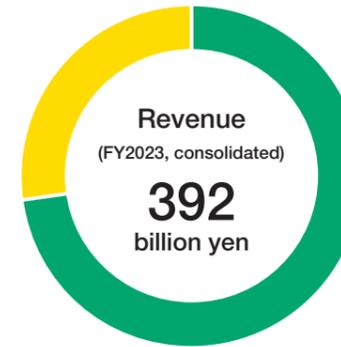


TechnoAmenity Report 2024



At a Glance

Supporting People and Society with the Power of Chemistry



Materials
Solutions

*The aggregate totals of revenue and operating profit are each based on the figures reported in the consolidated financial results for the fiscal year ended March 31, 2024.

Materials Business

Provides high-quality materials worldwide through sophisticated production technologies

Basic materials

Used as raw materials for a broad range of products, including fibers, resins and detergents

- Ethylene oxide
- Ethylene glycols
- Ethanolamines
- Maleic Anhydride



Ethylene oxide, a raw material for surfactants, etc.



Ethylene glycol, a raw material for polyester fibers, etc.

Acrylics

Consistently manufacture and supply absorbent materials for disposable diapers, materials for paints and adhesives, and acrylic acid (AA), a raw material for them.

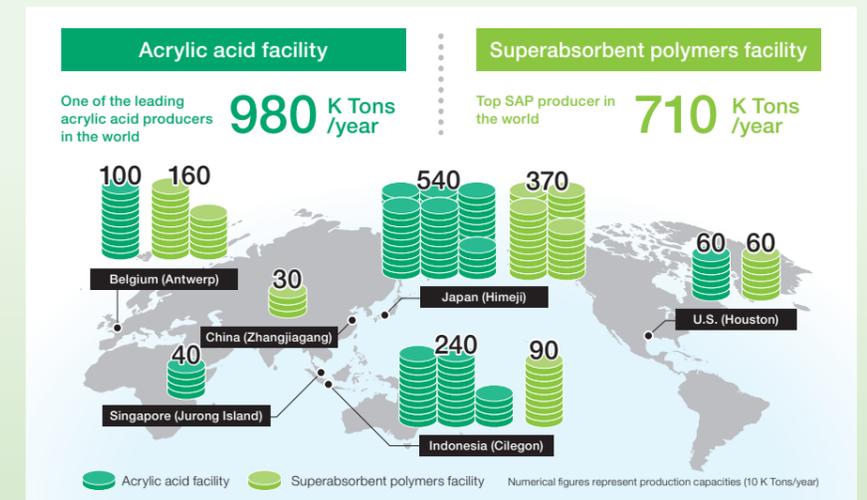
- Acrylic acid
- Acrylates
- Superabsorbent Polymers (SAP)



Acrylates, a raw material for paints, adhesives, etc.



SAP, a material for disposable diapers, etc. prepared from AA



Solutions Business

Provides unique functional products that can satisfy customer needs in a wide range of industries by capitalizing on our strengths in developing key materials.

Industrial & Household

We provide high-function products and solutions mainly to the infrastructure/housing and lifestyle product markets.

- AQUALIC™L
- AQUALOC™
- ACRYSET™
- Ethyleneimine derivatives
- SOFTANOL™

Water treatment/scavenging of harmful substances



Improvement in the performance of detergents



Energy & Electronics

We provide high-function products and solutions to growing areas, including batteries, electronics, and environmental purification.

- ACRYVIEWA™
- IONEL™
- Environment & Catalysts
- VEEA™

Improvement in battery performance



Optical control



Materials for high-quality printing



Decomposition of harmful substances in exhaust gas/waste water



Life Science

We provide support for drug discovery and the development of middle-molecular drugs through contract manufacturing services for APIs (active pharmaceutical ingredients), including oligonucleotide and peptides. In addition, we propose multifunctional cosmetics ingredients with skin care as the core target.

- API manufacturing service
- Cosmetics ingredients

Manufacturing of middle-molecular APIs



Functional cosmetics ingredients



Unchanging Values

Providing Prosperity and Comfort to People and Society

The Nippon Shokubai Group conducts its business activities with the aim of realizing its Group Mission: “**TechnoAmenity** : Providing prosperity and comfort to people and society, with our unique technology.” This is not just about material prosperity, but also about our desire to help create a society in which people can live comfortably, happily, and with hope for their spiritual affluence.



The Company was founded in 1941, and is the successor to Osame Gosei Kagaku Kogyo Co., Ltd., which used to produce phthalic anhydride using its own unique technology.



Regarding the safety of our employees and the local community, we have established our Safety Philosophy as “Safety takes priority over production.” The rules clearly state that, in the event of an emergency, production can be halted quickly without hesitation at the site, a measure that has been passed down and is in practice to this day.



To contribute to the development of human society, we established our Group Mission as “**TechnoAmenity**” The Group Mission was based on our desire to make people’s lives more livable and comfortable through our technology.



We reaffirmed our desire to help create a society in which people can live comfortably, happily, and with hope for not only material prosperity but also spiritual affluence.

Group Mission Framework

TechnoAmenity

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

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.

Preserve the Global Environment

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



For details on the Code of Conduct, please see https://www.shokubai.co.jp/en/wordpress/wp-content/uploads/2023/09/NIPPON-SHOKUBAI-Group-Code-of-Conduct_en_202209.pdf

Strategies that Need to Change

Implementing Three Transformations to Realize Our Mission and Vision

As chemical products become more globalized and commoditized, and the business environment becomes increasingly severe due to fierce cost competition worldwide, the functionality required of products is also becoming increasingly diverse. Meanwhile, activities aimed at realizing a sustainable society, including initiatives to address climate change and other environmental issues, have become essential for a company to survive.

In view of these aspects, in 2021 we established our long-term vision, "TechnoAmenity for the Future," which represents our Vision in 2030, and we are making steady progress towards its realization.

Mid-term Management Plan

Long-term Vision for FY2030

TechnoAmenity for the future

FY2030 Goals

- Provide materials and solutions required by people and society
- Become a chemical company that keeps evolving by identifying social trends
- Develop with various stakeholders inside and outside the company

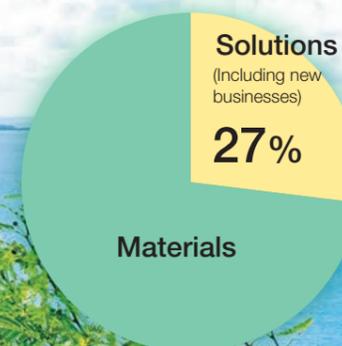
1
Business Transformation
Transform portfolio from existing to growth fields
→ p.31

2
Strategic Transformation for Environmental Initiatives
Promote sustainability to realize carbon neutrality by FY2050
→ p.45

3
Organizational Transformation
Transform into an organization with sustainable growth and a company where diverse talent are motivated to work
→ p.49

Portfolio Transformation (Sales Ratio)

FY2022 (Results)



FY2030 (Goals)



Nippon Shokubai's Competitive Edge

Constantly Strengthening Our Competitiveness by Organically Connecting Research and Development with Production Technology Based on Our Unique Core Technology

Since it succeeded in commercial production of phthalic anhydride for the first time in Japan in 1941, Nippon Shokubai Group has been promoting the development of unique technologies.

We have created various monomers, including ethylene oxide and acrylic acid, which serve as a foundation for our business, based on the vapor phase oxidation reaction caused by an inorganic catalyst. We have deployed them in functional monomer manufacturing and deployed catalyst design technologies in the production of environmental catalysts. In addition, those monomers were polymerized to develop into a superabsorbent polymer and other products.

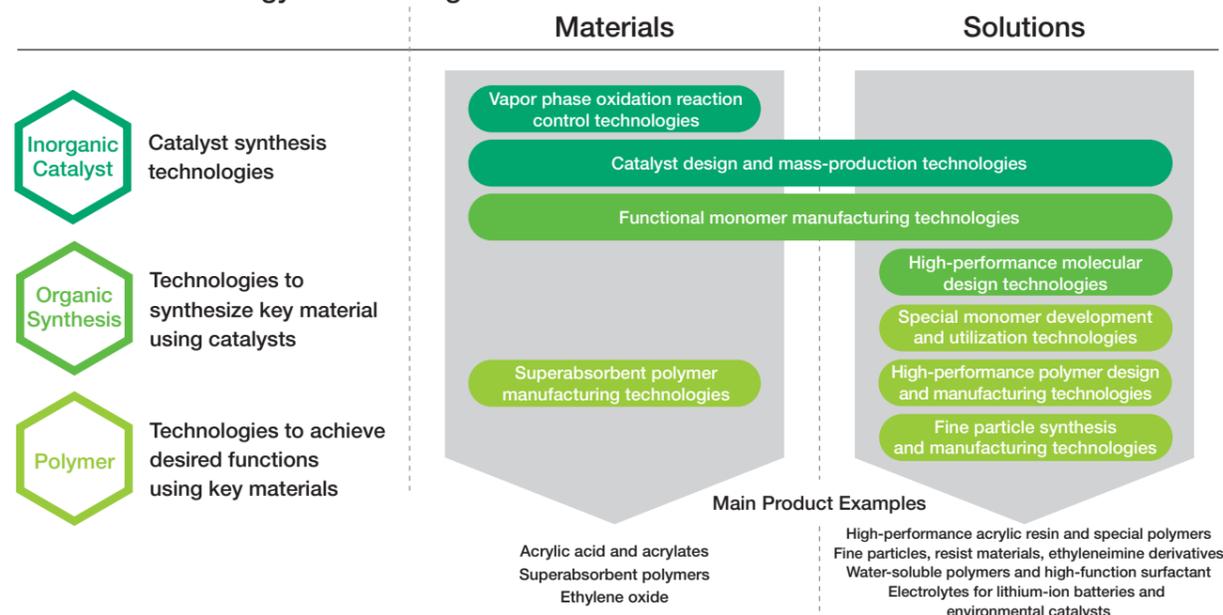
By being combined with organic synthetic technology that gives unique performance to materials, high-performance molecular design technologies have brought about the development of various types of functional materials, including high-function polymers and particle materials.

In this way, by organically connecting research and development with production technology, we will continue to propose new value that is beneficial to society.

Source of Competitive Advantage



Our Core Technology—Our Strength



Achieve the Materials Business Resilience

We are also working to improve added value by promoting sustainability, focusing on using biomass as a raw material.

Specifically, we are promoting the use of biomass raw materials (mass balance system) in many products, including those in our Solutions business. In addition, we will continue to enhance initiatives to improve profitability and strengthen our business foundations.

Expand the Solutions Business

To quickly respond to the increasingly diverse and complex needs of our customers, we will share information on selected markets across the organization, and make comprehensive proposals that combine multiple products, technologies, and services. We aim to improve profitability by strengthening our ability to propose solutions, concentrating resources on selected markets, and expanding sales of strategic product lines.

Expand the Solutions Business

Better Understanding of Customer Challenges and Stronger Solution Proposals

Provide even greater added-value through customer-oriented solutions to challenges

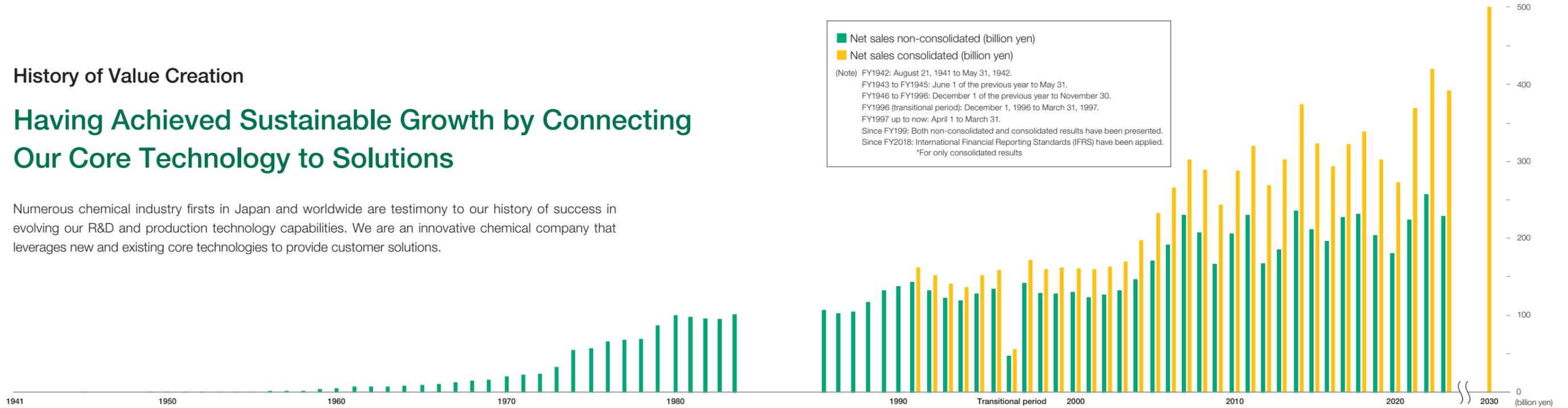


Nippon Shokubai Group Strengths: Proprietary Products and Technologies

History of Value Creation

Having Achieved Sustainable Growth by Connecting Our Core Technology to Solutions

Numerous chemical industry firsts in Japan and worldwide are testimony to our history of success in evolving our R&D and production technology capabilities. We are an innovative chemical company that leverages new and existing core technologies to provide customer solutions.



