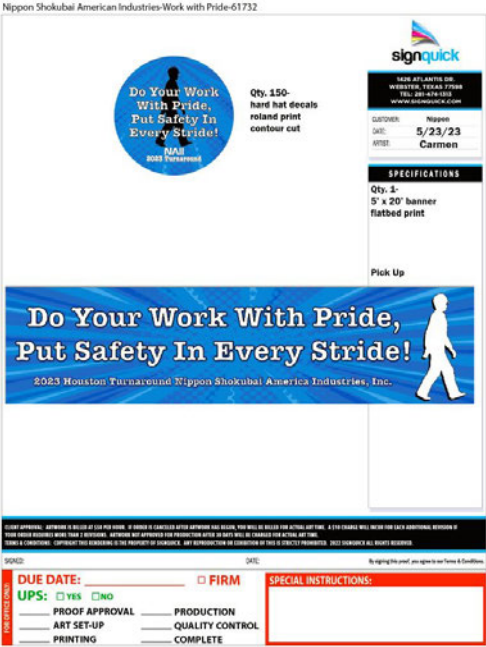
<b>Principal business</b>	Manufacture and sale of superabsorbent polymers, polymers for concrete admixture, water soluble polymers, and acrylic emulsions
---------------------------	---

In 2023, We took important steps to bolster our Safety and Environmental Programs at both US based facilities.

The Chattanooga facility had a busy year starting two new production lines. Their emulsion product line, which was decommissioned in 2012, was restarted in April 2023 with a new formulation that allows for a cleaner process that generates less waste. Newly built infrastructure, along with proper planning and strong Safety & Environmental Management Systems allowed for the startup of their new process without incident in June 2023.

At the Houston site, employee involvement was strengthened through its tradition of holding slogan contests each year before large-scale maintenance events. The winning slogan for 2023 was: “Do Your Work With Pride, Put Safety In Every Stride!” This slogan is used throughout the facility to keep this important principle on the minds of all employees during day-to-day operations.

The Houston and Chattanooga facilities obtained ISO 45001, 14001, and 9001 certifications and continue to strive for excellence in achieving their safety and environmental performance goals at both US based facilities.



Winning slogan for 2023

## PT. NIPPON SHOKUBAI INDONESIA

<b>Principal business</b>	Manufacture and sale of acrylic acid, acrylic esters, and superabsorbent polymers
---------------------------	---

Although in the past we conducted emergency drills during the day, in FY2023, we made plans to conduct night-time drills for all shifts.

In February 2024, we conducted Emergency Phase-1 Drills. The drill started at 7 p.m. with the scenario of fire occurrence, and the shift operation supervisor took command, with the shift operator, security personnel, and paramedics all taking part in the drill.

Although the drill went smoothly, some activities took time due to the darkness as assumed. Measures to address this issue include turning on all lighting, conducting regular inspections, and providing flashlights to allow the site supervisor to easily confirm their instructions.

We will incorporate the measures to address issues in this drill to future drills to improve our emergency response capabilities.





Nighttime emergency drills



## SINO-JAPAN CHEMICAL CO., LTD. (Taiwan)

### Principal business

Manufacture and sale of surfactant and other chemicals

To prevent global warming and climate change that can cause various environmental problems, the Taiwanese government set greenhouse gas emission reduction targets, aiming for a 10% reduction based on 2005 emission levels by 2025, a  $24 \pm 1\%$  reduction by 2030, and net zero emissions by 2050.

In FY2023, we calculated our own greenhouse gas emissions for FY2022 in order to formulate emission reduction targets in line with the government action. As part of the first phase from FY2024 to FY2030, we set an annual reduction target of 3% based on our FY2022 greenhouse gas emissions. For the second phase starting in FY2031, we set an annual reduction target of 4%. With the public announcement of our efforts to reduce greenhouse gas emissions and in an effort to increase our competitiveness by earning the trust of stakeholders, we adopted ISO 14064-1, the international standard for calculating emissions, and had our calculations externally reviewed.

The external review was completed in November 2023, and the review report was received in January, 2024.



Certificate of greenhouse gas verification report



# Initiatives for Environment

Environmental Management >	Environmental Impact of Business Activities >
Tackling Climate Change >	Efforts for Eco-Friendly Logistics >
Development and expansion of Environmental Contribution Products >	Chemical Substance Control >
Waste Reduction >	Air Pollution Prevention >
Water Resource Conservation >	Biodiversity Preservation >
Environmental Accounting >	



# Environmental Management

## Environmental Protection Policy

This Policy has been approved by the TechnoAmenity Promotion Committee (which is chaired by the President and composed of inside Members of the Board, Executive Officers and others appointed by the President).

The Nippon Shokubai Group has set out the following Environmental Protection Policy based on the RC Policy.

- Actively seek to improve energy efficiency, use renewable energy and bio-based raw materials, and engage in other efforts to reduce greenhouse gas emissions.
- Reduce emissions of waste and chemical substances and promote the recycling and the effective use of resources including water resources to contribute to the realization of a Sound Material-Cycle Society.
- Actively seek to develop and provide products and technologies that help reduce environmental impact.
- Seek to minimize the negative impacts of business activities and develop products and technologies that contribute to increasing the positive impacts on ecosystems in an effort to preserve and restore biodiversity.
- Actively disclose and communicate information about environmental conservation to further mutual understanding with stakeholders.

[RC Policy](#)

## Promotion System

- [RC Promotion System](#)

## Targets and Results

Item	FY2022-FY2024 targets	FY2023 results
------	-----------------------	----------------

<b>Energy saved</b>	6,000 kL (over 3 years)	6,703 kL* <sup>1</sup> 15,017 kL (FY2022-FY2023)
<b>Energy consumption intensity</b>	5% reduction from FY2019 levels	Increased 15.3%* <sup>1*2</sup>
<b>GHG emissions for FY2030</b>	30% or greater reduction from FY2014 levels (including Group companies in Japan)	Decreased 15.2%* <sup>1*3</sup>
<b>Fuel consumption intensity for road transport</b>	4% reduction from FY2020 levels	Increased 1.7%
<b>Modal shifts</b>	Promotion	Promotion ongoing
<b>Water use intensity</b>	reduction to at least FY2020 levels	Increased 9.1% from FY2020 levels
<b>Zero emissions*<sup>4</sup></b>	Zero emissions maintained	Zero emissions maintained
<b>Emissions of substances subject to the PRTR Law*<sup>5</sup></b>	99 t/yr or lesser	90.1 t/yr

\*1 Each coefficient has been revised due to acts (Act on the Rational Use of Energy, Act on Promotion of Global Warming Countermeasures, and Act on Rational Use and Appropriate Management of Fluorocarbons) amended in FY2023.

\*2 Due to the amended Act on the Rational Use of Energy, waste oil used as fuel is treated as energy, but calculations exclude waste oil for comparison with the base year.

\*3 Including a carbon credit offset of 7.3% due to the purchase of carbon-neutral city gas

\*4 Zero emissions: Reducing the quantity of waste subject to final disposal at off-site landfills to 0.1% or less of the total amount of waste generated

\*5 PRTR Law: Act on the Assessment of Releases of Specified Chemical Substances in the Environment and the Promotion of Management Improvement

\*6 Due to amendment of the PRTR Law, this objective was re-set.

## Initiatives

Nippon Shokubai promotes initiatives to reduce the environmental impact of our business operations, including tackling climate change and reducing waste through our product supply chains.

- [Environmental Management](#)
- [Environmental Impact of Business Activities](#)
- [Tackling Climate Change](#)
- [Efforts for Eco-Friendly Logistics](#)
- [Development and Expansion of Environmental Contribution Products](#)
- [Chemical Substance Control](#)
- [Waste Reduction](#)
- [Air Pollution Prevention](#)
- [Water Resource Conservation](#)
- [Biodiversity Preservation](#)
- [Environmental Accounting](#)

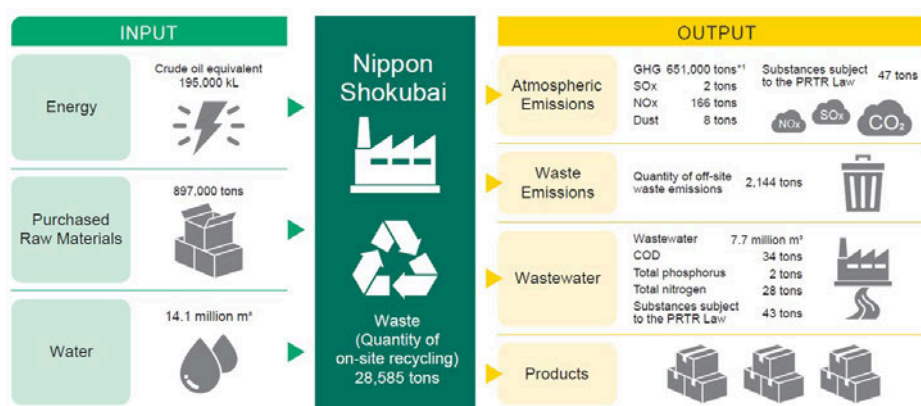
# Environmental Impact of Business Activities

In addition to striving to provide better products and services, we engage in various activities to reduce the environmental impact of our business activities, which we extend to include our supply chains.

We recycle the water we use in our production locations to a high degree and thoroughly treat it before releasing it into the natural environment in an effort to effectively use water resources in addition to the obvious benefits of saving energy and combating climate change.

Also, so that people in the vicinity of our production locations can live free of worry, we ask them to monitor the air for foul smells, and conduct odor patrols and measure noise ourselves on a regular basis.

There were no environmental pollution incidents or complaints in FY2023.



Note: This FY2023 data is for only Nippon Shokubai (including our head offices, research centers and other sites).

\*1 Including a carbon credit offset of 62,000 tons of CO<sub>2</sub> emissions due to the purchase of carbon-neutral city gas

# Tackling Climate Change


[Click here for the TCFD report.](#) 

## Promoting Greenhouse Gas (GHG) Emissions Reduction

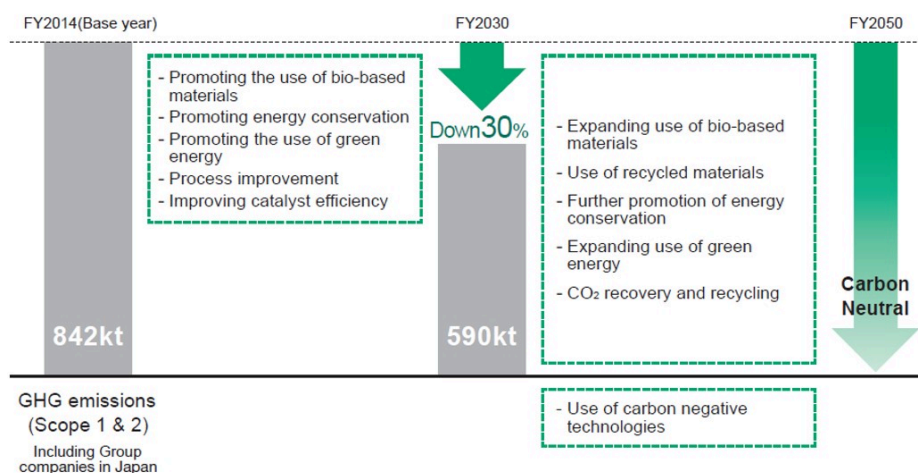
### Formulating a roadmap for reducing GHG emissions

Nippon Shokubai formulated a roadmap for reducing GHG emissions by 2050 in terms of the “strategic transformation for environmental initiatives,” one of the “three transformations” set out in “TechnoAmenity for the future,” the Nippon Shokubai Group long-term vision published in April 2021. Regarding our GHG emissions reduction target for FY2030, the final year of our long-term vision, we set a target of reducing our GHG emissions in Japan, which constitute roughly 70% of Group-wide emissions, by at least 30% from FY2014 levels by FY2030.

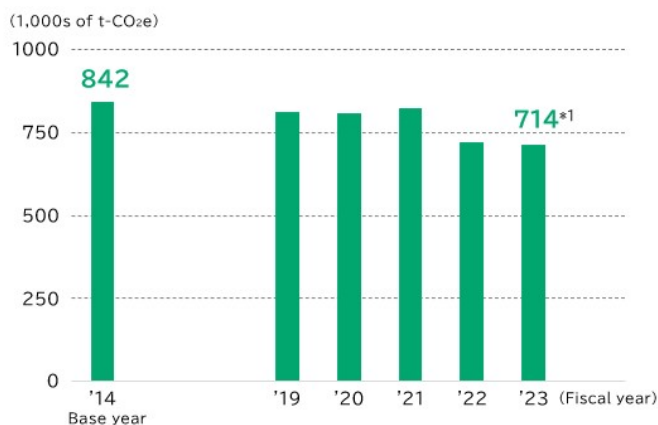
We have purchased carbon-neutral city gas since FY2022, and increased the amount of renewable energy introduced in FY2023. Our GHG emissions of FY2023 in Japan, including those offset by carbon-neutral city gas, amounted to 714,000 t-CO<sub>2</sub>e,<sup>\*1</sup> a 15%<sup>\*1</sup> reduction from FY2014 levels. We are currently considering setting targets for GHG emission reductions including Group companies outside Japan.

The calculation of GHG emissions and energy consumption has undergone third-party verification (see [Third-party Verification Report on GHG](#)  ).

### Roadmap for Reducing GHG Emissions by 2050



## Trend in GHG Emissions (in Japan)



Note: We partly changed the aggregation method of GHG emissions.

\*1 Including a carbon credit offset of 62,000 tons of CO<sub>2</sub> emissions (7.3% reduction from the FY2014 level) due to the purchase of carbon-neutral city gas

## Reducing energy consumption and CO<sub>2</sub> emissions

Our RC Promotion Committee, which is chaired by the Company President, formulated a Medium-Term RC Basic Plan based on the targets set out in the action plan of the Japan Chemical Industry Association (JCIA) for achieving a low carbon society. On the basis of this plan, each of our plants takes action to mitigate climate change under the leadership of the committees responsible for promoting energy conservation activities and a reduction in CO<sub>2</sub> emissions.

In FY2023, although energy-saving activities progressed, the energy consumption intensity deteriorated due to declining production volumes of energy generation products as well as products with relatively low energy consumption intensity. In addition, a decrease in production volume contributed to the worsening of CO<sub>2</sub> emission intensity, but CO<sub>2</sub> emissions were reduced partly due to the use of carbon-neutral city gas.

In FY2021, we started solar power generation (on-site PPA) at the Himeji Plant. In addition, we promote energy conservation activities through the collection of waste heat and the introduction of a co-generation system. We also collect part of the CO<sub>2</sub> generated in the manufacturing process and sell it as liquefied carbon dioxide to reduce CO<sub>2</sub> emissions.

### Employee's Voice

#### Introducing an advanced process control system for energy savings

At the Kawasaki Plant, we are working to enhance productivity and save energy through the use of digital transformation (DX). As part of this project, we introduced an advanced process control system at the ethylene oxide plant.

The advanced process control system uses DMC\* software to monitor and predict process operation data, and simultaneously operates multiple measuring instruments to ensure optimal conditions based on a constructed operation model. It reduces operating fluctuations compared to plant operations performed by an operator. For example, processes that must be maintained at a specified temperature or higher traditionally required excessive heating to account for fluctuations, but the advanced process control system optimizes the heating volume (by reducing excessive heating), thereby enabling energy savings.



Shunsuke Kyusai  
Production No. 3 Section,  
Kawasaki Plant

In cooperation with the Technology Department, I selected the measuring instruments to be part of the advanced process control system and explained the details of processes to a system development company. I also performed step response tests on actual manufacturing equipment and took on the role of obtaining actual manufacturing equipment data to be used to build an operation model. We conducted test runs on an operating plant, carefully collecting data with the system development company over several months while making sure not to adversely affect production, and successfully implemented the system. Currently, we are continuing initiatives to deepen the understanding of the system by establishing work procedures, creating educational materials for advanced process control operations, and educating operators.

By introducing this system, we have saved the crude oil equivalent of approximately 900 kL in FY2023. We are currently working to expand the scope of application of the system to promote further energy savings.

\* DMC (Dynamic Matrix Control): one of the model predictive control methods

## Fluorocarbon emission control

The Act on Rational Use and Proper Management of Fluorocarbons, which covers the entire lifecycle of fluorocarbons from production to disposal, went into effect in April 2015, and regulations for disposing of certain equipment were further tightened in April 2020.

As a manager of Class I specified products, the Company conducts the legally mandated simple inspections and routine inspections according to plans. Additionally, our calculations of leaked fluorocarbons in FY2023 revealed leakage of 40 t-CO<sub>2</sub>e from the Himeji Plant, 984 t-CO<sub>2</sub>e from the Kawasaki Plant, and 1,088 t-CO<sub>2</sub>e Company-wide. We intend to make efforts to reduce leaked fluorocarbons—an activity that facilitates climate change mitigation—by intensifying inspections and maintenance, upgrading to equipment that uses coolants with low global warming and ozone depletion potential, and properly disposing of equipment.

### Calculations of Leaked Fluorocarbons in FY2023

(t-CO<sub>2</sub>e)

Himeji Plant	Kawasaki Plant	Others	Entire company
40	984	65	1,088

## Promoting for the Reduction of the CO<sub>2</sub> Emissions Resulting from Our Entire Supply Chain

### Calculating Scope 3 emissions

The GHG Protocol classifies GHG emissions into three classes: Scope 1, Scope 2, and Scope 3, which are the total GHG emissions attributable to business activities throughout supply chains for all categories.

**Scope 1**

Direct GHG emissions by the reporting company itself (eg. fuel combustion, industrial process)

**Scope 2**

Indirect emissions from the use of electricity, heat, or steam supplied by others

**Scope 3**

Indirect emissions other than Scope 1 and Scope 2 (emissions by others related to the company's activities)

Nippon Shokubai will continue to calculate Scope 3 emissions and explore the possibility of reducing CO<sub>2</sub> emissions resulting from all corporate activities.

### Trend in Scope 3 Emissions (Data for Nippon Shokubai alone)

(1,000 t-CO<sub>2</sub>e)

No.	Category	Emissions		
		FY2021	FY2022	FY2023
1	Purchased goods and services	1,522	1,370	1,462
2	Capital goods	44	43	49
3	Fuel- and energy-related activities not included in Scope 1 or Scope 2	83	89	97
4	Upstream transportation and distribution	15	13	14
5	Waste generated in operations	8	5	5
6	Business travel	0.3	0.3	0.3
7	Employee commuting	0.9	0.9	0.9
12	End-of-life treatment of sold products	2,111	1,884	1,798
Total		3,783	3,405	3,426

### Initiatives for the reduction of Scope 3 emissions

In order to contribute to the reduction of Scope 3 emissions, the following items will also be strongly promoted.

- Development and expansion of Environmental Contribution Products (products that contribute to the reduction of CO<sub>2</sub> emissions when used, etc.)
- Development and dissemination of CO<sub>2</sub> recovery and recycling technology (carbon recycling technology)
- Development and social implementation of material recycling and chemical recycling



# Internal Carbon Pricing (ICP)

We have implemented internal carbon pricing (ICP) to promote low carbonization/decarbonization in corporate management on February 1, 2023.

In utilizing the ICP, we will raise awareness of Group’s commitment to decarbonization, promoting energy saving, and activate discussion about opportunities/risks concerning to CO<sub>2</sub> emission reductions.

This system is accelerating “Strategic Transformation for Environmental Initiatives” of our “three transformations” set forth in our long-term vision.

Outline of ICP	
ICP	¥ 10,000/t-CO <sub>2</sub> Shadow price set with reference to domestic and international carbon prices.
Method of application	The costs will be calculated using ICP based on a change of CO <sub>2</sub> emissions and used as a criterion for investment decision.
Range of application	Nippon Shokubai Group
GHG Scope	Scope 1 & 2

# Efforts for Eco-Friendly Logistics

## Promoting White Logistics to Reduce Environmental Impact

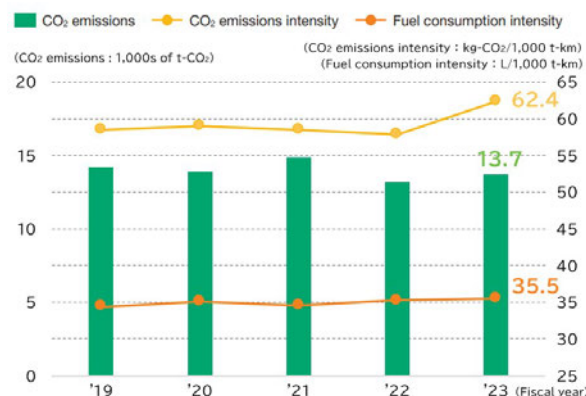
To tackle climate change and prevent air pollution in logistics, we are making efforts to reduce fuel consumption intensity and CO<sub>2</sub> emission intensity and undertaking emissions countermeasures. Although changes in traffic volume and the means of transportation resulting from economic conditions impact fuel consumption intensity and CO<sub>2</sub> emission intensity, we are deploying four measures to reduce CO<sub>2</sub> emission intensity: promoting modal shifts, improving transport efficiency, using digital tachographs linked to vehicle GPS and dashboard cameras, and saving energy in operations through efforts such as fitting vehicles with eco tires and switching engines off when vehicles are not in use.

As part of efforts to prevent air pollution, we are implementing three measures: eco-driving and displays indicating our commitment to eco-driving (eco-driving decals), avoiding the use of vehicles that do not satisfy the requirements of the Automotive NOx and PM Act, and proactively using low-pollution, fuel-efficient vehicles.

Also, given the increasing severity of the truck driver shortage in the logistics industry, we embrace and are working to promote the White Logistics movement that aims to realize more sustainable logistics. We are working to improve loading and unloading, streamline transport—for example shifting from long-distance trucking to roll-on/roll-off ship and railway transport and joint transport with competitors—and promote other efforts to improve productivity and create better working environments for women and older truck drivers.

Furthermore, we believe this movement concurrently helps reduce environmental impact.

### Trends in Fuel Consumption Intensity and CO<sub>2</sub> Emissions/CO<sub>2</sub> Emission Intensity in Domestic Logistics





Example of a modal shift: Railway tank containers and loading and refilling facilities

## Key Terminology

### Modal shift

Changing the mode of transport to mass transport modes such as railways or ships in an effort to streamline transport while also saving energy and reducing environmental impact.

### Roll-on/roll-off ship

A ship that transports loaded trucks and flatbeds.

### Ton-kilometer

In transport, a ton-kilometer (t-km) is a unit of work that expresses the volume of freight transport in which the weight of transported freight in tons is multiplied by the distance the freight is transported in kilometers. As such, it is an accurate measure of transport as an economic activity.

# Development and Expansion of Environmental Contribution Products

## Environmental Contribution Products

To produce chemical and industrial products, we use natural resources, emit CO<sub>2</sub>, and generate waste, all of which impact the environment. However, considering the entire lifecycle of products from raw material extraction to final product disposal, there are cases where the presence of these chemical and industrial products helps reduce the environmental impact.

The Nippon Shokubai Group's products are used throughout supply chains as well as in everyday products, the equipment used to produce those products, infrastructure, and elsewhere. Thus, we evaluate how our products contribute to reducing environmental impact.

Our internal certification committee examines checklists, numerical data, and other information to certify Environmental Contribution Products. From FY2022, we have received an annual third-party review prior to examination by the internal certification committee, and have reflected the views and advice obtained from the review in examination materials. Four products were newly certified in FY2023.

Applications in parentheses



IONEL™ (Lithium-ion battery materials)



EPOMIN™ (Water treatment agents)



AQUALOC™ (Concrete admixtures)



VEEA™ (UV-curable reactive diluent)



Electrolyte sheets for solid oxide fuel cells



Waste gas treatment catalyst

## Environmental Contribution Products

### Preventing global warming/conserving energy

Types of contribution	Product life stage	Application	Certified product
Reducing GHG	Manufacturing	Binding agent for fish feed in aquaculture	AQUALIC™ H (for feed)
		Concrete admixtures	AQUALOC™
		Multifunctional hydrophilic treatment agent for synthetic fibers	PET-4G (product using recycled PET) [SINO-JAPAN CHEMICAL CO., LTD.]*
	Use	Material for rechargeable lithium-ion batteries	IONEL™
		Solid-state battery materials	ICPDAP™, ICPSEB™
		CO absorbent	Aminoalcohol (for absorbent) [NIPPON NYUKAZAI CO., LTD.]*
		FO (forward osmosis) system components for seawater desalination	Draw solute
	Disposal	Paint, adhesive materials, and reactive diluent	Isobornyl Acrylate
		Paint and adhesive materials	Ethyl Acrylate
		Adhesive, Synthetic resin	2-Octyl Acrylate
		Same as conventional products	ISCC PLUS certified products
Energy conservation	Manufacturing	UV-curable reactive diluents	VEEA™
	Use	Material for solid oxide fuel cells	Electrolyte sheets for solid oxide fuel cells
		Automotive damping materials	ACRYSET™ (for damping materials)
		Optical and electronic materials	ZIRCOSTAR™

\*A product of our Group company

## Reducing chemical emissions/preserving air quality

Types of contribution	Product life stage	Application	Certified product
Reducing chemical emissions	Use	Water-based paints	UWR™, ACRYSET™ (for water-based paints)
		Emulsifier for emulsion polymerization for water-based paints	NEWCOL™ (for emulsion polymerization) [NIPPON NYUKAZAI CO., LTD.]*
			Reactive surfactant (for emulsion polymerization) [SINO-JAPAN CHEMICAL CO., LTD.]*
		Water-based adhesives	EPOCROS™
		UV-curable paints	AOMA™
Preventing air pollution	Use	Removing hydrocarbons (HC), NOx, dioxins, and other pollutants from exhaust gas	Automotive catalysts
			Waste gas treatment catalysts
			Denitrification catalysts and equipment

			Dioxin decomposition catalysts and equipment
--	--	--	--

\*A product of our Group company

## Conserving water resources/water quality/biodiversity

Types of contribution	Product life stage	Application	Certified product
Preventing water pollution	Use	Oxidizing/decomposing hazardous substances in wastewater	Wastewater treatment catalysts for catalytic wet air oxidation
		Water treatment agents	EPOMIN™
		Polymer flocculants	Aminoalcohol (for flocculants) [NIPPON NYUKAZAI CO., LTD.]*
	Disposal	Detergent builders	AQUALIC™ L (for detergent)
Bio-degradability	Disposal	Detergent ingredients	SOFTANOL™
			HIDS™
		Solvents for detergents and paints	Butyl Di Glycol [NIPPON NYUKAZAI CO., LTD.]*
		Solvents for electronic materials and industrial cleaning agents	Methyl Propylene Glycol [NIPPON NYUKAZAI CO., LTD.]*

\*A product of our Group company

## Reducing resource consumption

Types of contribution	Product life stage	Application	Certified product
Reducing resource consumption	Use	Hollow fiber membranes	Polyvinylpyrrolidone

## Reducing waste

Types of contribution	Product life stage	Application	Certified product
Reducing waste	Disposal	Concrete admixtures	AQUAGUARD™

## Promoting the Reduction of CO<sub>2</sub> Emissions Throughout the Entire Lifecycle of Products

We use the cLCA method to evaluate the best of our Environmental Contribution Products in terms of their contributions to reducing CO<sub>2</sub> emissions.

The cLCA method is an evaluation method for calculating net contributions to CO<sub>2</sub> emissions

reduction; specifically, the difference between CO<sub>2</sub> emissions throughout the lifecycle of a chemical product-based finished product and those of the finished product based on comparable products is considered to be the amount of additional emissions of the finished product if the constituent chemical product were not used.

### Products expected to contribute to reducing CO<sub>2</sub> emissions

<p><b>IONEL™</b> <b>ICPDAP™</b> <b>ICPSEB™</b> <b>Electrolyte sheets for solid oxide fuel cells</b></p>	<p><b>Total: 5.96 million tons<sup>*1</sup></b></p> <p>(1) Calculation of CO<sub>2</sub> emissions avoided when solid batteries are utilized as a regulated power supply for the use of renewable-energy-derived electricity supplied in one year (not including electricity for electric vehicles and the like) (2) Calculation of CO<sub>2</sub> emissions avoided from the use of fuel cells</p>	<p>IONEL™ and ICPDAP™/ICPSEB™ are used in storage batteries, which are expected to be used as regulating power sources to boost solar and wind power, which are the main sources of renewable energy but are characterized by widely fluctuating output. Additionally, solid oxide fuel cells are highly efficient at supplying power and heating water, contributing to reducing CO<sub>2</sub> emissions.</p>
---	---	---

\*1 Assessment prerequisites

The CO<sub>2</sub> reduction from using storage batteries is attributable to its regulation of fluctuations in power output for optimal economic efficiency in balancing supply and demand for electricity.

Due to the inability to forecast the supply of hydrogen, the CO<sub>2</sub> reduction from using fuel cells is based on household fuel cells that generate electricity by modifying municipal gas. Compared to thermal power generation.

<p><b>Aminoalcohol (for absorbent) [Nippon Nyukazai Co., Ltd.]<sup>*2</sup></b></p>	<p><b>5.5 million tons<sup>*3</sup></b></p> <p>Calculation of CO<sub>2</sub> emissions avoided in one year when the CO<sub>2</sub> emitted from thermal power plants is collected and stored using a chemical absorption technique</p>	<p>While renewable energy is increasingly being used, thermal power plants continue to operate to achieve stable power supply. Aminoalcohol contributes to CO<sub>2</sub> emissions reduction because this product is used when these power plants trap CO<sub>2</sub> from waste gas through a chemical absorption technique.</p>
---	--	--

\*2 A product of our Group company

\*3 Assessment prerequisites

Aminoalcohol was used as an absorbing solution when CO<sub>2</sub> was separated and collected, and the amount of energy required mainly for the separation and collection was evaluated. The comparison target was CO<sub>2</sub> emissions without the separation or collection.

<p><b>AQUAGUARD™</b></p>	<p><b>4.05 million tons<sup>*4*5</sup></b></p> <p>Calculation of CO<sub>2</sub> emissions avoided in one year when all</p>	<p>We developed AQUAGUARD™ to limit cracking in concrete. Combining AQUAGUARD™ with high-performance AE water reducer should substantially prolong the useful lives of concrete structures.</p>
--------------------------	--	---



apartments are built  
as long-lasting  
structures

**\*4 Assessment prerequisites**

Service life: Assumed to be 100 years for long-lasting public housing and 50 years for ordinary public housing.

CO<sub>2</sub> emissions associated with the manufacturing, use, and demolition of public housing evaluated based on the “LCA Guidelines for Buildings” issued by the Architectural Institute of Japan.

\*5 The prediction value used for this evaluation was recalculated based on conditions in recent years.

**VEEA™**

**330,000 tons\***<sup>6</sup>

Calculation of CO<sub>2</sub>  
emissions avoided by  
reduction expected  
from all the UV curable  
inks produced in one  
year

Using VEEA™ as a UV-curing reactive diluent in eco-friendly ink removes the need to use volatile solvents and the equipment associated with them, saving energy and improving productivity.

**\*6 Assessment prerequisites**

3.2 g of ink per m<sup>2</sup> of full-size A-series paper (880 × 625 mm) on a four-color printer. Commercial offset and commercial UV printing presses were compared for evaluation.

**ACRYSET™  
(for damping  
materials)**

**310,000 tons\***<sup>7</sup>

Calculation of CO<sub>2</sub>  
emissions avoided  
when an application-  
type vibration-  
damping material is  
installed in all  
automobiles  
manufactured in one  
year

We developed an emulsion for vibration-damping coating to be applied to the lower surface of a vehicle body to suppress vibrations and noise from engines and road surfaces. Using vibration-damping coating should make automobiles lighter and conserve fuel.

**\*7 Assessment prerequisites**

Vehicles to be driven 10,000 km per year for 10 years. Compared to vehicles with asphalt sheet as the vibration-damping material.

**ZIRCOSTAR™**

**220,000 tons\***<sup>8</sup>

Calculation of CO<sub>2</sub>  
emissions avoided  
when ZIRCOSTAR™ is  
incorporated in all  
smartphones  
manufactured in one  
year

With its high optical properties, this product can be used as an optical material for plastic lenses, displays, and other components of mobile phones and smartphones, helping conserve the energy consumed by the displays of the devices and lengthen the battery life.

**\*8 Assessment prerequisites**

According to the usage time described in the Carbon Footprint Product Category Rules, the product was evaluated as being in use for two years. A smartphone incorporating ZIRCOSTAR™ in the optical material was evaluated as achieving a 3.6% reduction in power consumption as an energy-efficiency benefit.

**AQUALIC™ H  
(for feed)**

**80,000 tons\*<sup>9</sup>**

Calculation of CO<sub>2</sub>  
emissions avoided  
when all aquaculture  
feed produced in one  
year is replaced with  
moist pellets (MP)

With AQUALIC™ H as its binding agent, MP contains less fish meal—an ingredient that requires a lot of energy to source and dry—than dry pellets, helping reduce CO<sub>2</sub> emissions in aquaculture business.

\*<sup>9</sup> Assessment prerequisites

Fish feed produced in all aquaculture business in Japan in one year. Compared to dry pellets with no binding agents and high fish meal content.

**Note:** The assumptions above are expected values and do not guarantee actual service lives or performance.

# Chemical Substance Control

## Reducing Chemical Substance Emissions

Since FY1995, we have participated in the voluntary PRTR investigations conducted by the Japan Chemical Industry Association (JCIA) in an effort to reduce emissions of chemical substances into the environment.

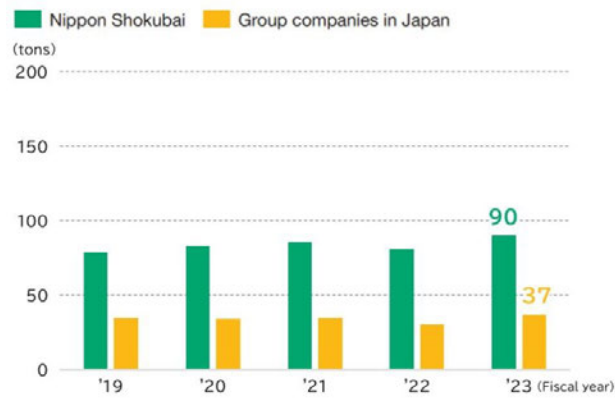
The reduction target during the period of the 11th (FY2022-FY2024) Medium-term RC Basic Plan was 81 t/y or less for FY2024. However, the target was revised to 99 t/y or less because the PRTR Law was revised in April 2023 and the number of applicable designated chemical substances greatly increased. We achieved our emission target of 90.1 t/y in FY2023 and we will continue to push for systematic reductions.

### FY2023 Emissions of PRTR Substances (Top 10 Substances for Nippon Shokubai alone)

(tons)

Cabinet Order No.	Name of PRTR substance	Air emissions	Discharge into water areas	Total	Movement
405	Boron compounds	0.0	27.5	27.5	0.2
321	Vanadium compounds	0.0	11.2	11.2	0.0
629	Cyclohexane	10.5	0.0	10.5	0.0
4	Acrylic acid and its water-soluble salts	6.8	0.0	6.8	0.0
12	Acetaldehyde	6.6	0.0	6.6	0.0
56	Ethylene oxide	4.9	0.0	4.9	0.0
80	Xylene	4.7	0.0	4.7	17.3
20	2-Aminoethanol	0.1	2.9	3.0	0.0
300	Toluene	3.0	0.0	3.0	6.8
7	Butyl acrylate	2.1	0.0	2.1	0.0

### Trends in Emissions of PRTR Substances



### Key Terminology

#### PRTR (Pollutant Release and Transfer Register)

A system for registering the discharge and movement of pollutants. Under the system, operators report the release of chemical substances into the air, water, and soil and transfer of waste to government agencies that gather, organize, and publish the data.

# Waste Reduction

## Reducing the Volume of Waste Sent to Off-site Landfills for Disposal

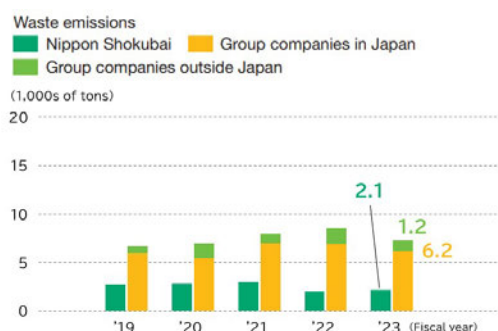
Promoting waste reduction is vital among efforts to form a sound material-cycle society. Nippon Shokubai sorts, collects, and recycles waste in addition to making other efforts consistent with our goal of achieving and maintaining zero emissions (volume of waste sent to off-site landfills for disposal is 0.1% or less of the total volume of waste).

In FY2023, in addition to continuing to rigorously sort and collect and promote recycling, we reduced the volume of waste sent to off-site landfills for disposal and maintained zero emissions by improving processes such that they produce less waste, reusing by-products, and treating product residues on-site.

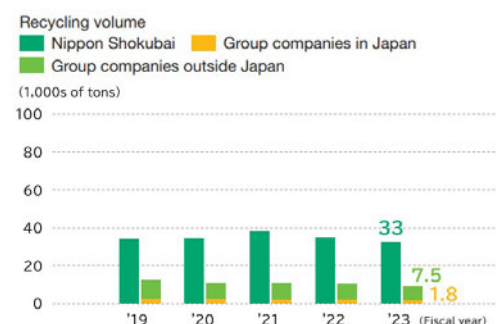
### Diagram of Waste Treatment



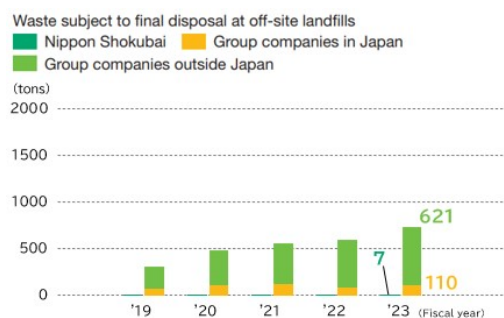
### Trends in the Volume of Waste Emissions



### Trends in the Volume of Recycling



## Trends in the Volume of Waste Sent to Off-site Landfills for Disposal



### Employee's Voice

#### Reducing our environmental impact through material recycling

The department I belong to manufactures ACRYVIEWA™, an acrylic resin for optical films with excellent transparency, optical properties, and heat resistance. During the manufacturing process, waste resin is generated at the start and end of production, and when product types are changed. Traditionally, waste resin has been handed over to waste disposal companies, and then thermal recycling has been performed by this company, in which the thermal energy generated during incineration is recovered and reused. However, this method is not considered to be recycling, as it does not allow recycling of materials after incineration, and a high disposal cost had been a challenge.

As a result of investigating countermeasures, we discovered the option of material recycling, in which the waste resin is sold to recycling companies as raw material for reused plastic. Although we struggled, not having a precedent for selling waste resin generated during the manufacturing process, we identified the technical, legal, and procedural issues and worked with relevant departments to solve each of these.

In particular, I focused on creating a sorting and managing method. In recycling waste resin, it is important to sort and manage it by color tone, as this determines its use and purchase price. After examining a sorting system that takes into consideration the increased workload on workers to continuously implement recycling, I was able to establish a method that maximizes profits and is understood by my colleagues.

In FY2023, through material recycling, we were able to reuse over 99% of the waste resin generated in the manufacture of ACRYVIEWA™, reducing our environmental impact.



Shunpei Konishi  
Fine & Specialty Chemical  
Production Department,  
Himeji Plant

# Air Pollution Prevention

## Efforts to Reduce Environmental Impact by Introducing Catalysts for Treating Exhaust Gas

We are making efforts to reduce emissions of SOx, NOx, and dust to prevent air pollution. We ascertained the emissions of the respective substances, and installed proprietary De-NOx equipment and scrubbers to reduce NOx and dust, respectively, and reduced fuel oil consumption and shifted to natural gas to reduce SOx. We also use proprietary catalysts for treating exhaust gas to purify unutilized materials and other emissions from our manufacturing processes.

None of our emissions exceed the values we agreed upon with the municipal and prefectural governments.

### Nippon Shokubai

	(tons)					
Fiscal year	2018	2019	2020	2021	2022	2023
SOx emissions	3.5	3.5	3.7	3.1	3.0	2.0
NOx emissions	198	203	198	196	186	166
Dust emissions	6.3	6.5	5.7	7.4	6.0	7.6

### Group companies in Japan

	(tons)					
Fiscal year	2018	2019	2020	2021	2022	2023
SOx emissions	1.6	1.4	1.6	1.4	0.7	0.6
NOx emissions	45	43	48	72	52	40
Dust emissions	2.2	3.3	2.1	2.1	1.9	1.4



# Water Resource Conservation

The Nippon Shokubai Group manufactures a wide variety of chemical products, and water is indispensable in the manufacturing process. For example, water is used to prepare water solution products, heat or cool materials in the manufacturing process, clean products, and operate detoxifying facilities that remove chemicals generated in the manufacturing process as well as drainage facilities. Consequently, the continuity of our business depends on our ability to ensure the sustainability of water, which we see as our responsibility to society. In an effort to conserve water resources, we are working to use water efficiently and prevent water pollution by introducing a wastewater collection system that enables acrylic acid contained in wastewater to be collected and reused. In addition, we strive to provide solutions to water problems through our products and technology (see [Environmental Contribution Products](#)).

## Reducing Water Consumption (Efficient Water Use)

The Group aims to reduce water usage in our plants by using and reusing recycled water and making other efforts to use water efficiently.

### Trends in water usage (water withdrawal<sup>\*1</sup>)

(million m<sup>3</sup>)

Fiscal year	2018	2019	2020	2021	2022	2023
Nippon Shokubai	15.0	14.9	14.7	14.8	14.4	14.1
Group Companies in Japan	5.8	5.9	6.0	6.0	6.0	6.0
Group Companies outside Japan	48.6	47.4	47.9	19.8	3.0	3.4

<sup>\*1</sup> Water withdrawal includes surface water, groundwater, seawater, and third-party sources (tap water, industrial water, etc.)

### Trends in water discharge<sup>\*2</sup>

(million m<sup>3</sup>)

Fiscal year	2018	2019	2020	2021	2022	2023
Nippon Shokubai	7.9	7.7	8.0	8.2	7.7	7.7
Group Companies in Japan	5.5	5.6	5.8	5.8	5.8	5.9
Group Companies outside Japan	47.2	46.1	46.6	18.0	1.0	1.0

<sup>\*2</sup> Water discharge includes water discharged into rivers, lakes, the ocean, and sewage

## Trends in water consumption<sup>\*3</sup>

(million m<sup>3</sup>)

Fiscal year	2018	2019	2020	2021	2022	2023
Nippon Shokubai	7.1	7.1	6.7	6.6	6.7	6.4
Group Companies in Japan	0.3	0.3	0.2	0.2	0.1	0.2
Group Companies outside Japan	1.4	1.3	1.3	1.7	2.0	2.4

<sup>\*3</sup> Water consumption = Water withdrawal – Water discharge

## Water Pollution Prevention

To prevent water pollution, we work to eliminate the environmental impact of wastewater at all plants through high-level purification of wastewater from manufacturing processes, specifically by introducing high-performance activated sludge treatment equipment, which is capable of consistently treating even heavy-duty wastewater.

All emissions of chemical oxygen demand (COD), total phosphorus, and total nitrogen for our wastewater are at levels below municipal and prefectural agreements.

### Nippon Shokubai

(tons)

Fiscal year	2018	2019	2020	2021	2022	2023
COD of wastewater	55	50	50	56	45	34
Total phosphorus emissions	2.9	2.7	2.5	2.6	2.3	2.5
Total nitrogen emissions	58	55	52	56	57	28


### Group companies in Japan

(tons)

Fiscal year	2018	2019	2020	2021	2022	2023
COD of wastewater	53	60	61	55	72	53

## Products and Technologies Providing Solutions to Water Issues

We develop and sell water treatment agents and wastewater treatment catalysts for wet air oxidation and decomposing hazardous substances in wastewater (See [Environmental Contribution Products](#)),

osmotic pressure-generating agents for seawater desalination and wastewater treatment (See Page 23 of the [TCFD Report 2024](#)  ), and other products to help solve problems with water resources.

## Water Risk Assessment

---

To assess water risk, the Nippon Shokubai Group uses the Aqueduct Water Risk Atlas, developed by the World Resources Institute (WRI) to determine whether any of our production sites are located in areas of high water stress. As a result of a reassessment following the update<sup>\*1</sup> of the tool, two production sites were identified as being in areas of high water stress.<sup>\*2</sup> However, both sites are promoting initiatives to secure additional water resources and reduce water usage, and there are no issues related to water risks.

We take appropriate measures to reduce these risks in addition to conducting regular water risk assessment at each production site.

<sup>\*1</sup> Aqueduct 4.0 Current and Future Global Maps Data (August 16, 2023)

<sup>\*2</sup> The Group defines areas of high water stress as those that have an Aqueduct Baseline Water Stress of “Extremely High” or “High.”

# Biodiversity Preservation

The Nippon Shokubai Group believes biodiversity preservation is a key issue in efforts toward sustainability based on the realization that all business activities both benefit from and impact biodiversity. One of our Environmental Protection Policies is to seek to minimize the negative impact of our business activities and develop products and technologies that contribute to increasing the positive impacts on ecosystems in an effort to conserve and restore biodiversity, which we believe we can accomplish by sustaining efforts to tackle climate change, conserve the environment through our products, control chemical substances, reduce waste, prevent air pollution, and conserve water resources.

We have also enjoyed the cooperation of local governments, NPOs, and other organizations in implementing volunteer activities by Nippon Shokubai Group employees to protect and restore natural environments in Japan and other countries. Through these activities, we learn the value of preserving and restoring biodiversity and aim to empower people to conceive of and take actions to help the environment.

## Biodiversity Risk Assessment

We conducted a survey on the proximity of major production sites of the Nippon Shokubai Group to protected biodiversity areas located within a 3 km radius by using the Integrated Biodiversity Assessment Tool (IBAT<sup>\*1</sup>).

The survey has confirmed that all production sites are not in close proximity to IUCN Category<sup>\*2</sup> Ia, Ib, II, or III areas (required to be strictly protected), World Heritage Sites,<sup>\*3</sup> or Ramsar Convention Wetlands.<sup>\*4</sup> However, IUCN Category IV, V, and VI areas have been found adjacent to many of the production sites (see [attached table](#) ).

Fully aware of such an environment, we will continue to work to minimize the negative impact of our business activities on the ecosystem and strive to preserve biodiversity.

<sup>\*1</sup> [IBAT](#) (Integrated Biodiversity Assessment Tool): developed and provided through a partnership of BirdLife International, Conservation International, International Union for Conservation of Nature (IUCN), and United Nations Environment World Conservation Monitoring Centre (UNEP-WCMC).

<sup>\*2</sup> [IUCN Categories](#) : IUCN Protected Area Management Categories are assigned to legally protected areas by national government agencies to allow international comparison between national protected area networks, based on management objectives of a protected area. Ia – Strict Nature Reserve; Ib – Wilderness Area; II – National Park; III – Natural Monument or Feature; IV – Habitat/Species Management Area; V – Protected Landscape/Seascape; VI – Protected Area with Sustainable Use of Natural Resources

<sup>\*3</sup> World Heritage: A landmark or area which is selected by the UNESCO as having cultural, historical, scientific or other form of significance, and is legally protected by international treaties. The sites are judged important to the collective interests of humanity.

<sup>\*4</sup> Ramsar Wetlands: protected by national governments to fulfil their obligations under the Convention on Wetlands of International Importance (commonly called the “Ramsar Convention”).

# Activities for Biodiversity Preservation and Restoration

## Forest conservation activities

### Creating the “Yugawara Myriad Leaves Forest”

Location: Kajiya, Yugawara-machi,

Ashigarashimo-gun, Kanagawa Prefecture

Description of activities: Forest maintenance,  
nature observation events, etc.

Duration: Since November 2013

We have implemented forest maintenance and held nature observation events in the headwater forest of the Niizaki River in the town of Yugawara. In November 2023, we hold the 10th anniversary event in the forest with Yugawara town hall staff, our outsourcing of our forest organization, and our employee. We enjoyed making tokens with leaves and cutting cedar tree branches.



Yugawara Myriad Leaves Forest

### Past activities

[Click here for the Past Activities.](#)

## PT. Nippon Shokubai Indonesia “Tree-Planting” in a Biodiversity Park

Location: Ciomas, Serang, Banten Province,  
Republic of Indonesia  
Description of activities: Tree-planting in 10 ha  
area in Ciomas  
Duration: Since November 2023

PT. Nippon Shokubai Indonesia has started a new activity “Tree-planting” in a Biodiversity Park in Ciomas, Serang, Banten, Indonesia with the help of a local non governmental organization (NGO: named “Rekonvasi Bhumi”) and Cisit Village Community. We recognize that conserving water sources in the region where we are located as well as preserving biodiversity are important efforts for our sustainability initiatives. We held an opening ceremony on “Indonesian Tree Planting Day 2023” (November 28), attended by members of the Banten Provincial Environmental Agency, local forest conservation groups, and others.



Biodiversity Park in Ciomas Serang Banten

### “Nojigiku” (*Chrysanthemum Japonense*) preservation and popularization

To rescue, preserve, and popularize the nojigiku (*Chrysanthemum japonense*)—the endangered prefectural flower of Hyogo—the Himeji Plant has dedicated roughly 2,000 m<sup>2</sup> of its greenery yard to cultivating 160 varieties of the flower (including foundation stocks).

The plant began cultivating the flowers in 1972, and has worked with the Hyogo prefectural government to distribute seedlings each year since 1974.

In FY2023, we distributed 16,000 seedlings to 218 organizations, including local governments, kindergartens, elementary and junior high schools and community associations.



The “nojigiku” preservation garden

## Number of important biodiversity areas within 3 km radius of Nippon Shokubai production sites by IBAT<sup>\*1</sup>

As of 15th February, 2024

Site name	Location	IUCN Category <sup>*2</sup>	World Heritage <sup>*3</sup>	Ramsar Wetlands <sup>*4</sup>
NIPPON SHOKUBAI CO., LTD. Himeji Plant	Himeji Hyogo, Japan	2 (V, VI)	0	0
NIPPON SHOKUBAI CO., LTD. Kawasaki Plant	Kawasaki Kanagawa, Japan	3 (IV, IV, IV)	0	0
NIPPOH CHEMICALS CO., LTD. Chimachi Factory	Isumi Chiba, Japan	2 (IV, VI)	0	0
CHUGOKU KAKO CO., LTD	Kurashiki Okayama, Japan	1 (IV)	0	0
NIPPON NYUKAZAI CO., LTD. Kawasaki Plant	Kawasaki Kanagawa, Japan	3 (IV, IV, IV)	0	0
NIPPON NYUKAZAI CO., LTD. Kashima Plant	Kamisu Ibaraki, Japan	0	0	0
TOKYO FINE CHEMICAL CO., LTD. Yokosuka Factory	Yokosuka Kanagawa, Japan	3 (IV, V, VI)	0	0
NISSHOKU TECHNO FINE CHEMICAL CO., LTD.	Ichikawa Chiba, Japan	2 (IV, VI)	0	0
NIPPON SHOKUBAI AMERICA INDUSTRIES, INC. Houston Plant	Houston Texas, USA	1 (V)	0	0
NIPPON SHOKUBAI AMERICA INDUSTRIES, INC. Chattanooga Plant	Chattanooga Tennessee, USA	1 (V)	0	0
NIPPON SHOKUBAI EUROPE N.V.	Antwerp Belgium	2 (IV, VI)	0	0
SINGAPORE ACRYLIC PTE LTD	Singapore	0	0	0
PT.NIPPON SHOKUBAI INDONESIA	Cilegon Banten, Indonesia	0	0	0
NISSHOKU CHEMICAL INDUSTRY (ZHANGJIAGANG) Co., Ltd.	Zhangjiagang Jiangsu, China	0	0	0
SINO-JAPAN CHEMICAL CO.,LTD. Kaohsiung Factory	Taipei, Taiwan	0	0	0

<sup>\*1</sup> IBAT (Integrated Biodiversity Assessment Tool): developed and provided through a partnership of BirdLife International, Conservation International, International Union for Conservation of Nature (IUCN), and United Nations Environment World Conservation Monitoring Centre (UNEP-WCMC). The IBAT provides key decision-makers with access to critical information on biodiversity priority sites to inform risk management and decision making processes that address potential biodiversity impacts.  
Excerpt from IBAT Proximity Reports generated on 03 March 2023 (GMT) under licence 29422-40461. [www.ibat-alliance.org](http://www.ibat-alliance.org)

<sup>\*2</sup> IUCN Categories: IUCN Protected Area Management Categories are assigned to legally protected areas by national government agencies to allow international comparison between national protected area networks, based on management objectives of a protected area. <https://www.biodiversitya-z.org/content/iucn-protected-area-management-categories>  
Ia - Strict Nature Reserve; Ib - Wilderness Area; II - National Park; III - Natural Monument or Feature; IV - Habitat/Species Management Area; V - Protected Landscape/Seascape; VI - Protected Area with Sustainable Use of Natural Resources

<sup>\*3</sup> World Heritage: A landmark or area which is selected by the UNESCO as having cultural, historical, scientific or other form of significance, and is legally protected by international treaties. The sites are judged important to the collective interests of humanity.

<sup>\*4</sup> Ramsar Wetlands: protected by national governments to fulfil their obligations under the Convention on Wetlands of International Importance (commonly called the Ramsar Convention).



# Environmental Accounting

We base our environmental accounting on the *Environmental Accounting Guidelines for Chemical Companies* published in 2003 by the Japan Chemical Industry Association (JCIA) and the Japan Responsible Care Council. We also refer to the *Environmental Accounting Guidelines 2005* of the Ministry of the Environment.

## Costs and benefits of environmental protection (Nippon Shokubai alone)

Duration: April 1, 2023–March 31, 2024

Category Key Activity	Investment (millions of yen)	Cost (millions of yen)	Outcome
<b>Business area cost</b> <b>1. Pollution prevention cost</b> Preventing air/water pollution, controlling hazardous substance emissions	69	2,387	No pollution problems occurred.
<b>Business area cost</b> <b>2. Global environmental protection cost</b> Energy-saving activities and activities to tackle climate change	0	4,511	Saved 6,703 kL (crude oil equivalent) during the period.
<b>Business area cost</b> <b>3. Resource circulation cost</b> Properly treating/disposing of industrial waste	14	708	Achieved zero emissions through sorted collection and recycling of waste.
<b>Upstream/downstream cost</b> Reusing resources	0	65	Reusing some drums and containers.
<b>Administration cost</b> Operating environmental countermeasure systems, obtaining/maintaining ISO 14001 certification	0	735	Obtained certification for all plants, enhancing environmental management systems.
<b>R&amp;D cost</b> Developing eco-friendly products, reducing environmental impact in manufacturing processes	0	3,076	Researching and developing Environmental Contribution Products.
<b>Social activity cost</b> Donating to environmental causes	0	20	Engaging in Nippon Shokubai Forest Conservation Activities.
<b>Environmental remediation cost</b> —	0	4	—
Total	84	11,506	

## Economic Benefit Associated with Environmental Protection Initiatives (Actual Benefits)

Details of Benefit		Amount (millions of yen)
Revenue	Operating revenue from the sale of recycled waste products and used products produced through key business activities	8
Cost reduction	Reductions in energy costs through energy conservation	2,151
	Reductions in waste disposal costs through resource	4,086
Total		6,245

Reference: Total investment during the period: 10,162 million yen / Total R&D cost during the period: 14,210 million yen

### Key Terminology

#### Environmental accounting

A system employed by companies and others seeking sustainable development to quantitatively understand, analyze, and publish the costs and benefits of environmental conservation activities in the context of business activities to the extent.

# Initiatives for Society

- Respect for human rights >
- Human resources management >
- Diversity & Inclusion >
- Process Safety and Disaster Prevention >
- Occupational Safety and Health >
- Chemical Safety >
- Quality >
- Supply Chain Management >
- Corporate Citizenship >

# Respect for Human Rights

## Policy

## Structure & Initiatives

### Basic Policy on Human Rights

This policy has been approved by the Board of Directors of NIPPON SHOKUBAI CO., LTD.

#### Basic Stance on Human Rights

Based on our Group Mission “TechnoAmenity: Providing prosperity and comfort to people and society, with our unique technology,” the Nippon Shokubai Group aims to realize a sustainable society by solving social issues through business activities. The people involved in Group business activities are the foundation of the sustainable growth of society and the Group. It is important to respect their human rights.

In order to respect the human rights of everyone whose human rights may be directly or indirectly affected by Group business activities, the Group is promoting efforts to respect human rights by establishing this “Basic Policy on Human Rights” (hereinafter referred to as the “Policy”) to supplement our Code of Conduct and other guidelines from the perspective of respect for human rights, and to further clarify our approach to respect for human rights.

#### 1. Commitment to Respect for Human Rights

The Nippon Shokubai Group considers respect for human rights to be important and supports the 10 Principles of the United Nations Global Compact. Within these initiatives, the Group shall respect human rights in line with human rights norms such as the Universal Declaration of Human Rights, the International Bill of Human Rights (consisting of the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights), and the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work.(\*). We shall comply with the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises, and ensure compliance with the relevant laws and regulations of the countries in which we operate.

If there is a discrepancy between internationally recognized human rights principles and the laws and regulations of each country in the occurrence of human rights violations, we will operate with respect for internationally recognized human rights principles to the greatest extent possible.

We are also committed not to tolerate or be complicit in threats, intimidation, or attacks against human rights defenders, and to work with these defenders to create a safe and

effective environment for civil action and dialog and respect for human rights at the local, national, and international levels.

(\*) Includes support and respect for core labor standards such as the prohibition of child labor, prohibition of forced labor, elimination of discrimination, recognition of freedom of association and the right to collective bargaining, and principles of occupational health and safety.

## **2. Responsibility to Respect Human Rights**

The Nippon Shokubai Group will fulfill its responsibility to respect human rights by ensuring that there is no infringement on the human rights of all people involved in Group business activities, and by taking appropriate corrective measures in the case of any adverse impacts on human rights that may arise from Group business activities.

## **3. Scope of Application**

This Policy shall apply to all business activities of the Nippon Shokubai Group, and all directors and employees shall comply with this Policy. It is also expected that our suppliers and business partners will understand and commit to respecting all human rights described in this Policy in order to more widely implement activities based on the UN Guiding Principles on Business and Human Rights.

This Policy includes respect for the human rights of all business partners; when suppliers, business partners, or other related parties are associated with an adverse impact on human rights, the Group will require these suppliers, business partners, and/or related parties to respect and not violate human rights in accordance with this Policy.

## **4. Human Rights Issues**

Human rights issues to be addressed by the Nippon Shokubai Group as defined by international norms and human rights issues considered to be particularly important are listed below. These human rights issues shall be appropriately reviewed from time to time based on changes in Group business and social conditions. We expect our suppliers and business partners also to make a commitment to respect human rights on all issues described herein.

## **5. Human Rights Due Diligence**

The Nippon Shokubai Group shall establish a human rights due diligence system to be incorporated as a required process in business activities. The system shall be implemented on an ongoing basis.

## **6. Dialog and Consultation**

In the process of implementing this Policy, the Nippon Shokubai Group will utilize independent, external human rights expertise and will engage in sincere dialog and consultation with rights holders and related stakeholders.

## **7. Education**

The Nippon Shokubai Group will continually provide appropriate education to directors, employees and others to ensure that a correct understanding of this Policy is disseminated internally and externally, and that it is effectively implemented. We also expect our suppliers

and business partners to provide their workers with appropriate education on human rights and to support their efforts when necessary.

## **8. Remedies**

If it is found that the business activities of the Nippon Shokubai Group have directly caused an adverse impact on human rights, or if it is found that the Nippon Shokubai Group is involved, is suspected of being involved, or is contributing to such an impact through its business partners, we will make remedial efforts through dialog and appropriate procedures in accordance with international norms.

In addition, we will maintain reporting desks for internal and external access to remedies required for this purpose, and continuously evaluate the effectiveness of corrective and remedial measures.

## **9. Management**

The Nippon Shokubai Group will clearly identify the officer in charge of the implementation of this Policy and supervise its implementation.

## **10. Disclosure**

The Nippon Shokubai Group will disclose the progress and results of its initiatives on respect for human rights on the Company website and in other media.

Enacted March 2022

Revised July 1, 2024

## (Appendix)

### 1. Human Rights Issues Addressed by the Nippon Shokubai Group

The following are human rights issues that the Nippon Shokubai Group respects and addresses as defined by international norms. These human rights issues shall be appropriately reviewed from time to time based on changes in Group business and social conditions. We expect our suppliers and business partners also to make a commitment to respect human rights on all issues described herein.

#### Discrimination

- Prohibition of discrimination based on gender, age, nationality, ethnicity, race, birthplace, religion, creed, disability, sexual orientation, gender identity, etc.

#### Workers' rights

- Prohibition of child labor
- Prohibition of forced labor (including foreign and migrant workers)
- Prohibition of human trafficking
- Respect for freedom of association and the right to collective bargaining
- Prevention of low-wage work (work below minimum wage or living wage)
- Prevention of excessive working hours (commitment to ILO conventions on labor standards)
- Prohibition of power harassment and sexual harassment
- Ensuring occupational safety
- Ensuring the health of workers (including mental health)

#### Rights of vulnerable people related to business operations

- Respect for the rights of local residents in the areas where business is conducted
- Respect for land, natural resources, and indigenous peoples' rights \*1
- Respect for the rights of women \*2
- Respect for the rights of children \*3
- Respect for the rights of minority groups
- Respect for the rights of the elderly, et cetera
- Respect for the rights of immigrants and refugees \*4
- Respect for environmental rights held by future generations
- Respect for the rights of access to water and sanitation
- Respect for the rights of human rights defenders

\*1 Including respect for the rights described in the Voluntary Guidelines for Responsible Governance of Land Use, Fisheries and Forest Ownership in the Context of National Food Security (VGGT), IFC Performance Standards, ILO Indigenous and Tribal Peoples Convention 1998 (No. 169), and the UN Declaration on the Rights of Indigenous Peoples, etc., and obtaining free, prior and informed consent (FPIC) from indigenous peoples.

\*2 Including respect for the Convention on the Elimination of All Forms of Discrimination against Women

\*3 Including respect for the Convention on the Rights of the Child

\*4 Including respect for the International Convention for the Protection of the Rights of All Migrant Workers and Members of Their Families

#### Privacy and Freedom of Expression

- Respect for privacy and digital protection, including the protection of personal information of customers, employees, and others
- Respect for the right to freedom of expression

### 2. Human Rights Issues Salient to the Nippon Shokubai Group

The following are human rights issues that the Nippon Shokubai Group considers to be particularly important in terms of human rights issues to be addressed by the Group. These human rights issues shall be appropriately reviewed from time to time based on changes in Group business and social conditions.

#### Prohibition of discrimination

Under no circumstances will the Nippon Shokubai Group discriminate on the basis of gender, age, nationality, race, ethnicity, social status, origin, ideology, creed, religion, physical characteristics, sexual orientation, gender identity, disease, or disability. The Group respects the human rights of all people and will not engage in any act of unfair discrimination or any act that offends individual dignity for any reason whatsoever.

#### Prohibition of forced labor and child labor

Under no circumstances will the Nippon Shokubai Group permit forced labor, slave labor or human trafficking. Neither will the Group tolerate forced labor, slave labor, or human trafficking in the supply chain. The Group prohibits labor by children who have not reached the working age stipulated by the laws and regulations of each country or region.

#### Good labor-management relations

The Nippon Shokubai Group respects the right to form or join labor unions and to engage in collective bargaining and peaceful assembly in accordance with the relevant laws and regulations of each country and region.



#### Appropriate working hours

The Nippon Shokubai Group will ensure sound employment and labor practices, and will comply with the relevant laws and regulations of each country and region in the treatment of its employees, including wages, working hours and leave.

#### Prohibition of harassment

Under no circumstances will the Nippon Shokubai Group engage in discriminatory, threatening or offensive language or behavior, whether mental or physical, toward others, including sexual harassment, power harassment or maternity harassment.

#### Respect for diversity

The Nippon Shokubai Group promotes the creation of a workplace environment and culture where employees respect and recognize one another's diversity as they work and grow together. New value shall be created through the synergy formed by maximizing the individuality and capabilities of each and every person as a professional.

#### Personal Information and Privacy Protection

The Nippon Shokubai Group respects the privacy of individuals and collects personal information only to the extent that is necessary and appropriate. Personal information that is collected will be strictly managed and will not be disclosed to third parties or used for any other purpose, except as permitted by law or with the prior consent of the individual concerned.

This Policy is prepared in Japanese and English, and shall be disclosed to all stakeholders, including all Group employees, business partners, suppliers, and local communities through publication on the Nippon Shokubai website.

**Structure & Initiatives →**

# Respect for Human Rights

## Policy

## Structure & Initiatives

### Management Structure

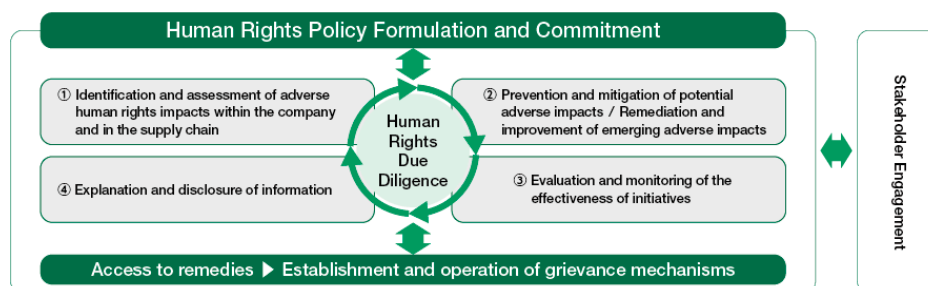
Nippon Shokubai Group policies and strategies regarding respect for human rights, as well as the evaluation of performance, are determined by the TechnoAmenity Promotion Committee, which is headed by the President and consists of directors and executive officers of the Company. The results are reported to the Board of Directors as necessary.

Daily operations, including the formulation and implementation of plans and measures based on policies and strategies, are carried out in cooperation with related departments and Group companies, led by the Sustainability Promotion Department of the Company.

### Human Rights Due Diligence

The Nippon Shokubai Group will establish a human rights due diligence mechanism in accordance with procedures based on the United Nations Guiding Principles on Business and Human Rights to prevent and mitigate adverse human rights impacts and to implement corrective measures.

If it becomes clear that the Group's business activities are causing or encouraging human rights violations, corrective and remedial measures will be taken. In addition, if the Group's products or services are directly involved in human rights violations due to business relationships, even if Group business activities have not caused or encouraged such violations, the Group will work to correct the situation.



Human Rights Due Diligence Process

Initiatives drawing on international human rights guidance and risk assessments commenced in FY 2021. We have identified potential adverse human rights impacts of Group business activities, primarily within the Company, and have taken measures to prevent or mitigate these impacts.

From FY 2023 on, we will expand our scope to include external parties to further improve our human rights due diligence and have begun to identify rights holders who may be adversely impacted through our business activities and supply chain, salient human rights issues, and our own priority issues.

\*Rights Holder: A person who is the subject of human rights and who is or may be subject to human rights violations through the activities of a company.

## Identification and assesment of adverse human rights impacts

To assess human rights risks, we have identified the human rights issues that need to be considered throughout our business activities and supply chain, and the rights holders who may be adversely impacted.

Based on the extracted human rights issues, we investigated and confirmed the specific human rights risks and their occurrence with relevant stakeholders. Using these results, we created a human rights risk map and identified salient human rights issues.

For the salient human rights issues where we determined that sufficient measures have not been taken, we will be set as our priority issues. We will implement measures to prevent, mitigate, and remediate the adverse impacts on each human rights issue and continue to engage in ongoing human rights due diligence.

\*Human Rights Risks: The potential adverse impacts on human rights caused by business activities.