<h3>1941-</h3> <p>Established as Nippon Shokubai Kagaku Kogyo Co., Ltd. First in Japan to commercially produce phthalic anhydride</p>	<h3>1959-</h3> <p>Used proprietary technology to commercially produce ethylene oxide (EO) for the first time in Japan Opened Kawasaki and Himeji factories</p>	<h3>1970-</h3> <p>First in Japan to commercially produce acrylic acid (AA)</p>	<h3>1981-</h3> <p>Launched commercial production of MMA* Launched full-scale production of superabsorbent polymers (SAP) Established NAIL <small>* methyl methacrylate</small></p>	<h3>1991-</h3> <p>Accelerated the global rollout of AA and SAP Established NSE and NSI</p>	<h3>2001-</h3> <p>Expanded the electronics & information materials business Expanded the AA business (AA/MMA business exchange) Established NSC, acquired SAA shares</p>	<h3>2010-</h3> <p>Launched the health & medical business and the cosmetics business</p>	<h3>2030</h3> <p>Revenue (consolidated) target Approx. 500 billion yen</p>
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<h4>Resin additives</h4> <p>Contribution to improving the performance of synthetic resins, including polyvinyl chloride</p>	<h4>EO and its derivative</h4> <p>Provision of raw materials for fibers, resins, detergents, and other products that support rapid economic growth</p>	<h4>AA and its derivative</h4> <p>Provision of raw materials that support various industrial materials such as paints and resins</p>	<h4>SAP Building materials</h4> <p>Provision of raw materials for disposable diapers, which help ease the burden of childcare arising along with the progress of women's participation in society Contribution to enhancing the safety and durability of social infrastructure with technology that supports high-strength constructions</p>	<h4>Environmental catalysts Fuel cells</h4> <p>Contribution to detoxifying dioxins and harmful substances in waste water in response to the growing awareness of environmental issues Provision of new battery materials that support the promotion of green energy</p>	<h4>Electronic materials</h4> <p>Provision of materials that meet demand for increased functionality of smartphones and TVs</p>	<h4>Battery materials</h4> <p>Contribution to enhancing the performance of lithium-ion batteries, a key to CO₂ emission reductions Investment in Hunan Fluopont to expand our lithium-ion battery electrolyte (IONEL™) business</p>
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■ Abbreviation

- NAIL** : Nippon Shokubai America Industries, Inc.
- NSE** : NIPPON SHOKUBAI EUROPE N.V.
- NSI** : PT. NIPPON SHOKUBAI INDONESIA
- NSC** : NISSHOKU CHEMICAL INDUSTRY (ZHANGJIAGANG) CO., LTD.
- SAA** : SINGAPORE ACRYLIC PTE LTD
- Hunan Fluopont** : Hunan Fluopont New Materials Co., Ltd.

Nippon Shokubai's Value Creation

Social trends

Population growth, an aging society, growing economies of emerging countries, etc.

Social issues

Achieving a long healthy life, responding to climate change, inventing new materials to support technological development, etc.

Long-term Vision for FY2030 "TechnoAmenity for the future"

FY2030 Goals

- Provide materials and solutions required by people and society
- Become a chemical company that keeps evolving by identifying social trends
- Develop with various stakeholders inside and outside the company

p.6

Management capital

Human capital

- ▶ No. of employees **4,607**
- ▶ Ratio of females managers (non-consolidated) **5.4%**

Intellectual capital

- ▶ R&D expenses **15 billion yen**
- ▶ No. of intellectual properties owned **2,177**

Manufacturing capital

- ▶ Domestic Production Sites **10**
- ▶ Overseas Production Sites **7**
- ▶ Capital investments **17 billion yen**

Natural capital

- ▶ Water consumption **9 million m³**
- ▶ Energy consumption **330,000 kL** (crude oil equivalent)

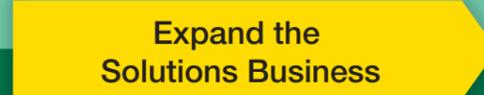
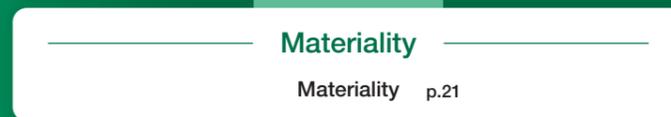
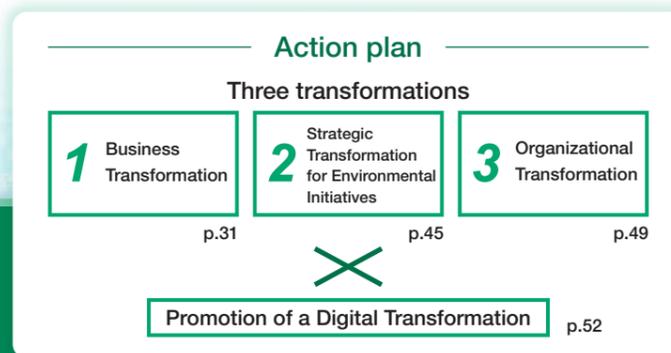
Financial capital

- ▶ Rate of equity attributable to owners of parent **70.5%**
- ▶ Rating (by Rating and Investment Information, Inc.)* **A**

Social capital

- ▶ No. of consolidated subsidiaries **26**
- ▶ Expense for activities on social contributions (non-consolidated) **200 million yen**

* As of August 30, 2024



Major output

Transform portfolio from existing to growth fields

p.31
Business Transformation

Realize carbon neutrality by FY2050

p.45
Strategic Transformation for Environmental Initiatives

A company where diverse talents are motivated to work and an organization with sustainable growth

p.49
Organizational Transformation

Outcome

Customers and society

Environmental Initiatives / Carbon Neutrality

- Broader use of hydrogen
- CO₂ recovery and recycling
- Biomass-derived products
- Securing water resources through the desalination of seawater
- Battery materials

Advancement of Digital Technologies

- Materials for displays

Higher Quality of Life

- Raw materials for disposable diapers
- Cosmetics ingredients
- Oligonucleotide drug discovery business

Employees

- ▶ Hand-in-hand growth with the company

Business partners

- ▶ Fair and equitable trade in compliance with laws and regulations and with a strong sense of ethics for mutual sustainable growth

Shareholders

- ▶ Increase in medium- to long-term returns



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 Noda

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.

Message from the President



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.

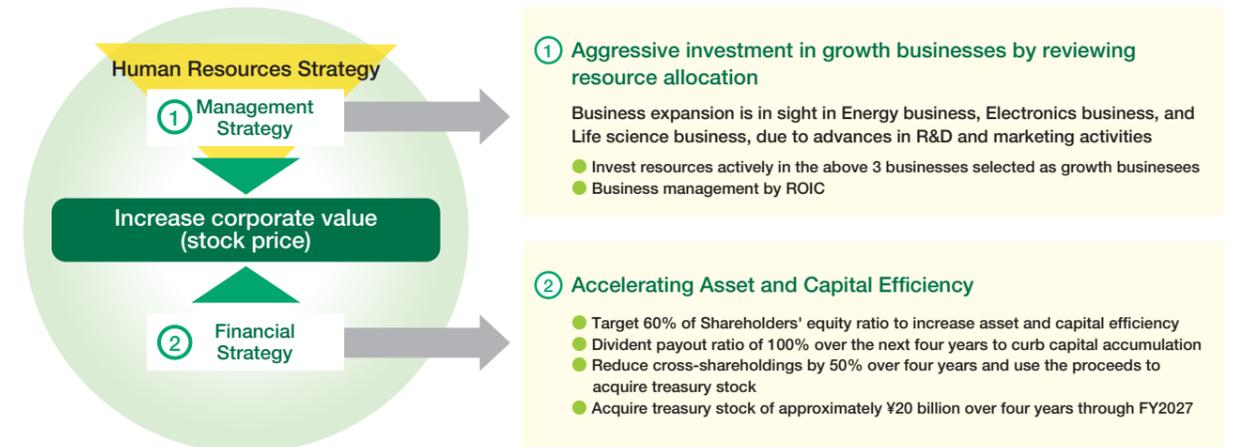
Financial Strategy

—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

To achieve our Long-term Vision for FY2030

While the next Mid-term Management Plan (TAF-II FY2025-2027) is currently being formulated, in view of achieving an ROE of 9% or more in the Long-term Vision for FY2030, we have reviewed our [1] management strategies and [2] financial strategies, and have decided to move forward and already embark on the following necessary initiatives.



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 CO₂ 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.



Editorial Policy

Starting from 2019, Nippon Shokubai Group has published “TechnoAmenity Report” as a report that covers both financial information, such as business plans and results, and non-financial information, such as ESG (environmental, social, and governance) activities.

From fiscal 2022 onward, we have decided to publish the TechnoAmenity Report as an integrated report that provides a wide range of information—including materiality, value creation processes, business strategies, governance, and financial data—in order to clearly convey Our Company medium- to long-term initiatives for value creation to all stakeholders, including shareholders and investors.

ESG Data compiling numerical figures of our ESG initiatives (including our Responsible Care activities) is available on our company website.

Overview of our Reporting Media

Story of Value Creation

● TechnoAmenity Report (Japanese/English)

Financial data	Non-financial data
<ul style="list-style-type: none"> ● Annual Securities Report (Japanese) https://ssl4.eir-parts.net/doc/4114/youho_pdf/S100TNYU/00.pdf ● Financial Report (English) ● Website pages Investor Relations https://www.shokubai.co.jp/en/ir/ 	<ul style="list-style-type: none"> ● RC-related information* https://www.shokubai.co.jp/en/sustainability/rc/ ● Website pages Sustainability https://www.shokubai.co.jp/en/sustainability/ ● Website pages ESG Data https://www.shokubai.co.jp/en/sustainability/data/ ● TCFD Report https://www.shokubai.co.jp/en/wordpress/wp-content/uploads/2024/03/TCFD-Report-202403_en.pdf

* Since fiscal year 2024, the RC Report has been integrated with the present report, with the specific details of our RC activities being made public on the website.

Scope of this Report

This Report contains the Nippon Shokubai Group's corporate activity details, ESG information, and financial data.

Reporting period April 1, 2023 to March 31, 2024 Some topics in and after April 2024 are also contained in the report.

Publication date November 2024

Reference guideline IIRC (International Integrated Reporting Council: International Integrated Reporting Framework)

We are included in these ESG investment indices (as of August 2024).

2024 CONSTITUENT MSCI JAPAN EMPOWERING WOMEN INDEX (WIN)

* 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.

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Strategies

Two years have passed since the formulation of our Mid-term management plan “TechnoAmenity for the Future-I,” and we are now in the final year of the plan. Of the three transformations, “strategic transformation for environmental initiatives” and “organizational transformation” are progressing smoothly, but it is becoming increasingly difficult to achieve the goal of “business transformation.” As a result, we are revising our management strategy and financial strategy from fiscal 2024, without waiting for the next Mid-term management plan.

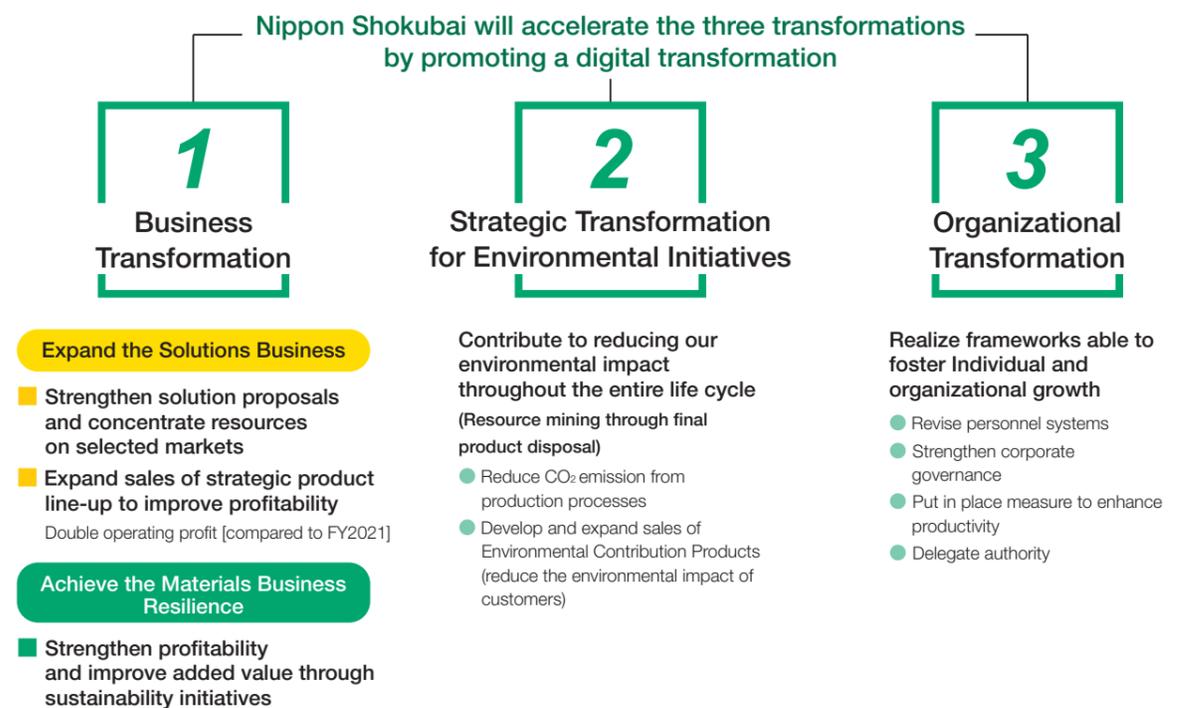
Additionally, we will report on the strategies, progress, and future outlook in each business.

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TechnoAmenity for the future-I

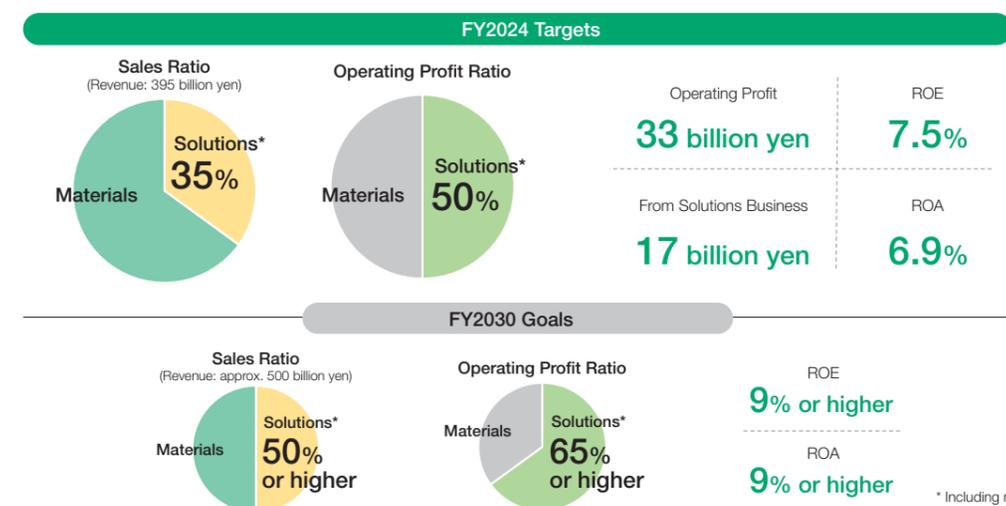
Overview of TechnoAmenity for the future- I

We have formulated “TechnoAmenity for the future-I” toward achieving the FY2030 Goals set in our long-term vision. As a specific action plan through the end of FY2024, we will work on strengthening the foundation and implementing the transformation.



Management Targets

Expand the Solutions Business with the aim to reach record-high earnings in FY2024.



“Three transformations” and 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



For more details, please see ► <https://www.shokubai.co.jp/en/sustainability/concept/materiality/>

Three transformations	Materiality	KPI and their ideal state	Year of achievement	Actual performance in FY2023	See page(s)
1 Business Transformation	Contribute to solving customer issues	(1) Develop a platform to strengthen solution proposals	(1) End of FY2024	(1)-1 Strengthened the experimental environment and equipment with the aim of, for example, promoting commercialization	42
		(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)	(2) End of FY2030	(1)-2 Strengthened European functions with the aim of, for example, expanding the development and sales of products that address environmental issues	
2 Strategic Transformation for Environmental Initiatives	Promote climate change response	● Scope 1, Scope 2: reduce CO ₂ emissions by 30% from the 2014 level (Nippon Shokubai and Group Companies in Japan)	End of FY2030	Reduced by 15% (including an offset equivalent to 7.3% through the purchase of carbon-neutral city gas)	46
		● Develop and socially implement technologies for resource use reduction and recycling	—		
		Environmental Contribution Products Revenue: (1) 55 billion yen (2) 135 billion yen	(1) End of FY2024 (2) End of FY2030	45 billion yen	47
3 Organizational Transformation	Developing/ Promoting the Active Participation of Talent	● 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)	End of FY2024	● Began to conduct engagement surveys in FY2022, and they are still ongoing	52 51
		● 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		● Began to conduct Company-recommended training named “autonomous learning programs” (with an attendance rate of about 20%)	
	Strengthen corporate governance	● 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)	End of FY2024	● Began to conduct engagement surveys in FY2022, and they are still ongoing	50
		● Increase the ratio of female employees hired in the clerical and chemical fields to at least 30%		● Rate of female employees hired in the clerical and chemical fields: 28.6%	
		● Increase the ratio of females in managerial position to 6% or more		● Rate of females in managerial positions: 5.4%	
Key business foundation	Promote safe and stable production activities	● Improve the effectiveness of the Board meeting by enhancing its decision-making of management policy and strategy, and supervisory functions	End of FY2024	Confirmed with a third-party evaluation that the effectiveness of the Board was ensured	67
		● Disclose a skills matrix of the Board meeting	End of FY2024	● Clarified each specialty and Experience in the skills matrix and the reasons for selection (please refer to the Notice of the Shareholders Meeting for details) https://ssl4.eir-parts.net/doc/4114/announcement1/99727/00.pdf	65
		● Satisfy the skills matrix of the Board meeting		● Discussion ongoing at the Board meeting	
		● Introduce stock-based compensation for internal Members of the Board, etc.	End of FY2022	Introduced the plan at the end of FY2022 (Effectiveness being monitored on an ongoing basis)	
		● Third-party evaluation: maintain above industry standards for the petroleum and petrochemical industries	—	● Conducted a third-party evaluation at the Kawasaki Plant in FY2022 → Confirmed the maintenance of levels above industry standards	
				● Planned to conduct a third-party evaluation at the Himeji Plant in FY2026	

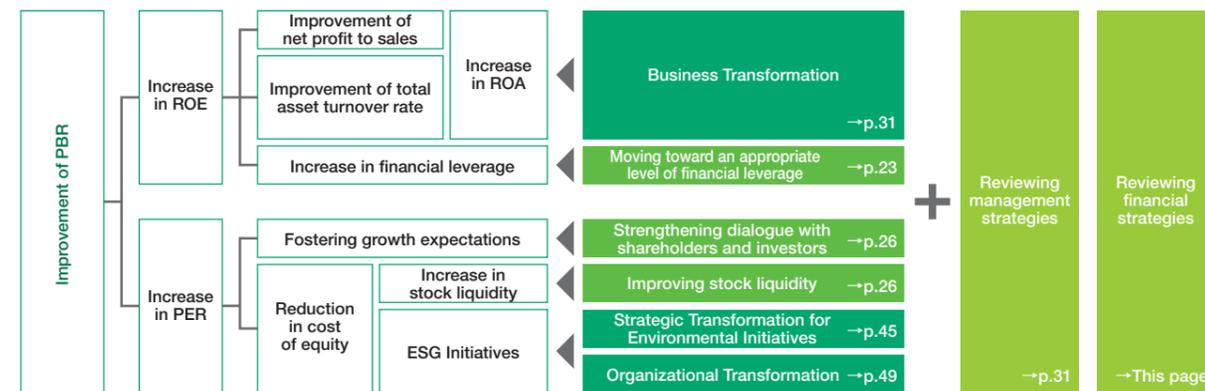
* CO₂ emissions : Our Group’s emissions reduction targets are for greenhouse gases, but since they are mostly carbon dioxide (CO₂), they are referred to as CO₂.

Financial Strategy

To Improve Corporate Value

Starting in FY2024, we have been executing new initiatives in order to achieve the ROE targets set in our Long-term Vision for FY2030 and the Mid-term Management Plan, which are: "7.5% for FY2024, and 9.0% or more for FY2030."

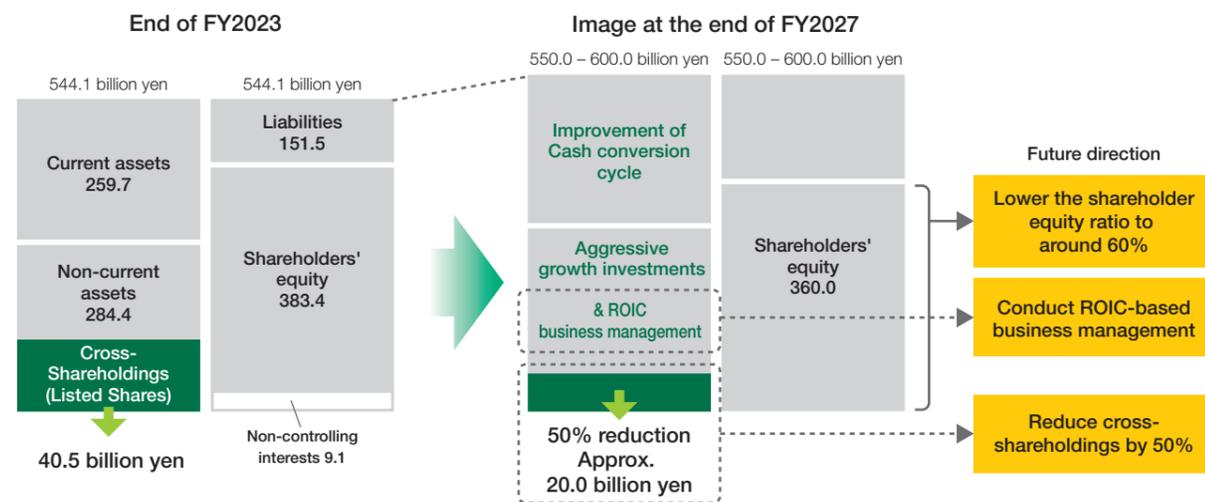
We are strengthening our financial strategies by pursuing three initiatives: moving toward an appropriate level of financial leverage, strengthening dialogue with shareholders and investors, and improving stock liquidity.



Reviewing financial strategies

We will improve asset and capital efficiency by implementing ROIC-based business management and reducing cross-shareholdings, while lowering the shareholder equity ratio to around 60%.

Specifically, the company plans to reduce its cross-shareholdings by 50% (approximately 20 billion yen) by the end of FY2027, and to use the resulting funds to acquire treasury stock.



Reviewing the Cash Allocation Policy

We will review the cash allocation policy of the current Mid-term Management Plan and aim to achieve both increased profits and improved capital efficiency through proactive growth investments and shareholder returns.