Human rights issues identified as targets of human rights risk assessment
Insufficient, unpaid or living wages, Excessive and unreasonable working hours, Working environment, health and safety, right to social security, Power harassment, sexual harassment, maternity/paternity harassment, nursing care harassment, Forced labor, Freedom to move residence, Freedom of association and collective bargaining, Rights of migrant workers, Child labor, Human rights violations associated with the use of the Internet, ICT (Information and Communication Technology), AI, etc., Right to privacy, Consumer safety and right to know, Discrimination, Human rights issues related to gender, Freedom of expression, Rights of indigenous and local peoples, Human rights issues related to climate change, Intellectual property rights, Bribery and corruption, Human rights issues in the supply chain, Right of access to remedy, Access to natural resources (including water resources), Deforestation, Air and ocean pollution, Waste and hazardous substance emissions, Damage to ecosystems and biodiversity, Security, Business in conflict countries, Expansion into pre- and post-conflict countries, Relationships with countries with low human rights awareness, Money laundering and transparency (including tax avoidance)
Rights holders that could be adversely impacted by our business activities
Nippon Shokubai employees (including contract and temporary employees), employees of business partners (customers, suppliers, logistics companies, production contractors, etc.), subcontractor employees, consumers, and local community members  * The above includes particularly vulnerable to adverse impacts on their human rights, such as women, children, migrant workers, indigenous peoples, minorities, and human rights defenders, etc. *Other relevant stakeholders: labor unions/worker representatives, NPO/NGOs, experts, investors/shareholders, national and local governments
International Norms and Guidelines Referenced
Universal Declaration of Human Rights, International Bill of Human Rights, Ten Principles of the UN Global Compact, International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work, UNEP FI (United Nations Environment Programme Finance Initiative) Human Rights Guidance Tool, and various guidelines formulated by the Ministry of Economy, Trade and Industry and the Ministry of Justice, etc.

## Access to Remedies (Establishment of Reporting Desks)

---

The Nippon Shokubai Group has established reporting desks that can be used by internal and external stakeholders to freely report and discuss facts and questions regarding human rights violations in the course of Group business activities. In addition, we respect the wishes of whistleblowers regarding the disclosure or nondisclosure of the content of the report and whistleblower names, and we protect whistleblowers. Group regulations stipulate the prohibition of any disadvantageous treatment, such as retaliation, for reports or allegations.

We do not condone or tolerate human rights violations, and when a report or allegation about a failure to respect human rights is received, an appropriate investigation is conducted. If a specific problem is recognized, measures are taken to correct the situation and to encourage corrective action.

## Human Rights Awareness and Education

---

From the “Nippon Shokubai Group Code of Conduct: 4. Respect for Human Rights,” the Nippon Shokubai Group clearly states that it supports international norms on human rights, respects the human rights of all people involved in Group business activities, prohibits discrimination and harassment, and prohibits and does not tolerate forced labor and child labor not only within the Group but also in the supply chain. In addition to initiatives disseminating the Code of Conduct to Group employees, we have incorporated compliance training on human rights-related topics as part of our level-specific and onsite training programs. We are also implementing harassment prevention training for managers in a timely manner to deepen the understanding of respect for human rights among Group employees and to foster a corporate culture of respect for human rights.

In FY2023, training was conducted for managers of domestic and overseas Group companies to raise awareness of the Code of Conduct, with approximately 800 employees participating.

## Initiatives toward Respecting Human Rights in the Supply Chain

---

Nippon Shokubai promotes sustainable procurement activities to ensure respect for human rights throughout the supply chain.

### Related links

[Supply Chain Management](#) 

# Human resources management

Human resources  
management system

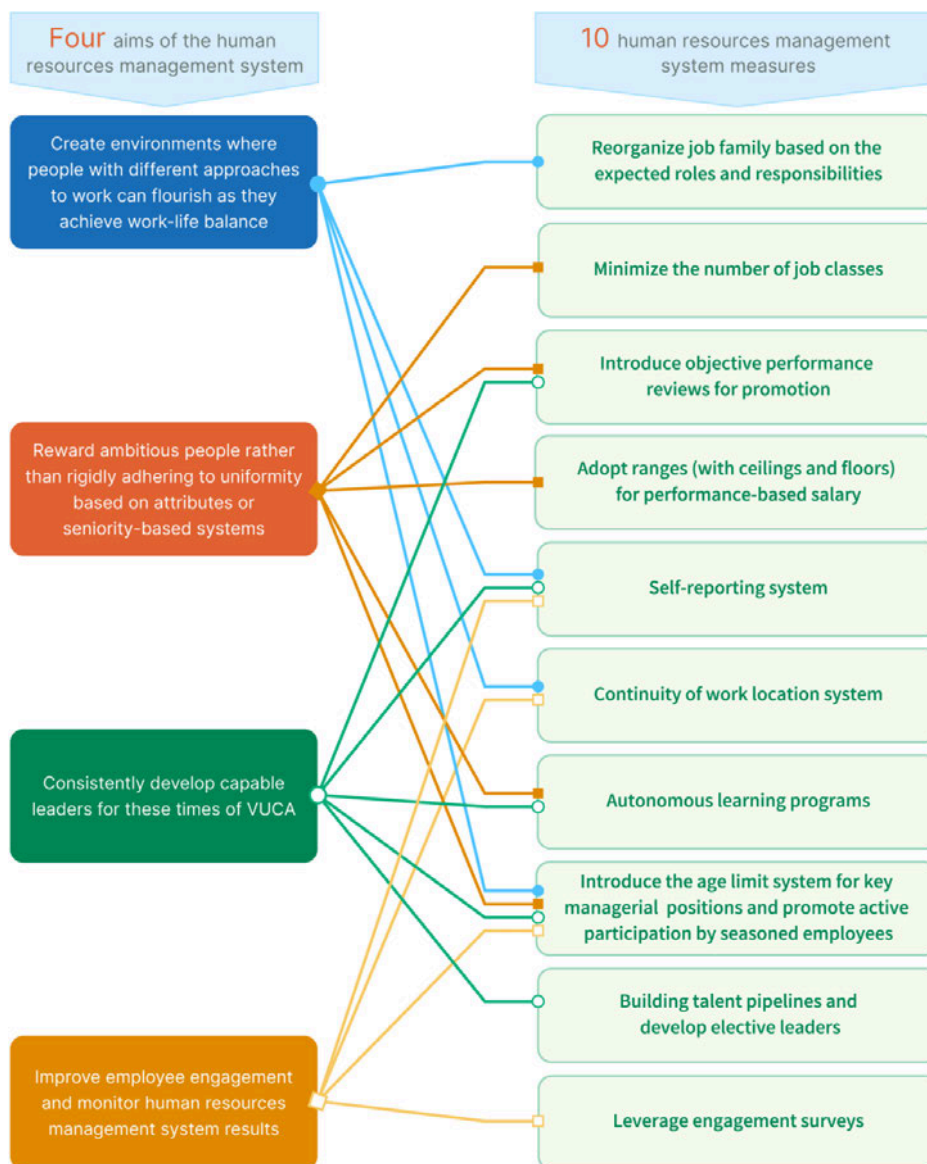
Talent acquisition

Talent development

## Human resources management system

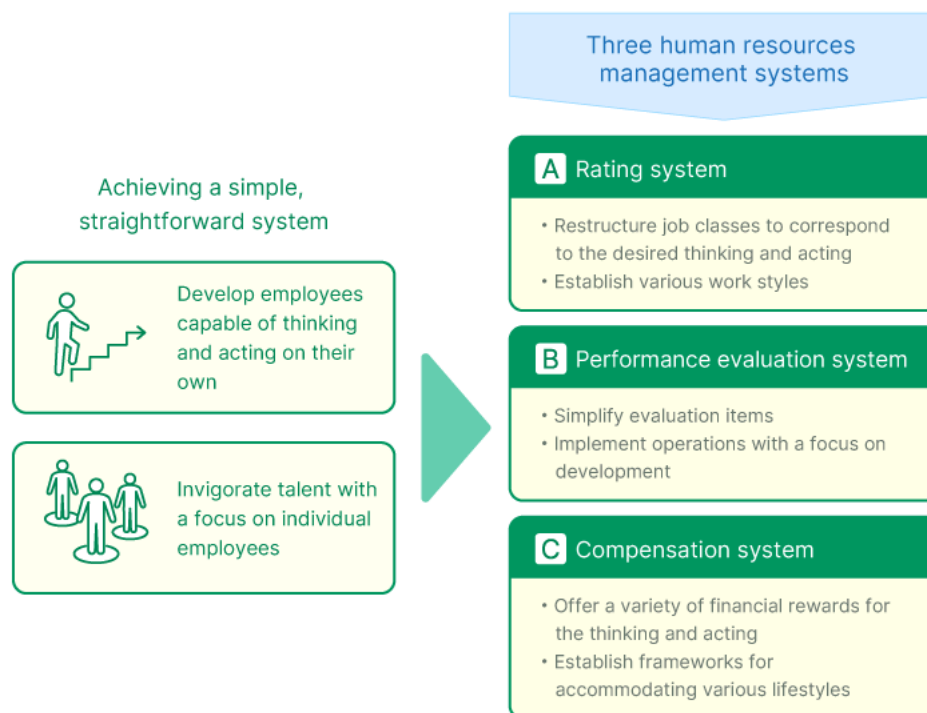
To promote our transformation into a company where diverse talent can flourish as they work in a constantly growing organization, we have established a human resources management system that encourages employees to think and act on their own and leverages their individual qualities and attributes. Our system aims to foster the personal motivation to grow by empowering ambitious, skilled employees to pursue more important roles and greater responsibilities as soon as they wish to.

## Transformation in our Human resources management system



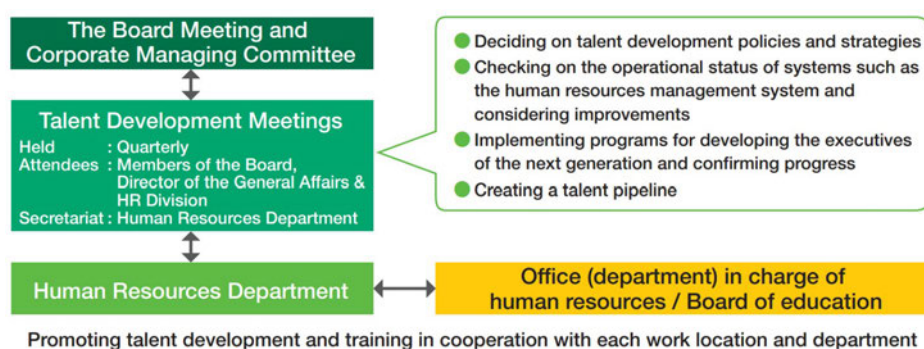
### Concept of our Human resources management system: “think and act” and diversity

We have established three core human resources management systems based on the concept of “think and act” and diversity.



## Structure

All members of the Board attend talent development meetings, which are held periodically to check on the progress of talent development initiatives, the operation of the human resources management system, and the development of the executives of the next generation, as well as to implement and review measures such as the construction of a talent pipeline. The Human Resources Department also promotes talent development and training in cooperation with each work location and department.



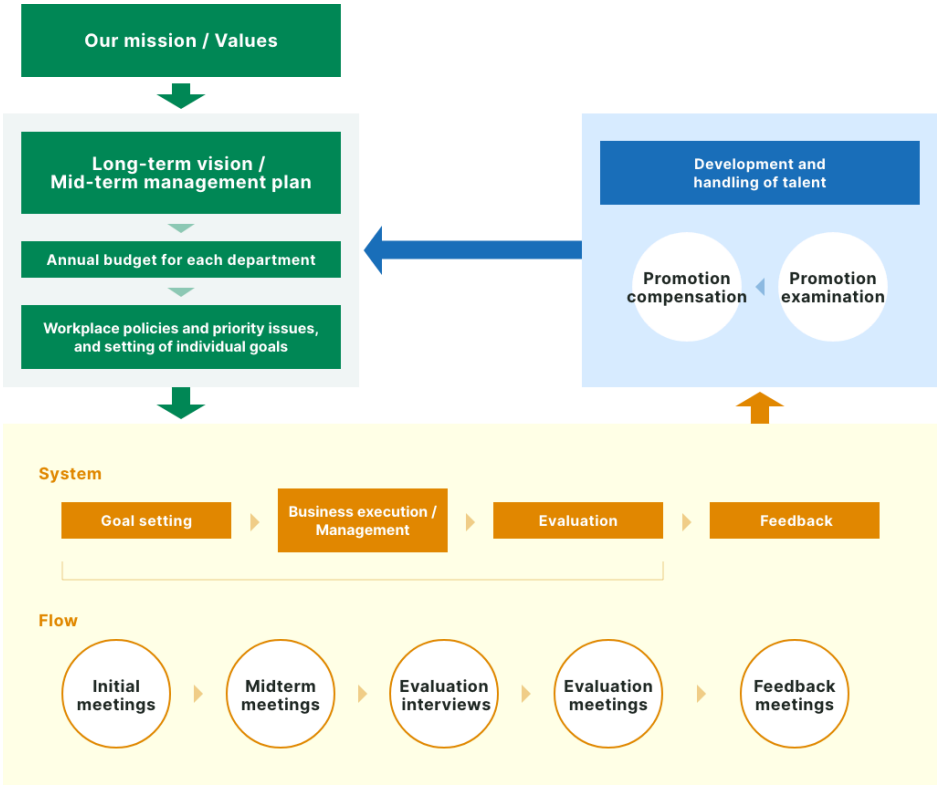
## Evaluation and compensation

We have established and are operating an evaluation system that evaluates the capabilities, results, and attitudes required to achieve organizational goals, focusing on the specific actions of employees. The evaluation system is used to develop and utilize talent, promote appropriate compensation based on the demonstration of an employees' capabilities, and identify their level of performance and areas for improvement.

Goal setting involves consulting with supervisors and subordinates, setting personal goals and processes, and supervisors communicating the expectations they have regarding growth to their subordinates. At the end-of-term evaluation interview, the degree of achievement of the goals are



confirmed, and the supervisor carries out an evaluation. Each individual's compensation is determined based on that evaluation.



## Systems that promote the invigoration of human resources with a focus on individual employees

### Self-reporting

Each employee writes down own vision of career development and has a consultation with supervisor once each year. This provides opportunities for employees to think about their careers in addition to helping the Company understand employees' thoughts and circumstances, information the Company can use to develop employees and examine ways to get them more actively involved.

### The continuity of work location

We have introduced the continuity of work location system as a measure to promote diverse work styles and to secure talent. Employees who would like to avoid changing work locations for childcare, nursing care, or other personal reasons may continue to work at their current office for as long as they wish.

### Administering engagement surveys

Once each year, we administer an engagement survey to all employees to enhance their engagement by providing assistance for group invigoration activities at each workplace. The survey results are used to quantitatively evaluate the circumstances of each organization, and division leaders clarify organizational challenges and take steps to improve on them. This leads to the improvement of

organizations and engagement as we administer progress surveys to verify the impact of the measures.

### **Promoting active participation by seniors**

We provide training that helps seasoned employees reflect on their careers and consider ways to exhibit their strengths to the fullest to enable them to work independently over the long term as we approach an era in which people live for 100 years. We are also working on measures to support career independence, for example enrolling employees in a practical program that allows them to experience working for other companies without giving up their current positions.

# Human resources management

Human resources  
management system

Talent acquisition

Talent development

## Talent acquisition

### Basic concept

Our basic policy is to conduct recruitment activities fairly, without discrimination based on gender, age, nationality, race, ideology, disability, etc. Based on the belief that diversity of thought and inclinations is what creates new innovation, we promote the acquisition of talent with a diverse range of values, experiences, and skills, which will lead to the sustainability of both society and Nippon Shokubai.

### Initiatives and achievements

#### Hiring results

	FY2021	FY2022	FY2023
<b>Number of new graduate</b>	98	84	76
<b>Female</b>	14	12	15
<b>Number of mid-career hires</b>	15	44	41
<b>Female</b>	4	12	9
<b>Percentage of mid-career</b>	13.3%	34.4%	35.0%

### Enhancing talent acquisition through a diverse range of approaches

The acquisition of talent is an extremely important part of realizing our long-term vision: “TechnoAmenity for the future.” We are using a variety of approaches in acquiring talent, including strengthening the recruitment of doctoral candidates, promoting the recruitment of foreign nationals, and actively utilizing mid-career recruitment.

In addition to the conventional hiring methods, we have introduced new recruitment methods such

as hiring through referrals from our employees, “comeback hiring” for employees who have worked at our company in the past, and “position search hiring,” where we find a position for candidates based on their past experience and skills. We will continue to take various approaches to acquire the talent essential to our growth.

# Human resources management

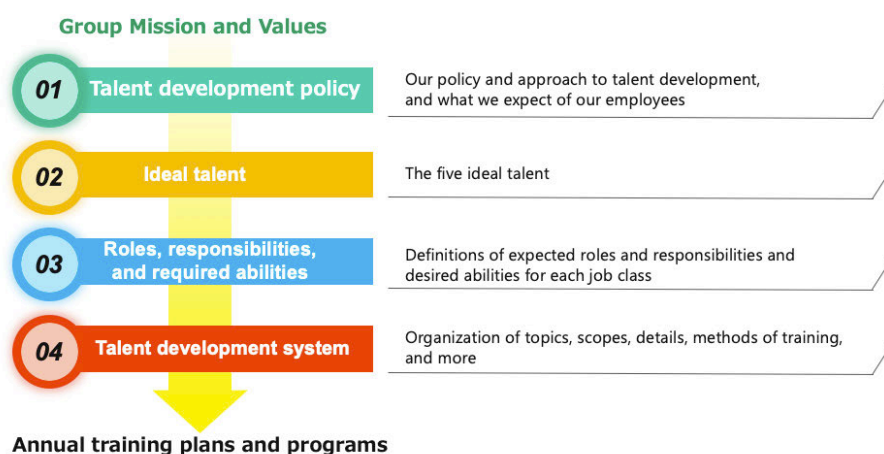
Human resources management system

Talent acquisition

Talent development

## Talent development

### Overall vision for talent development



### Talent Development Policy

The Nippon Shokubai Group **views employees as essential assets based on the recognition that people are the source of constant value creation.**

The following three points are the focus of our talent development.

1. **Utilizing the individuality, willingness, and abilities of diverse talent**
2. **Providing support to talent who think, act, and grow on their own initiative**
3. **Fairly evaluating and rewarding employees under company systems**

To become a chemical company that continuously evolves based on an acute awareness of changes in society, **we implement and promote the invigoration of talent with a focus on individual employees so that they can exhibit their individual strengths to the fullest.**

## Ideal talent

In talent development, the Company and employees are on equal footing; the Company provides employees with opportunities for growth and expects them to have high aspirations and motivation to grow as well as to contribute to the Company.



## Definition of ideal talent

### Respect for Diversity & Inclusion

People who respect and acknowledge each other's differences and can contribute organizations where everyone can grow and flourish. People who can improve productivity by enhancing the psychological safety of organizations.

### Collaboration

People who as members of an organization can create synergy by cooperating with other members to achieve a goal. People who can work to maximize organizational value through effective communication within the organization.

### Challenge & Action

People who interpret things positively and can think and take action on their own. People who can facilitate individual and organizational development by taking on challenges without fear of failure.

### Professional

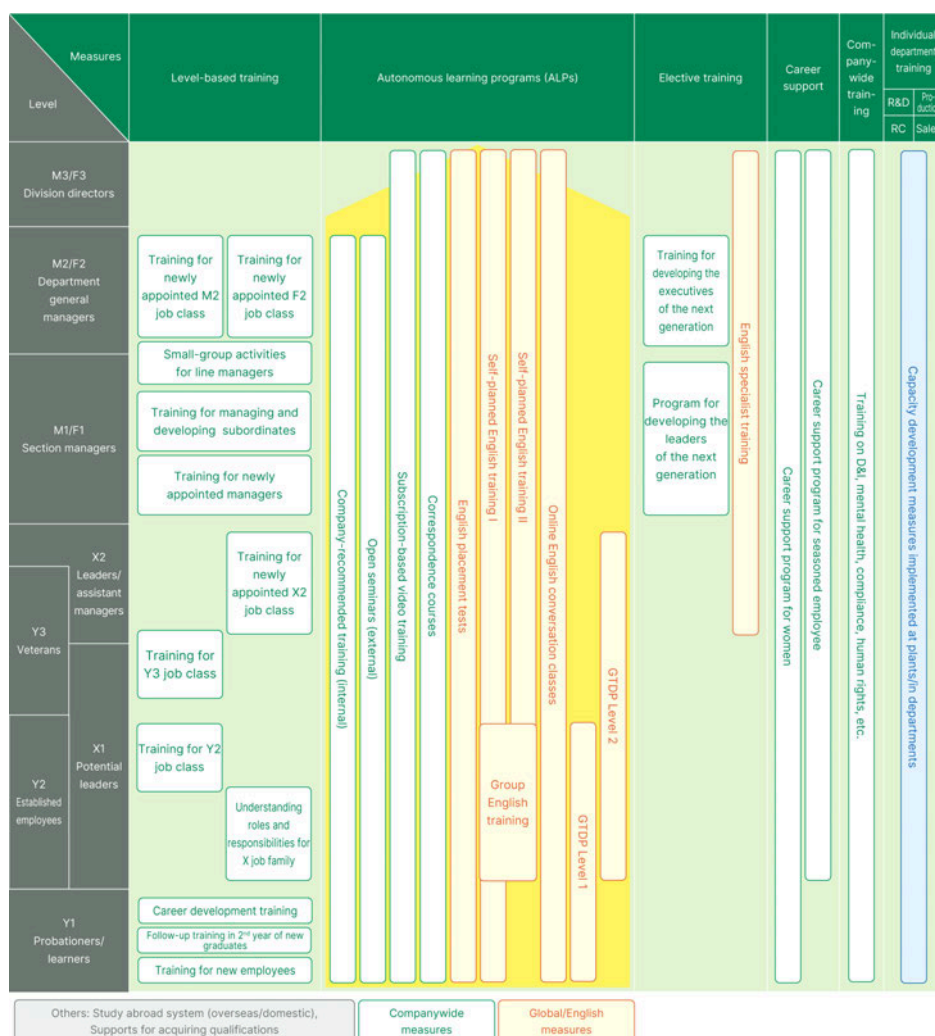
People who can contribute to the organization as professionals with a sense of pride and responsibility for their job. Also, people who proactively work to improve their skills with the aim of becoming professionals.

## Globalization

- People who can adapt flexibly to changes in the external environment based on an awareness and understanding of global standards (e.g. international standards, rules, ideas, systems).
- People who can use their understanding of foreign cultures as well as their linguistic ability and other components of effective communication to expand their fields of expertise in addition to creating opportunities and produce results for organizational development.

## Talent development system

On-the-job training (OJT) is the basis of employee growth and the foundation of learning from working experience in actual positions and workplaces. The process promotes growth as trainees receive support from their supervisors and fellow employees. We concurrently create opportunities for off-the-job training—learning from training and other experiences outside the workplace—to foster among each and every employee the motivation to create a vision of the person they want to be in terms of ideal talent and to enhance their own value to achieve that vision.



## Developing autonomous talent



We promote the development of autonomous talent who find their own purpose and take the initiative to work toward solutions rather than waiting for instructions. We visualize the skills required for each job family and advancement in terms of the definition of the different job classes under the Human resources management system and the matters considered for advancement. In addition to ongoing level-based training, we provide opportunities for each and every employee to apply their skills in systematic learning to progress toward the next level. Specifically, we have enhanced Company-recommended training named “autonomous learning programs (ALPs)” in which employees can choose and participate in order to improve their skills and abilities, and have made other efforts to establish a system allowing everyone to develop their capacities effectively and efficiently.

## Developing talent for leaders

We are implementing a variety of measures to cultivate leaders who can drive the organization.

Specifically, we offer training for developing the leaders of the next generation, which aims to cultivate the leaders who will lead the organization using rank-based education, as well as selective education, with the Future Leaders Development Program (FLDP) for section managers and the Next Leaders Development Program (NLDP) for general managers, in which we select participants based on certain criteria with the aim of developing the next generation of executives who will bring about innovation.

We have also extended invitations to roundtable management discussions—previously conducted for general managers throughout the Company—to section managers as well, and are conducting manufacturing manager training, which lasts 18 months and specializes in developing potential section managers for manufacturing divisions.



Leaders training

## Developing talent who will be active Globally

At any given time, more than 50 Japanese employees are seconded to overseas affiliates. As our overseas sales revenue accounts for more than 50% of our Group's total sales, it is increasingly important to develop talent who can play active roles on a global scale. We have a program to dispatch employees to overseas affiliates for short periods of time, as well as a study abroad program where employees can study for up to two years at an overseas graduate school.



Global talent development program

# Diversity & Inclusion

## Diversity & Inclusion

## Work-life balance

### Diversity & Inclusion

Nippon Shokubai has set “respecting diversity” as one of the common values of our Group, and we see the promotion of diversity and inclusion (D&I) as essential for sustainable growth. In this age of rapid change where it is difficult to predict the future, the promotion of D&I is an important management strategy, and it is necessary to bring together people from a diverse range of backgrounds to speak from various perspectives and share ideas, leading to the creation of innovation.

In addition, the Nippon Shokubai Group Code of Conduct prohibits discrimination on the basis of gender, age, nationality, race, ethnicity, social status, origin, ideology, creed, religion, physical characteristics, sexual orientation, gender identity, and the presence or absence of disease or disability. In response to the changing values of our increasingly diverse employees regarding their career and work styles, we are implementing various D&I promotion measures.

#### D&I Promotion Policy

We have formulated a D&I Promotion Policy in order to respect the diversity of our employees. We recognize diverse ability, individuality, and value of each individual and unify them to enhance collective strength of Nippon Shokubai Group. We are implementing various measures to become an organization in which everyone can flourish in their own way.

##### < D&I Promotion Policy >

1. We will create a working environment and culture where employees can work with diversity and mutual respect, and grow together.
2. Each employee, as a professional, will make every effort to show his or her individuality and ability, that will lead to innovation.
3. By enriching and balancing employee's work and life, each employee will improve his or her motivation and maximize their ability, thereby make great achievements

## D&I promotion system

The promotion of D&I at Nippon Shokubai started in 2019 with the President's recommendation of the "Women's Empowerment Project," which consists of five women in core managerial positions. In response to our expansion of D&I, we established the D&I Promotion Group in the Human Resources Department in 2021, and we are working to create an environment, systems, and culture in which diverse talent can play an active role and thrive.

Under our long-term vision, "TechnoAmenity for the future," we have set targets for the ratio of female hires, the ratio of female managers, and the ratio of male employees taking childcare leave. The Corporate Managing Committee reviews and discusses the progress of these targets and the measures undertaken, demonstrating management's commitment to promoting D&I.

### History of the promotion system

2019	Launched the Women's Empowerment Project Proposing company tasks and measures to enhance the promotion of women's participation and advancement in the workplace
2021	D&I Promotion Group established in the Human Resources Department Promoting the development of an environment, systems, and culture in which diverse talent can play an active role and thrive

## Message from the Management on D&I Promotion

D&I in our company means that diverse employees, not only diverse in race, nationality, gender, age, or disability, but also diverse in ability, individuality and values of each individual, respect each other, demonstrate and integrate their abilities, and create new value. In this age of rapid change where it is difficult to predict the future, we must respond flexibly to change, understand issues from the customer's perspective, and continue to provide products that help solve a diverse range of issues. This is why I believe that promoting D&I as a source of innovation is the key to achieving our long-term vision of "TechnoAmenity for the future."



We introduced the new human resources management system in April 2022, which is based on the proper evaluation of individual abilities and achievements instead of academic background or seniority.

In addition to our existing flextime and teleworking systems, we have also introduced a continuity of work location system, which enables employees to work flexibly according to their individual circumstances.

In our current situation, I believe that the first indicators to measure the progress of D&I promotion are the ratio of women hires, the ratio of women in managerial positions, and the ratio of men taking childcare leave.

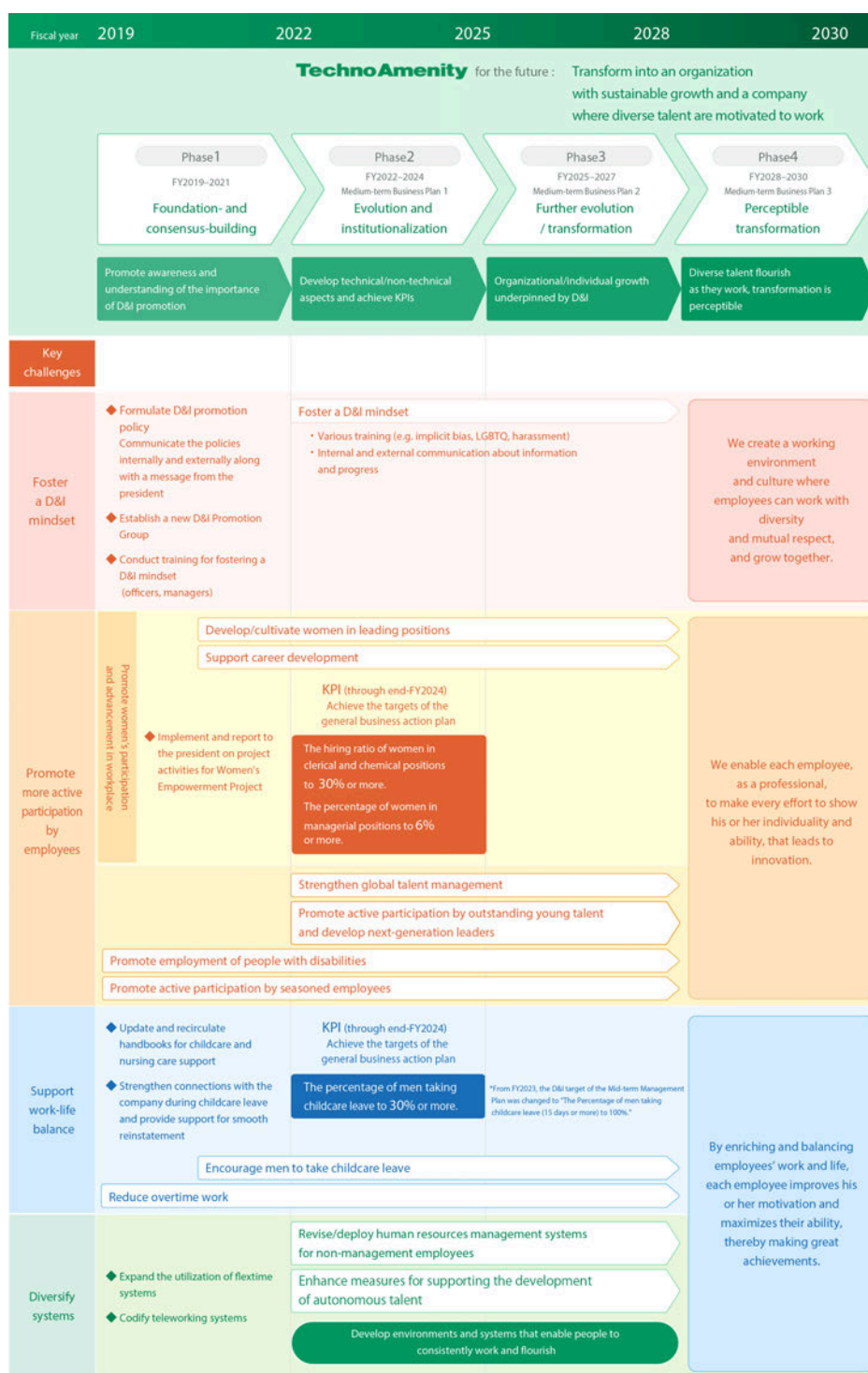
We continue to promote D&I, so that strive for the mutual growing and development of Nippon Shokubai and its employees and to provide new value to society in the future.

Member of the Board, Managing Executive Officer  
Administration, HR, Finance, Accounting, General Affairs & HR Division  
Kuniaki Takagi

## Promoting active participation of diverse talent

### D&I Promotion Roadmap (to FY2030)

We formulated a roadmap to FY2030 after setting out four key challenges for promoting D&I (fostering a D&I mindset, promoting the further empowerment of employees, supporting work-life balance, and the diversification of the corporate system). The human resources department's D&I Promotion Group established in April 2021 is leading our planning and implementation of various measures.



## Promoting women's participation and advancement in workplaces

We have been actively promoting the participation of women in our business activities by actively hiring female employees in our administrative, chemical, and factory divisions. At the same time, we are focusing our efforts on fostering a corporate culture that allows women to continue working if they please, such as by improving our systems.

Our biggest challenge now is to increase the number of women in decision-making positions. To achieve this, we need to fill the pipeline for female employees, and in order to increase the number of female candidates for managerial positions, we need to raise the ratio of female employees across the company. Accordingly, we have set ratios for the number of female managers and female hires as indicators for promoting the active participation and advancement of women.

## Increasing the ratio of female managers

We are working to raise the ratio of female managers to 6% by the end of FY2024. In order to achieve this goal, we believe it is necessary to further deepen a correct understanding of D&I in management and communication, particularly among managers, and to appropriately improve both the rate and speed of the promotion of women to section managers, which tends to be lower than that of men.

Based on this philosophy, we are promoting a deeper, more correct understanding by carrying out D&I management training for executives and line managers, as well as video training for managers.