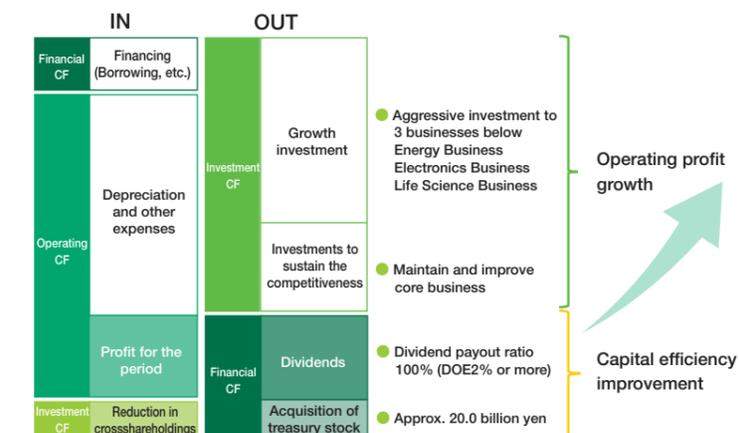
Policy and Progress in Current Mid-term Plan

- Emphasis on balance between investment and shareholder returns
- Delay investment for growth
- Sell non-business assets and increase shareholder returns ahead of schedule

FY2022 - 2024 Mid-term Management Plan		FY2022 -2024 Forecasts	
IN	OUT	IN	OUT
Borrowing, etc. 10.0 billion yen			
Operating CF 140.0 billion yen	Growth and competitiveness investments 120.0 billion yen	Operating CF 133.0 billion yen	Growth and competitiveness investments 97.0 billion yen
	Shareholder Return 30.0 billion yen	Sale of non-business assets 12.0 billion yen	Loan Repayment, etc. 13.0 billion yen
			Shareholder Return 35.0 billion yen

FY2024 - FY2027 Policy

- Prioritize investments (including M&A) and dividends
 - Use surplus funds for share buybacks
- *Details of investment amount, etc. will be disclosed after the formulation of the next Mid-term Management Plan



In the current Mid-term Management Plan, we implemented approximately 80% of the investments we had initially planned in order to further grow and to maintain competitiveness, and at the same time, made progress on repaying borrowings.

From FY2024 to 2027, we will utilize borrowings to actively invest in growth and core businesses.

During this period, the dividend payout ratio will be 100% (or DOE of 2.0%) to curb further increases in shareholders' equity.

Financial Strategy

Return to Shareholders

For FY2023, we paid the same dividend as in the previous fiscal year (180 yen/share before the stock split).

From FY2024, we will make the switch to a new return policy with the aim of achieving an optimal capital structure (a shareholder equity ratio of approximately 60%).

Policy in Current Mid-term Plan

While securing sufficient financial resources for investment in growth as well as maintaining competitiveness of existing business and pursuing capital efficiency.

Total return ratio 50%
(Payout ratio 40%, share repurchase 10%)

FY2024-FY2027 Policy

Dividend payout ratio 100% + Buybacks of treasury stock

Dividend payout ratio 100% or DOE* 2.0%, whichever is greater.

Use surplus funds obtained from the reduction of cross shareholdings to purchase treasury stock. (Approx. 20 billion yen is planned by FY2027)

*DOE (Dividend on Equity Ratio)

FY2020	FY2021	FY2022	FY2023	FY2024 (Forecasts)
1.1%	2.2%	2.0%	1.9%	2.8%

Changes in Shareholder Returns

	FY2020	FY2021	FY2022	FY2023	FY2024 (Forecasts)
Annual dividend per share (Yen)	90	180	180	180	(280)
After stock split	(23)	(45)	(45)	(45)	70
Basic earnings per share (Yen)	-273.33	594.86	488.29	281.91	(274.96)
After stock split	(-68.33)	(148.7)	(122.07)	(70.48)	68.74
Payout ratio (%)	-	30.3	36.9	63.9	101.8
Annual total dividends (Billion yen)	36	72	71	70	106
Amount of share repurchase (Billion yen)	0	0	30	40	50
Total payout amount (Billion yen)	36	72	101	110	156
Profit (Billion yen)	-109	237	194	110	105
Total return ratio (%)	-	30.3	52.2	99.7	148.9

In FY2024, Plan to pay a dividend of 70 yen/share (increase 25 yen from FY2023, after the stock split) and buybacks 5.0 billion yen of treasury stock.

Financial Measures Implemented in FY2023

Strengthening dialogue with shareholders and investors

Enhancing dialogue opportunities and tools

- Continuously held financial results briefings for institutional investors, small meetings, individual meetings, facility tours, briefings for individual investors, etc.
- Enhanced financial results briefing materials and accelerated the publication of financial results summary reports (in English)
 - From FY2024, first and third quarter financial results briefing materials will be disclosed (until FY2023, only second quarter and full-year materials were disclosed).

Reflecting the content of dialogue in management strategies

- Provided appropriate feedback to management and the Board meeting on the opinions and comments of shareholders and investors
 - [Major dialogue themes] - Future growth strategies - Capital costs and financial strategies - ESG (CO₂ emission reduction, corporate governance, etc.)

Improving stock liquidity

Stock split implementation

- Effective April 1, 2024, each share of common stock was split into four shares, reducing the amount per trading unit

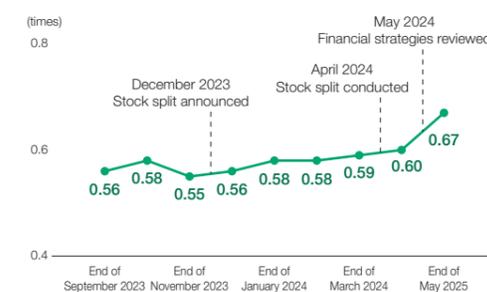
Dissolution of cross-shareholdings

- Continued discussions with our shareholders regarding the dissolution of cross-shareholdings
 - In FY2023, approximately three million of our shares (the number of shares after the stock split) were sold by the holder.

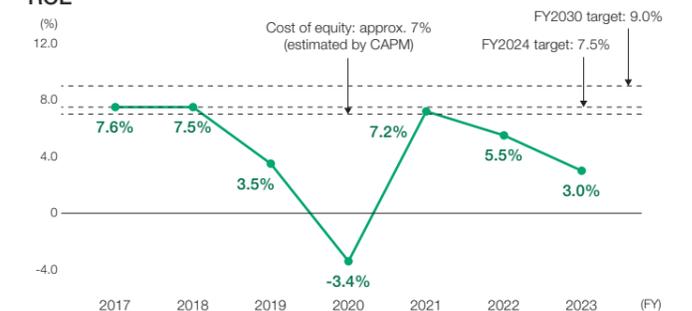
Status of PBR and ROE

Although the ROE is below the cost of equity (approx. 7%), the PBR is improving through our efforts including the review of financial strategies. Going forward, we will continue to work to improve the PBR and ROE by steadily implementing our financial strategies and expanding profits through "Business Transformation."

PBR (end of September 2023 to end of May 2024)



ROE (%)



Dialogue

The present and future of the Solutions Business



Masahiro Watanabe

Member of the Board,
Managing Executive Officer

Yasutaka Sumida

Member of the Board,
Managing Executive Officer

— Please tell us again about the role and importance of the Solutions Business.

Watanabe: First, we have divided our business segments into the materials business and the solutions business. I would like to reconfirm that it is important to work in a way that provides solutions rather than focusing on how to divide products and sales.

For this reason, we are moving forward with reforms based on the recognition that we should shift our focus from our mainstay materials (materials), such as acrylic acid, which are easily affected by raw material prices and product market conditions, and which tend to fluctuate due to economic fluctuations, to our proposal-based solutions business.

Unfortunately, we are struggling to achieve sufficient growth with respect to this in the three-year period of the current Mid-term Management Plan.

On the other hand, several of our products in the Solutions Business that have been in our lineup for some time now are currently generating very high profit margins. These products and businesses have not attracted significant attention thus far due to their relatively small overall sales; however, we aim to foster growth by creating clusters of these products and businesses and shifting our focus to them.

Sumida: Since Nippon Shokubai is a manufacturer, it is important for us to utilize our R&D and technological capabilities. However, based on the realization that such

utilization should not be company-centered, the Solutions Business is advancing with the idea of offering customer-oriented solutions with added value.

This requires us to understand our customers well and work with a sense of quickness and flexibility. To acquire such capabilities, we are currently delving into the systems, mindsets, and other aspects of the company so as to make necessary changes in order to transform ourselves into a solution proposal-oriented company.

— The Mid-term Management Plan includes “Strengthen solution proposals.” Can you tell us about your progress so far in this regard?

Watanabe: As we execute the Mid-term Management Plan, the main theme of the Solutions Business has been to “Enhance our ability to understand customer challenges, and Strengthen solution proposals.” To lay the foundation for this goal, we have established a marketing team within the Business Planning Division. Also, I believe that the most impactful result was that the utilization of DX realized visualization and the sharing of customer information, allowing us to structure what is currently expected of our company. As an example, we have been seeing an increase in inquiries via our website in recent years. When we received an inquiry regarding a certain product, we searched the data to find any past connections with the department of the inquiring company, and immediately found that it already had a relationship with another department within our company. The connections revealed by data enable us to quickly consider a variety of proposals from different perspectives than before.

Sumida: Our challenge has been to figure out how to create a “timely production system” that is quick and flexible, as mentioned before. Our new Process Incubation Center (PIC) building that opened in April 2024 is a major step forward in this regard. With the increase in the demand from customers for product proposals incorporating certain new concepts, it became clear to us that we were unable to respond quickly enough when it came to producing these relatively high-added-value items in small quantities. So, we have spent the last five years deliberating on how to remedy this, and eventually decided to allow our researchers to leave the lab and work in the PIC building to scale up their product under development. This enables us to identify process-related issues in advance, and by reducing the time required to resolve them, it is expected to lead to quicker production. In addition, the facility has a rule that researchers bring in their own equipment and devices necessary for their experimental themes and use them for a set period of time. In this way, we are constantly replacing equipment and devices according to the theme in order to increase the turnover rate, and we are beginning to use the

facility flexibly in cooperation with external parties.

Watanabe: In terms of “Strengthen solution proposals,” times have changed since the days when we could offer just one material with unique technological advantages to make our clients happy. Therefore, we are focusing on evaluation technology.

Sumida: The cosmetics market is definitely one in which the ability to evaluate is essential in making impactful proposals. The message that “this product will bring great value to your company” must be conveyed in a package that includes the evaluation data. As a measure to instill awareness of the importance of evaluation, we are also enhancing our use of digital science and DX, and last year we reorganized the existing Analysis Technology Center into the Materials Evaluation and Analysis Research Center within the Corporate Research Division. Through these initiatives, we are fostering a culture in which employees are more aware of the importance of evaluation.

— I understand you adopted the “selected markets” strategy to capture the needs of each target market. How is that going?

Watanabe: We set out to focus on businesses such as Life Science, Electronics, and Energy. Among these, the product that is expected to contribute the earliest to profits is IONEL™, an electrolyte used in the Energy business as one of our strategic products. If all goes well, we should see results within a few years.

On the other hand, we have also decided to temporarily suspend the IONEL™ business in Europe. This is because, although we anticipated higher demand in Europe due to industry growth under the strict environmental regulations of those countries, in the end, products from China and other countries showed overwhelming presence in the market. However, in China, which is currently expected to become both the largest supplier and the market with the highest demand, we are increasing our production capacity through joint ventures. The next most attractive market is North America, and we are already in the stage of considering options, including finding joint venture partners. Finally, we are also planning for independent production in Japan, with the aim of improving our own technology. In this way, we aim to set up multiple production bases around the world in the future, so as to create a system that allows for local production and consumption.

The reason we are pushing for local production and consumption is that there are geopolitical transportation issues, and the fact that the market for IONEL™ is too heavily weighted toward China. We cannot deny the possibility that the United

Dialogue

The present and future of the Solutions Business

States and Europe may start refusing products produced in China in the future, so in order to avoid this risk, we are exploring ways to realize local production and consumption.

Sumida: As for the Life Science business, it is a new area for Our Company, and we were prepared to deal with substantial barriers upon entering the market. Nevertheless, when we were actually manufacturing the active pharmaceutical ingredients, we came to realize firsthand how difficult it was to comply with the strict management standards of Good Manufacturing Practice (GMP). However, I do believe that we have overcome this issue in the first half of “TechnoAmenity for the future-I.”

Our main target markets are North America and Europe. These regions place great importance on proven results, and at first, no one would take Our Company seriously, as a totally unknown company. Over the past two years, we have taken on a significant number of businesses, albeit each one being small, and have provided each and every client with high-level, speedy services. Through our steady research and sales activities, we have achieved considerable success and are finally becoming recognized domestically. I feel that we have reached a level within Japan where we can begin to consider several development options, including M&A.

To grow our business, we need to target clients outside Japan, so approaching such clients will be our next step. Furthermore, as nucleic acid technologies have been gaining attention in recent years, we will likely be competing with several companies, but we would like to capitalize on the

technologies we have refined and the facilities we possess thus far to propel ourselves to the next step.

— **That said, at the financial results briefing in May 2024, you reflected on the insufficient narrowing of the business focus, and defined “growth businesses.” Could you tell us how you narrowed down your choices?**

Sumida: In the Energy business, along with batteries, we view hydrogen as an extremely important area in the coming years. This is because catalysts have been the strong suit of Our Company since its founding, and the development of technologies related to catalytic material is our forte. In fact, solid oxide fuel cells (SOFCs) are a result of our research on catalysts. SOFCs convert hydrogen into electricity, while solid oxide electrolytic cells (SOECs) convert water into hydrogen. We utilized this technology in creating an organic-inorganic composite material, and aided by our long-standing research on sheet-making technology, realized an alkaline water electrolyte membrane. We also develop catalysts to extract hydrogen from ammonia decomposition. In addition to having an advantage in terms of technological background, we believe that the past achievements we have accumulated thus far will give credibility to our name, giving us a further leg up.

Furthermore, when we look at the entire hydrogen supply chain, I believe that there are many areas in the field of hydrogen where our company’s technology can be useful, which means this is an opportunity that we ought not to miss. For this reason, we have brought together related researchers in the GX Research & Development Division and have adopted a system for moving forward in a unified manner. You can tell just from looking in that the floor is bustling with energy, which gives us hope.

Watanabe: In terms of the Display business, we have ACRYVIEWA™, VEEA™, and other original materials that we have developed in past business projects. We can expect steady growth in the areas related to optical materials and semiconductors, by continuing to provide a product lineup that captures the latest trends. Additionally, we have many other materials that, although their sales volume is not particularly large when viewed individually, generate steady profits and maintain strong relationships with clients. How we can cluster these products and propose them as solutions is becoming increasingly important. We believe that coming up with welcomed solutions will contribute to growth.

— **Investment in financial capital, human capital, and other areas is essential for growth. What are your thoughts on this?**

Watanabe: Looking back, we were unable to invest sufficiently in growth this past year. As for growth investments, there are

several projects in the focus areas I mentioned earlier. We are also considering a number of M&A deals. Most recently, we have invested in a joint venture to produce IONEL™ in China, and the plant will be launched in several phases. Also, we believe that we will soon be able to supply products from our existing plant that we have already set up with our joint venture partner.

Additionally, we expect to see future growth in Asian and African markets. In Asia in particular, I think India will be our major growth market, so we think it important to consider how to become relevant in this region. We are exploring the possibility of collaborating with local Indian manufacturers on certain products, also we are beginning to consider doing business with India through our various connections.

Sumida: As part of our research and development investment, we opened the Innovation Center for Sustainable Solutions in Belgium in April 2024. There were talks of this Center since the start of this Mid-term Management Plan. It will allow us to respond flexibly to trends such as the carbon neutral movement. The aforementioned SOFC, alkaline water electrolysis, and water-related products. Europe is the region where trends relating to these products are moving quickly, so we are always keeping a close eye on the latest developments and making sure we have access to the relevant technology.

I also believe that investing in people, such as researchers and engineers, is the most important investment of all. It is not a matter of simply spending research funds indiscriminately.

Research and development is the kind of work that can take more than a decade to bear fruit, so we as the company must commit to supporting our people as they strive to find ways to commercialize projects. In other words, if we can provide the right answer to the question “Why should I work here? What will I achieve by working here?”, then we can expect to attain and retain valuable human resources. This is an investment in long-term human resource development. Also, I always say, “play against those outside the company.” Find opportunities to talk with people outside the company, gain experience from such conversations, or request to be transferred to a department outside of research within the company to gain a new perspective on the company. Or, maybe temporarily leave the company and interact with our clients from a different position. These are some of the measures we have implemented in order to foster new perspectives. People who have undergone such experiences have been returning to the company in the last few years, bringing with them a fresh take on things. My hope is that, if this becomes a bigger trend, things will change considerably.

— **Finally, please tell us about your outlook for next fiscal year and beyond.**

Watanabe: As I said in the beginning, I feel like we have been discussing the Solutions Business so much that has become



overwhelming for our employees. Of course, the Solutions Business is important, but it is not our only business. We must advance our strategy as a whole. We will surely continue to sell materials, but we want to add value to them and offer as “solutions” to our clients. I hope we will not lose sight of the fact that this is the business model that we are aiming for in our transformation.

Sumida: I feel like the foundation for our new business is being laid, so I'd like to make sure that our next step will be a major one. To achieve this, I believe that effective and concrete measures, including management decisions, will be extremely important. We have accumulated technologies and results, not just during the “TechnoAmenity for the future-I” period but also throughout the company’s history. We have built a solid foundation by taking advantage of our internal company culture and strengths while also incorporating external knowledge. I hope that, if we can create a virtuous cycle of improving our internal capabilities and gaining external perspectives, we will be able to achieve the world we envision for our next Mid-term Management Plan, and ultimately for 2030. And I commit to work toward that future.



Contribute to solving customer issues

Reviewing Strategies

—Active investment in growth businesses

We will actively allocate resources to growth businesses with a strategy centered on business expansion in line with market expansion. Until fiscal 2027, we will increase profits through the achievements of the TechnoAmenity for the Future-I initiatives and the restructuring of our strategic product lines, and by fiscal 2030 we will bring our growth businesses into a profit expansion phase. In our core businesses, which form the foundation of our Group, we aim to steadily secure cash by implementing strategies of (1) maximizing profits by improving production efficiency and (2) expanding our business areas and business by capturing changes in market trends.

Business		Page
Growth Business Business expansion to capture market growth	Energy	Battery  → p.36
		Hydrogen  → p.41
	Electronics	Optical materials  → p.36
		Semiconductors  → p.39
	Life Sciences	Health and Medicine  → p.37
Business		Page
Core Business (1) Maximize profits with increased efficiency	AA (acrylic acid) SAP (superabsorbent polymer)	→ p.44
	EO (ethylene oxide)	→ p.44
Core Business (2) Business expansion in response to area expansion and market inflection points	Specialty Chemical	→ p.34
	Construction Chemical	→ p.34

Promote Commercialization to Strengthen Solution Proposal Capabilities

We will use the information platform established through the TechnoAmenity for the Future-I and the increased personnel to promote commercialization. Specifically, we will provide prototypes in a timely manner to support our capability to make proposals, expand our marketing bases to grasp advanced technologies and market trends, and implement measures to develop experts.

Item	Initiatives	Page
Provide sufficient samples in a timely manner to support our capability to make proposals	We take advantage of an experimental environment with wide-ranging utilities and highly versatile equipment	→p.42
Expand our marketing bases to grasp advanced technologies and market trends	Establish a new European development base	→p.42

TechnoAmenity for the future-I

Progress Status of the Expansion of the Solutions Business

Status of Our Strategic Product Lines

Nippon Shokubai Group will expand its Solutions business in order to transform its portfolio from existing fields to growth fields. In expanding the Solutions business, we position important products as strategic product lines. By focusing on increasing revenues from these products, we aim to expand the Solutions business five-fold by fiscal 2030. With regard to the company's goal of doubling the operating profit of the Solutions business in fiscal 2024, the sale of strategic product lines is struggling. Meanwhile, the development of the battery, hydrogen, and health & medical businesses, which the company aims to expand from fiscal 2025 onward, is expected to be delayed by about two years. We will begin reviewing our management strategy and implementing measures without waiting for the next Mid-term Management Plan.

Domain, etc.	FY2022–FY2024	FY2025–FY2027	FY2022–FY2030	Status of FY2023
Industrial & Household	Expand sales of strategic product line-up Operating profit +1 billion yen Acrylic resin, ethyleneimine derivatives, etc.	Revenue+8 billion yen	Create clusters in new markets	Revenue Fierce competition from overseas
Energy & Electronics	Expand sales of strategic product line-up Operating profit +5 billion yen ACRYVIEWA™, VEEA™, environmental catalysts, etc. Electronics and environmental purification fields	Revenue+11 billion yen	Expand to growth markets	Revenue Decrease in volume Increase in raw materials and fuel prices
	Expand businesses globally IONEL™, all-solid state electrolyte polymers and other battery fields	Revenue+15 billion yen	Expand business	pp.39-40 Progress in exploring alliance opportunities
Life Science (Health & medical and cosmetic products)	Reach profitability	Develop businesses	Revenue:20 billion yen	pp.41-42 Promotion of sales activities
Innovation & Business Development	Gradually release new business and products to selected markets Separator for alkaline water electrolysis, graphene oxide, etc.		Revenue:30 billion yen	pp.43-44 Promotion of product commercialization

Building a Platform to Strengthen Solution Proposal Capabilities

To expand the Solutions business, we constructed a system to enable the sharing of necessary information and its timely use in fiscal 2023. By the end of fiscal 2024, we expect to have completed our staffing expansion to train market-specific experts in charge of planning, development, and marketing functions.

Item	FY2024 Targets	Progress
Increased personnel resources in related departments	70 people	FY2024: Approx. 100 people (estimated)
Visualization of customer information	Build a system for visualization and sharing of customer information through information systems	Completed infrastructure-system construction in FY2023

Contribute to solving customer issues

Strategy by Market Domain

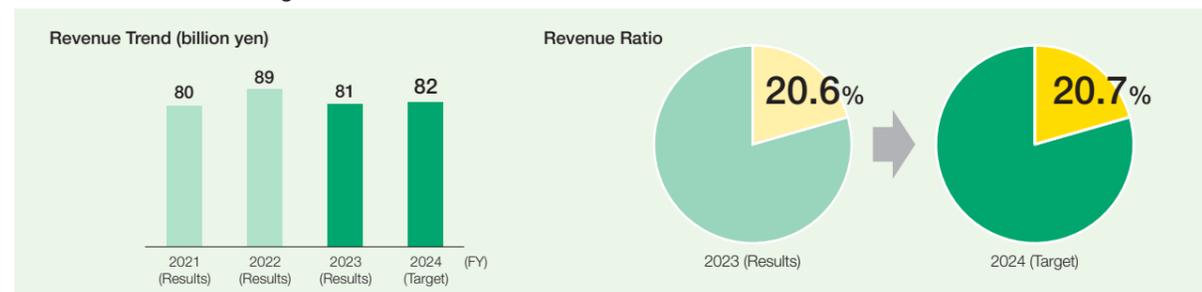
Industrial & Household

Our basic strategy is to expand our business areas and also to expand our business by capturing changes in market trends, focusing on our core businesses of construction chemicals and specialty chemicals. In the construction domain (the infrastructure and housing market), we will develop and launch products that contribute to carbon neutrality. In addition, we will expand our lineup of construction materials, focusing on emulsions.

In the specialty chemical domain, we will develop high profit businesses using highly unique materials, and accelerate overseas expansion.