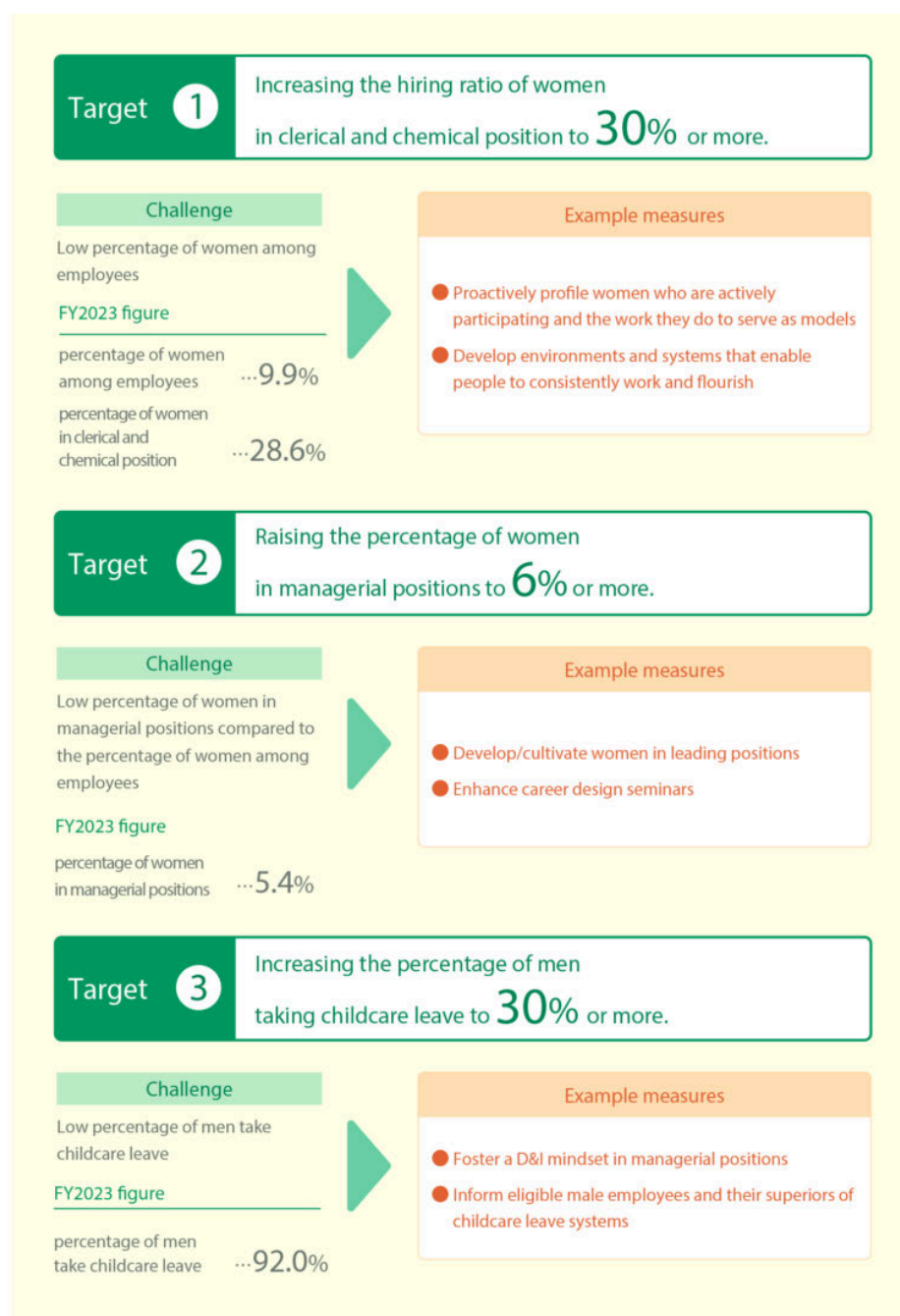
## Increasing the ratio of female hires

We have set a target of increasing our ratio of female hires to at least 30% for administrative and chemical department positions in FY2024. At least 30% of new employees in the administrative and chemical departments will be women, and we are aiming to build a talent pipeline that maintains this ratio. In order to achieve this target, we are actively promoting the creation of an environment that is friendly and welcoming to women, introducing female employees who are currently playing an active role in the company, and more.

## Initiatives under the Next-Generation Children Act and the Women's Participation and Advancement Promotion Act

Based on the Act on Advancement of Measures to Support Raising Next-Generation Children (Next-Generation Children Act) and the Act on Promotion of Women's Participation and Advancement in the Workplace (Women's Participation and Advancement Promotion Act), we set goals and an action plan for the period from April 1, 2021 to March 31, 2025.





## Promoting the active participation of foreign employees

In anticipation of further expansion of our business across the globe, we continue to hire foreign nationals in Japan as well as in our Group companies in other countries.

## Promoting the active participation of employees with disabilities

We are committed to employing people with disabilities, who are playing active roles in various jobs at each of our workplaces.

Moreover, NS Green Co., Ltd., our designated Group subsidiary established from the perspective of promoting the employment of people with disabilities, is in charge of the management of green spaces of manufacturing plants, and also grows seedlings of chrysanthemum in small pots every year. In FY 2023, the pots are distributed to approximately 218 organizations for free, thereby supporting the urban greening project by the prefectural government.



## Promoting the active participation of employees who have been rehired past the compulsory retirement age

We have introduced a job-based re-employment system that enables employees to continue working after compulsory retirement up to age 65 with a high level of motivation. We currently have more than 100 experienced rehired retirees who are contributing to the passing on of core techniques and helping to develop young talent. With an eye on the era of 100-year lifespans, we offer second-career training, programs for work experience outside the company (cross-border work), and more to support each employee in becoming a professional in their own life.

## LGBTQ inclusion

The Nippon Shokubai Group Code of Conduct states that discrimination based on sexual orientation or gender identity is not permitted.

- Establishment of a dedicated counter  
We have set up an LGBT helpline to help those with LGBTQ-related issues, including harassment and difficulties with coming out.
- Benefits for same-sex partners  
As of April 2024, if an employee notifies the company that they have a same-sex partner, the company will treat said partner in the same way as spouses with respect to certain leave, leave of absences, and benefit systems. In order to foster a culture that makes it easier for employees to use the system, we are considering measures and working to create an environment that makes it easier for said employees to work.  
Applicable in-house programs: Marriage, bereavement, care and nursing leave, childcare and caregiving leave, company housing systems, and the employee welfare club

## D&I training and lectures

### D&I management training

The promotion of D&I is not driven by a specific department. It cannot be promoted without the understanding and cooperation of each and every department and business site. This training is first conduct for executives and line managers to foster a D&I mindset and promote innovation.

Program	Details
Promoting D&I as a management strategy	D&I promotion as a corporate growth strategy, our D&I Promotion Policy, and promoting women's participation and advancement in the workplace as a touchstone of D&I
Developing and managing a diverse workforce	How to unleash the potential of a diverse range of employees and deal with unconscious biases
Making the most of a diverse range of talent to strengthen the company	Changing the way we work – Reflecting changes caused by the COVID-19 pandemic and the best practices of leading companies

### In-house compliance training (D&I promotion)

As part of our in-house compliance training, we carried out D&I promotion training for all employees. The Nippon Shokubai Group Code of Conduct stipulates “respect for human rights” and the “promoting the active participation of diverse talent.” We are deepening our understanding of D&I in

order to foster an organizational culture that embraces D&I.

After viewing the video material, participants reflected on their work and actions taken at their workplaces, identified what they could and could not put into practice, and discussed positive responses and solutions for each workplace.

## In new employee training (D&I promotion)

D&I training for new employees, we foster awareness by explaining what D&I is, the significance of our efforts, and how each individual's efforts will help create a positive D&I culture.

Program	Details
What is D&I? The background regarding its promotion	Why organizations need D&I, management strategies, and the risks for organizations lacking D&I
The first step to D&I	Specific actions to be taken, unconscious biases, and psychological safety
Nippon Shokubai's initiatives	Our D&I Promotion Policy, past initiatives, and current status

## Networking training for female employees

Starting in FY2021, we have been carrying out networking training for female employees with the aim of helping participants develop their skills and shape their careers in a way that allows them to be themselves while finding fulfillment and job satisfaction, as well as facilitating networking among female employees. This training incorporates a lot of work and dialogue, and by expressing themselves verbally, they can gain a new understanding of themselves and learn a lot from others. In addition, by involving supervisors in these activities, we are able to stimulate communication between them as well.

Session 1	Introduction Lecture: "Working in My Own Way – Vitalizing the Company and Enriching Life"
Session 2	Career Training (Career Design) Proactively directing yourself to lead a professional life that is uniquely your own
Session 3	Career Training (Self-Leadership) Learning the elements of leadership that engage others in problem-solving at the workplace and in your career
Session 4	Exchange with internal and external role models
Session 5	Declaration of action by participants

## Second career training

Second career training is held for employees aged 52 and up with the goal of having them reaffirm their own values and skills, helping them to map out their future career plans in light of possible changes in the environment. In order for senior employees to work with enthusiasm, it is important for them to make independent career choices. Participants take stock of their career and verbalize their strengths and values in order to deepen their self-understanding. They then consider their career options and design their future careers.

Program	Details
Thinking about future work styles and money	Think about how you want to work and until what age, taking financial factors into consideration
Self-understanding	Identifying your strengths, characteristics, and values, which you can utilize in your future career
Considering your career options	Expand your potential by considering your future career options from two different perspectives
Design your future career	Put into words what you want to be after age 60, and think about what you can and want to do moving forward

## Cross-cultural communication training

We provide cross-cultural communication training so that employees can acquire the knowledge and common language necessary for working with people from different cultures. Targeted at those who have numerous opportunities to communicate with people from different cultures, both in Japan and overseas, approximately 20 people take this course every year. Participants gain an understanding of differences in culture, communication styles, work styles, problem-solving methods, and more, considering and learning how to behave in a different culture through pair work and discussions.

Program	Details
A mindset for accepting different cultures	Rather than blindly denying or ignoring differences in the culture, values, and common sense of others, learn to adopt a mindset of accepting them and utilizing them in your own work
Four styles of collaboration for understanding different cultures	Four styles of collaboration that help promote an understanding of various differences so that challenges can be found and a mutual compromise can be reached
Communication skills for reaching out to people from different cultures	Learn communication skills that help you reach out to those who are different from yourself

# Diversity & Inclusion

## Diversity &amp; Inclusion

## Work-life balance

## Work-life balance

We have established systems that go beyond the legal requirements regarding time off and leaves of absence, working hours, and income considerations to accommodate life events such as childcare and nursing care, and we have been working to raise awareness of these systems.

In addition to supporting flexible work styles such as with our teleworking system and flextime, we are working to provide even greater support for employees to balance their work and life, such as revising our system to allow employees to take accumulated leave regardless of the reason.

### Promoting work-life balance

#### Providing balanced assistance for work, child care and nursing care

To create a better environment that supports employees with their parenting and nursing responsibilities while employed, we are working to establish systems and raise the awareness of our employees. We have published a guidebook that summarizes our balanced support system to keep the users of the system informed, while working to improve the system so that users can easily obtain the understanding of and cooperation from their superiors and coworkers.

\* Number of persons taking childcare leave of absence: 81 (FY 2023 total)

\* Return rate from child care leave of absence : 100% (FY2023)



The Osaka Labour Bureau of the Ministry of Health, Labour and Welfare granted us an authorization for complying with Standards for General Employers under the Next Generation Nurturing Support Measures Promotion Law.

#### Raising the percentage of male employees taking childcare leave

We set a goal of raising the percentage of male employees taking childcare leave to at least 30% by the end of FY2024, and have promoted initiatives such as cultivating a D&I mindset among managers and creating a handbook to raise awareness of the childcare leave system. When the Act on Childcare Leave/Caregiver Leave was revised in October 2022, we established a new system for childcare leave after birth that provides paid leave for up to 15 calendar days of an employee's leave period. As a result, we were able to achieve our target, reaching 51.1% in FY2022. We have now raised our target to the challenging goal of 100% of male employees taking childcare leave of at least 15 days\*, and are further promoting the development of a corporate culture and systems that make it easier for all eligible employees to take childcare leave, regardless of the organizational structure or work situation in each department.

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	The goal of FY2024
<b>The percentage of male employees taking childcare leave</b>	9.0%	5.9%	7.2%	51.1%	92.0%	30.0%
<b>(After change) Percentage of male employees taking childcare leave (15 days or more)</b>	–	–	–	36.4%	90.0%	100.0%

## Reduce overtime work and promote flexible working styles

We are working to reduce overtime work and promote flexible working styles. The Working Hours Management Committee, established by both labor and management, monitors the overtime performance of all employees on a monthly basis and endeavors to reduce them. For employees who have worked long hours, we conduct monthly health checks by having them speak with or be interviewed by an industrial physician, and provide guidance to the employee's supervisor based on the results of the health check.

In addition, we have introduced a system that allows employees to take paid leave on a half-day or even hourly basis, a teleworking system, and a unique flextime system has no core hours and allows employees to work less than the specified working hours.

We will continue to create a comfortable working environment that takes the work-life balance of our employees into consideration.

\* Average monthly overtime hours per person: 15 hours (FY2023)

\* Percentage of annual paid leave taken: 90% (FY2023)

## Promoting mental and physical health management

To maintain and improve the mental and physical health of our employees, we have introduced various measures to help them to manage their health. Administered by our industrial physicians and occupational health staff, these efforts revolve around the health promotion office in each of our business offices. Specifically, we conduct general and specialized health examinations and provide tailored health advice in cooperation with the Nippon Shokubai Health Insurance Union. Together, we arrange health checks with dentists in addition to family health checks and the like. We also offer educational activities such as in-house lectures, physical strength measurement sessions and sports event on a regular basis. We have formulated a Mental Health Plan aimed at staving off mental and physical illnesses. At the same time, we are working to improve productivity and create a bright and lively workplace by providing stress checks and level-based training focusing on mental health education for all employees. In FY2019, we held 10 sessions of line care training targeting around 550 managers throughout the company. In FY2021 and FY2022, we provided web video training to young people and mid-career employees, respectively.



Mental health training

## Main systems and measures taking work-life balance into consideration

Annual paid leave	Employees are granted 16 days per year upon joining the company and 20 days per year after their fifth year of service. This time off can be taken in increments of one day, a half day, or even hourly.
Accumulated leave system	Up to 5 days of unused paid leave can be accumulated per year, up to a total of 50 days, and can be taken regardless of reason.
Special paid leave	Assignment leave/Protective leave/Marriage leave/Bereavement leave/Special leave/Public duty leave
Flextime system	Working hours are managed on a monthly basis instead of a daily basis. There is no core time. If you work at least one hour a day, you can work less than the designated working hours per month.
Teleworking system	Can be used up to 10 days per month.
Cross-border employment system	Conditions and procedures are currently in place for employees aged 52 or older to work outside the company.
Overseas accompaniment leave system	Employees can take a leave of absence of up to five years to accompany their spouse on an overseas assignment.

Childcare leave system	Employees can take childcare leave in two installments to care for children under three years old.
System for childcare leave after birth	Employees can take a leave of absence for childcare purposes in two installments up to a total of four weeks within eight weeks of the date of birth or expected date of birth. It provides paid leave for up to 15 calendar days of an employee's leave period.
Nursing leave system	When an employee needs to care for a child up to the age of elementary school, they can take leave in hourly increments up to 5 days per year if they have one child, and up to 10 days per year if they have two or more children.
Childcare reduced working hours system	Employees can reduce their working hours by up to two hours a day in order to raise their children, up to the child reaching the third grade of elementary school.
Caregiver leave system	Employees can take leave up to three times, for a total of 365 days, to care for a family member who requires it (*).
Nursing care leave system	When nursing care is required for a relative (*) in need, up to 5 days of leave can be taken per year for one family member, and up to 10 days a year for two or more family members.
Nursing care reduced working hours system	In order to care for a relative (*) who is in need of nursing care, an employee can reduce their designated working hours to six hours per day. This can be used up to two times per care recipient within a three year period.

\*Parents, spouses, and children of the employee and their spouse, and grandparents, siblings, or grandchildren of the employee.

## **Toward a sound labor-management relationship**

Nippon Shokubai and the Nippon Shokubai Labor Union, a member of the Japanese Federation of Energy and Chemistry Workers Unions, maintain a dialogue based on mutual respect as their basic stance. Respecting the three rights of labor and through a good labor-management relationship based on mutual understanding and trust, we are addressing the resolution of various issues and achievement of goals through cooperation. Regarding collective bargaining, we have specified the scope of negotiations, procedures, the method of settlement, and other matters in collective labor agreements so that various issues can be properly solved and overcome through dialogue. Moreover, meetings of the central labor-management council and meetings of the branch labor-management council at each plant are held periodically as forums for exchanging opinions between labor and management. The company and the union have concluded a union shop agreement under which all our general employees join the union.

# Process Safety and Disaster Prevention

All Nippon Shokubai employees engage in various activities to ensure safety based on our Safety Philosophy, “Safety takes priority over production.”

## Basic Approach to Safety Issues

We have incorporated the lessons learned from the accident at the Himeji Plant in 2012 to reinforce our basic approach to safety issues. We have clarified our Safety Philosophy, Safety Oath, and the safety management principles presented below, as well as the roles of the company at each organizational level, and are ensuring that all employees stay fully informed.

### Principles for safety management

The Company’s “Rules for Safety Management” set out the basic principles for safety management, guidelines for manufacturing activities, and more, which we put into practice.

Excerpt from basic principles for safety management

(1) Ensure safety based on our Safety Philosophy, “Safety takes priority over production.”

Guidelines for manufacturing activities

(1) When you detect anything out of the ordinary during operations, immediately shut down operations. You are not responsible for the consequences of the shutdown.



Safety Philosophy, “Safety takes priority over production”



Safety Oath

## Promotion System

- [RC Promotion System](#)

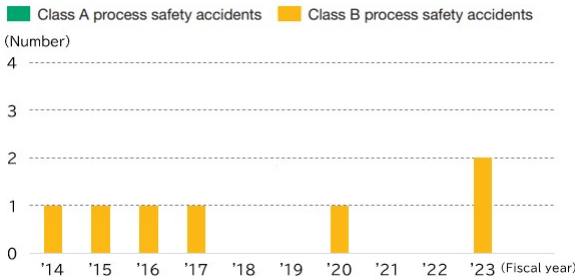


# Targets and Results

FY2023 targets	FY2023 results	FY2024 targets
Class A process safety accidents: 0 Class B process safety accidents: 0	Class A process safety accidents: 0 Class B process safety accidents: 2	Class A process safety accidents: 0 Class B process safety accidents: 0

In FY2023, we had zero Class A process safety accident but had two Class B process safety accidents. We will continue efforts to prevent process safety accidents while continuously improving safety activities.

## Trends in the Number of Process Safety Accidents



# Initiatives

## Message from the President on Safety

During a briefing in the days leading to Safety Oath Day in FY2023, the President emphasized that the foundation of the Company’s survival is safe and stable operations, and to continue on this path, it is important for each and every employee to implement basic safety activities and recurrence prevention measures with on a daily basis in the spirit of our Safety Philosophy of “Safety takes priority over production.” During Safe Operation Month (from September 16 to October 15), safety discussions were held at each workplace to discuss what can be done at each workplace to strengthen the culture of prioritizing safety and what one’s own role and responsibilities are.

## President’s Plant Visits

Again in FY2023, the President visited both the Himeji and Kawasaki Plants actively to have a lively dialogue with the plant employees on topics including safety.



Inspection of Kawasaki Plant by President



Inspection of Himeji Plant by President

## Preventing trouble

Our efforts to prevent trouble include adopting HAZOP as our method of identifying potential risks at plants and systematically implementing it (including both routine and non-routine situations) in addition to consistently implementing change and non-routine work management.

We also implement small group activities—HMI activities at the Himeji Plant and KICS activities at the Kawasaki Plant—to identify deficiencies and promote improvement.

We intend to continue implementing broad-ranging activities to prevent trouble.

## Systematically implementing safety measures

When accidents occur, we analyze the causes from various perspectives and implement countermeasures in addition to reflecting and systematically implementing permanent measures for facilities in maintenance plans. We also systematically promote measures to counter the age-related deterioration of facilities.

## Seismic countermeasures

In light of our experience with the Great East Japan Earthquake in 2011, we have reviewed and undertaken both technical and non-technical measures to prepare for massive earthquakes and tsunami. We also periodically revise and strengthen the measures.

Regarding existing measures to improve the earthquake resistance of high-pressure gas facilities, we have already verified that our spherical tanks with steel pipe braces and gas holders—critical high-pressure gas facilities in terms of seismic design—satisfy earthquake-resistance standards, and have reported that fact to the relevant administrative agencies. We will also continue to implement earthquake resistant measures for piping in FY2024.

## Enhancing education and training

We are striving to enhance training for chemical plant risk management in an effort to strengthen skills and abilities pertaining to safety.

The courses on risk management and other related topics were given in FY2023, as usual, by instructors from the Sanyo Association for Advancement of Science & Technology, in which a total of 51 employees participated.

We also collect and organize “Know-Why” information for use in training to enable trainees at both plants to inherit techniques and understand the basis for procedures and rules.

We intend to continue internal and external training while incorporating the views of our employees in an effort to improve their knowledge and awareness of safety.



A course titled “What Accidents Can Teach Us about Risk Management”



“Chemical plant accident prevention based on actual case study” class

## Verification of safety management activities

In FY2023, as in previous years, the management conducted RC inspections and checked the safety management activities for the Himeji and Kawasaki Plants.

Head Office auditors chaired by the executive officer in charge of the Responsible Care Division also conducted safety audits and verified the implementation status and effectiveness of the safety management system.

## Certified high-pressure gas plants

The Chidori and Ukishima Plants of the Kawasaki Plant were certified by the Ministry of Economy, Trade and Industry in 1989 and 1991, respectively, as entities capable of conducting completion and safety inspections for high-pressure gas certification, and each undergoes screenings for renewal every five years.

This certification allows plants with outstanding voluntary safety systems to continuously operate high-pressure gas manufacturing facilities and conduct their own safety inspections. The certification of the Ukishima Plant was renewed in February 2024.

## Improving emergency drills

Each plant has established a disaster risk reduction system and systematically conducts emergency drills for different types of disasters and accidents each year.

In FY2023, as in the previous year, the emergency drills were conducted at each plant.

By reflecting the issues identified in disaster prevention drills into subsequent drills, we revise and strengthen our disaster risk reduction system as well as education and training.



Comprehensive emergency drill at the Kawasaki Plant



Comprehensive emergency drill at the Himeji Plant



Comprehensive emergency drill at the Suita Research Center



## Strengthening the culture of prioritizing safety

To strengthen the culture of prioritizing safety, it is essential to recognize that safety is not something given by others, but something we must think about and earn on our own, and to reflect this in the organization and our own actions. Both plants are engaging in distinct initiatives in an effort to strengthen the culture of prioritizing safety.

## Preserving memories of accidents

To prevent memories and lessons learned from the 2012 accident from fading and to demonstrate our determination to avoid similar accidents, we held another Safety Oath Ceremony in front of the Safety Oath monument at the Himeji Plant in FY2023 to recommit ourselves to improving our safety capacity.



Safety Oath Ceremony

## Commendations

At the 52th Hyogo High Pressure Gas Safety Managers' Convention, an employee of our Himeji Plant received as an excellent high-pressure gas safety manager.



Receiving award at the Hyogo High Pressure Gas Safety Managers' Convention

### Key Terminology

#### **HAZOP (Hazard and Operability Study)**

A method of evaluating safety in which potential risks at plants are exhaustively identified and corresponding safety measures are systematically investigated for sufficiency.

#### **HMI activities (Himeji Manufacturing Innovation activities)**

Activities to promote improvement and transformation at the Himeji Plant.

#### **KICS activities (Kawasaki Innovation Challenge Sustainable activities)**

Improvement activities aiming to build resilient plants with a comfortable working environment.

# Occupational Safety and Health

Consistent with its goal to completely avoid occupational injuries at the Company and its contractors, Nippon Shokubai implements occupational safety and health activities to improve working environments, reduce risk factors, and promote the creation of comfortable workplaces.

## Occupational Safety and Health Policy

This Policy has been approved by the TechnoAmenity Promotion Committee (which is chaired by the President and composed of inside Members of the Board, Executive Officers and others appointed by the President).

The Nippon Shokubai Group continues to create comfortable working environments and promote occupational safety and health activities together to prevent occupational injuries and health problems and to ensure safety and health for our employees based on the RC Policy.

### [RC Policy](#)

## Promotion System

- [RC Promotion System](#)

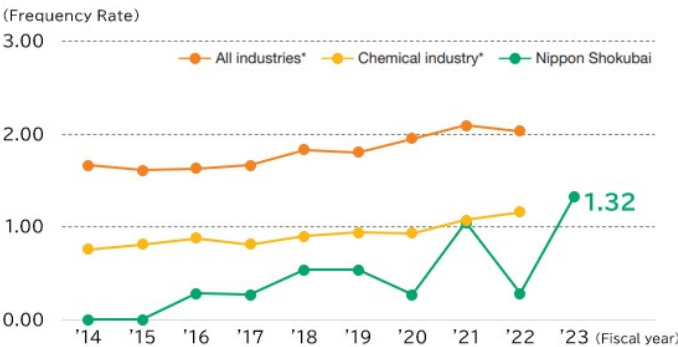
## Targets and Results

FY2023 targets	FY2023 results	FY2024 targets
Zero injuries with loss of workdays Zero injuries without loss of workdays (including contractors)	Nippon Shokubai Injuries with loss of workdays: 5 Injuries without loss of workdays: 4 Contractors Injuries with loss of workdays: 2 Injuries without loss of workdays: 5	Zero injuries with loss of workdays Zero injuries without loss of workdays (including contractors)



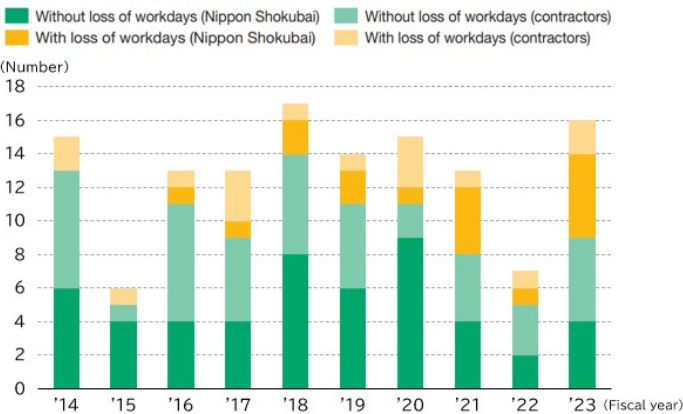
In the past several years, occupational injuries at the Company have often involved younger employees. Similarly, our affiliates report many injuries among relatively inexperienced workers. We intend to enhance safety training to improve risk awareness among younger and less-experienced employees.

### Trends in Lost-time Injury Frequency Rate



Note: Lost-time injury frequency rate: Number of casualties in occupational injuries per 1 million actual working hours  
 \* Source: *Survey on Industrial Accidents*, Ministry of Health, Labor and Welfare

### Trends in Total Number of Occupational Injuries (with Loss of Workdays and without Loss of Workdays)



## Initiatives

### Continuously improving Occupational Safety and Health

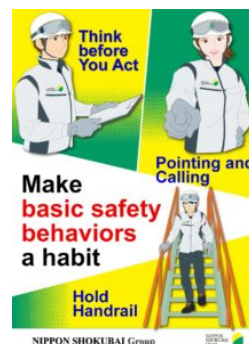
We work to continuously improve occupational safety and health, mainly through our Occupational Safety and Health Management System (OSHMS). We also engage in hazard prediction (KY), near miss analysis 5S activities, and other basic safety activities on a daily basis, and systematically conduct training and drills in an effort to prevent occupational injuries. When occupational injuries occur in the workplace, we explore the causes at the scene, draft countermeasures, and have the Safety and Health Committee evaluate the countermeasures from the perspectives of labor and management to prevent the same or similar injuries from occurring again.

## Prevention of occupational injuries

We work to reduce and eliminate the risks of tasks and substances we work with, not only for routine work but also for new and non-routine work, by assessing them based on our occupational safety and health management system.

### Basic safety initiatives

We recognize the importance of daily safety activities in preventing occupational injuries. Accordingly, we devote energy to KY activities preceding tasks, documenting near misses, and implementing 5S activities in the workplace. We aim to improve daily safety activities by regularly conducting KY training and seminars to maintain and improve risk awareness. Another effort aiming to prevent occupational injuries is posting posters and conducting training to thoroughly inform employees and ensure the rigorous implementation of the three basic safety behaviors: (1) Think before you act; (2) Pointing and calling; and (3) Hold the handrail when stepping on stairs.



### On-site training sessions

Aiming to improve employees' sensitivity and ability to predict potential risks in the field, we provide various hands-on training (see [Himeji Plant Site Report](#) ).

Part of our hands-on training includes experiencing the ignition and explosion of organic solvents caused by static electricity.



Group training (explosion hazard of organic solvents)

### Health-related accommodations for retirees from the Company

Although we have never manufactured asbestos products in our history, some of the insulation materials and sealants we used contained asbestos. Therefore, we respond to health-related consultations from retirees from the Company and set up medical examinations for all who desire them. For more information, please visit our [website](#) .



## **Key Terminology**

### **KY activity**

An activity involving holding meetings before starting tasks to identify potential hazards (unsafe behaviors and conditions) and undertake countermeasures in an effort to prevent injuries.

### **Near miss analysis**

Reflecting on near misses in everyday operations to identify why they occurred and how they could have been avoided, and undertaking safety measures in terms of both facilities and behavior.

### **5S activities**

Promoting and practicing the 5S: sort, set in order, shine, standardize, and sustain.

# Chemical Safety

## Basic Approach

Nippon Shokubai Group promotes chemical product control by complying with laws and regulations, disseminating information, and engaging in other efforts to completely avoid legal and social problems with chemical products throughout their lifecycles based on the RC Policy.

## Promotion System

- [RC Promotion System](#)

## Targets and Results

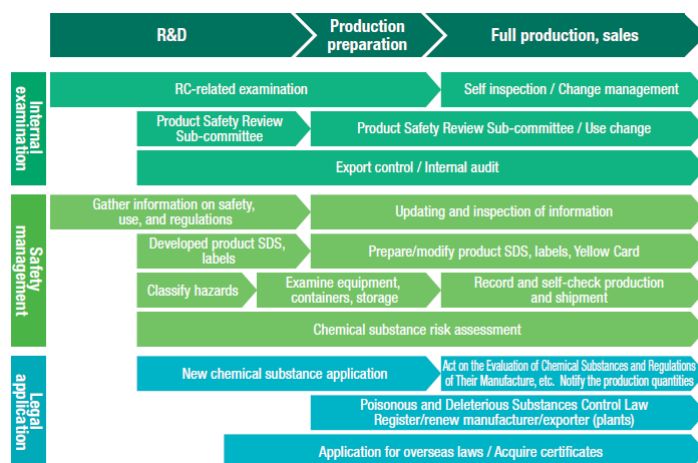
FY2023 targets	FY2023 results	FY2024 targets
Completely avoid (legal/social) problems with chemical products	Cases involving problems with chemical products: 0	Completely avoid (legal/social) problems with chemical products

## Initiatives

### Rigorous chemical product control throughout product lifecycles

We have been conducting thorough chemical management for each stage of products lifecycles from research and development to disposal after usage by establishing operation scheme, rules, systems, etc. to comply with domestic and foreign laws and regulations and providing appropriate information on chemicals safety to customers.

### Chemical Management System



## Efforts toward product safety

We strive to ensure the safety of new products and swiftly put them on the market by appropriately and promptly examining the safety and compliance status throughout the chemical product lifecycles at each stage, from research and development to commercialization.

## Product safety initiatives

We create GHS-compatible Safety Data Sheets (SDS), warning labels, and Yellow Cards to promote the dissemination of information to our customers and the education of our employees. We also conduct strict checks of products intended for different end-uses (e.g. active pharmaceutical ingredients, pesticides, cosmetics, food additives) that include action by the Product Safety Review Subcommittee to comply with the Product Liability Act (PL Act).



Example of an SDS



Example of a warning label

## Operating our chemical substance control system

We established a chemical substance control system to centrally manage information on chemical substances, raw materials, product-related hazards, laws and regulations, and more, and use the system for many purposes, including evaluating risks, preparing SDS, and responding to customers' inquiries about the chemical substances in products. We are also sustaining efforts to update information and improve the functionality of the system, and in FY2020 launched an automatic warning label-creating function based on the system, that we began using for products in development.

## Accommodating chemical registration requirements within and outside Japan

We work with specialized agencies and Group companies outside Japan to comply with laws and regulations, for example the Chemical Substances Control Act and the Industrial Safety and Health Act of Japan, TSCA in the USA, and REACH in the EU.

We also hold training on laws and regulations and briefings on new systems pertaining to chemical product control on a regular basis to inform our employees and foster in them a sense of respect for the laws and regulations.

Additionally, regarding acrylic acid—a priority assessment chemical substance under the Chemical Substances Control Act—an organization to which we belong conducts safety tests for aquatic life, and we submit information and otherwise respond proactively to risk assessments by the central government.

## Import and export control initiatives

To ensure faithful compliance with import and export regulations, we establish and maintain Company rules, inform everyone in the Company of decisions as to controlled items, establish and maintain a shipping management system tied to our central accounting system, and conduct internal training on a regular basis. Additionally, our annual internal audit revealed no problems with exports during CY2023.

## Promoting a voluntary initiative of the JCIA

We participate in GPS/JIPS, a voluntary initiative for strengthening chemical management promoted by the Japan Chemical Industry Association (JCIA), which prepares and releases a safety summary to the public.

### Key Terminology

#### GHS

An abbreviation for Globally Harmonized System of Classification and Labeling of Chemicals, GHS reflects the physical, health and environmental hazards of chemicals determined in accordance with international standards. Under this system, chemical products identified as presenting a hazard are categorized according to international standards and displayed on containers and in the respective SDS. Countries around the world have also introduced this system on the recommendation of the United Nations. This system is enforced in Japan through the Industrial Safety and Health Act.

#### SDS (Safety Data Sheet)

The Safety Data Sheet lists a chemical's properties as well as data on its hazards, applicable laws, proper handling and transportation requirements, and specific emergency response measures in a prescribed format. We prepare an SDS for each of the products we manufacture and develop and provide them to our customers. We are implementing a system for distributing these documents to all employees through our chemical substance management system.

**Yellow Card**

The yellow card is a unique initiative in Japan, which lists a product's hazards, first aid procedures in an accident, and emergency contact information. As part of its promotion of RC, the Japan Chemical Industry Association (JCIA) prepares and manages guidelines on the procedures for preparing a yellow card in order to strengthen first aid measures in the event of an accident. Carriers transporting dangerous goods are encouraged to carry a yellow card to report information about the cargo to the fire brigade in the event of an accident.

# Quality

## Basic Approach

We make efforts to maintain and improve quality under a basic quality policy of consistently providing products and services that satisfy customers and are worthy of their trust.

## Promotion System

- [RC Promotion System](#)

## Targets and Results

FY2023 targets	FY2023 results	FY2024 targets
<ul style="list-style-type: none"> <li>• Zero serious quality complaints</li> <li>• To improve customer satisfaction by strictly complying with quality-related laws and promoting priority initiatives regarding quality</li> </ul>	<ul style="list-style-type: none"> <li>• Serious complaints about quality: 0</li> <li>• Accomplished quality priority initiatives designed to improve customer satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>• Zero serious quality complaints</li> <li>• To improve customer satisfaction by strictly complying with quality-related laws and promoting priority initiatives regarding quality</li> </ul>

## Initiatives

**Implementation and continual improvement of quality management system**

All our plants and all Group companies both inside and outside of Japan engaged in manufacturing have introduced quality management systems. We implement our quality assurance initiatives from the customer's perspective from the product development stage through manufacturing and delivery.

We are dedicated to the continuous improvement of our quality management system to ensure our customers are satisfied with the stable high quality of our products and services.



Quality control convention

### Promoting activities to prevent problems with quality

We respond quickly to any complaints or inquiries from customers concerning our products. At the same time, we prevent quality issues from occurring through company-wide distribution of case studies. In FY2023 as well, we shared information about complaints and problems at meetings of division leaders and took permanent measures for the prevention of recurrence. The information on quality complaints and issues are also distributed to our Group companies in Japan, with the aim of preventing similar quality problems.

### Verification of quality management system

We maintain quality systems that preserve the feelings of safety and security our products deliver. The quality assurance departments at our Head Offices conduct quality audits at our plants and Group companies and engage in other efforts to monitor the state of quality assurance systems and quality control at all Group manufacturing facilities.

In quality audits for FY2023, a Lot traceability exercise of the products with quality problems that have occurred in the past was used to check whether countermeasures against past quality issues had been taken on an ongoing basis, and to confirm that there was no problem with the quality system.

These audits did not reveal any problems that were considered to constitute non-conformance. We will conduct quality audits on a continual basis to check that measures to meet customer requests and countermeasures against past quality issues are taken properly.

### Introducing products with halal certification

Parts of Southeast Asia, most notably Malaysia and Indonesia, are home to many Muslims, and demand for halal-certified ingredients and production processes from food-related businesses has been increasing. In response to this situation, we have acquired halal certification for products for which acquisition of the certification is strongly urged by customers. Specifically, in 2014, the Himeji Plant acquired halal certification for organic acids (maleic anhydride, succinic acid, and disodium

succinate), and Sino-Japan Chemical Co., Ltd. acquired halal certification for some products. In 2015, the Himeji Plant acquired halal certification for sodium polyacrylate (AQUALIC™ H series), too. Furthermore, PT. Nippon Shokubai Indonesia (NSI) acquired halal certification for all products in 2019. With these certifications, we can expect further expansion of demand for these products in Southeast Asia. We will make continuous efforts to provide prosperity and comfort to people and society by responding to the needs of society.

Note: Examples of products for which the Nippon Shokubai Group has acquired halal certification

(as of April 1, 2024)

Succinic acid, Disodium succinate,

Maleic anhydride,

AQUALIC™ FH (Food additive use),

AQUALIC™ MH (Feed additive use)

and AQUALIC™ IH (Industrial use),

and All products produced at NSI

- Acrylic acid (AA)
- Acrylates (AES)
- Superabsorbent polymers (SAP)



Halal certification

**Key Terminology**

**Halal Certification**

A certification with religious relevance, granted by the relevant organizations when certain standards are satisfied, for products and services targeted at Muslim customers.



# Supply Chain Management

In our supply chain, from the procurement of raw materials to the manufacture, sale, use, and disposal of products, we are promoting various sustainable procurement initiatives with the aim of putting into practice our Group Mission “TechnoAmenity: Providing prosperity and comfort to people and society, with our unique technology”.

## Sustainable Procurement Policy

The Nippon Shokubai Group recognize our suppliers as important partners, and we will build a relationship of mutual understanding and trust with them. We will also conduct fair and impartial business transactions in compliance with laws and regulations and with high ethical standards for the sustainable development of both parties. With the cooperation of our suppliers, we will also promote sustainable procurement initiatives that take human rights and environmental preservation into consideration.

## CSR Procurement Guidelines

The Nippon Shokubai Group are committed to sustainable procurement to fulfill our social responsibility throughout the supply chain. We strongly believe that the understanding and cooperation of our suppliers are indispensable in promoting such efforts. Based on this belief, we have compiled a set of CSR Procurement Guidelines that we invite our suppliers to collaborate on with our Group companies. These guidelines are published on our corporate website and distributed during our CSR supplier survey. We kindly request our suppliers to provide a written confirmation of their agreement with the guidelines. We also encourage our business partners to understand these guidelines and take appropriate actions.

[NIPPON SHOKUBAI Group CSR Procurement Guidelines](#) 

## Green Procurement Initiatives

Nippon Shokubai promotes initiatives to ensure supplies of safe and reliable products throughout the entire supply chain, from procurement of raw materials to manufacture and sales of products. In accordance with our regulations for green procurement management, we have independently assigned substances that are regulated or highly hazardous to two categories: “prohibited substances” and “restricted substances.” We are promoting the development of green products and the procurement of raw materials with low environmental impact while controlling the inclusion of such substances in our products. For information transmission sheets, we have introduced chemSHERPA\*.

\*chemSHERPA: This shared system for transmitting information about chemicals contained in products to supply chains was developed under the initiative of the Ministry of Economy, Trade and Industry in Japan. Full-scale utilization began in April 2018.

## Responsible Procurement of Minerals Policy

---

To fulfill our social responsibilities, we continue to confirm that we do not procure so-called conflict minerals\*. We continuously monitor the actual situations at our suppliers, and stop procurement promptly if the use of conflict minerals is discovered.

\*Gold (Au), tantalum (Ta), tungsten (W), tin (Sn), and cobalt (Co) are mined under conditions of conflict, human rights violations, etc. and sold in the Democratic Republic of Congo and its surrounding countries, and CAHRAs (Conflict and High Risk Areas). Risks include Annex II risks of the OECD Guidance and global environmental impacts.

## Conduct of CSR Supplier Survey

---

To promote sustainable procurement, we have been conducting CSR questionnaire-type survey of our major suppliers since fiscal year 2021. The survey takes place every 2 years, using the CSR Procurement Self-Assessment Questionnaire that is prepared by GCNJ (Global Compact Network Japan). By requiring suppliers to response to the survey, we are able to confirm whether they have conducted business activities in accordance with our “CSR Procurement Guidelines”.

In fiscal year 2023, based on the survey conducted during the year, significant suppliers (equivalent to 95% of raw material purchases) participated and responded from 96% of them. For suppliers whose response do not meet our company’s standards, we have conducted hearings to confirm their current situation of their activities and provided support for improvement, and confirmed that there are no serious issues. We will continue to strengthen cooperation with our suppliers and promote sustainable procurement initiatives.

## Initiatives to Promote Responsible Procurement

---

We endeavor to steadily respond to human rights, labor practices, health and safety, environment and Fair Operating Practices in Nippon Shokubai and our group companies, while we also implement a variety of initiatives to ensure responsibility on the supply chain. We utilize Supply Chain Ethical

Information Sharing Platform, such as Sedex<sup>\*1</sup> and EcoVadis<sup>\*2</sup> to disclose sustainability information. We have acquired RSPO<sup>\*3</sup> (Roundtable on Sustainable Palm Oil) certification.

<sup>\*1</sup> An online platform is organized by non-profit organization Sedex, for storing and accessing data regarding ethical and responsible business practices. Enterprises in the global 35 industries, including food, automobile, cosmetics and amenity over 180 countries and regions, have joined Sedex.

<sup>\*2</sup> The supply chain ethical information sharing platform is operated by the French CSR rating agency EcoVadis. The platform is used by over 130,000 multinational companies in about 180 countries.

<sup>\*3</sup> RSPO stands for Roundtable on Sustainable Palm Oil, a non-profit organization promoting the sustainable production and use of palm oil.

## Logistics Initiatives

Nippon Shokubai outsources all logistics operations to Nisshoku Butsuryu Co., Ltd. The company works closely with the environmental safety and quality assurance divisions at the Himeji and Kawasaki Plants to ensure safety and quality and prevent accidents in logistics. We regularly conduct drills for responding to accidents while products are in transit to make it possible to respond swiftly and minimize the damage in the rare occasions when such accidents occur.

We also endorse the White Logistics movement promoted by the Ministry of Land, Infrastructure, Transport and Tourism and others with the aim of realizing sustainable logistics. We issued our own White Logistics Declaration in April 2020 and have been implementing activities accordingly since then.



A drill for responding to accidents while products are in transit



# NIPPON SHOKUBAI Group

## CSR Procurement Guidelines

Based on our Group Mission "TechnoAmenity - Providing prosperity and comfort to people and society, with our unique technology", the Nippon Shokubai Group are engaged in business activities to contribute to the achievement of a sustainable society.

In our procurement activities, we strive to fulfill our social responsibilities throughout the supply chain and to ensure sustainable procurement, and we believe that the understanding and cooperation of our suppliers are indispensable in promoting such efforts.

Based on this belief, we have compiled a set of CSR Procurement Guidelines that we would like our suppliers to work on together with our Group companies. We ask our business partners to understand these guidelines and take action accordingly.

## 1. Compliance

### **(1) Observance of the relevant national and local laws, ordinances, and regulations and business ethics**

We will observe the relevant laws, ordinances and regulations in the countries and regions where we do business.

We will behave with integrity, fairness, good will, in a self-directed fashion, and law-abiding spirit.

### **(2) Prevention, early detection and correction of misconduct**

For the prevention, early detection and correction of misconduct, we will establish a system that allows concerned parties who become aware of misconduct to report it directly. In doing so, we will protect the confidentiality of whistleblowers and treat them fairly so that they will not be disadvantaged.

## 2. Fair and honest business dealings

### **(1) Fair disclosure of information**

We disclose timely and accurate information about ourselves in accordance with the relevant legislation, and we are transparent in our explanations.

### **(2) Fair and free dealings**

We will observe the relevant laws, ordinances, and regulations concerning fair and free competition and business activities in other countries and regions where we do business. We will avoid any conduct which restricts free and fair market competition (abuse of market dominant position, cartel, and unfair trade practice) in every business activity including sales, procurement, research and development, and manufacturing, in order to ensure free and fair business activities.

### **(3) Prevention of bribery and corruption**

a. We will not commit any violation of anti-bribery laws of any country, including making inappropriate payoff,

offering or promising to pay money/anything of value, to public officials.

- b. We will not aid, abet or authorize any of such illegal conduct by any third party.
- c. We will not provide with or accept any entertainment and gifts, which go beyond the bounds of socially accepted limits, to/from clients, customers and other business partners.

#### **(4) Respect for trade-related laws and ordinances**

- a. In trading raw materials and products, we will follow proper trade procedures in accordance with the relevant laws and ordinances and will not trade in contraband.
- b. We will not export technology that will be used as information, materials, or products in the production of weapons of mass destruction that would interfere with the preservation of international peace and safety, including nuclear, chemical, and biological weapons.

#### **(5) Responsible procurement**

Because our business activities are dependent on the cooperation of the many people and companies in our supply chain, we will promote responsible procurement practices and engage in transactions that are honest and proper.

#### **(6) Respect for and use of intellectual property**

- a. We will strive to protect our intellectual property rights and use them in effective way, as we believe that patents, trademarks, designs, knowhow, trade secrets, and publications are key corporate assets and the source of our competitive strength.
- b. In the manufacture and sale of our products, research and development, provision of service, and other business activities, we will respect the intellectual property rights of others and will not infringe on them.

#### **(7) Information security**

- a. We will closely control access to our information assets and data systems in order to prevent unauthorized access, loss, leaks, manipulation, destruction, and hacking.
- b. We will formulate measures to counter threats to our computer network and endeavor to minimize any damage to ourselves and others.

#### **(8) Management of confidential information**

- a. We will strictly manage the confidential information of others obtained in the course of business.
- b. We will not allow unauthorized disclosures or leaks, and we will not permit such information to be used for purposes other than those intended, nor will we permit viewing by uninvolved parties.

#### **(9) Protection of personal information and privacy**

We respect individuals' privacy and collect personal information to the extent necessary and appropriate. We will also strictly manage and protect personal information collected.

#### **(10) Dealing with antisocial forces**

- a. We will have absolutely nothing to do with antisocial forces that threaten public order and safety or the stable business of the company, whether it is through business relations, money laundering, and other means of providing profits to those involved in such forces.
- b. We will take a firm stance in rejecting improper demands from antisocial forces.

### **3. Respect for human rights**

#### **(1) Respect for human rights**

- a. We will respect everyone's human rights and will not engage in any conduct that unfairly discriminates or harms the dignity of an individual, regardless of the reason.
- b. We will prevent human rights violations by respecting international human rights standards, and the laws and ordinances of each country and region. In the event of a violation, we will respond appropriately and with fairness.
- c. Recognizing that our business activities have an impact on human rights, we will not provide products to firms or groups that commit or promote human rights violations, and we will not take part in purchasing any products or services from such firms or groups.

#### **(2) Prohibition against forced labor and child labor**

Under no circumstances will we ever engage in forced labor, child labor, slave labor or trafficking, and we will not allow forced labor, child labor, slave labor or trafficking to take place in our supply chain.

#### **(3) Prohibition against discrimination**

Under no circumstances will we ever engage in discrimination based on gender, age, nationality, race, ethnicity, social status, place of origin, beliefs, creed, religion, physical characteristics, sexual orientation, sexual identity, or disease or disability.

#### **(4) Prohibition against harassment**

Under no circumstances will we ever engage in sexual harassment, abuse of power, pregnancy discrimination, or other discriminatory behaviors against another person, or do anything that threatens them or makes them uncomfortable, regardless of whether such threat is physical or emotional.

### **4. Fair hiring, labor, and compensation**

#### **(1) Payment of appropriate wages and proper management of working hours**

We will maintain sound hiring and labor practices, and our treatment of employees regarding wages, work hours,

vacations, and the like will conform to the relevant laws and ordinances of the respective countries and regions.

### **(2) Respect for employees' freedom of association and collective bargaining rights**

In accordance with the relevant laws and ordinances of each country and region, we will respect the right to form or participate in labor unions, the right to engage in collective bargaining, and the right to assemble peacefully.

### **(3) Provision of equal opportunities**

We will treat everyone fairly in accordance with their work skills and performance.

## **5. Preserving the environment**

### **(1) Harmony with the global environment**

Based on the desire to leave a better global environment to the next generation, we are controlling emissions of hazardous materials and are taking initiatives to address environmental issues.

### **(2) Climate change initiatives**

Besides reducing emissions of carbon dioxide and other greenhouse gases in our business activities, we are helping to reduce emissions throughout the supply chain, thus contributing to bringing about carbon neutrality.

### **(3) Efficient use of resources**

We are actively involved in resource and energy conservation, waste reduction, and recycling efforts, so that our limited and precious resources including water resources can be used more efficiently.

### **(4) Preserving and restoring biodiversity**

Recognizing that our business activities have negative impacts on biodiversity and the importance of developing products and technologies that contribute to increasing the positive impacts, we are promoting a deeper understanding and awareness of biodiversity preservation and restoration and biodiversity-friendly programs.

## **6. Ensuring product safety and quality**

### **(1) Providing safe and reliable products and services**

We will comply with the laws and regulations of the countries and regions in which we operate, and provide products and services that meet the quality standards of our customers.

### **(2) Providing safe, high-quality information**

When providing products and services, we will properly furnish the necessary information regarding quality and safe usage in an easily understandable way.



### **(3) Proper management of chemical substances**

- a. In the manufacturing process, we will manage chemical substances specified by the laws and regulations of the country in which they are located.
- b. We will manage chemical substances specified by the laws and regulations of each country for all products.

## **7. Security, disaster prevention, and safety and health**

### **(1) Comprehensive process safety and disaster prevention**

We will comply with laws, regulations, and rules related to security and disaster prevention, and thoroughly implement various measures to prevent accidents and disasters that may affect the environment and society, such as explosions, fires, and leaks of hazardous substances. We will also prepare an emergency response plan and make it known to all employees throughout the workplace.

### **(2) Workplace health and safety**

- a. We will strive to eliminate work-related disasters, and we will observe all laws, ordinances, and regulations concerning workplace health and safety.
- b. We will consider our health as well as the health of those working with us and will strive to maintain and enhance a workplace environment in which everyone can be assured of safety and comfort.

### **(3) Business continuity**

We will establish operational structures, including a business continuity plan (BCP), to ensure early recovery in the event of natural disasters such as earthquakes and floods, infectious diseases, cyber attacks, and other threats.

## **8. Contributing to local communities**

### **(1) Respecting local culture**

We will respect the natural surroundings, culture, traditions, and customs of the countries and regions where we do business, and we will work together with local communities and contribute to their development.

End

Revised in March 2024

# Corporate Citizenship

Community Co-Creation →

Developing the Next Generation →

Realization of 'Leave No One Behind' →

## Philosophy

The Nippon Shokubai Group aims to contribute to the realization of a sustainable society by putting into practice its corporate philosophy “TechnoAmenity: Providing prosperity and comfort to people and society, with our unique technology,” we are deepening and strengthening its sustainability initiatives in the areas of business activities, human capital (talents), which are the source of value creation in business activities, and organizational foundation. At the same time, companies are expected not only to contribute in their business activities, but also to fulfil their responsibilities as members of society in various aspects of their relations with society.

From this perspective, our Group’s corporate citizenship activities are aimed at resolving social issues that are difficult to solve through business activities alone, and are promoted in accordance with the Corporate Citizenship Policy set out below.

## Corporate Citizenship Policy

1. We will work to resolve social issues that lead to the realization of a sustainable society.
2. We will take an international perspective, such as the SDGs, while at the same time correctly recognizing the social issues that need to be tackled, taking into account local characteristics.
3. We respect local nature, culture, traditions and customs, and promote initiatives tailored to the needs and actual conditions of the local community based on the “three actuals” principle, which means go to the site, make a direct observation, and determine the facts.
4. We will develop activities that make use of the Group’s management capitals, such as talents and technology.
5. We aim for the most effective initiatives through dialogue and partnerships with NGOs, NPOs, specialist organizations, public administration and local authorities.

## Priority Areas of Corporate Citizenship

Of the themes related to Corporate Citizenship, three themes of high importance and strong relevance to the Group Mission Framework (Mission, Values and Code of Conduct), business characteristics (components of value creation) and Materiality have been set as priority areas to be addressed.

Community Co-Creation →

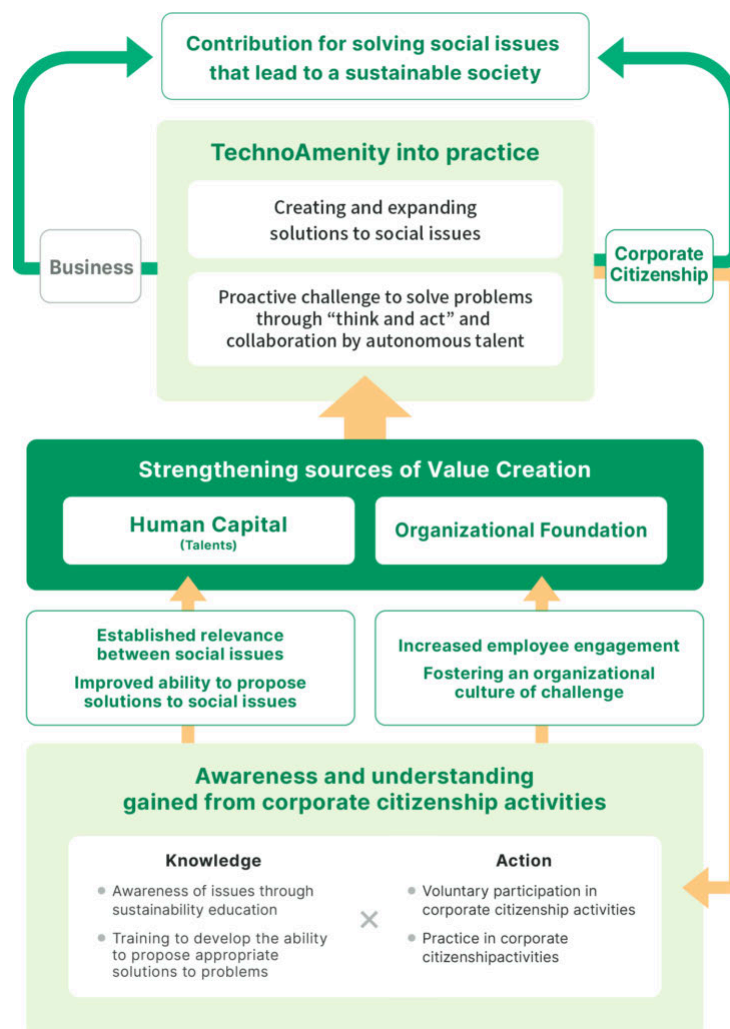
Developing the Next Generation →

Realization of 'Leave No One Behind' →

## Strengthening Value Creation through Corporate Citizenship Activities

The corporate citizenship activities we undertake contribute to improving the sustainability of society, which is the basis for the sustainability of our business, while at the same time strengthening talents and organizational foundation, which are the source of our value creation -by establishing relevance between social issues and talents, improving our ability to propose solutions, fostering an organizational culture that challenges and improving employee engagement.

By strengthening our ability to create value through corporate citizenship activities, we aim to realize a virtuous circle in which solutions to social issues are expanded in both our business activities and corporate citizenship activities.



## Management System for Promoting Corporate Citizenship

The Sustainability Planning Department of Nippon Shokubai is responsible for formulating the concept and priority areas of corporate citizenship activities for the company and the Group as a whole, and consolidating the results of these activities. In carrying out these activities, the department collaborates with relevant divisions and offices, as well as domestic and overseas Group companies, to promote activities in line with the actual situation in each region. The results and status of our corporate citizenship activities are fed back to management through the TechnoAmenity Promotion Committee, and effective corporate citizenship activities are carried out based on the opinions of management.

## Collaboration with Stakeholders

We will actively disclose and share our Corporate Citizenship Policy and the details of our corporate citizenship activities through our corporate website and reports, and work for continuous improvement through communication with our stakeholders.



# Community Co-Creation

## Activity Policy

Our business activities belong to and with the local community. Mutual understanding between we companies and local communities is essential for stable business operations. We engage, connect and cooperate with a diverse range of people in local communities, utilizing their unique characteristics to help solve problems and promote activities that create new value.

## Our Activities

Contribution to SDGs :



### Cleanup activities

We regularly clean up areas around our plants and cooperate with community beautification efforts. Each year in the Suita district, we participate in the Kanzaki River Cleanup Activities, which is implemented as part of the Adopt-a-River Program promoted by the Osaka prefectural government.



### Potato harvesting

We grow sweet potatoes in a potato patch in the greenery yard at the Himeji Plant, and children from nearby preschools and nursery schools enjoy digging them up at harvest time.

We have done this every year since 1971, and it has enriched our connections with the community—some of the children have even gone on to join the company when they grew up.

In FY2023, about 690 children and their parents took part.



## Dialogue with local communities

We participate in the community dialogue undertaken by the JCIA Responsible Care Committee in the areas in which our plants are located to explain and communicate our RC activities to the neighborhood associations, local governments, NPOs, industrial associations, companies, and other participants in pursuit of mutual understanding.

In FY2023, such dialogue was held in the Kawasaki area, in which representatives of the Kawasaki Plant participated.



RC community dialogue

[Corporate Citizenship TOP →](#)

# Developing the Next Generation

## Activity Policy

As a company that provides materials and solutions needed by society in various fields and aims for sustainable development together with society, the development of the next generations who will create future is an indispensable and important initiative. Through programs that utilize the characteristics of our business, we help young people to acquire the knowledge and thinking that will enable them to carve out their own future and lead independent lives as members of society. In this context, we will promote activities that will help young people become familiar with and foster interest in manufacturing in chemistry, which is difficult to see in daily life, and promote girls' participation in STEM (Science, Technology, Engineering and Mathematics) education, which is a major issue in the promotion of D&I in the chemical industry.

## Our Activities

Contribution to SDGs :



### Riko challenge (Supporting Girls' Challenges in STEM Fields)

The Riko challenge\* is an initiative led by the Gender Equality Bureau of the Japanese Cabinet Office to encourage female students interested in STEM fields to make career path choices (challenge) by clearly imaging their future work in STEM fields.



Riko challenge

Nippon Shokubai joined the “Riko challenge Supporting Organization” to support this initiative.

\*Riko means science and engineering in Japanese.

### Demonstrations of Chemistry Experiments for Children



We put on demonstrations titled “Superabsorbent Polymers: Mysterious Powders.” Children find these demonstrations to be a fun, interesting introduction to chemistry.

### The number of participants in our company’s booth

- FY2023 : Kawasaki Science Challenge (about 90 people), Science Booth Exhibit (about 340 people)
- FY2022 : Kawasaki Science Challenge (about 90 people), Science Booth Exhibit (about 100 people)
- FY2019 : Chemistry Day Kids’ Chemistry Experiment Show 2019 (about 450 people), Kawasaki Science Challenge (about 430 people), Science Booth Exhibit (about 330 people)
- FY2018 : Chemistry Day Kids’ Chemistry Experiment Show 2018 (about 400 people), Science Booth Exhibit (about 280 people)
- FY2017 : Chemistry Day Kids’ Chemistry Experiment Show 2017 (about 300 people), Science Booth Exhibit (about 250 people)

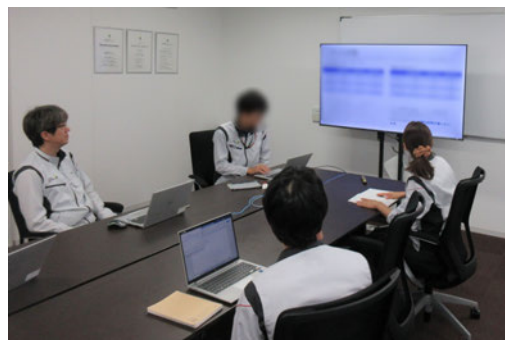


Experiment Show

## Internship Program

Our company offers internship opportunities for technical college students with the following objectives.

- To foster a sense of employment through actual work experience at a company.
- To utilize the knowledge learned at school during the internship, gaining practical skills and insights into one’s career.
- To bring back the learnings from the internship and apply them to future studies and life.



Internship

### Total Number of Interns Accepted:

- FY 2024: 23 interns
- FY 2023: 16 interns
- FY 2022: 3 interns \*
- FY 2021: 3 interns \*
- FY 2020: 0 interns \*
- FY 2019: 29 interns

\*Internship acceptance was cancelled/reduced from 2020 to 2022 due to COVID-19 measures.



# Realization of 'Leave No One Behind'

## Activity Policy

The society we aim for is a sustainable society in which all people have not only material and economic wealth, but also spiritual and social wealth, and can live in harmony with nature and various cultures, in a healthy, convenient and secure manner. We promote 'Leave No One Behind' initiatives so that children, the elderly, people with disabilities and their families, disaster victims and all those who need support due to poverty and other various reasons can create and enhance their communities, livelihoods and purpose in life together.

## Our Activities

Contribution to SDGs :



## Matching Gift Program

The Matching Gift Program is a donation system under which the company matches employee donations with a certain amount.

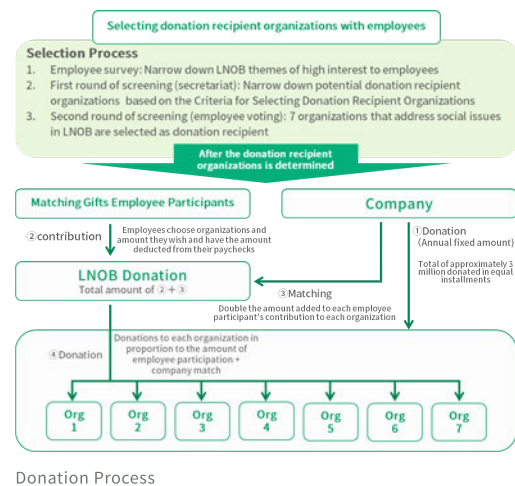
This program is designed to raise employees' interest in social issues.

Priority Areas of Activity Support
<p>Leave No One Behind (LNOB) themes that were of high interest to employees in the employee survey (social issue (matter) or target (people))</p> <p>Social issue (matter): High-quality education for all, zero hunger, health and welfare for all, etc.</p> <p>Target (people): Children, students, infants, people with intractable diseases and disabilities</p>
Criteria for Selecting Donation Recipient Organizations
<ol style="list-style-type: none"> <li>1. Their activities are in line with the our Corporate Citizenship Policy and Realization of "Leave No One Behind" Activity Policy.</li> <li>2. Their activities and finances are open to the public, and it has a high degree of transparency and social credibility.</li> <li>3. Their activities directly support social issues in the regions where our offices are located.</li> <li>4. Their activities fits into our "Priority Areas of Activity Support".</li> </ol>

## Activity Results

In FY2023, a total of approximately 3 million yen was donated (①) to 7 organizations that were selected as donation recipients.

As of September 2024, there were approximately 130 employees participating in the first phase of the program (November 2023-October 2024). After the end of the period, the company will match the amount of employee contributions to each organization and make a donation (④).



## Donation recipient organizations for the first phase (November 2023-October 2024)

Organization Name
<a href="#">Nippon Volunteer Network Active in Disaster (NVNAD)</a> <a href="#">🔗</a>
<a href="#">Learning for All</a> <a href="#">🔗</a>
<a href="#">Chance for Children</a> <a href="#">🔗</a>
<a href="#">Children's Hospice Project (CHP)</a> <a href="#">🔗</a>
<a href="#">Food Bank Kansai</a> <a href="#">🔗</a>
<a href="#">Child Chemo Support Foundation</a> <a href="#">🔗</a>
<a href="#">Children's Support Center Tsunagg</a> <a href="#">🔗</a>

## Relief Donation

We are making donations for disaster recovery support and support for COVID-19 countermeasures.

## Donation activities such as resource recycling

We make donations that lead to vaccinations for children in developing countries and donations to local welfare groups, etc., based on earnings from collecting PET bottle caps and sales commissions from vending machines.

[Corporate Citizenship TOP →](#)



# Governance

Corporate Governance >	Compliance >
Risk Management >	Tax Policy >
Information Security >	Intellectual Property Activities >

# Corporate Governance

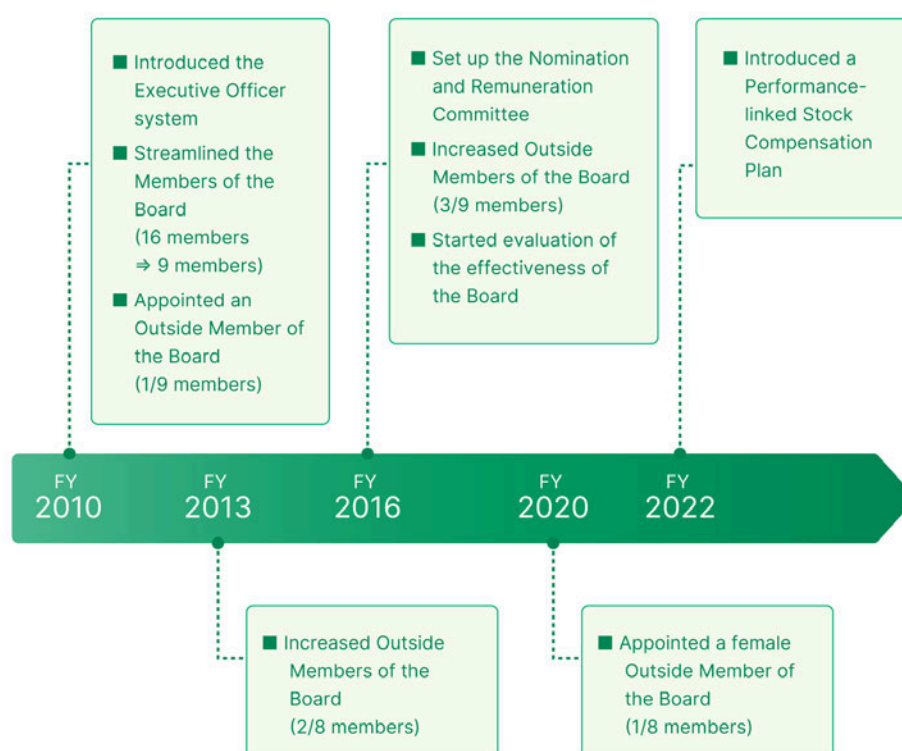
We are working on continuously improving our systems and their operation to strengthen and enhance a viable corporate governance.

## Our basic approach to corporate governance

Under the Nippon Shokubai Group Mission "TechnoAmenity: Providing prosperity and comfort to people and society, with our unique technology," we will increase our corporate value and achieve sustainable growth.

We consider viable corporate governance to be essential and have adopted initiatives toward that end. We ensure the rights and equality of our shareholders and maintain an open dialogue, collaborate with various stakeholders as appropriate, disclose information as appropriate and ensure transparency, ensure that the roles of Board Meeting and management teams relate to the appropriate execution of duties, ensure appropriate supervision of the execution of these duties and strengthen and enhance our internal control systems.

### Initiatives to strengthen governance



## Our basic information on corporate governance system

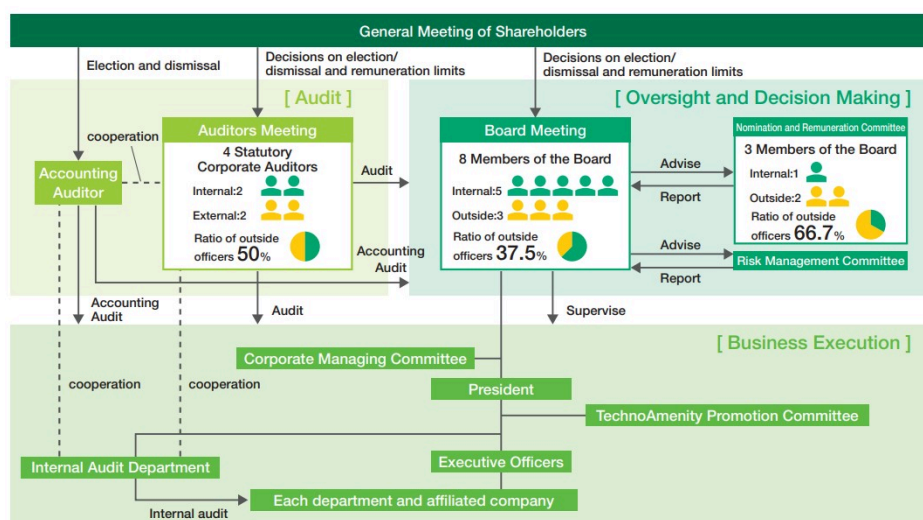
(as of June 20, 2024)

Main Items	Content
Institutional design	Company with an Auditors Meeting
Number of Members of the Board	8 (5 internal, 3 external), including 2 female Members of the Board
Ratio of Outside Members of the Board (Independent Officers)	38%
Term of office of the Members of the Board	1 year
Number of Board Meetings (FY2023) (Average attendance rate of Outside Members of the Board / External Statutory Corporate Auditors each)	15 times (100% / 100%)
Number of Statutory Corporate Auditors	4 (2 internal, 2 external)
Ratio of External Statutory Corporate Auditors (Independent Officers)	50%
Term of office of Statutory Corporate Auditors	4 years
Number of Auditors Meeting (FY2023) (Average attendance rate of External Statutory Corporate Auditors)	16 times (100%)
Executive Officer system	Have already been introduced
Number of Executive Officers	15, including 5 who concurrently serve as a Members of the Board
Advisory body to the Board Meeting	Nomination and Remuneration Committee established

\*The ratios are rounded to the nearest unit.