TechnoAmenity for the future-I: Plan and Results

Results for FY2023 and Targets for FY2024

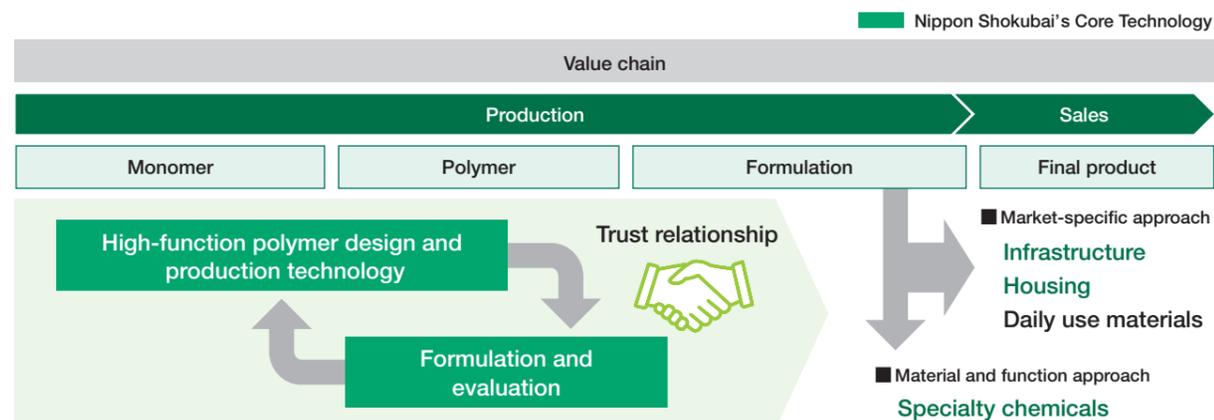


Year-on-year sales revenue increase/decrease: -8.3 billion yen

<Status> Concrete (polymer for admixture): Quantity decreased due to competition from Chinese and South Korean products
 Paint (acrylic resin): Steady demand due to renovations
 Industrial materials (ethyleneimine): Inventory was in an adjustments phase, but has been recovering
 Daily use materials (e.g., detergents): Sales volume declined due to economic slowdown in China

Our Competitive Edges

We have manufactured various monomers. As a result, we are able to handle monomers in a safe manner with full knowledge of their physical properties, and have advantages in the design and manufacturing technology of high-function polymers based on them. In addition, we have established relationships of trust with customers who have a presence in their respective markets, by promoting product development that leverages our strengths, such as evaluation technologies that support our broad R&D knowledge and ability to make proposals. We are able to grasp the changes in overall industrial sectors in a timely manner and convert them into solutions, taking advantage of contact points with a wide range of customers.



Growth Strategy



Social Issues and Needs

In Japan, many facilities and transportation networks were developed intensively during the period of high economic growth. Now that the number of aging facilities, constructed more than 50 years ago, has rapidly increased, the maintenance and repair of those facilities will become increasingly conspicuous as a social issue.

With response to climate change becoming a global challenge, companies in the cement industry, which emit large amounts of CO₂, are urged to review how they create their products and to seek solutions, throughout the entire life cycle, including the development of materials.

Risks and Opportunities

- An increase in special construction products and materials, including recycled materials, due to climate change measures and resource depletion
- A decrease in demand for concrete and cement expected in Japan, in contrast to an increase in the global market

Our Value

Based on high-function polymers and evaluation technologies,

- Improvement in the efficiency of constructions: Improving the properties of concrete, thereby contributing to workability and energy saving
- Improvement in the high strength of constructions: Increasing the strength of concrete, thereby contributing to reduction of the materials used
- Improvement in the resilience of constructions: Extending the lifespan of structures by improving the durability of buildings
- Provision of environmentally friendly VOC-free water-based paints

Future Initiatives

- Short term:** We aim to maintain and expand spreads of existing products and increase market share with high-performance products in construction materials.
- Medium term:** We will shift from general-purpose products to high-value-added products. We will focus on environmentally friendly products such as concrete for CO₂ reduction.



Social Issues and Needs

Nippon Shokubai's specialty chemicals provide materials with unique functions that are manufactured by only a few companies in the world, including ourselves. As these materials are used in a variety of fields both in Japan and overseas, we also play an important role in gathering information on the needs of a wide range of customers. In addition to expanding product sales, we will support the provision of solutions for the entire group in cooperation with each business, including construction, detergents, electronics, water, and batteries.

Representative Products

- Polyvinylpyrrolidone
- EPOCROS™
- EPOMIN™
- POLYMENT™
- ACRYSET™

Risks and Opportunities

- Entry and expansion of alternative products and technologies
- Wide range of industrial uses (opportunities for expansion to potential needs)

Our Value

Ability to propose and provide a wide range of related products

Future Initiatives

We will focus on developing new applications for environmental contribution.

Contribute to solving customer issues

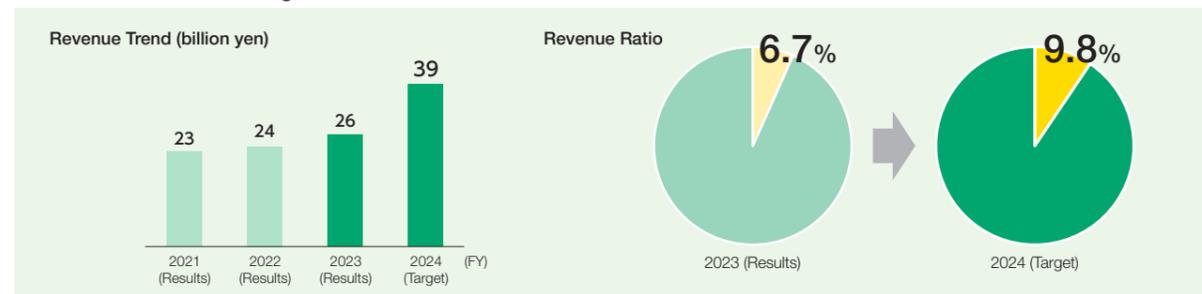
Strategy by Market Domain

Energy & Electronics

We will actively invest resources in our selected growth businesses, namely, the Energy (batteries) & Electronics (optical materials and semiconductors) business. In the battery business, we will capture the expanding demand for in-vehicle lithium-ion batteries, and advance the development of next-generation electrolytes and peripheral materials. In the field of optical materials, we will respond to the shift in the LCD market to China, and promote a shift to high-value-added products (e.g., next-generation displays).

TechnoAmenity for the future-I: Plan and Results

Results for FY2023 and Targets for FY2024

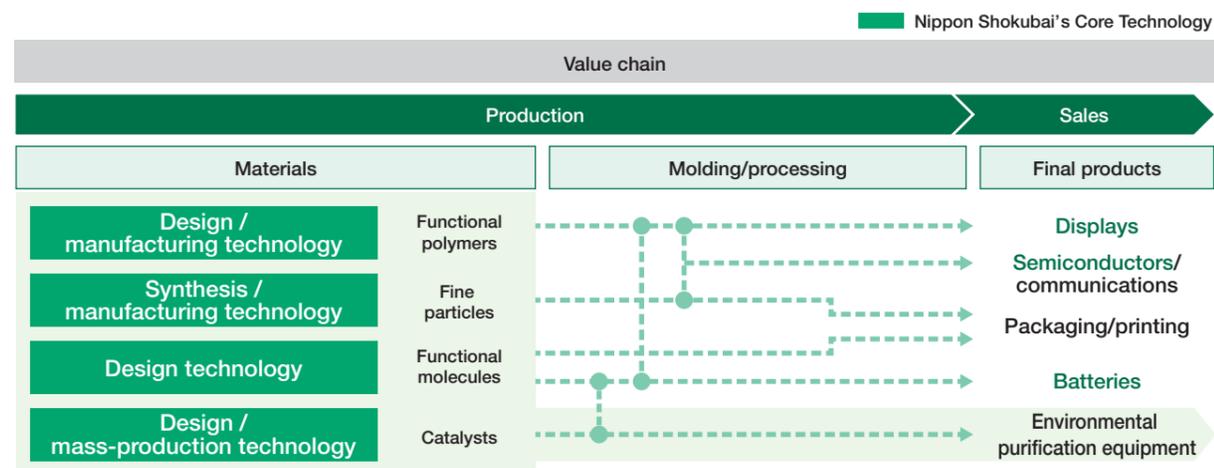


Year-on-year sales revenue increase/decrease: 2.8 billion yen

<Status> Display: Sales volume of related products increased due to a gradual increase in demand.
 Battery & IONEL: Sales were strong in the Japanese, European, and U.S. markets. Meanwhile, in China, amid a sharp decline in market prices, we began switching to highly price-competitive JV products.
 Zr sheet: Growth sales by responding to strong customer needs.
 Environmental purification: De-NOx catalysts and catalysts for catalytic combustion decreased in sales volume YoY.

Our Competitive Edges

Unique performance can be imparted to materials by combining our core technologies, such as inorganic catalysts, organic synthesis, and polymers. (→ p.16) For particle materials, for example, we have the technology of preparing various types of materials in a wide range of sizes from nano to micron. In the development of catalysts, optimum shapes of catalyst are achieved by simulating the characteristics of the target decompose and its environment of use.



Growth Strategy



Social Issues and Needs

Now that TVs, PCs, and smartphones are indispensable in sharing information in our daily lives, devices with displays have become increasingly important. With continuing innovation of information technology, everything can have a display, thereby increasing the need for technologies and solutions depending on various functions.

Risks and Opportunities

- Rapid changes in consumer needs, and fragmentation of needs
- Increase in demand and progress of commoditization mainly in the Chinese market
- Development of new display technologies, such as quantum dots (QD) and virtual reality (VR)/augmented reality (AR)

Our Value

- Features of resins for optical films
Achieve high transparency, optical properties, and heat resistance by unique monomer and design technology of new polymers, and expand their potential as optical materials with multiple uses.
- Features of fine particles
Various fine particles, synthesized from organic and inorganic materials, can improve the light diffusion properties of displays with their wide refractive index. Fine particles can be used to improve the properties of such materials as anti-blocking agents and fillers, in addition to optical properties.

Future Initiatives

Short term: We will promote sales expansion in response to the shift of the LCD market to China. In addition, we will advance sales expansion of high-value-added products.
Medium term: We will develop new products for next-generation displays.



Social Issues and Needs

Amid the urgent need to tackle climate change, the electric vehicle (EV) market has been expanding rapidly, primarily in China, Europe, and the United States.
 The performance of an EV depends heavily on the performance of its onboard battery.

Risks and Opportunities

- Unexpected expansion or contraction of electrolyte demand

Our Value

In the field of battery electrolytes, IONEL™, developed by Nippon Shokubai, which is the key material to the performance of vehicle batteries, can solve several of the issues that existing products have been facing.

Future Initiatives

We will establish a production base for IONEL™ (see the table below) and differentiated technology in line with the strategy of local production for local consumption.

Region	Business Type	Manufacturing Capacity*	Efforts to Achieve Goals	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
China	JV/Capchem	Gradual increase from 1,200 t/y to the scale of 12,000 t	Increased production capacity	→	→	→	→	→	→	→
Japan	Own	3,000 t/y scale	Project proceeding as planned				Commercial operation scheduled to begin in 2028	→	→	→
North America	JV	Several thousand tons/y scale	Selection of JV partners and implementation of schemes				Targeting to start commercial operation in 2029	→	→	→
Europe	JV/Arkema	Suspension of plan and resumption of study in response to future demand trends								

*Production capacity at each site is shown. In the case of JV, it is planned to collect and sell a quantity corresponding to our company's stake.

Contribute to solving customer issues

Strategy by Market Domain

Life Science

New Strategy: Set as a Growth Business Based on the Progress and Marketing Status of TAF-I

We offer contract development and manufacturing services for active pharmaceutical ingredients, along with support for pharmaceutical development using our proprietary technologies. We are expanding our marketing effort to growing overseas areas, particularly North America.



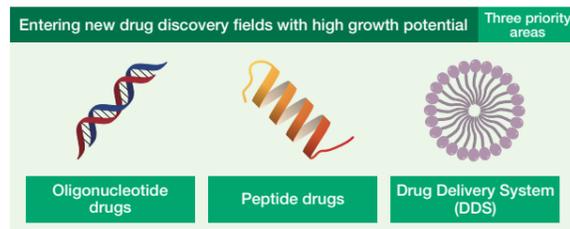
Market Environment

Middle molecule (oligonucleotide and peptide) active pharmaceutical ingredients (APIs) show promise as the next generation of drugs due to the reasons that they generally have fewer side effects than small-molecule drugs, that their manufacturing costs are lower than large molecule drugs, and that it is possible to target treatment that conventional drugs cannot target. Their market growth rates* are expected to be high, with 8% per year for peptide drugs and 17% per year for oligonucleotide drugs.