## Our corporate governance system

(as of June 20, 2024)





# Roles and Functions of Various Bodies and Committees

## Board Meeting

Comprising eight Members of the Board, including three Outside Members of the Board, Board Meeting reports, deliberates and resolves important matters related to business operations, and supervises the business operations of each Member of the Board. In general, meetings are convened monthly under the chairmanship of a Member of the Board selected from members by a resolution of the Board Meeting. Four Statutory Corporate Auditors, including two External Statutory Corporate Auditors, also attend to give advice and state their opinions when necessary.

## Corporate Managing Committee

Comprising the President and executive officers, this committee generally convenes once a month to deliberate on items related to the implementation of basic policies and important management issues. Among proposals discussed by the Corporate Managing Committee, important issues are forwarded to Board Meeting for consideration.

## Auditors Meeting

Comprising four Statutory Corporate Auditors, including two External Statutory Corporate Auditors, the Auditors Meeting usually convenes monthly, submits reports and engages in discussions and deliberations on important matters related to audits.

## Accounting Auditor

Nippon Shokubai is audited by Ernst & Young ShinNihon LLC.

## Nomination and Remuneration Committee

An advisory body to the Board Meeting, this is a voluntary organization comprising three or more Members of the Board (including a majority of Outside Members of the Board). It advises on the election/dismissal of the President and Member of the Board, as well as draft nominations of candidates for Members of the Board and Statutory Corporate Auditor positions and on remuneration and bonuses for Members of the Board.

## Nomination and Remuneration Committee members

Name	Status	Attendance rate
------	--------	-----------------

Kazuhiro Noda	President and Member of the Board	100%
Tetsuo Setoguchi	Outside Member of the Board	100%
Miyuki Sakurai	Outside Member of the Board	100%

### **Risk Management Committee**

An advisory body to the Board Meeting, this is an organization consisting of the president, who is the chairperson, and members appointed by the president. Based on consultation from the Board meeting, it advises the Board meeting on matters related to identification, response policies, response measures, and the person responsible for management of serious Group-wide risks, etc.

### **TechnoAmenity Promotion Committee**

We promote sustainability activities based on our belief that promoting sustainability means implementing the Nippon Shokubai Group Mission “TechnoAmenity: Providing prosperity and comfort to people and society, with our unique technology.” We consider promotion of sustainability activities as a core theme of our corporate management. The Committee is responsible for deciding policies and strategies therefor, providing instructions to relevant departments, and evaluating the results of the activities.

### **Internal Audit Department**

The Internal Audit Department (6 members) conducts audits on the effectiveness and efficiency of each operational process, compliance and other matters from a standpoint independent from other executive sections, and thereby verifies the appropriateness of internal control of the Company. The Internal Audit Department strives to improve the effectiveness of internal audits by working in close cooperation with Statutory Corporate Auditors and the Accounting Auditor through mutual exchange of information and opinions.

In addition, the results of internal audits are regularly reported to the President, the Board Meeting, Statutory Corporate Auditors, and the Auditors Meeting.

## **Policy and procedure for election/dismissal of Members of the Board and Statutory Corporate Auditors**

The Board Meeting, including three independent Outside Members of the Board, decides on election/dismissal of management executives and nomination of candidates for Members of the Board and Statutory Corporate Auditors, taking thoroughly into account their expertise, experience, achievements, qualities, abilities, personalities and the like. Also, the Nomination and Remuneration Committee, a voluntary organization consisting mainly of independent Outside Members of the Board, has been established to receive advice on election/dismissal of the President and Member of the Board and nomination of candidates for Members of the Board and Statutory Corporate Auditors,

thereby ensuring transparency and fairness in election/dismissal of the President and Member of the Board, and nomination of candidates for Members of the Board and Statutory Corporate Auditors.

## Specialty and Experience of Members of the Board and Statutory Corporate Auditors

	Name	Corporate management	Internationality	Sustainability	Compliance / Governance	Finance / Accounting	Production technology / R&D	Sales and marketing	Other
Members of the Board	Kazuhiro Noda	●	●			●			
	Kuniaki Takagi		●		●	●			
	Masahiro Watanabe	●						●	● SCM
	Yasutaka Sumida			●			●		● Intellectual property
	Yukihiro Matsumoto	●					●		● DX
	Outside Tetsuo Setoguchi	●	●					●	
	Outside Miyuki Sakurai				●				● Internal control / Audit
	Outside Akiko Ikeda	●						●	● Business development
Statutory Corporate Auditors	Takashii Kobayashi	●	●			●			
	Teruhisa Wada				●				● HR / Labor relations
	External Tsukasa Takahashi				●				
	External Kazumasa Murai			●		●			

\*1 In the table above, up to three main areas of specialty and experience are marked for each person.

\*2 SCM is an acronym for Supply Chain Management and DX is an acronym for Digital Transformation.

## Evaluation of the effectiveness of the Board Meeting

### 1.Process of evaluating the effectiveness of the Board Meeting

As an initiative to improve the effectiveness of the Board Meeting, the Company conducts surveys such as questionnaires to both of the Members of the Board and Statutory Corporate Auditors once a year to evaluate the effectiveness of the Board Meeting. In FY2023, we have implemented the evaluation through a third-party.

Evaluation Process of Board Meeting Effectiveness

1. Attendance of the Board Meeting and survey of materials of the Board Meeting by a third-party organization

2. Questionnaire for all Members of the Board and all Statutory Corporate Auditors
3. Third-party interviews with all Members of the Board and all Statutory Corporate Auditors
4. Summary of the result of the effectiveness evaluation at the Board Meeting

\* The decision will be made each fiscal year regarding viewing and hearing to materials held by the Board Meeting and conducting interviews with all officers

## 2.Items for improvement

The items for improvement identified in the evaluation of the previous fiscal year are as follows:

- Selection of appropriate themes for discussion at the Board Meeting
- Enhancing information provision and training for Outside Officers regarding the status of internal considerations and discussions, and industry environment, etc.
- Enhancing discussions at the Nomination and Remuneration Committee

## 3.Evaluation results and initiatives for the future

- It was confirmed that all the systems that support the composition, operation, deliberations/reports and the supervision of business execution of the Board Meeting were functioning properly and that the effectiveness of the Board Meeting was ensured. It was also confirmed that the measures taken based on the items for improvement identified in the evaluation of the effectiveness of the Board Meeting in the previous fiscal year had been implemented properly.
- To steadily achieve “stronger corporate governance” to foster sustainable growth and enhance medium- to long-term corporate value set forth in “TechnoAmenity for the Future-I” launched in fiscal 2022, we are currently making the following efforts:

«Discussions towards strengthening the functions of the Board Meeting»

- Discussion of themes to be discussed at the Board Meeting
- Enhancing discussions about the direction the Board Meeting should aim for

## Outline of the executive remuneration system

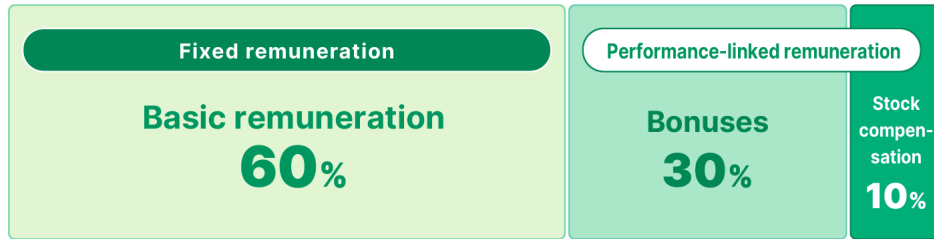
### 1.Basic Policy

- To have Members of the Board put the Company’s mission into practice and provide an incentive to sustainably enhance corporate value
- To have Members of the Board share interests with shareholders according to the Company’s business results and commensurate with their responsibilities
- To set the executive remuneration system at a reasonable level in light of the Company’s business results, the level of employee salaries, and that of other companies
- To have the Nomination and Remuneration Committee, consisting mainly of independent Outside Members of the Board, deliberate on the matter, thereby ensuring transparency and fairness

## 2.Components of the Remuneration

The remuneration for Members of the Board (excluding Outside Members of the Board) consists of basic remuneration, which is fixed remuneration, and bonuses and stock compensation, which are performance-linked remuneration. Outside Members of the Board receive only basic remuneration as fixed remuneration because they oversee business operations from an independent standpoint.

### The Ratio of remuneration for the Members of the Board (excluding Outside Members of the Board)



\*The above ratio is only a guide and is subject to change according to the Company's business results, stock market conditions, and degrees of achievement of targets by each individual as assessed by the target management system.

### Outline of remuneration

	Fixed remuneration	Performance-linked remuneration	
	Basic remuneration	Bonuses	Stock compensation
<b>Type</b>	Fixed remuneration	Short-term incentive	Medium- and long-term incentive
<b>Persons to be paid</b>	Members of the Board	Members of the Board (excluding Outside Members of the Board)	Members of the Board (excluding Outside Members of the Board)
<b>Method of payment</b>	Money	Money	Shares and Money
<b>Time of payment</b>	Monthly	Paid at a certain time after the Ordinary General Meeting of Shareholders each year	Paid upon the retirement of a Member of the Board
<b>Description</b>	<ul style="list-style-type: none"> <li>• Paid based on the position and responsibilities.</li> <li>• The amount of remuneration for Outside Members of the Board is determined by comprehensively considering the level of remuneration of the Company's officers, and that of other companies.</li> </ul>	<ul style="list-style-type: none"> <li>• Bonuses are paid according to evaluation indicators: the degree of achievement of key performance indicators (KPIs) and the degrees of achievement of targets by each individual as assessed by the target management system.</li> <li>• KPIs consist of "profit before tax" and "ROA (return on assets before tax)," with achievement ratings ranging from 0 to 150%.</li> </ul>	<ul style="list-style-type: none"> <li>• Utilizing the share benefit trust mechanism for officers, payments shall be made according to the total cumulative number of performance-linked points, which are linked to the achievement level of the mid-term management plan, and fixed points, which are for the purpose of holding shares to share stock value.</li> <li>• Performance-linked points and fixed points shall be granted at a ratio of 1:1.</li> <li>• Performance-linked points vary depending on the degree of achievement of KPI results in the final year of the mid-term management plan against the targets of the mid-term</li> </ul>

		management plan set as KPIs. • KPIs consist of “operating profit” and “ROE (return on equity attributable to owners of parent)”, with evaluation weights of 50% for “operating profit” and 50% for “ROE”. In addition, each achievement rating shall be in the range of 0 to 150%.
--	--	---

### 3. Process for Determining Remuneration

- The Nomination and Remuneration Committee, a voluntary advisory organization consisting mainly of independent Outside Members of the Board, has been established. The Committee deliberates on policies, systems, and issues related to the determination of remuneration for Members of the Board, as well as the appropriateness of the level of remuneration and the amount of remuneration for individual Members of the Board, and reports back to the Board Meeting.
- Based on the Committee’s report, the Board Meeting determines the policy for determining the details of remuneration, etc. for each individual Member of the Board and details of remuneration, etc. within the framework of the amount of remuneration approved by the General Meeting of Shareholders. After the determination of the Board Meeting, the President and Member of the Board is entrusted with decisions regarding the amounts of basic remuneration and bonuses, excluding stock compensation, for individual Members of the Board in light of the contents of the Committee’s report.

#### Aggregate Amount of Remuneration to Members of the Board and Statutory Corporate Auditors

Category of positions	Aggregate amount of remuneration (million yen)	Aggregate amount of remuneration by type (million yen)			Number of persons to be paid (persons)
		Fixed remuneration	Performance-linked remuneration		
			Basic remuneration	Bonuses	
Members of the Board (Outside Members of the Board)	368 (40)	234 (40)	128 (－)	6 (－)	10 (3)
Statutory Corporate Auditors (External Statutory Corporate Auditors)	74 (20)	74 (20)	－ (－)	－ (－)	4 (2)
Total (Outside Officers)	442 (60)	308 (60)	128 (－)	6 (－)	14 (5)

\*1 The number of persons and the amounts of remuneration above include two Members of the Board who retired at the 111th Ordinary General Meeting of Shareholders on June 21, 2023.

\*2 The amount of bonuses represents the amount of provision for directors’ bonuses for the current fiscal year.

\*3 The amount of stock compensation is the amount posted for the current fiscal year.

## Cross shareholding

Under the Nippon Shokubai Group Mission "TechnoAmenity: Providing prosperity and comfort to people and society, with our unique technology," we are willing to further advance our contributions to industry and society. To this end, Nippon Shokubai, as a chemical manufacturer, with a view to continuously improving its corporate value, believes that long and stable relationships of trust with business partners are important in development, production, sales and other activities. Based on this belief, we own shares of our partners for the purpose of cross share holding when deemed necessary. Each year, the Board Meeting, including three independent Outside Members of the Board, comprehensively examines all the listed shares we own by issue in light of the above purpose, taking into consideration the capital costs, and confirms the importance of the shareholding. We sell shares if it is judged no longer important to hold such shares.

In fiscal 2023, we sold all shares of two issues. As a result, the number of issues of cross shareholdings as of March 31, 2024 decreased from 70 as of the end of the fiscal year before the introduction of the Corporate Governance Code (March 31, 2015), to 33.

We plan to further reduce cross shareholdings from fiscal 2024 onwards, with a policy of reducing cross shareholdings by approximately 20 billion yen over the four years until fiscal 2027.

# Compliance

We are committed to various group-wide initiatives intended to further improve and strengthen compliance system in accordance with our Corporate Code of Compliance.

## Compliance system

In order to reinforce our compliance, our Board Meeting has established group-wide compliance policies, “Code of Conduct” and the other codes of conduct, and the executive officer responsible for compliance decides medium- to long-term and annual action plans.

Under the supervision of the executive officer responsible for compliance, the Legal Department promotes various group-wide initiatives for the entire Group including affiliated companies.

## Activities to improve compliance

### Level-based training

We provide systematic training courses on compliance for new employees, promoted mid-level employees, and promoted managerial employees, depending on their respective job positions and roles.

We also provide periodic training courses on compliance for employees depending on their levels to instill and establish compliance awareness.

### Awareness initiatives in each workplace

To ensure the penetration and adoption of compliance throughout the workplace, we conduct training courses on compliance for each workplace once every six months. This training has become a forum for active discussion within each workplace based on a training program that covers violations of corporate ethics and legal violations and similar actions prepared based on situations that actually arose at other companies. We have been implementing this program also at our Group companies in Japan.



## Awareness activities on our portal

Our corporate intranet hosts a portal. It lists various kinds of manuals including the manuals as to basic information on contracts, competition laws in various countries, observance of anti-bribery laws and subcontract law, links to websites covering related laws and regulations, and a FAQ page. This site presents the latest available information, and it is updated whenever the relevant laws and regulations are revised.

## Whistleblower System

As part of our initiatives to implement compliance, we have established the Whistleblower System under which facts or suspicions of compliance violations inside the company can be freely reported to the internal reporting desks we have set up both inside and outside the company. The intention of the whistleblower is always respected in determining whether or not to disclose the details of the information and the name of the whistleblower, with the objective of protecting the whistleblower.

## Compliance with Anti-Bribery Laws and Competition Laws

### For Compliance with Anti-Bribery Laws ( Nippon Shokubai Group's Code of Conduct )

Nippon Shokubai Group Companies strictly prohibit any corruptions in breach of applicable laws in our business activities.

In order to express and give shape of such group policy, we adopt the group code of conduct, which all the individuals working for Nippon Shokubai Group Companies should comply with.

[Group Code of Conduct](#) 

### For Compliance with Competition Laws ( Nippon Shokubai Group's Code of Conduct )

Nippon Shokubai Group Companies will conduct all business transactions based on free and fair market competition principle.

In order to express and give shape of such group policy, we adopt the group code of conduct, which all the individuals working for Nippon Shokubai Group Companies should comply with.

[Group Code of Conduct](#) 



## **For Compliance with Anti-Bribery Laws (Nippon Shokubai Group's Code of Conduct)**

For the past several years, the relevant authorities all around the world have shown their aggressive policies against corruptions. Especially, in case of bribery of foreign public officials, huge amount of fines are imposed on the companies and individuals in violation of the relevant laws and some of such individuals are punished by imprisonment. News report on mass-media about the violation of laws would lead to deterioration of reputation of the company and have severe adverse effect on the company's business activities.

In our business activities, our decision should always be made based upon "what is right and what is wrong" rather than the profit/loss perspective. The fair business transactions and activities respecting all relevant laws and rules will, in the long run, contribute to Nippon Shokubai Group Companies' acquisition of reliance from stakeholders and increase of business interests.

Nippon Shokubai Group Companies strictly prohibit any corruptions in breach of applicable laws in our business activities. In order to express and give shape of such group policy, we adopt the following group code of conduct, which all the individuals working for Nippon Shokubai Group Companies should comply with.

**Nippon Shokubai Group Companies, in our business activities,**

**Will not commit any violation of anti-bribery laws of any country, including making inappropriate payoff, offering or promising to pay money/anything of value, to public officials or will not make any illegal facilitation payment, and**

**Will not aid, abet or authorize any of such illegal conduct by any third party, and**

**Will not provide with or accept any entertainment and gifts, which go beyond the bounds of socially accepted limits, to/from clients, customers and other business partners.**

Needless to say, any individual within Nippon Shokubai Group Companies in violation of the relevant laws or our code of conduct will be subject to strict discipline procedures in accordance with the relevant organization's internal rules, which might lead to dismissal or other discipline actions.

For the individuals working for Nippon Shokubai Co., Ltd., we prepared and published the Compliance Manual on Anti-Bribery Laws, which contains the summary explanation of the relevant laws, points of attention and practical measures to take so that they could refer to in doing business. The president of each Nippon Shokubai Group Companies are hereby requested to comply with our group code of conduct, prepare compliance manual taking the relevant circumstances of their own into consideration and take necessary actions to prevent the violation, including provision to their employees with educational opportunity and/or implementation of audit.

Masanori Ikeda  
President  
Nippon Shokubai Co., Ltd.

**For Compliance with Competition Laws  
(Nippon Shokubai Group's Code of Conduct)**

In recent years, aggressive prosecution has been seen in the field of Competition Laws (Japanese Anti-Monopoly Law and equivalences in other countries) in many foreign countries or regions. More and more competent authorities are developing enforcement regimes, and leading authorities impose severe sanctions such as huge amount of fines and imprisonment.

An investigation or prosecution in one country in violation of Competition Laws relating to global business activities can lead to another enforcement in other countries and spread throughout an industry, as the international auto parts cartel case illustrates. Therefore, Nippon Shokubai Group Company should build up the compliance program as a team, irrespective of the country of its establishment.

Nippon Shokubai Group is aiming to be “A company that everybody can be proud of”; “A company that people can be proud to work for.” To achieve this aim, a decision in our business activities should always be made based upon “what is right and what is wrong” rather than the profit/loss perspective.

Nippon Shokubai Group Companies will conduct all business transactions based on free and fair market competition principle. In order to express and give shape of such group policy, we adopt the following group code of conduct, which all the individuals working for Nippon Shokubai Group Companies should comply with.

**We will avoid any conduct which restricts free and fair market competition (abuse of market dominant position, cartel, and unfair trade practice) in every business activity including sales, procurement, research and development, and manufacturing, in order to ensure free and fair business activities.**

Needless to say, any individual within Nippon Shokubai Group Companies in violation of the Competition Laws or our code of conduct will be subject to strict discipline procedures in accordance with the relevant organization's internal rules, which might lead to dismissal or other discipline actions.

All individuals are hereby requested to comply with our group code of conduct and follow internal rules in relevant organization, to prevent the violation of the Competition Laws.

Masanori Ikeda  
President  
Nippon Shokubai Co., Ltd.

# Risk Management

We are implementing a variety of measures to accurately identify and respond to risks that accompany changes in the management and business environments and that could impact the long-term continuation of our Group, in accordance with our Risk Management Regulations.

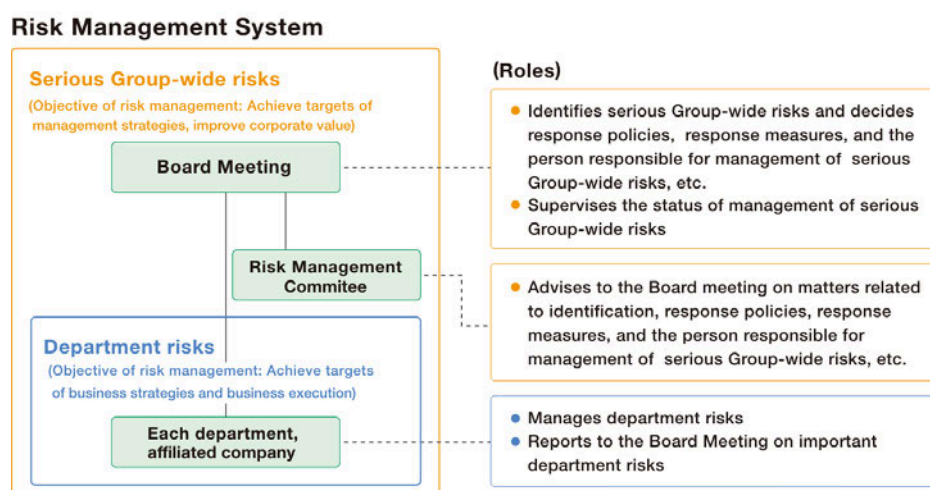
## Risk Management System

At the Nippon Shokubai Group, we classify various internal and external risks that threaten our Group into “serious Group-wide risks” and “department risks,” and we develop a risk management system appropriate for each risk category, thereby maintaining and improving our corporate value.

For “serious Group-wide risks,” potential serious risks underlying execution of the Group’s management strategies, sustainable improvement of corporate value, and acquisition of trust from stakeholders are subject to risk management, and we have established a system in which the Board Meeting receives advices from the Risk Management Committee, an advisory body, identifies and assesses the risks, decides whether they should be addressed, and supervises the status of risk management by the executive section.

For “department risks,” on the other hand, potential risks underlying execution of business strategies or business operations by each department or affiliated company are subject to management, and we have established a system in which each department or affiliated company is responsible for risk management, thereby promptly responding to the risks.

With these two systems, we aim to develop and enhance the Group-wide risk management system, which includes our affiliated companies.



## Business Continuity Management (BCM)

---

We have established a Business Continuity Plan (BCP) with countermeasures for earthquakes, influenza outbreaks and other incidents. We are working to strengthen Business Continuity Management (BCM) by regularly reviewing our BCP, as well as by implementing earthquake response training and other measures.

Most recently, we revised the BCP in line with the improvement of IT tools and workplace environment. We are working to strengthen our crisis management system for large-scale earthquakes by making employees fully aware of the revised countermeasures through e-learning and conducting periodic training.

# Tax Policy

We have established the Nippon Shokubai Group Code of Conduct as a guideline for all officers and employees of Nippon Shokubai Co., Ltd. and its Group companies to follow when taking specific actions. It enables us to ensure the trust of all stakeholders and promote sustainable business activities aimed at putting our corporate philosophy into practice. Following this Code of Conduct means making tax compliance a top priority. That's why we have established the following Tax Policy for the Nippon Shokubai Group that ensures compliance with the corporate tax laws and regulations of each country and region where we operate as well as all tax treaties, and international tax rules as we work to ensure that we pay our fair share of taxes as required.

This Tax Policy has been approved by the TechnoAmenity Promotion Committee (which is chaired by the President and composed of inside Members of the Board, Executive Officers and others appointed by the President).

[Nippon Shokubai Group Code of Conduct](#) 

## Tax Policy

### 1. Tax compliance system

Nippon Shokubai's Accounting Department works with the accounting departments of Group companies to enhance overall tax compliance across the Group. In order to achieve this, we have our Accounting Department's tax personnel take part in external training to acquire the necessary expertise, staff the department with a specified number of employees with long-term practical experience, and take other measures as we endeavor to maintain and strengthen our tax governance system.

We also make sure that important matters, such as those related to tax audits and transfer pricing, are reported on at regularly scheduled Corporate Managing Committee meetings.

### 2. Tax planning

The Nippon Shokubai Group seeks to improve the cash flow from its operating activities through proper tax planning, but does not undertake tax planning that is out of step with its actual business substances, use tax havens for tax avoidance purposes, or transfer profits to low-tax jurisdictions without an economic rationale.

### **3. Response to transfer pricing taxation**

We set intergroup transaction prices in accordance with the OECD Guidelines and other relevant international regulations. We also assess foreign subsidiaries based on functional and risk analysis to determine whether the distribution of profits is appropriate. At the same time, we maintain transfer pricing documents in accordance with the tax laws and related regulations of each country in order to identify transfer pricing risks on our own. However, since it is difficult to completely eliminate the risk that a transaction price determined to be appropriate by our Group will not be recognized by the tax authorities of each country, we seek advice from outside experts, use the Advance Pricing Arrangement, etc. to minimize such a risk. In the event of double taxation, we will endeavor to resolve it through tax treaties or mutual consultation.

### **4. Relationship with tax authorities**

We will respond to requests from tax authorities to provide information, submit materials, etc., and provide the basis for decisions on tax treatment carried out by our Group in tax audits, etc., as we strive to maintain and build a good relationship with tax authorities. We will also endeavor to promptly take measures to prevent any recurrence with respect to deficiencies identified by the tax authorities in past tax audits, etc. However, if the decision of the tax authorities is unreasonable in light of laws and regulations, we will file for relief via an appeal hearing, mutual consultation, etc. if it is appropriate to do so.



# Information Security

The Nippon Shokubai Group recognizes that ensuring information security is a corporate social responsibility and considers it an important management issue that affects business continuity. We have established an Information Security Policy to manage and protect the information we handle as important assets, and we will use such information appropriately in our business activities.

## Information Security Policy

The Nippon Shokubai Group handles its information assets as well as information assets provided by third parties in compliance with all relevant laws, regulations, and internal rules. We strive to maintain and improve appropriate information management and information security in order to protect information assets from the risks associated with accidents, disasters, and crime as we work to earn the trust of stakeholders and the public at large with an eye to minimizing the potential impact of any security incidents on our business operations.

Our information management and information security initiatives cover all business activities of our Group and are designed to ensure that all officers and employees correctly recognize the importance of information security and take appropriate actions.

## Management System

We are working to maintain, manage, and improve information security. We have established a management organization needed to achieve systematic and continuous information security operations so that we can implement more appropriate information security measures in response to the growing complexity of our business activities on a global scale and preserve the public's trust while ensuring safety and security.

The DX Promotion Division is responsible for information security, and the head of the DX Promotion Division serves as the chief information security officer under the supervision of the Member of the Board/Executive Officer in charge. We have established a dedicated team to manage and protect information in the Information Technology Management Department as a headquarters organization. The team works with the departments in charge of information security at business offices and Group companies to strengthen information security.

## Security Measures

---

We have defined basic information security measures (e.g., the introduction of virus scanning software, access control, and external storage device control) that should be implemented in order to protect the information assets we handle from external threats and periodically monitor their implementation status. We also conduct vulnerability assessments by outside experts and examine appropriate responses to enhance network security. In order to prevent information leaks from inside the company, we check the information system operation logs of all officers and employees and take other measures to strengthen our monitoring system. In the event of any violation of internal rules on information security, we will take strict action in accordance with the rules of employment and disciplinary procedures.

## Information Security Education

---

We believe that the awareness of all officers and employees is important to ensure information security and protect information assets. As an information security awareness activity, we provide all officers and employees with targeted attack email training and information security education on an ongoing basis. Providing regular education in this way enables us to improve the information literacy and ethics of each individual and train them to correctly understand information security and information handling. While it is most important to prevent incidents from occurring, we have made it a rule to immediately report any incidents to our security team, so that we can take swift and appropriate action to minimize damage.

# Intellectual Property Activities

Consistent with our recognition of intellectual property as essential assets of the company and sources of competitive advantages, our business and research and development divisions are united in their promotion of intellectual property strategies to expand and strengthen existing businesses and create new businesses. We also minimize intellectual property risks by conducting patent surveys as we engage in development and move toward commercialization to show our respect for the intellectual property of other companies and avoid unnecessary disputes.

## Promoting inventions

---

We file high-quality patent applications, and retain useful patent for the new technology we produce in the course of carrying out everyday research and production activities by actively working to unearth new inventions, regularly holding patent review meetings, and applying for patents with the intent to obtain and take advantage of the exclusivity they grant. We also strategically apply for defensive patents and seek to acquire rights with an eye on competitors in our core businesses to ensure our advantages in terms of patents and otherwise quickly adapt to changes in the circumstances surrounding intellectual property.

Furthermore, we are working to reform and improve awareness of intellectual property among our people in research and development sections by training them in intellectual property, specifically through internal patent seminars featuring original training and workshops for R&D agreements to more effectively engage in co-creation with outside entities.

## Employee Inventions

---

To incentivize our employees to create intellectual property, we established an employee invention program under which we compensate employees for inventing things worthy of applying for patents. We also give rewards to the inventors of inventions that contribute significantly to the company. Since instituting the invention reward program in 2001, we have received and approved more than 10 applications.

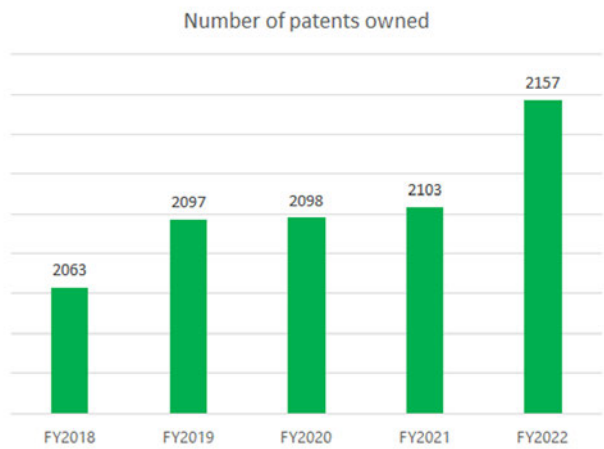
## Licensing

---

Although the foremost use of our proprietary technology is to develop our own business, we also license it to other companies based on our business and research and development strategies—the aim is to leverage the resulting synergy into further development of the company. We also work to increase business opportunities and enhance our presence by proactively introducing the best technology from outside the company and stepping up collaboration with partner companies.

## Number of patents owned

We take steps to improve our intellectual property portfolio and properly maintain patents based on research and business policies in an effort to protect the company, enhance collaboration with outside entities through open innovation, and recover research investments through licensing.



# Sustainability Data

<a href="#">Policies</a>	<a href="#">Editorial Policy</a>
<a href="#">Initiatives and Organizations</a>	<a href="#">Status of Certification Acquisition</a>
<a href="#">ESG Data</a>	<a href="#">Sustainability Library</a>
<a href="#">GRI Standards Comparison Table</a>	

# Policies

## Group Mission Framework / Safety Philosophy

- [Group Mission Framework / Safety Philosophy](#)

## Sustainability Management

- [Sustainability Policy](#)

## Responsible Care

- [RC Policy](#)

## Initiatives for Environment

- [Environmental Protection Policy](#)

## Initiatives for Society

- [Basic policy on human rights](#)
- [Talent Development Policy](#)
- [D&I Promotion Policy](#)
- [Basic Approach to Safety Issues](#)
- [Occupational Safety and Health Policy](#)
- [Sustainable Procurement Policy](#)
- [CSR Procurement Guidelines](#)
- [Responsible Procurement of Minerals Policy](#)
- [Corporate Citizenship Policy](#)

## Governance

- [Our basic approach to corporate governance](#)
- [For Compliance with Anti-Bribery Laws\(Nippon Shokubai's Group Code of Conduct\)](#)
- [For Compliance with Competition Laws\(Nippon Shokubai's Group Code of Conduct\)](#)
- [Tax Policy](#)
- [Information Security Policy](#)

## Investor Relations

- [Disclosure Policy](#)

---

**Other Information**

- [Privacy Policy](#)
- [Cookie Policy](#)

# Editorial Policy



## Editorial Policy

The Nippon Shokubai Group Sustainability Website describes our initiatives to realize a sustainable society under the Group Mission “TechnoAmenity: Providing prosperity and comfort to people and society, with our unique technology.” For the purpose of gaining the understanding of our stakeholders, we have posted details of our group’s general approach to sustainability, as well as initiatives related to the environment, society, and governance.

We periodically archive the sustainability website and record it as a sustainability report for the relevant fiscal year.

In addition, the integrated report “TechnoAmenity Report” reports on the Group’s vision, strategies, and initiatives for medium- to long-term value creation. We hope that you will also read the TCFD Report, which contains information based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

Data related to the environment, society, and governance are posted in the ESG Data.

- [Sustainability Library](#) 
- [ESG Data](#) 

## Reporting Scope

### Organizational boundary

“Nippon Shokubai Group” and “our Group” refer to Nippon Shokubai and its domestic and overseas consolidated subsidiaries, and “Nippon Shokubai”, “the company” and “we” refer to Nippon Shokubai alone.

Reporting targets for Responsible Care initiatives are as follows.

#### **NIPPON SHOKUBAI CO., LTD.**

Osaka Office

Tokyo Office

Himeji Plant

Kawasaki Plant

Suita Research Center

Himeji Research Center



### Group Companies in Japan

NIPPOH CHEMICALS CO., LTD.

TOKYO FINE CHEMICAL CO., LTD.

CHUGOKU KAKO CO., LTD.

NIPPON POLYMER INDUSTRIES CO., LTD.

NISSHOKU TECHNO FINE CHEMICAL CO., LTD.

NIPPON NYUKAZAI CO., LTD.

Nisshoku Butsuryu Co., Ltd.

### Group Companies outside Japan

Nippon Shokubai America Industries, Inc.

PT. NIPPON SHOKUBAI INDONESIA

NIPPON SHOKUBAI EUROPE N.V.

SINGAPORE ACRYLIC PTE LTD

NIPPON SHOKUBAI (ASIA) PTE.LTD.

NISSHOKU CHEMICAL INDUSTRY (ZHANGJIAGANG) CO., LTD.

SINO-JAPAN CHEMICAL CO., LTD.

- [Business Locations](#) 

## Reporting Period

April 1, 2023 to March 31, 2024

Some topics in and after April 2024 are also contained in the website.

## Reporting Cycle

Annually



## Publication date

Publication date : December 2024

Previous publication: December 2023

Next scheduled publication: December 2025

## Referenced Guidelines

- Global Reporting Initiative (GRI) Sustainability Reporting Standards
  - [GRI Standards Comparison Table](#) 
- Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)
  - [TCFD Report](#) 

- Environmental Reporting Guidelines 2018, Environmental Accounting Guidelines 2005, Ministry of the Environment, Government of Japan
- Environmental Accounting Guidelines for the Chemical Industry, Japan Chemical Industry Association and Japan Responsible Care Council
- IIRC (International Integrated Reporting Council) International Integrated Reporting Framework

## Third-party Verification

---

The calculation of GHG emissions has undergone third-party verification.

- [Third-party Verification Report on Greenhouse Gas Emissions](#) 

## Contact

---

Contact



# Greenhouse Gas Emissions Verification Report

**To: NIPPON SHOKUBAI CO., LTD.**

## 1. Objective and Scope

Japan Quality Assurance Organization (hereafter “JQA”) was engaged by NIPPON SHOKUBAI CO., LTD. (hereafter “the Company”) to provide an independent verification on “FY2023\* calculation report of GHG emissions” (hereafter “the Report”). The content of our verification was to express our conclusion, based on our verification procedures, on whether the Report was correctly measured and calculated, in accordance with the “Calculation manual of GHG emissions” (hereafter “the Rule”) developed by the Company. The purpose of the verification is to evaluate the Report objectively and to enhance the credibility of the Report.

\*The fiscal year 2023 of the Company ended on March 31, 2024.

## 2. Procedures Performed

JQA conducted verification in accordance with “ISO 14064-3” for GHG emissions, and with “ISAE3000” for energy consumption and Carbon Neutral City Gas purchase quantity. The scope of this verification assignment covers Scope 1, 2 as GHG (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, CFC, HCFC, HFCs and PFCs) emissions, energy consumption and Carbon Neutral City Gas purchase quantity. The verification was conducted to a limited level of assurance and quantitative materiality was set at 5 percent of the total emissions in the Report. The organizational boundaries of this verification include ten production sites and four non-production sites of the Company and its group companies in Japan.

Our verification procedures included:

- Confirming the integrated functions and the Rule prior to the on-site assessment.
- Holding on-site verification at the Company’s two domestic production sites. The location of sampling sites for on-site assessment was selected by the Company.
- On-site assessment to check the Report’s boundaries, source of GHG, monitoring points, monitoring and calculation system and its controls.
- Vouching: Cross-checking the GHG emissions, energy consumption and Carbon Neutral City Gas purchase quantity data against evidence for all sampling sites.

## 3. Conclusion

Based on the procedures described above, nothing has come to our attention that caused us to believe that the statement of the information regarding the Company’s FY2023 GHG emissions, energy consumption and Carbon Neutral City Gas purchase quantity in the Report, is not materially correct, or has not been prepared in accordance with the Rule.

GHG Emissions	Scope 1	Scope 2	Total
	612 thousand t-CO <sub>2</sub> e	164 thousand t-CO <sub>2</sub>	776 thousand t-CO <sub>2</sub> e
Carbon Neutral City Gas purchase quantity	28,000 thousand Sm <sup>3</sup> (15°C, atmospheric pressure)		

## 4. Consideration

The Company was responsible for preparing the Report, and JQA’s responsibility was to conduct verification of GHG emissions, energy consumption and Carbon Neutral City Gas purchase quantity in the Report only. There is no conflict of interest between the Company and JQA.



Sumio Asada, Board Director

For and on behalf of Japan Quality Assurance Organization

1-25, Kandasudacho, Chiyoda-ku, Tokyo, Japan

September 3, 2024

# Initiatives and Organizations

## Major initiatives which we support and organizations which we belong to

### United Nations Global Compact (UNGC)

The UNGC is a sustainability initiative that brings together the United Nations and the private sector (companies and organizations) to build a healthy global society.

Each company and organization acts as a good member of society by exercising responsible and creative leadership, and takes voluntary initiatives to achieve sustainable growth.


Signatory companies and organizations are required to continue their efforts to achieve ten principles in the areas of the protection of human rights, the elimination of unfair labor practices, environmental responsibility, and anti-corruption, based on the commitment of their top management themselves to these principles.



### The Ten Principles of the UNGC

Human Rights	Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and Principle 2: make sure that they are not complicit in human rights abuses.
Labour	Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; Principle 4: the elimination of all forms of forced and compulsory labour; Principle 5: the effective abolition of child labour; and Principle 6: the elimination of discrimination in respect of employment and occupation.
Environment	Principle 7: Businesses should support a precautionary approach to environmental challenges; Principle 8: undertake initiatives to promote greater environmental responsibility; and Principle 9: encourage the development and diffusion of environmentally friendly technologies.

### Related links


- [United Nations Global Compact \(UNGC\)](#) 
- [News Release \(October 26th, 2020\) – Nippon Shokubai Signs United Nations Global Compact](#)
- [Sustainability Management](#)

## Task Force on Climate-Related Financial Disclosures (TCFD)

The TCFD is a task force established by the Financial Stability Board (FSB), an international organization of central banks and financial regulators from major countries and regions around the world. It provides a framework for disclosing information on climate change-related risks and opportunities.



### Related links

- [Task Force on Climate-Related Financial Disclosures \(TCFD\)](#) 
- [News Release \(March 30th, 2021\) – Nippon Shokubai to Support the Recommendations of the Task Force on Climate-related Financial Disclosures \(TCFD\)](#)
- [Tackling Climate Change](#)
- [TCFD Reports](#)

## The GX League

The GX League (GX: green transformation) is a forum for cooperation between a group of companies and the government, universities, and academic institutions in order to meet greenhouse gas reduction targets and increase industrial competitiveness by using Japan's goal of carbon neutrality by 2050 as an opportunity for economic growth.



### Related links

- [The GX League](#) 

## Responsible Care Global Charter

Responsible Care (RC) is an activity in which companies handling chemical substances engage in dialogue and communication with society by voluntarily ensuring the environment, safety, and health in all processes from development, manufacturing, distribution, use, and final consumption to disposal and recycling of chemical substances, and by disclosing the results of these activities.

The International Council of Chemical Associations (ICCA) published the Responsible Care Global Charter, which was revised in 2014 to promote activities internationally.



President's signature on the RC Global Charter (Revised 2014 version)

### Related links

- [Responsible Care Initiatives](#)

## Japan Clean Ocean Material Alliance (CLOMA)

The CLOMA is a platform in Japan to accelerate innovation by strengthening collaboration among a wide range of stakeholders across industries to solve the global issue of marine plastic waste.



### Related links

- [Japan Clean Ocean Material Alliance \(CLOMA\)](#) [↗](#)

## Long-range Research Initiative(LRI)

The LRI is an international initiative that provides long-term support for research on the effects of chemical substances on human health and the environment. The Japan Chemical Industry Association (JCIA) is promoting this initiative in Japan.

### Related links

- [Long-range Research Initiative\(LRI\)](#) [↗](#)

## Keidanren Initiative for Biodiversity Conservation

This is an initiative by the Japan Business Federation (Keidanren) to “realize a sustainable society through building a society in harmony with nature”.

The initiative has seven action guidelines, including management responsibility, voluntary efforts, and partnership.

### Related links

- [Keidanren Initiative for Biodiversity Conservation](#) 
- [Biodiversity Preservation](#)

## The 30by30 Alliance for Biodiversity

The 30by30 Alliance for Biodiversity is a voluntary alliance of industries, the private sector, and governments that aims to contribute to achieving the “30by30”, which effectively protect or conserve at least 30% of land and sea areas as healthy ecosystems by 2030.



### Related links

- [Japan's 30by30 Roadmap](#) 

## “White Logistics” Movement

This is an initiative promoted by the Ministry of Land, Infrastructure, Transport and Tourism, and other ministries. This movement aims to ensure the stable logistics necessary for people’s daily lives and industrial activities as well as to contribute to the growth of the economy by improving productivity and logistics efficiency of truck transportation and achieving a “white” working environment for drivers and other workers.

### Related links

- [“White Logistics” Movement](#) 
- [Logistics Initiatives](#)

## Challenge Initiative for 30% of Executives to Be Women by 2030 – #Here We Go 203030 –

The initiative was announced by the Japan Business Federation (Keidanren) in 2021. The initiative aims to “increase the proportion of women on the board of directors to at least 30% by 2030” and is working to “promote the active participation in the workforce by diverse people” in order to achieve inclusion and co-creation of diverse value that are the keys to sustainable capitalism.

#### Related links

- [Challenge Initiative for 30% of Executives to Be Women by 2030 – #Here We Go 203030 –](#) 

### EcoVadis

EcoVadis is an online platform for supply chain sustainability performance management operated by French company EcoVadis. The platform serves over 130,000 companies in some 180 countries.

#### Related links

- [Initiatives to Promote Responsible Procurement](#)

### Sedex

Sedex, a non-profit organization, operates an online platform for companies to store and view data on ethical and responsible business practices. The platform is adopted in 180 countries and regions across 35 industry sectors, including food, agriculture, financial services, clothing, garments, packaging, and chemicals.

#### Related links

- [Initiatives to Promote Responsible Procurement](#)

### Roundtable on Sustainable Palm Oil (RSPO)

The RSPO is a not-for-profit organization to promote the sustainable production and use of palm oil. It unites a wide range of stakeholders involved in palm oil and facilitates them working together to consider the impact of palm oil on the environment and human rights through two systems: certification of sustainable production and certification of systems for the proper distribution of certified palm oil.

#### Related links

- [Roundtable on Sustainable Palm Oil \(RSPO\)](#) 
- [Initiatives to Promote Responsible Procurement](#)



## Other major organizations which we belong to

- Japan Business Federation (Keidanren)
- Japan Chemical Industry Association (JCIA)
- Japan Petrochemical Industry Association (JPCA)
- Kansai Chemical Industry Association (Kankakyo)
- Battery Association for Supply Chain (BASC)
- Clean Fuel Ammonia Association (CFAA) etc.

# Status of Certification Acquisition

Nippon Shokubai Group has obtained the following certifications for the environmental and quality management system.

## Environmental management system

As of October, 2024

### NIPPON SHOKUBAI CO., LTD.

Name of manufacturing site	Applicable standard	Registration number	Acquisition date	Effective date
Kawasaki Plant	ISO 14001:2015	JCQA-E-0157	June 2000	15 August, 2026
Himeji Plant	ISO 14001:2015	JCQA-E-0273	July 2001	22 July, 2025

### Group Companies in Japan

Name of group company	Applicable standard	Registration number	Acquisition date	Effective date
NIPPOH CHEMICALS CO., LTD.	ISO 14001:2015	C2021-05330	February 2007	1 February, 2025
CHUGOKU KAKO CO., LTD.	Eco-Action 21	0001926	October 2007	11 October, 2025
NIPPON NYUKAZAI CO., LTD.	ISO 14001:2015	JCQA-E-0908	May 2003	10 October, 2026
TOKYO FINE CHEMICAL CO., LTD.	Eco-Action 21	0003559	April 2009	21 April, 2025
NISSHOKU TECHNO FINE CHEMICAL CO., LTD.	ISO 14001:2015	EMS517539	August 2007	31 July, 2025

### Group Companies outside Japan

Name of group company	Applicable standard	Registration number	Acquisition date	Effective date
SINGAPORE ACRYLIC PTE LTD.	ISO 14001:2015	10410011	January 2007	2 January, 2025

<b>PT. NIPPON SHOKUBAI INDONESIA</b>	ISO 14001:2015	118973	November 2002	14 November, 2024
<b>Nippon Shokubai America Industries, Inc.</b>	ISO 14001:2015	141948.00	March 2020	20 August, 2025
<b>NIPPON SHOKUBAI EUROPE N.V.</b>	ISO 14001:2015	10469752	September 2004	30 September, 2025
<b>NISSHOKU CHEMICAL INDUSTRY (ZHANGJIAGANG) CO., LTD.</b>	ISO 14001:2015	CN041409	November 2007	20 October, 2025
<b>SINO-JAPAN CHEMICAL CO., LTD.</b>	ISO 14001:2015	TW15/10557	June 2006	26 June, 2027

## Quality management system

As of October, 2024

### NIPPON SHOKUBAI CO., LTD.

Name of manufacturing site	Applicable standard	Registration number	Acquisition date	Effective date
<b>Kawasaki Plant</b>	ISO 9001:2015	JCQA-0235	July 1997	15 August, 2026
<b>Himeji Plant</b>	ISO 9001:2015	JCQA-0515	July 1999	11 July, 2026

### Group Companies in Japan

Name of group company	Applicable standard	Registration number	Acquisition date	Effective date
<b>NIPPOH CHEMICALS CO., LTD</b>	ISO 9001:2015	C2021-05329	December 2001	1 February, 2025
<b>CHUGOKU KAKO CO., LTD</b>	ISO 9001:2015	C2023-03659	September 2002	25 September, 2026
<b>NIPPON NYUKAZAI CO., LTD.</b>	ISO 9001:2015	JCQA-0377	October 1998	4 October, 2025
<b>TOKYO FINE CHEMICAL CO., LTD.</b>	ISO 9001:2015	JCQA-1580	December 2005	18 December, 2026
<b>NISSHOKU TECHNO FINE CHEMICAL CO., LTD</b>	ISO 9001:2015	FM 81150	March 2004	15 July, 2027
<b>NIPPON POLYMER INDUSTRIES CO., LTD.</b>	ISO 9001:2015	JCQA-1038	January 2002	14 January, 2026

### Group Companies outside Japan

Name of group company	Applicable standard	Registration number	Acquisition date	Effective date
-----------------------	---------------------	---------------------	------------------	----------------

<b>SINGAPORE ACRYLIC PTE LTD</b>	ISO 9001:2015	10589656	May 2006	1 May, 2027
<b>PT. NIPPON SHOKUBAI INDONESIA</b>	ISO 9001:2015	118972	November 2001	4 December, 2024
<b>Nippon Shokubai America Industries, Inc.</b>	ISO 9001:2015	111948.00	March 2020	20 August, 2025
<b>NIPPON SHOKUBAI EUROPE N.V.</b>	ISO 9001:2015	10469752	October 2004	30 September, 2025
<b>NISSHOKU CHEMICAL INDUSTRY (ZHANGJIAGANG) CO., LTD.</b>	ISO 9001:2015	CN041408	December 2007	18 October, 2025
<b>SINO-JAPAN CHEMICAL CO., LTD.</b>	ISO 9001:2015	TW15/10538	July 2000	27 July, 2027

# ESG Data

The data sheets include environmental data, social data, governance data.

## FY2023

FY2023 ESG Data Sheet (FY2019-FY2023) Last Updated : September 25, 2024



## Back numbers

FY2022 ESG Data Sheet (FY2018-FY2022)



FY2021 ESG Data Sheet (FY2017-FY2021)



FY2020 ESG Data Sheet (FY2016-FY2020)



FY2019 ESG Data Sheet (FY2015-FY2019)



# NIPPON SHOKUBAI Group

## FY2023 ESG Data Sheet

**[Aggregation Period]** April 1 – March 31 of each fiscal year, and March 31 of each fiscal year  
**[Last Updated]** September 25th, 2024

### [Scope of Data Aggregation]

"Nippon Shokubai" NIPPON SHOKUBAI CO., LTD.  
 "Consolidated" NIPPON SHOKUBAI CO., LTD. and its consolidated subsidiaries

### Scope of data aggregation in Responsible Care Initiatives (Environment, and part of Society (Occupational safety and health, Quality))

"Nippon Shokubai" NIPPON SHOKUBAI CO., LTD.  
 "Nippon Shokubai (manufacturing sites)" All manufacturing sites of NIPPON SHOKUBAI CO., LTD. (Himeji Plant / Kawasaki Plant)  
 "Group companies in Japan" NIPPOH CHEMICALS CO., LTD. / TOKYO FINE CHEMICAL CO., LTD. / CHUGOKU KAKO CO., LTD. / NIPPON POLYMER INDUSTRIES CO., LTD. / NISSHOKU TECHNO FINE CHEMICAL CO., LTD. / NIPPON NYUKAZAI CO., LTD. / Nisshoku Butsuryu Co., Ltd.  
 "Group companies outside Japan" Nippon Shokubai America Industries, Inc. / PT. NIPPON SHOKUBAI INDONESIA / NIPPON SHOKUBAI EUROPE N.V. / SINGAPORE ACRYLIC PTE LTD / NIPPON SHOKUBAI (ASIA) PTE.LTD. / NISSHOKU CHEMICAL INDUSTRY (ZHANGJIAGANG) CO., LTD. / SINO-JAPAN CHEMICAL CO., LTD.  
 "Nippon Shokubai Group" The above Nippon Shokubai, Group companies in Japan, and Group companies outside Japan  
 "Nippon Shokubai Group in Japan" The above Nippon Shokubai and Group companies in Japan  
 "Number of production sites" 16 sites  
 NIPPON SHOKUBAI CO., LTD.: 2 sites / NIPPON NYUKAZAI CO., LTD.: 2 sites /  
 Nippon Shokubai America Industries, Inc.: 2 sites /  
 SINGAPORE ACRYLIC PTE LTD (SAA), NIPPON SHOKUBAI (ASIA) PTE.LTD. (NSA)  
 : 1 site for SAA and NSA combined /  
 Other Group companies inside and outside Japan  
 : 1 site each (excluding Nisshoku Butsuryu Co., Ltd.)

### [Coverage rate]

	FY2019	FY2020	FY2021	FY2022	FY2023
Ratio of non-consolidated sales revenue to consolidated sales revenue	67.7%	66.3%	60.8%	61.3%	58.5%

\* The coverage rate for "consolidated" is 100%.

\* The sales revenue ratio of the "Nippon Shokubai Group" to consolidated sales revenue is 90% or more.

"Nippon Shokubai Group" : Scope of data aggregation in Responsible Care Initiatives  
 (Environment, and part of Society (Occupational safety and health, Quality))

**Environment**  
**(1/4)**

Aspect	Classification		Scope	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
Prevention of global warming *1	Energy consumption		Nippon Shokubai Group	1,000 kL (crude oil equivalent)	306	309	299	302 <sup>*2</sup>	317 <sup>*2</sup>
				GWh	2,431	2,443	2,405 <sup>*3</sup>	2,443 <sup>*2</sup>	2,681 <sup>*2*3</sup>
			Nippon Shokubai	1,000 kL (crude oil equivalent)	191	197	184	187	203 <sup>*2</sup>
			Nippon Shokubai (manufacturing sites)		182	189	175	179	195 <sup>*2</sup>
			Group companies in Japan		26	27	28	27	27
			Group companies outside Japan		89	85	87 <sup>*3</sup>	88 <sup>*2</sup>	87
	Energy intensity		Nippon Shokubai (manufacturing sites)	L/tons-production volume (crude oil equivalent)	102	109	98	111	126 <sup>*2</sup>
	GHG emissions	Scope 1+2 *4	Nippon Shokubai Group	1,000 tons-CO <sub>2</sub> e	1,150	1,145	1,159 <sup>*3</sup>	<sup>*2*3*5</sup> 1,046	<sup>*2*3*5</sup> 1,019
			Nippon Shokubai		748	739	755	654 <sup>*5</sup>	651 <sup>*2*5</sup>
			Group companies in Japan		64	68	70	68	63 <sup>*2</sup>
			Group companies outside Japan		338	338	334 <sup>*3</sup>	324 <sup>*3</sup>	305 <sup>*3</sup>
		Scope 1 *4	Nippon Shokubai Group	1,000 tons-CO <sub>2</sub> e	809	803	839	727 <sup>*5</sup>	731 <sup>*2*5</sup>
			Nippon Shokubai		607	596	627	521 <sup>*5</sup>	510 <sup>*2*5</sup>
			Group companies in Japan		37	43	45	44	40 <sup>*2</sup>
			Group companies outside Japan		165	164	168	161	181
		Scope 2	Nippon Shokubai Group	1,000 tons-CO <sub>2</sub>	341	343	320 <sup>*3</sup>	319 <sup>*3</sup>	287 <sup>*2*3</sup>
			Nippon Shokubai		141	143	128	133	141 <sup>*2</sup>
			Group companies in Japan		27	25	25	24	23
			Group companies outside Japan		173	174	167 <sup>*3</sup>	162 <sup>*2*3</sup>	124 <sup>*3</sup>
		Scope 3	Nippon Shokubai	1,000 tons-CO <sub>2</sub> e	3,701	3,567	3,783	3,405	3,426
		Cat. 1: Purchased goods and services			1,510	1,445	1,522	1,370	1,462
		Cat. 2: Capital goods			37	55	44	43	49
		Cat. 3: Fuel- and energy-related activities not included in Scope 1 or Scope 2			63	85	83	89	97
		Cat. 4: Upstream transportation and distribution			14	14	15	13	14
		Cat. 5: Waste generated in operations			7	7	8	5	5
		Cat. 6: Business travel			0	0	0	0	0
		Cat. 7: Employee commuting			1	1	1	1	1
		Cat. 8: Upstream leased assets			—	—	—	—	—
		Cat. 9: Downstream transportation and distribution			—	—	—	—	—
		Cat. 10: Processing of sold products			—	—	—	—	—
		Cat. 11: Use of sold products			—	—	—	—	—
		Cat. 12: End-of-life treatment of sold products			2,068	1,961	2,111	1,884	1,798
		Cat. 13: Downstream leased assets			—	—	—	—	—
		Cat. 14: Franchises			—	—	—	—	—
		Cat. 15: Investments			—	—	—	—	—
	Estimated value of avoided emissions in the supply chain by Environmental Contribution Products		Nippon Shokubai Group	1,000 tons-CO <sub>2</sub> *6	—	—	1,040	1,140	1,070

**Environment  
(2/4)**

2/4

Aspect	Classification		Scope	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
Environmental conservation for logistics *1	CO <sub>2</sub> emissions attributable to domestic logistics		Nippon Shokubai	1,000 tons-CO <sub>2</sub>	14.2	13.9	14.8	13.2	13.7
	CO <sub>2</sub> emissions intensity attributable to domestic logistics		Nippon Shokubai	kg-CO <sub>2</sub> /1,000 ton-km	58.5	59.0	58.7	57.9	62.4
Water	Water withdrawal	Surface water (rivers, lakes, etc.)	Nippon Shokubai Group	million m <sup>3</sup>	0.0	0.0	0.0	0.0	0.0
			Nippon Shokubai		0.0	0.0	0.0	0.0	0.0
			Group companies in Japan		0.0	0.0	0.0	0.0	0.0
			Group companies outside Japan		0.0	0.0	0.0	0.0	0.0
		Groundwater	Nippon Shokubai Group	million m <sup>3</sup>	3.3	3.3	3.3	3.4	3.4
			Nippon Shokubai		0.0	0.0	0.0	0.0	0.0
			Group companies in Japan		3.3	3.3	3.3	3.4	3.4
			Group companies outside Japan		0.0	0.0	0.0	0.0	0.0
		Sea water	Nippon Shokubai Group	million m <sup>3</sup>	45.4	45.8	17.1	0.0	0.0
			Nippon Shokubai		0.0	0.0	0.0	0.0	0.0
			Group companies in Japan		0.0	0.0	0.0	0.0	0.0
			Group companies outside Japan		45.4	45.8	17.1	0.0	0.0
		Third-Party sources (tap water, industrial water, etc.)	Nippon Shokubai Group	million m <sup>3</sup>	19.5	19.5	20.0	19.9	20.1
			Nippon Shokubai		14.9	14.6	14.8	14.4	14.1
			Group companies in Japan		2.6	2.7	2.6	2.6	2.6
			Group companies outside Japan		2.1	2.1	2.6	3.0	3.4
		Total	Nippon Shokubai Group	million m <sup>3</sup>	68.2	68.6	40.5	23.3	23.5
			Nippon Shokubai		14.9	14.6	14.8	14.4	14.1
			Group companies in Japan		5.9	6.0	6.0	6.0	6.0
			Group companies outside Japan		47.4	47.9	19.8	3.0	3.4
		Water use intensity	Nippon Shokubai (manufacturing sites)	m <sup>3</sup> /tons-production volume	—	8.45	8.26	8.96	9.22
		Water Stress sites *7	Nippon Shokubai Group	numbers	0	0	0	0	2
		Total water withdrawal in water-stressed regions	Nippon Shokubai Group	million m <sup>3</sup>	0.0	0.0	0.0	0.0	3.0
	Water discharge	Surface water (rivers, lakes, etc.)	Nippon Shokubai Group	million m <sup>3</sup>	4.5	4.6	4.7	4.8	4.9
			Nippon Shokubai		0.0	0.0	0.0	0.0	0.0
			Group companies in Japan		3.9	4.0	4.0	4.0	4.0
			Group companies outside Japan		0.6	0.7	0.7	0.8	0.8
		Subsurface	Nippon Shokubai Group	million m <sup>3</sup>	0.0	0.0	0.0	0.0	0.0
			Nippon Shokubai		0.0	0.0	0.0	0.0	0.0
			Group companies in Japan		0.0	0.0	0.0	0.0	0.0
			Group companies outside Japan		0.0	0.0	0.0	0.0	0.0
		Ocean	Nippon Shokubai Group	million m <sup>3</sup>	54.7	55.5	27.0	9.4	9.5
			Nippon Shokubai		7.7	7.9	8.1	7.7	7.7
			Group companies in Japan		1.6	1.7	1.7	1.8	1.8
			Group companies outside Japan		45.4	45.8	17.1	0.0	0.0
		Third Party Dischargers (sewage, etc.)	Nippon Shokubai Group	million m <sup>3</sup>	0.3	0.3	0.3	0.2	0.2
			Nippon Shokubai		0.0	0.0	0.0	0.0	0.0
			Group companies in Japan		0.1	0.1	0.1	0.0	0.0
			Group companies outside Japan		0.2	0.2	0.2	0.2	0.2
		Total	Nippon Shokubai Group	million m <sup>3</sup>	59.5	60.4	32.0	14.5	14.5
			Nippon Shokubai		7.7	8.0	8.2	7.7	7.7
			Group companies in Japan		5.6	5.8	5.8	5.8	5.9
			Group companies outside Japan		46.1	46.6	18.0	1.0	1.0
	Water consumption *8	Total	Nippon Shokubai Group	million m <sup>3</sup>	8.7	8.2	8.6	8.8	9.0
			Nippon Shokubai		7.1	6.7	6.6	6.7	6.4
			Group companies in Japan		0.3	0.2	0.2	0.1	0.2
			Group companies outside Japan		1.3	1.3	1.7	2.0	2.4
Raw material	Purchased raw materials		Nippon Shokubai	1,000 tons	1,032	969	1,047	924	897



**Environment**  
**(3/4)**

Aspect	Classification	Scope	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
Prevention of air and water pollution	SOx emissions	Nippon Shokubai Group	tons	9.9	8.6	7.9	8.6	14.9
		Nippon Shokubai		3.5	3.7	3.1	3.0	2.0
		Group companies in Japan		1.4	1.6	1.4	0.7	0.6
		Group companies outside Japan		5.0	3.3	3.5	4.9	12.3
	NOx emissions	Nippon Shokubai Group	tons	313	307	328	308	290
		Nippon Shokubai		203	198	196	186	166
		Group companies in Japan		43	48	72	52	40
		Group companies outside Japan		67	61	61	70	84
	Dust emissions	Nippon Shokubai Group in Japan	tons	9.8	7.8	9.4	8.0	8.9
		Nippon Shokubai		6.5	5.7	7.4	6.0	7.6
		Group companies in Japan		3.3	2.1	2.1	1.9	1.4
	VOC emissions	Nippon Shokubai	tons	89	57	59	62	53
	COD emissions	Nippon Shokubai Group in Japan	tons	110	111	110	116	86
		Nippon Shokubai		50	50	56	45	34
		Group companies in Japan		60	61	55	72	53
	Total phosphorous emissions	Nippon Shokubai	tons	2.7	2.5	2.6	2.3	2.5
	Total nitrogen emissions	Nippon Shokubai	tons	55	52	56	57	28
Waste reduction	Quantity of off-site waste *9	Nippon Shokubai Group	1,000 tons	9.5	9.8	11.0	10.6	9.5
		Nippon Shokubai		2.8	2.8	3.0	2.0	2.1
		Group companies in Japan		6.0	5.5	7.0	6.9	6.2
		Group companies outside Japan		0.7	1.6	0.9	1.6	1.2
	Quantity of recycling	Nippon Shokubai Group	1,000 tons	47	45	49	46	42
		Nippon Shokubai		34	34	38	35	33
		Group companies in Japan		2	2	2	2	2
		Group companies outside Japan		10	9	9	9	7
	Quantity of final off-site landfill	Nippon Shokubai Group	tons	322	494	568	611	738
		Nippon Shokubai		11	11	9	9	7
		Group companies in Japan		71	108	118	82	110
		Group companies outside Japan		240	376	442	521	621
	Quantity of final off-site landfill / Total amount of waste generated Objective: ≤0.1%	Nippon Shokubai	%	0.016	0.016	0.016	0.018	0.016
Chemical management	Substances subject to the PRTR law *10	Nippon Shokubai Group in Japan	tons	113	117	121	112	128
		Nippon Shokubai		79	83	86	81	90
		Released into atmosphere		41	38	40	37	47
		Released into water		37	45	46	45	43
		Group companies in Japan		35	34	35	30	37

**Environment**  
**(4/4)**

Aspect	Classification	Scope	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
Environmental management	Ratio of plants with environmental management system (EMS) certification *11	Nippon Shokubai Group	%	100	100	100	100	94
		Nippon Shokubai		100	100	100	100	100
		Group companies in Japan		100	100	100	100	86
		Group companies outside Japan		100	100	100	100	100
Environmental accounting	Environmental protection cost (Investment)	Nippon Shokubai	million yen	2,960	327	105	164 <sup>*2</sup>	84
	Environmental protection cost (Expense)	Nippon Shokubai	million yen	9,678	9,471	10,137 <sup>*2</sup>	11,356 <sup>*2</sup>	11,506
	Economic effect resulting from environmental protection initiatives	Nippon Shokubai	million yen	2,577	2,484	6,722	5,881	6,245
Violation of environmental laws and regulations	Number of significant fines and penalties for violations of environmental laws and regulations	Nippon Shokubai Group	numbers	0	0	0	0	0

\*1 Due to the revision of the Act on Rationalization of Energy Use and Shift to Non-fossil Energy (Energy Conservation Act), the Act on Promotion of Global Warming Countermeasures (Global Warming Countermeasures Act), and the Act on Rational Use and Appropriate Management of Fluorocarbons (Fluorocarbons Act), the calculation method has been revised from the fiscal 2023 results.

\*2 Fixed calculation errors

\*3 The calculation method has been revised

\*4 Calculated based on the GHG Protocol and includes GHG emissions from non-energy sources not subject to calculation under the Act on Promotion of Global Warming Countermeasures.

\*5 Includes offset from the purchase of carbon-neutral city gas (FY2022: 61,000 tons-CO<sub>2</sub> per year, FY2023: 62,000 <sup>\*2</sup> tons-CO<sub>2</sub> per year)

\*6 Revised disclosure method

\*7 To conduct water risk assessments, we used the Aqueduct 4.0 Water Risk Atlas of World Resources Institute (WRI). Definition of water stress sites: Number of production sites located in areas with "Extremely High" and "High" baseline water stress.

\*8 Water consumption is calculated by subtracting water discharge from water withdrawal.

\*9 The quantity of off-site waste emission is obtained by subtracting the quantity of on-site reduction, on-site recycling, on-site landfill and off-site recycling from the quantity of waste generated.

\*10 PRTR law: The official name is "Act on the Assessment of Releases of Specified Chemical Substances in the Environment and the Promotion of Management Improvement."

Due to a revision of the law, the number of substances subject to the law increased from FY2023.

\*11 Ratio at manufacturing sites. EMS certification is ISO 14001 or EcoAction 21, Japan's own EMS established by the Ministry of the Environment.

<Scope 3 calculation method>

Cat. 1: Calculated by multiplying physical volume data of products purchased or acquired by the company by emissions unit values for each product from the resource extraction stage to the manufacturing stage

Cat. 2: Calculated by multiplying the value of newly acquired fixed assets by the emissions intensity

Cat. 3: Calculated by multiplying physical volume data such as fuel, electricity, and heat purchased by the company by the emissions intensity from the resource extraction stage to the transportation stage

Cat. 4: Calculated by applying the calculation method for specified consignors under the calculation, reporting, and publication system

Cat. 5: Calculated by multiplying the outsourced amount by waste type and processing method by the emission intensity by waste type and processing method

Cat. 6: Calculated by multiplying the number of employees by the emissions intensity

Cat. 7: Calculated by multiplying the number of employees by work type and city class by the number of business days per year and the emissions intensity

Cat. 8: Only leases within the group, not applicable as they are calculated in scope 1 and 2 of group companies

Cat. 9: Not calculated due to difficulty in collecting data necessary for calculation

Cat. 10: Not calculated due to difficulty in collecting data necessary for calculation

Cat. 11: Not calculated due to difficulty in collecting data necessary for calculation

Cat. 12: Calculated by multiplying the sales volume of each product by the emission factor for each product (Products with a sales volume of 100 tons or more are covered, and the coverage rate is 99% or more.)