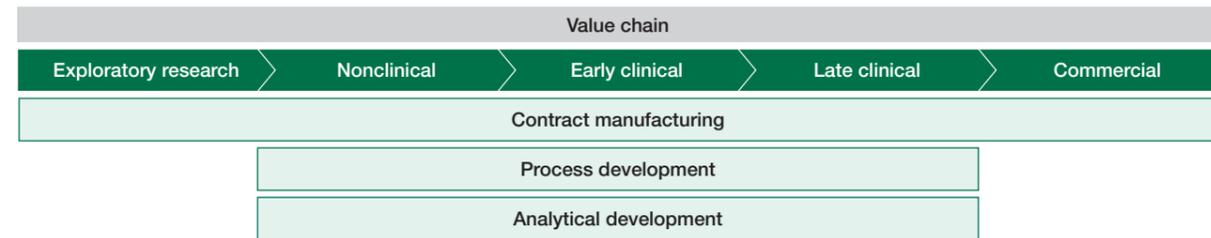
* Survey report "Current Status and Prospects of the Peptide and Oligonucleotide CDMO Industry" (Development Bank of Japan)

Business Strategy and Strengths

Nippon Shokubai Group has a leading domestic manufacturing facility dedicated to the production of middle molecule APIs, active pharmaceutical ingredients. Utilizing these facilities, integrated contract manufacturing services, from discovery research to commercial production, are provided. In addition, we offer solution services, including the development of production processes and the development of analytical methods.

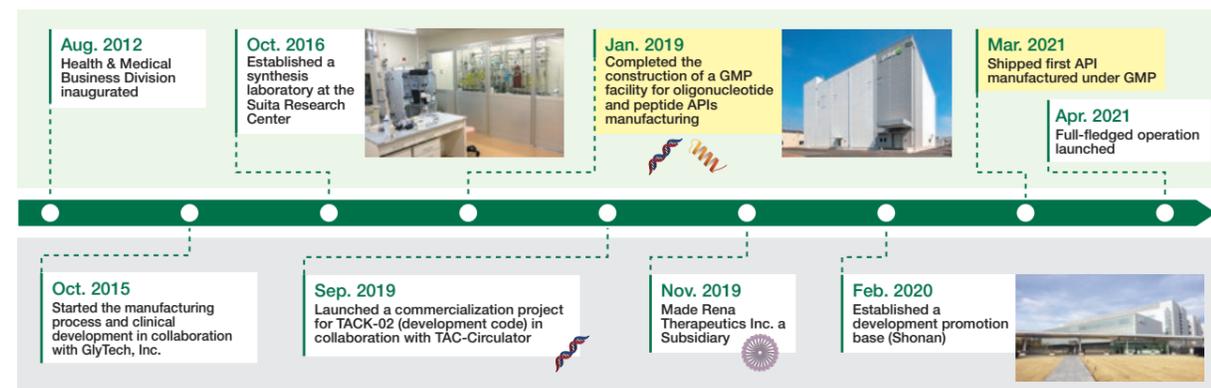


Business model



We will contribute to pharmaceutical development through collaborations with drug discovery startups with promising seeds for oligonucleotide and peptide drugs.

Major Past Initiatives in the Health & Medical Business



TOPICS

1. Selected as a Finalist for CITELINE PHARMA INTELLIGENCE AWARDS JAPAN 2023

This award is an initiative to recognize companies and individuals who contribute to the development of the pharmaceutical industry, and has been held in its home country of the UK for nearly 20 years.

Judging considers the quality and benefits of services and the relationships built with clients. The Health & Medical Business Division was highly recognized for its contract development and manufacturing of middle-molecule APIs and its pharmaceutical development support business using DDS technology, resulting in its selection as a finalist in the 2023 awards.

2. Participation in Exhibitions around the World

At the TIDES exhibition, which brings together companies involved in middle-molecule pharmaceuticals from around the world, the company was highly praised for its high-purity samples and analytical capabilities, including separation, identification, and quantification. Due to the strong demand for kilogram-scale manufacturing facilities from companies in the U.S. and Europe, we are considering the introduction of large-scale equipment to accelerate our worldwide business expansion.

Results in FY2024 and Future Plans

TIDES Asia (Kyoto) / CPHI Japan (Tokyo) / TIDES USA (Boston, USA) / in-PHARMA JAPAN (Tokyo) / TIDES Europe (Hamburg, Germany) / BioJapan (Yokohama)

For more details, please see <https://www.lifescience.shokubai.co.jp/en/>



Market Environment

The cosmetic ingredients market is estimated to be worth 180 billion yen in Japan and about 3 trillion yen worldwide and is expected to continue to grow at an annual rate of 4% or more.

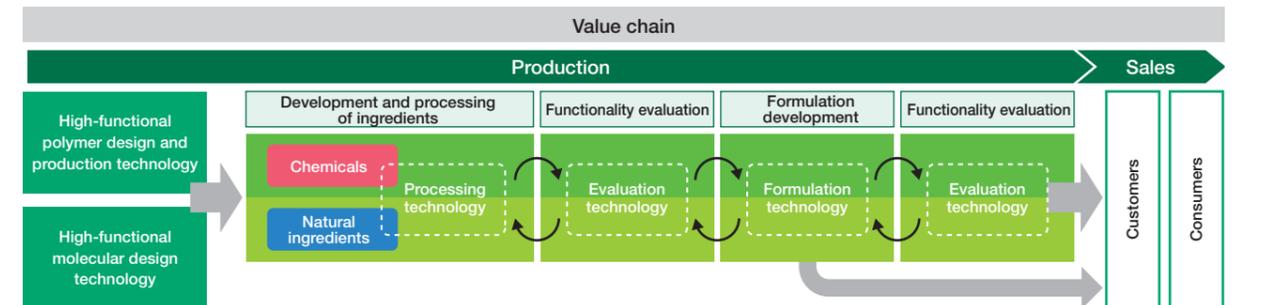
This growth is supported by lifestyle changes and increased consumer purchasing power in developing countries, the rapid growth of multifunctional personal care materials, and the growing demand for "more functional" materials in developed countries.

Business Strategy and Strengths

With the skin care, hair care, and peripheral market as the core target, we develop ingredients for cosmetics with various functions by using our high-functional molecular and polymer design technologies.

In addition, by acquiring the natural ingredients and new technologies we do not have through external alliance and using unique compounding/formulation technologies, we will establish a proposal-based cosmetics business capable of presenting a story for customers. We are now working to acquire processing, compounding, and formulation technologies, while expanding sales of each ingredient.

Business Model



Status and Progress in FY2023

- Commercialized multiple functional polymers and emulsion polymers (polyvinylpyrrolidone, organic acids, polyethyleneimine, etc.)
- Expanded the adoption of existing products
- Won customization projects

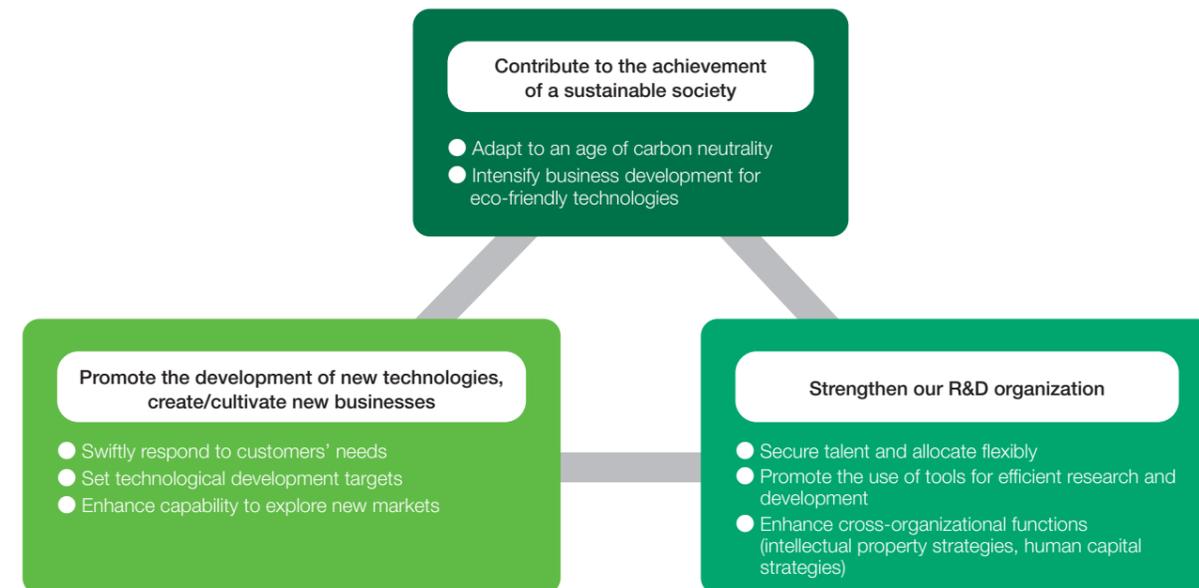
For more details, please see [Products \(Ingredients for Cosmetics\): https://www.shokubai.co.jp/en/products/detail/cosmetics/](https://www.shokubai.co.jp/en/products/detail/cosmetics/)



Contribute to solving customer issues

Creation of new businesses

R&D strategies



Products under Development and Selected Markets

To respond to customers in a timely manner and enhance customer satisfaction, the R&D Division will create a competitive product line-up by further advancing the capabilities to develop key materials based on the three core technologies (inorganic catalysts, organic synthesis, and polymers).

Product under development	Outline	Market	Division
Ammonia cracking catalyst	This is a catalyst essential to the process of cracking ammonia into hydrogen. Ammonia is attracting attention as a "hydrogen carrier" that enables the effective transport and storage of hydrogen. (p.41)	Hydrogen	GX Research & Development
Separator for alkaline water electrolysis	This separator is used for "alkaline water electrolysis," which has gained recognition as a method for producing green hydrogen. (p.41)	Hydrogen	
Draw Solutes	This agent is a key component of the Forward Osmosis (FO) system, a next generation seawater desalination technology. We achieved a product which significantly improved the amount of freshwater production. (p.40)	Water	Water & Environment Solutions Business
Fouling inhibitor	This agent is a modifier for the water treatment membrane to inhibit the membrane fouling, the membrane contamination caused by organic substances and microorganisms. It is expected to reduce the frequency of the membrane cleaning and replacement.	Water	
Multi-functional Hydrophilic Particles	This submicron multifunctional hydrophilic particles have high affinity with aqueous resins. As a result, it can provide various coating agents and films with hydrophilicity effect.	Semiconductors/Communications	Corporate Research
Derivatives of AOMA™	We are developing derivatives of our unique monomer AOMA™. This is a group of materials that improves the hard and brittle properties of acrylics and also has excellent heat resistance.	Packaging/Printing	
iOLED™	This OLED light source is a highly flexible material with around 0.1 mm thickness. This electric module has a great design freedom in terms of emission color and shape, decorating, and emission control.	Displays	

TOPICS

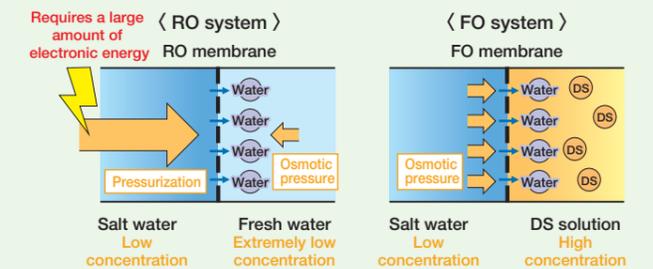
Draw Solutions for Forward Osmosis Processes (Draw Solution: DS)

In light of worsening water shortages around the world, desalinating seawater for agricultural and drinking water and treating water for factories are critical issues. Nippon Shokubai Group has worked with Trevi Systems Inc. to improve the performance of DS, and has confirmed the effectiveness of a forward osmosis (FO) system, a next-generation seawater desalination/water treatment system, in a demonstration test processing 500 m³ per day using this system on the island of Hawaii.

Test Results

- The fresh water recovery ratio from sea water exceeded 65%.
- Electronic energy consumption is one-third of that of a competing system.*
- Competitive Capital Costs: Demonstrated capital costs competitive with the competing system. *

*Reverse osmosis (RO) system



Future Plans

We have the following plans at the same site on Hawaii Island:

- 6,000 m³/day plant operation
- Demonstration test of zero liquid discharge using concentrated seawater as a model liquid
- Demonstration test to concentrate seawater and recover minerals

The introduction of the FO system is being considered for seawater desalination in the Middle East and other areas with high water demand, and also as a concentration technology for achieving zero liquid discharge. With an eye on the future expansion of the FO system, Our Company will strive to further improve the performance and functionality of DS.

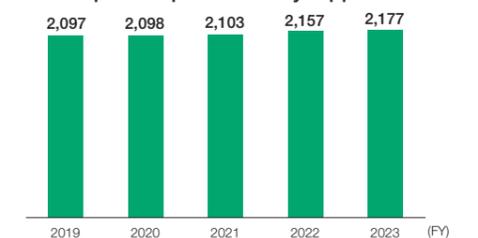


Intellectual Property Activities

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.