Cat. 13: Only leases within the group, not applicable as they are calculated in scope 1 and 2 of group companies

Cat. 14: Not applicable because there is no applicable activity

Cat. 15: Not applicable as the company is not an investment company

\*Database used

IDEA: National Institute of Advanced Industrial Science and Technology Safety Science Research Institute IDEA Lab (Ver.3.4 was used in 2023)

Ministry of the Environment DB: Emission intensity database for calculating greenhouse gas emissions, etc. of organizations through the supply chain (Ver.3.4 was used in 2023)

Social  
(1/3)

Aspect	Classification		Scope		Unit	FY2019	FY2020	FY2021	FY2022	FY2023	
Employees	Number of employees	Number of employees	Consolidated	Total	persons	4,510	4,555	4,526	4,574	4,607	
			Nippon Shokubai	Male		2,156	2,185	2,197	2,206	2,244	
				Female		197	206	215	237	247	
				Total		2,353	2,391	2,412	2,443	2,491	
		Male-female ratio	Nippon Shokubai	Male	%	91.6	91.4	91.1	90.3	90.1	
				Female		8.4	8.6	8.9	9.7	9.9	
		Male-female ratio in STEM positions *1*2	Nippon Shokubai	Male	%	—	—	—	—	93.5	
		Female		—		—	—	—	6.5		
		Percentage of mid-career hires to all employees in the end of the fiscal year	Nippon Shokubai	Total	%	5.1	5.5	5.8	7.1	8.2	
		Number of managers	Number of managers	Nippon Shokubai	Male	persons	530	545	559	520	531
	Female				18		23	24	24	30	
	Total				548		568	583	544	561	
	Male-female ratio		Nippon Shokubai	Male	%	96.7	96.0	95.9	95.6	94.6	
				Female		3.3	4.0	4.1	4.4	5.4	
	Male-female ratio in director-level or above *1		Nippon Shokubai	Male	%	—	—	—	—	100.0	
				Female		—	—	—	—	0.0	
	Male-female ratio in management staff (general manager-level or above) *1		Nippon Shokubai	Male	%	—	—	—	—	98.0	
				Female		—	—	—	—	2.0	
	Number of new management staff (manager-level or above) *1		Nippon Shokubai	Male	%	—	—	—	—	89.0	
				Female		—	—	—	—	11.0	
	Male-female ratio in manager-level or above in revenue-generating functions *1*3		Nippon Shokubai	Male	%	—	—	—	—	96.5	
				Female		—	—	—	—	3.5	
	Average age		Nippon Shokubai	Total	ages	38.3	38.5	38.7	38.8	39.0	
	Average length of service			Nippon Shokubai	Male	years	16.4	16.6	16.7	16.6	16.8
					Female		14.4	14.8	14.7	14.0	13.8
					Total		16.2	16.4	16.5	16.4	16.5
	Participation rate of labor union *4		Nippon Shokubai	Total	%	69.4	69.9	69.8	70.3	74.1	
	Employment and Diversity & Inclusion	Number of hires	Number of new graduate hires (College graduate)	Nippon Shokubai	Male	persons	39	40	43	35	31
					Female		6	6	7	9	13
					計		45	46	50	44	44
Male-female ratio			Nippon Shokubai	Male	%	84.4	87.0	86	79.5	70.5	
				Female		13.3	13.0	14.0	20.5	29.5	
Number of mid-career hires			Nippon Shokubai	Male	persons	14	12	11	32	32	
				Female		3	2	4	12	9	
				計		17	14	15	44	41	
Male-female ratio			Nippon Shokubai	Male	%	82.4	85.7	73.3	72.7	78.0	
				Female		17.6	14.3	26.7	27.3	22.0	
Percentage of mid-career hires to all new hires *5		Nippon Shokubai	Total	%	14.7	12.4	13.3	34.4	35.0		
Wage		Average annual salary	Nippon Shokubai	Total	thousand yen	8,103	7,661	7,598	7,826	8,178	
		Wage differences between male and female workers *6	Nippon Shokubai	Total	%	—	—	—	82.8	83.4	
		The gender annual income gap (Percentage of women's annual income to men's annual income.) *1	Nippon Shokubai	Non-management staff	%	—	—	—	—	93.4	
				Management staff (manager-level or above)		—	—	—	—	90.1	
				Total		—	—	—	—	84.7	
		The gender pay gap (Percentage of women's pay to men's pay.) *1	Nippon Shokubai	Non-management staff	%	—	—	—	—	92.5	
				Management staff (manager-level or above)		—	—	—	—	90.5	
				Total		—	—	—	—	85.3	
		The gender bonus gap (Percentage of women's bonus to men's bonus.) *1	Nippon Shokubai	Non-management staff	%	—	—	—	—	95.6	
				Management staff (manager-level or above)		—	—	—	—	89.2	
				Total		—	—	—	—	83.6	
		Number of foreign national employees		Nippon Shokubai	Total	persons	4	4	4	4	7
		Employment rate of persons with disabilities		Nippon Shokubai	Total	%	2.2	2.3	2.2	1.9	2.0

**Social  
(2/3)**

Aspect	Classification		Scope		Unit	FY2019	FY2020	FY2021	FY2022	FY2023
Employment and Diversity & Inclusion (continued)	Re-employment	Re-employment rate of retired employees	Nippon Shokubai	Total	%	87.0	89.0	88.0	83.0	82.0
		Average Monthly Wage of Rehired Employees	Nippon Shokubai	Total	thousand yen	322	327	339	363	441
	Turnover/Layoff	Turnover rate of regular employees (Personal reason)	Nippon Shokubai	Male	%	—	—	—	1.5	2.3
				Female		—	—	—	3.5	2.8
				Total		1.4	1.8	2.5	1.7	2.3
Work-Life Balance	Child Care	Number of employees using child care leave (Total numbers for fiscal year)	Nippon Shokubai	Male	persons	1 <sup>*7</sup>	6 <sup>*7</sup>	7 <sup>*7</sup>	45	80
				Female		10 <sup>*7</sup>	9 <sup>*7</sup>	6 <sup>*7</sup>	5	1
				Total		11 <sup>*7</sup>	15 <sup>*7</sup>	13 <sup>*7</sup>	50	81
		Percentage of employees taking childcare leave	Nippon Shokubai	Male	%	0.9	5.9	7.2	51.1	92.0
				Female		—	—	—	—	100.0
				Total		—	—	—	—	92.0
		Average number of days used for childcare leave *1	Nippon Shokubai	Male	%	—	—	—	—	39.3
				Female		—	—	—	—	366.0
				Total		—	—	—	—	43.0
		Return rate from child care leave of absence	Nippon Shokubai	Male	%	—	—	—	—	100.0
				Female		—	—	—	—	100.0
				Total		97.0	100.0	95.7	100.0	100.0
		Employee retention rate three years after childcare leave *1	Nippon Shokubai	Male	%	—	—	—	—	75.0
				Female		—	—	—	—	85.7
				Total		—	—	—	—	81.8
	Nursing Care	Number of employees using nursing care leave and personal reasons of absence	Nippon Shokubai	Total	persons	1	1	0	0	0
	Paid leave	Average annual paid leave acquisition days per employee (Labor union member)	Nippon Shokubai	Total	days	13.0	12.6	13.4	18.0 <sup>*8</sup>	19.3 <sup>*8</sup>
		Rate of taking annual paid leave (Labor union member)	Nippon Shokubai	Total	%	69.0	67.2	71.3	94.5 <sup>*8</sup>	100.7 <sup>*8</sup>
		Average annual paid leave acquisition days per employee (Management)	Nippon Shokubai	Total	days	10.9	10.5	11.0	12.9 <sup>*8</sup>	13.3 <sup>*8</sup>
		Rate of taking annual paid leave (Management)	Nippon Shokubai	Total	%	54.5	52.4	55.0	65.5 <sup>*8</sup>	67.6 <sup>*8</sup>
		Average annual paid leave acquisition days per employee (All)	Nippon Shokubai	Total	days	12.5	12.2	12.9	16.7 <sup>*8</sup>	17.2 <sup>*8</sup>
		Rate of taking annual paid leave (All)	Nippon Shokubai	Total	%	65.6	63.8	67.3	87.6 <sup>*8</sup>	90.0 <sup>*8</sup>
		Working hours	Average overtime hours (Hours/Month)	Nippon Shokubai	Labor union member	hours	15.4	15.3	15.3	15.3
	Number of employees whose overtime hours exceeded 80 hours / month *1		Nippon Shokubai	Labor union member	persons	—	—	—	—	0
				Management		—	—	—	—	4
Total				—		—	—	—	4	
Human right	Number of Child Labor and Force Labor		Consolidated		numbers	0	0	0	0	0
Human resources development	Training	Total number of hours spent on employee's training	Nippon Shokubai	Total	hours	55,783	49,623	44,408	40,074	70,941
		Training time per employee	Nippon Shokubai	Total		23.7	20.8	18.4	16.4	28.5
		Total employee training expenses	Nippon Shokubai	Total	million yen	195	109	129	240	307
		Training expenses per employee	Nippon Shokubai	Total	thousand yen	83	46	54	98	123
		Total number of participants in self-selected training programs	Nippon Shokubai	Total	persons	—	—	—	1,312	1,810
		Total reskilling expenses for senior employees	Nippon Shokubai	Total	million yen	—	—	—	4	1
	Global Human Resources	Percentage of employees with overseas work experience	Nippon Shokubai	Total	%	—	—	—	11.7	11.6
Percentage of positions filled internally (Management position)	Percentage of positions filled internally (in director,general manager,manager) *1		Nippon Shokubai	Total	%	—	—	—	—	98.9
Engagement	Engagement score *10		Nippon Shokubai	Total	—	—	—	—	CCC	CCC

Social  
(3/3)

3/3

Aspect	Classification		Scope	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
Occupational safety and health	Number of injuries with loss of workdays	Nippon Shokubai Group		numbers	4	5	5	5	8
		Nippon Shokubai			2	1	4	1	5
		Group companies in Japan			0	4	0	3	1
		Group companies outside Japan			2	0	1	1	2
		Contractors of Nippon Shokubai			1	3	1	1	2
	Lost-time injury frequency rate	Nippon Shokubai Group		—	0.57	0.71	0.70	0.73	1.12
		Nippon Shokubai			0.54	0.27	1.05	0.28	1.32
		Group companies in Japan			0.00	2.75	0.00	2.08	0.68
		Group companies outside Japan			1.06	0.00	0.54	0.54	1.07
		Contractors of Nippon Shokubai			0.32	1.04	0.36	0.36	0.75
	Number of fatal accidents	Nippon Shokubai Group		numbers	0	0	0	0	0
		Nippon Shokubai			0	0	0	0	0
		Group companies in Japan			0	0	0	0	0
		Group companies outside Japan			0	0	0	0	0
		Contractors of Nippon Shokubai			0	0	0	0	0
	Ratio of plants with ISO 45001 (management systems of occupational health and safety) *11	Nippon Shokubai Group		%	—	38	38	38	38
	Number of participants in company-wide RC training including safety	Nippon Shokubai		persons	—	181	187	191	174
Quality	Ratio of plants with ISO 9001 (quality management system) *11		Nippon Shokubai Group	%	100	100	100	100	100
Social contribution	Expense	Amount paid for activities on social contributions	Nippon Shokubai	million yen	126	161	128	209	170
		Donation	Nippon Shokubai		54	95	64	139	48
		Expenditure for other activities on social contributions *12	Nippon Shokubai		72	66	64	70	122 <sup>*12</sup>
	Volunteer activity	Number of participants for "Japan-China Friendship Forest Development and Global Warming Prevention"	Nippon Shokubai	persons	3 <sup>*13</sup>	0 <sup>*14</sup>	0 <sup>*14</sup>	0 <sup>*14</sup>	— <sup>*15</sup>
		Number of participants for "Contributing to Our Forests and Water Resources"	Nippon Shokubai		175	11 <sup>*14</sup>	21 <sup>*14</sup>	34 <sup>*14</sup>	— <sup>*15</sup>
		Number of participants for "Contributing to the 'Yugawara Myriad Leaves Forest'"	Nippon Shokubai		56	0 <sup>*14</sup>	11 <sup>*14</sup>	55	55
		Number of participants for "Japan-Indonesia Friendship Forest of Banten Bay for Biodiversity Preservation"	Nippon Shokubai PT. Nippon Shokubai Indonesia		60	5 <sup>*14</sup>	4 <sup>*14</sup>	0 <sup>*14</sup>	— <sup>*15</sup>

\*1 Added new contents

\*2 STEM: Science, technology, engineering and mathematics.

STEM positions refer to R&amp;D, Production, Engineering, RC, and DX departments.

\*3 Revenue-generating functions: refer to line management roles in departments such as sales, or that contribute directly to the output of products or services. It excludes support functions such as HR, IT, Legal.

\*4 All applicable employees join the labor union based on the Union Shop Agreement.

\*5 Percentage of mid-career hires to all new hires, including high school graduates, etc.

\*6 Ratio of average female wage to average male wage. Include number of contract employees.

\*7 Correction due to revision of calculation scope

\*8 Temporary increase in FY2022 and FY2023 due to the increase in the number of days granted as a result of the change in the date for granting annual paid leave all at once.

\*9 The definition of external is mid-career hires these five years.

\*10 Evaluation by Motivation Cloud of Link and Motivation, Inc.

\*11 Ratio at manufacturing sites

\*12 Expenditure for Volunteer activity, Facilities offering, etc. The coverage was revised from FY2023.

\*13 The secretariat and NPO members performed maintenance work.

\*14 Volunteer activities by employees have been suspended to prevent infection from spreading of COVID-19.

To the extent possible, we carried out activities such as on-site visits with NGO/NPO and check the report.

\*15 Activities ended in FY2022

**Governance**

Aspect	Classification		Scope	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
Related information for management	Number of Members of the Board	Members of the Board (incl. Outside Members of the Board)	Nippon Shokubai	persons	9	8	9	9	8
		Outside Members of the Board	Nippon Shokubai		3	3	3	3	3
	Number of Members of Auditors Meeting	Statutory Corporate Auditors (incl. External Statutory Corporate Auditors)	Nippon Shokubai	persons	4	4	4	4	4
		External Statutory Corporate Auditors	Nippon Shokubai		2	2	2	2	2
	Outside Officers composition ratio of the Nominating and Remuneration Committee		Nippon Shokubai	%	66.7	66.7	66.7	66.7	66.7
	Remuneration of Members of the Board (except Outside Members of the Board)		Nippon Shokubai	million yen	334	196	333	390	328
	Remuneration of Statutory Corporate Auditors (except External Statutory Corporate Auditors)		Nippon Shokubai	million yen	47	47	46	52	54
	Remuneration of Outside Officers (except External Statutory Corporate Auditors)		Nippon Shokubai	million yen	34	35	36	39	40
Shareholder	Dividend	Interim	Nippon Shokubai	yen per share	90	45	80	90	90
		Annual	Nippon Shokubai		180	90	180	180	180
	Dividend Payout Ratio		Consolidated *1	%	64.7	—	30.3	36.9	63.9
Compliance	Number of participants in the training for new employees, new middle level employees and new managers regarding compliance		Nippon Shokubai	persons	186	219	194	2,485*2	200
	Number of internal reporting		Nippon Shokubai	numbers	4	0	0	3	2
Compliance with laws and regulations	Number of violations for "For Compliance with Anti Bribery Laws in Nippon Shokubai Group's Code of Conduct"		Consolidated	numbers	0	0	0	0	0
	Number of fine and penalty for bribery		Consolidated	numbers	0	0	0	0	0
	Number of violations for "For Compliance with Competition Laws in Nippon Shokubai Group's Code of Conduct"		Consolidated	numbers	0	0	0	0	0
	Number of significant violations of laws or regulations in the social and economic area besides those mentioned above		Consolidated	numbers	0	0	0	0	0
Contribution	Political Contribution		Nippon Shokubai	yen	0	0	0	0	0
Information security	Number of critical Incidents in Information Systems		Consolidated	numbers	0	0	0	0	0

\*1 NIPPON SHOKUBAI CO., LTD., its subsidiaries and its affiliates

\*2 In FY2022, Code of Conduct introduction training was conducted for all levels of employees. The number of the participants includes those in the training for new employee as well as those in Code of Conduct introduction training.

[Updated Contents]

July 11th, 2024

Released FY2023 data

Added new contents

Social > Employees > Number of employees > Male-female ratio in STEM positions

Social > Employees > Number of managers > Male-female ratio in director-level or above,

Male-female ratio in management staff (general manager-level or above),

Number of new management staff (manager-level or above),

Male-female ratio in manager-level or above in revenue-generating functions

Social > Employment and Diversity & Inclusion > Wage > The gender annual income gap, The gender pay gap, The gender bonus gap

Social > Work-Life Balance > Child Care > Average number of days used for childcare leave,

Employee retention rate three years after childcare leave

Social > Work-Life Balance > Working hours > Number of employees whose overtime hours exceeded 80 hours / month

Social > Percentage of positions filled internally > Percentage of positions filled internally (in director, general manager, manager)

Social > Occupational safety and health > Number of injuries with loss of workdays, Lost-time injury frequency rate, Number of fatal accidents >

Group companies outside Japan

Fixed errors

Environment > Prevention of global warming > Energy consumption > FY2022

Environment > Prevention of global warming > GHG emissions > Scope 1+2, Scope 2 > FY2022

Social > Work-Life Balance > Child Care > Number of employees using child care leave (revision of calculation scope)

September 25th, 2024

Fixed errors





Environment > Prevention of global warming > Energy consumption > FY2021, FY2023

Environment > Prevention of global warming > GHG emissions > Scope 1+2, Scope 1, Scope 2 > FY2021-2023

# Sustainability Library







## 2024

---

- [TechnoAmenity Report 2024 \[9.1MB\]](#)  (Integrated report)
- [Third-party Verification Report of FY2023 GHG emissions \[142KB\]](#) 
- [TCFD Report 2024 \[1.8MB\]](#)  Updated in September 2024
- [Financial Report year ended March 31, 2024 \[522KB\]](#) 







## 2023

---

- [TechnoAmenity Report 2023 \[8.7MB\]](#)  (Integrated report)
- [RC Report 2023 \[5.2MB\]](#) 
  - [Third-party Verification Report of FY2022 GHG emissions \[154KB\]](#) 
- [TCFD Report 2023 \[4.0MB\]](#)  Updated in September 2023
- [Sustainability Report 2023 \[11.8MB\]](#) 
- [Financial Report year ended March 31, 2023 \[1.0MB\]](#) 




## 2022

---




- [TechnoAmenity Report 2022 \[10MB\]](#)  (Integrated report)
- [RC Report 2022 \[6.1MB\]](#) 
  - [Third-party Verification Report of FY2021 GHG emissions \[145KB\]](#) 
- [TCFD Report 2022 \[3.7MB\]](#)  Published in April 2022
- [Sustainability Report 2022 \[34.2MB\]](#) 
- [Financial Report year ended March 31, 2022 \[1.0MB\]](#) 

## 2021




---

- [TechnoAmenity Report 2021 \[13.2MB\]](#) 
- [TechnoAmenity Report Financial Section 2021 \[1.3MB\]](#) 
- [RC Reports 2021 \[6.1MB\]](#) 

## 2020

- [TechnoAmenity Report 2020 \[11.2MB\]](#) 
- [TechnoAmenity Report Financial Section 2020 \[948KB\]](#) 
- [RC Reports 2020 \[6.2MB\]](#) 

## 2019

- [TechnoAmenity Report 2019 \[9.9MB\]](#) 
- [TechnoAmenity Report Financial Section 2019 \[8.8MB\]](#) 
- [RC Reports 2019 \[8.8MB\]](#) 

[CSR Reports back number](#)

[Annual Reports back number](#)

## Reports

### TechnoAmenity Report (Integrated report)

This report has been published as an integrated report from the 2022 edition, and aims to help a broad range of stakeholders understand our initiatives to achieve the Nippon Shokubai Group Mission “TechnoAmenity: Providing prosperity and comfort to people and society, with our unique technology.”



### RC Report

This report, which has introduced the details of RC (Responsible Care) activities, has been integrated into the TechnoAmenity Report from 2024, providing an overview. For specific details, please refer to our sustainability site.

### TCFD Report



Reports containing information based on the TCFD framework.







## Sustainability Report






The information posted on the Nippon Shokubai Group Sustainability Website has been compiled into a PDF as an annual report.

# CSR Reports Back number

## CSR Reports Back number

2018 CSR Report [10.0MB]	
2017 CSR Report [8.0MB]	
2016 CSR Report [3.0MB]	
2015 CSR Report [2.5MB]	




## Environmental and Social Reports Back number

2014 Environmental and Social Report [2.5MB]	
2013 Environmental and Social Report [2.8MB]	
2012 Environmental and Social Report [3.0MB]	
2011 Environmental and Social Report [2.9MB]	
2010 Environmental and Social Report [2.9MB]	

# GRI Standards Comparison Table




The Nippon Shokubai Group refers to “GRI Sustainability Reporting Standards” in our sustainability reporting.

## Related documents







- [TechnoAmenity Report](#) 
- [TCFD Report](#) 
- [Financial Report](#) 

## GRI 2: General Disclosures 2021

### 1. The organization and its reporting practices

No.	Disclosure	References
2-1	Organizational details	<a href="#">Company Profile</a>  <a href="#">Domestic Network</a>  <a href="#">Global Network</a> 
2-2	Entities included in the organization's sustainability reporting	<a href="#">Editorial Policy</a>  <a href="#">Financial Report</a> 
2-3	Reporting period, frequency and contact point	<a href="#">Editorial Policy</a>  <a href="#">Contact</a> 
2-4	Restatements of information	<a href="#">ESG Data</a> 
2-5	External assurance	<a href="#">Third-party Verification Report on GHG</a> 

### 2. Activities and workers

No.	Disclosure	References
2-6	Activities, value chain and other business relationships	<a href="#">Products</a>  <a href="#">Domestic Network</a>  <a href="#">Global Network</a>  <a href="#">TechnoAmenity Report 2024</a>  <a href="#">Financial Report</a> 
2-7	Employees	<a href="#">Company Profile</a>  <a href="#">Financial Report</a>  <a href="#">ESG Data</a> 
2-8	Workers who are not employees	—

### 3. Governance

No.	Disclosure	References
2-9	Governance structure and composition	<a href="#">Corporate Governance</a> <a href="#">Sustainability Management</a>
2-10	Nomination and selection of the highest governance body	<a href="#">Corporate Governance</a>
2-11	Chair of the highest governance body	<a href="#">Corporate Governance</a>
2-12	Role of the highest governance body in overseeing the management of impacts	<a href="#">Corporate Governance</a> <a href="#">Sustainability Management</a>
2-13	Delegation of responsibility for managing impacts	<a href="#">Corporate Governance</a> <a href="#">Risk Management</a> <a href="#">Sustainability Management</a>
2-14	Role of the highest governance body in sustainability reporting	<a href="#">Sustainability Management</a>
2-15	Conflicts of interest	—
2-16	Communication of critical concerns	<a href="#">Risk Management</a> <a href="#">ESG Data</a>
2-17	Collective knowledge of the highest governance body	<a href="#">Corporate Governance</a>
2-18	Evaluation of the performance of the highest governance body	<a href="#">Corporate Governance</a>
2-19	Remuneration policies	<a href="#">Corporate Governance</a>
2-20	Process to determine remuneration	<a href="#">Corporate Governance</a>
2-21	Annual total compensation ratio	—

#### 4. Strategy, policies and practices

No.	Disclosure	References
2-22	Statement on sustainable development strategy	<a href="#">Message from the President</a>
2-23	Policy commitments	<a href="#">Policies</a> <a href="#">Respect for Human Rights</a> <a href="#">Supply Chain Management</a> <a href="#">Stakeholder Communication</a>
2-24	Embedding policy commitments	<a href="#">Nippon Shokubai's Sustainability</a> <a href="#">Responsible Care Initiatives</a> <a href="#">Initiatives for Environment</a> <a href="#">Initiatives for Society</a> <a href="#">Governance</a>
2-25	Processes to remediate negative impacts	<a href="#">Compliance</a> <a href="#">Respect for Human Rights</a> <a href="#">Supply Chain Management</a>
2-26	Mechanisms for seeking advice and raising concerns	<a href="#">Compliance</a>
2-27	Compliance with laws and regulations	<a href="#">ESG Data</a> <a href="#">Environmental Impact of Business Activities</a> <a href="#">RC Basic Plan and Results</a>
2-28	Membership associations	<a href="#">Initiatives and Organizations</a>

#### 5. Stakeholder engagement

No.	Disclosure	References
2-29	Approach to stakeholder engagement	<a href="#">Stakeholder Communication</a>
2-30	Collective bargaining agreements	<a href="#">Diversity &amp; Inclusion</a> <a href="#">ESG Data</a>

## GRI 3: Material Topics 2021

No.	Disclosure	Reference
3-1	Process to determine material topics	<a href="#">Materiality</a>
3-2	List of material topics	<a href="#">Materiality</a>
3-3	Management of material topics	<a href="#">Materiality</a> <a href="#">Sustainability Management</a> <a href="#">TCFD Report</a>

## GRI 201: Economic Performance 2016


No.	Disclosure	References
201-1	Direct economic value generated and distributed	<a href="#">Financial Report</a>
201-2	Financial implications and other risks and opportunities due to climate change	<a href="#">TCFD Report</a>
201-3	Defined benefit plan obligations and other retirement plans	<a href="#">Financial Report</a>
201-4	Financial assistance received from government	—

## GRI 202: Market Presence 2016

No.	Disclosure	References
202-1	Ratios of standard entry-level wages by gender compared to local minimum wage	—
202-2	Proportion of senior management hired from the local community	—

## GRI 203: Indirect Economic Impacts 2016



No.	Disclosure	References
-----	------------	------------

203-1	Infrastructure investments and services supported	<a href="#">Biodiversity Preservation</a>  <a href="#">Corporate Citizenship</a> 
203-2	Significant indirect economic impacts	—


## GRI 204: Procurement Practices 2016

No.	Disclosure	References
204-1	Proportion of spending on local suppliers	—





## GRI 205: Anti-Corruption 2016

No.	Disclosure	References
205-1	Operations assessed for risks related to corruption	—
205-2	Communication and training about anti-corruption policies and procedures	<a href="#">Compliance</a> 
205-3	Confirmed incidents of corruption and actions taken	<a href="#">ESG Data</a> 




## GRI 206: Anti-Competitive Behavior 2016

No.	Disclosure	References
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	<a href="#">ESG Data</a> 



## GRI 207: Tax 2019

No.	Disclosure	References
207-1	Approach to tax	<a href="#">Tax Policy</a>  (Nippon Shokubai Group ) <a href="#">Code of Conduct</a> 
207-2	Tax governance, control, and risk management	<a href="#">Tax Policy</a> 
207-3	Stakeholder engagement and management of concerns related to tax	<a href="#">Tax Policy</a> 
207-4	Country-by-country reporting	—










## GRI 301: Materials 2016

No.	Disclosure	References
301-1	Materials used by weight or volume	<a href="#">ESG Data</a> 
301-2	Recycled input materials used	<a href="#">Waste Reduction</a> 
301-3	Reclaimed products and their packaging materials	<a href="#">Waste Reduction</a> 




## GRI 302: Energy 2016

No.	Disclosure	References
302-1	Energy consumption within the organization	<a href="#">Tackling Climate Change</a>  <a href="#">ESG Data</a> 
302-2	Energy consumption outside of the organization	<a href="#">Tackling Climate Change</a> 
302-3	Energy intensity	<a href="#">Tackling Climate Change</a>  <a href="#">ESG Data</a>  <a href="#">Himeji Plant</a>  <a href="#">Kawasaki Plant</a> 
302-4	Reduction of energy consumption	<a href="#">Environmental Management</a>  <a href="#">Tackling Climate Change</a> 
302-5	Reductions in energy requirements of products and services	<a href="#">Development and Expansion of Environmental Contribution Products</a> 
















## GRI 303: Water and Effluents 2018

No.	Disclosure	References
303-1	Interactions with water as a shared resource	<a href="#">Water Resource Conservation</a>  <a href="#">ESG Data</a> 
303-2	Management of water discharge-related impacts	<a href="#">Water Resource Conservation</a> 
303-3	Water withdrawal	<a href="#">Water Resource Conservation</a>  <a href="#">ESG Data</a> 
303-4	Water discharge	<a href="#">Water Resource Conservation</a>  <a href="#">ESG Data</a> 
303-5	Water consumption	<a href="#">Water Resource Conservation</a>  <a href="#">ESG Data</a> 











## GRI 304: Biodiversity 2016

No.	Disclosure	References
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	<a href="#">Biodiversity Preservation</a> 
304-2	Significant impacts of activities, products, and services on biodiversity	<a href="#">Biodiversity Preservation</a> 
304-3	Habitats protected or restored	<a href="#">Biodiversity Preservation</a> 
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	—

## GRI 305: Emissions 2016


No.	Disclosure	References
305-1	Direct (Scope 1) GHG emissions	<a href="#">Tackling Climate Change</a>  <a href="#">ESG Data</a>  <a href="#">Third-party Verification Report on GHG</a> 
305-2	Energy indirect (Scope 2) GHG emissions	<a href="#">Tackling Climate Change</a>  <a href="#">ESG Data</a>  <a href="#">Third-party Verification Report on GHG</a> 
305-3	Other indirect (Scope 3) GHG emissions	<a href="#">Tackling Climate Change</a>  <a href="#">ESG Data</a> 
305-4	GHG emissions intensity	<a href="#">Tackling Climate Change</a>  <a href="#">Himeji Plant</a>  <a href="#">Kawasaki Plant</a> 
305-5	Reduction of GHG emissions	<a href="#">Tackling Climate Change</a> 
305-6	Emissions of ozone-depleting substances (ODS)	<a href="#">Tackling Climate Change</a> 
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	<a href="#">Air Pollution Prevention</a>  <a href="#">ESG Data</a> 

## GRI306: Waste 2020



No.	Disclosure	References
306-1	Waste generation and significant waste-related impacts	<a href="#">Waste Reduction</a>  <a href="#">ESG Data</a> 
306-2	Management of significant waste-related impacts	<a href="#">Waste Reduction</a>  <a href="#">ESG Data</a> 
306-3	Waste generated	<a href="#">Waste Reduction</a>  <a href="#">ESG Data</a> 
306-4	Waste diverted from disposal	<a href="#">Waste Reduction</a>  <a href="#">ESG Data</a> 
306-5	Waste directed to disposal	<a href="#">Waste Reduction</a>  <a href="#">ESG Data</a> 



## GRI 308: Supplier Environmental Assessment 2016

No.	Disclosure	References
308-1	New suppliers that were screened using environmental criteria	—
308-2	Negative environmental impacts in the supply chain and actions taken	<a href="#">Supply Chain Management</a> 

## GRI 401: Employment 2016





No.	Disclosure	References
401-1	New employee hires and employee turnover	<a href="#">ESG Data</a> 
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	—
401-3	Parental leave	<a href="#">ESG Data</a> 

## GRI 402: Labor/Management Relations 2016




No.	Disclosure	References
402-1	Minimum notice periods regarding operational changes	<a href="#">Diversity &amp; Inclusion</a> 

## GRI 403: Occupational Health and Safety 2018



No.	Disclosure	References
403-1	Occupational health and safety management system	<a href="#">ESG Data</a> 
403-2	Hazard identification, risk assessment, and incident investigation	<a href="#">Occupational Safety and Health</a> 
403-3	Occupational health services	<a href="#">Occupational Safety and Health</a> 
403-4	Worker participation, consultation, and communication on occupational health and safety	<a href="#">Occupational Safety and Health</a> 
403-5	Worker training on occupational health and safety	<a href="#">Production/R&amp;D Site Reports</a>  <a href="#">Occupational Safety and Health</a>  <a href="#">ESG Data</a> 
403-6	Promotion of worker health	<a href="#">Diversity &amp; Inclusion</a> 

403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	<a href="#">Supply Chain Management</a> 
403-8	Workers covered by an occupational health and safety management system	—
403-9	Work-related injuries	<a href="#">Occupational Safety and Health</a>  <a href="#">ESG Data</a> 
403-10	Work-related ill health	<a href="#">ESG Data</a> 



## GRI 404: Training and Education 2016

No.	Disclosure	References
404-1	Average hours of training per year per employee	<a href="#">ESG Data</a> 
404-2	Programs for upgrading employee skills and transition assistance programs	<a href="#">Human resources management</a> 
404-3	Percentage of employees receiving regular performance and career development reviews	<a href="#">Human resources management</a> 

## GRI 405: Diversity and Equal Opportunity 2016

No.	Disclosure	References
405-1	Diversity of governance bodies and employees	<a href="#">ESG Data</a> 
405-2	Ratio of basic salary and remuneration of women to men	<a href="#">ESG Data</a> 

## GRI 406: Non-Discrimination 2016

No.	Disclosure	References
406-1	Incidents of discrimination and corrective actions taken	<a href="#">Respect for human rights</a>  <a href="#">ESG Data</a> 

## GRI 407: Freedom of Association and Collective Bargaining 2016

No.	Disclosure	References
-----	------------	------------

407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	—
-------	--	---

## GRI 408: Child Labor 2016

No.	Disclosure	References
408-1	Operations and suppliers at significant risk for incidents of child labor	—

## GRI 409: Forced or Compulsory Labor 2016

No.	Disclosure	References
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	—

## GRI 410: Security Practices 2016

No.	Disclosure	References
410-1	Security personnel trained in human rights policies or procedures	—

## GRI 411: Rights of Indigenous Peoples 2016


No.	Disclosure	References
411-1	Incidents of violations involving rights of indigenous peoples	—

## GRI 413: Local Communities 2016


No.	Disclosure	References
413-1	Operations with local community engagement, impact assessments, and development programs	<a href="#">Corporate Citizenship</a> <a href="#">↗</a> <a href="#">Occupational Safety and Health</a> <a href="#">↗</a> <a href="#">Biodiversity Preservation</a> <a href="#">↗</a>

413-2	Operations with significant actual and potential negative impacts on local communities	—
-------	--	---




## GRI 414: Supplier Social Assessment 2016

No.	Disclosure	References
414-1	New suppliers that were screened using social criteria	—
414-2	Negative social impacts in the supply chain and actions taken	<a href="#">Supply Chain Management</a> 




## GRI 415: Public Policy 2016

No.	Disclosure	References
415-1	Political contributions	<a href="#">ESG Data</a> 

## GRI 416: Customer Health and Safety 2016

No.	Disclosure	References
416-1	Assessment of the health and safety impacts of product and service categories	<a href="#">Chemical Safety</a> 
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	<a href="#">RC Basic Plan and Results</a>  <a href="#">Chemical Safety</a> 

## GRI 417: Marketing and Labeling 2016

No.	Disclosure	References
417-1	Requirements for product and service information and labeling	<a href="#">Chemical Safety</a> 
417-2	Incidents of non-compliance concerning product and service information and labeling	<a href="#">RC Basic Plan and Results</a>  <a href="#">Chemical Safety</a> 
417-3	Incidents of non-compliance concerning marketing communications	—

## GRI 418: Customer Privacy 2016

No.	Disclosure	References
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	—