To effectively use intellectual property information in business strategies, we newly established the Intelligence Group within the Intellectual Property Center as of April 2023.

Number of patents possessed by Nippon Shokubai



Contribute to solving customer issues



Unique solutions to support the hydrogen supply chain

Hydrogen and ammonia do not emit CO₂ during combustion, and for this reason they are attracting attention as alternative energy sources to petroleum, coal, and natural gases.

Ammonia is also attracting attention as a substance (carrier) that can be used to store and transport hydrogen energy. Nippon Shokubai's unique solutions that support the hydrogen supply chain will contribute to the spread of next-generation energy.

● Products that support the hydrogen supply chain and the 2030 objective: revenue of 20 billion yen and an operating profit margin of 20%

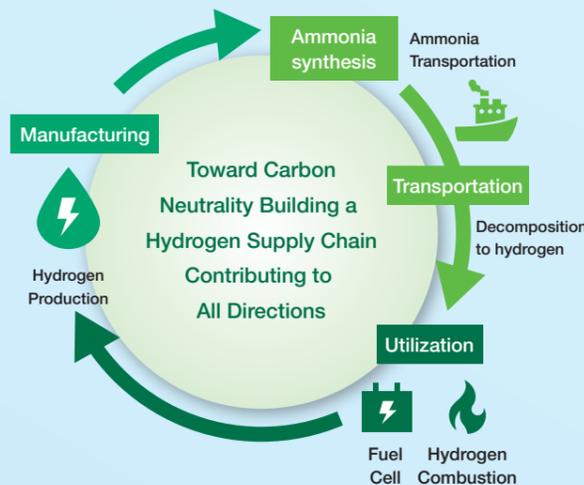
*Revenue in 2030

For Alkaline Water Electrolysis Separator Billions of yen scale

- The alkaline type method is the mainstream for water electrolysis. By 2030, the market size will be almost tripled.
- Successfully achieved higher efficiency and lower cost than the preceding competitive products
- Adoption is progressing for small separators, aiming to expand business for large separators and large customers.

For SOEC Electrolyte sheet Billions of yen scale

- Development is leading in Europe as a highly efficient hydrogen production method
- Utilizes SOFC sheet manufacturing technology. Timely supply in response to market expansion.



Ammonia Decomposition catalyst Billions of yen scale

- Ammonia is an effective substance for achieving carbon neutrality as a fuel and hydrogen carrier
- Small-scale demonstration by customers to be conducted during the next Mid-term Plan period, Commercial-scale demonstration to be conducted by 2030

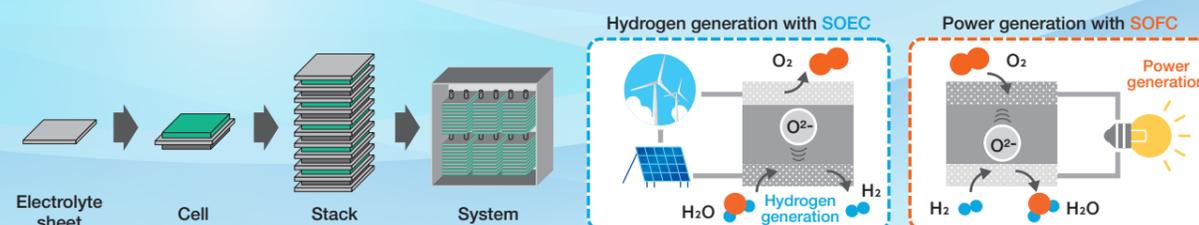
For SOFC Electrolyte sheet 10 Billions of yen scale

- More than 20 years of business with the industry's top manufacturer
- Expand production capacity by 1.5 times in FY2024
- Further capacity expansion expected during the next Mid-term Plan period

Electrolyte Sheets for Solid Oxide Fuel Cells (SOFCs)

Solid oxide fuel cells (SOFCs) generate electricity and water by utilizing the electrochemical reaction of hydrogen with oxygen. They are attracting global attention as a clean energy source. They are used as stationary batteries in facilities where securing power is critically important, such as medical institutions and data centers.

As opposite to SOFCs, solid oxide electrolytic cells (SOECs) generate hydrogen and oxygen by electrolyzing water. By taking advantage of experiences we have gained through the development of electrolyte sheets for SOFCs, we have been developing electrolyte sheets for SOECs. Using SOECs, hydrogen can be produced from renewable energy sources such as wind and solar. Furthermore, by using such green hydrogen to generate electricity with SOFCs, it is possible to supply electricity without emitting CO₂ or environmental pollutants.



Further strengthen of solution proposal capabilities

"TechnoAmenity for the Future-I" set the development of a platform to strengthen proposal capabilities for the Solutions Business (such as building a system for visualizing and sharing customer information) as one of the priorities, and we have already completed this task. In addition, we are strengthening our facilities globally in order to ensure quick and flexible delivery of value to our customers.

We have completed construction of the Process Incubation Center (PIC) building, with the aim of accelerating scaling-up considerations for timely commercialization, and enhancing researchers' knowledge and experience of scaling up.

In addition, we have established the Innovation Center for Sustainable Solutions (ICSS) within NIPPON SHOKUBAI EUROPE N.V. (NSE) to promote sales and marketing of environmentally friendly products in Europe.

Completion of the PIC building

There is a difference in scale of about 100-fold or more between several-liter-scale research facilities for fundamental reaction studies, and pilot plants that are aimed at establishing manufacturing conditions. Laboratory facilities are too small to demonstrate industrial processes or provide sufficient samples to customers, while bench-to-pilot plants are too costly and have too long lead times to perform various experiments and manufacturing.

The PIC building provides facilities that are just the right size to resolve this issue. We take advantage of an experimental environment with wide-ranging utilities and highly versatile equipment to accelerate the commercialization of developed products.



PIC building

Establishment of a European development base (NSE-ICSS)

Our Company lists "Strategic transformation for environmental initiatives" as one of its three transformations described in "TechnoAmenity for the future-I." Within this transformation, we have positioned the development and sales expansion of products that address environmental issues as an important initiative.

Europe is a pioneering region, with highly environmentally conscious people, and is vigorously implementing large-scale environmental projects such as those involving hydrogen and renewable energy. Hydrogen- and renewable-energy-related products (storage batteries) are important technologies that are aligned with Our Company's growth business strategy. To quickly collect and analyze information on advanced local regulatory trends, needs, and technological trends, and to promote our environment-related research and development themes, we have established the ICSS as an organization within NSE. Operations have commenced with a mixed team of personnel seconded from Japan and locally hired employees.

Short- to medium-term initiatives

- Separators for alkaline water electrolysis
- Marketing activities centered on separators for zinc-based secondary batteries

Functions of the ICSS

- Enhance recognition of Our Company
- Search for and support collaborations with external partners



ICSS members

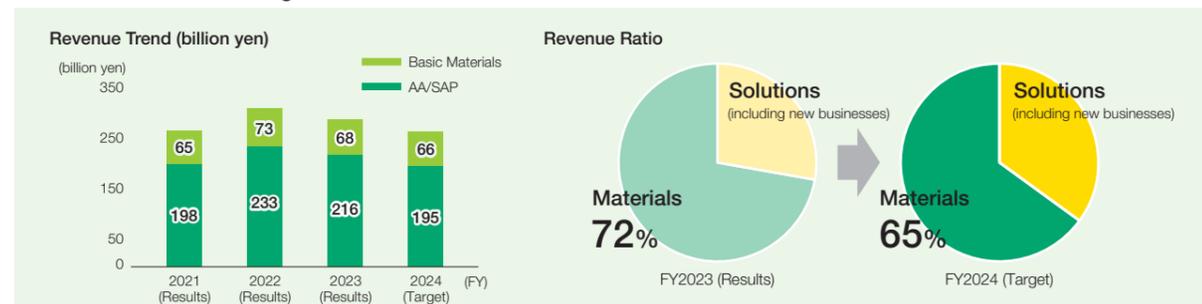
Contribute to solving customer issues

Achieve the Materials Business Resilience

Acrylic acid (AA) and ethylene oxide (EO), core products of the Materials business, are raw materials indispensable for many industrial products and materials that support our comfortable lives, such as superabsorbent polymers (SAP) used in disposable diapers. As a core business that supports the Nippon Shokubai Group, we will work to maximize profits by improving efficiency.

TechnoAmenity for the future-I: Plan and Results

Results for FY2023 and Targets for FY2024



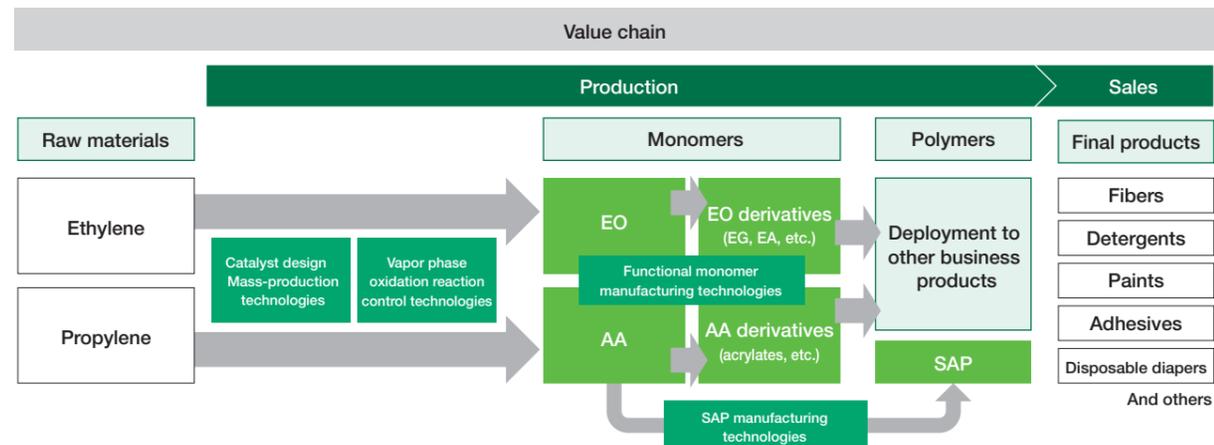
Major products For click here <https://www.shokubai.co.jp/en/products/divisions/>

Competitive Edges

Our Company stably manufactures basic chemicals, including difficult-to-handle EO and AA, taking advantage of its unique technologies. We also offer a wide variety of derivatives made from such raw materials, showing competitive advantages brought by integrated production from raw materials. SAP, one of our leading derivatives, is highly rated for its superior performance, continuously meeting various customer needs required for disposable diapers, including high water absorption performance, water absorption under pressure, fluid permeability, and long-lasting deodorization. These competitive edges have been achieved by establishing the research division at each production site, which enables close communication regarding the development and improvement directly linked to production. Our AA and SAP production sites have located in multiple regions around the world, ensuring stable supply in response to fluctuations in global supply and demand. This makes us one of the globally leading AA producers and the top SAP producer in the world.

Core Technology and Value Chain

Nippon Shokubai's core technology



Strategy by Market Domain

AA and SAP

Market Environment

With rising populations worldwide, AA and SAP are expected to show a 3 to 5% growth in the medium and long term. Considering that the balance between supply and demand can be weakened, however, we need to maintain a high level of global competitiveness.

In response to the recent global trends to tackle climate change, in addition, it is increasingly important to take measures to reduce CO₂ and other greenhouse gas emissions.

It is difficult to tackle climate change on an individual company basis. It is necessary to collaborate and cooperate with partners in individual countries and take necessary measures according to the circumstances of each country.

Initiatives for FY2023

- Response to climate change
 - AA and derivatives: Obtained ISCC PLUS certification for product supply using a mass balance system (bio-based products did not grow as much as initially expected)
 - Development of bio-acrylic acid through multiple routes in progress
- Our Indonesian subsidiary, PT. NIPPON SHOKUBAI INDONESIA (NSI), obtained International Sustainability and Carbon Certification (ISCC PLUS Certification). NSI has established a supply system for certified products in which biomass-derived raw materials are allocated using a mass balance system. In addition, NSI has signed a renewable energy power purchase agreement, which is expected to reduce its overall CO₂ emissions by approximately 24%.
- Capacity expansion through modification of existing plants has been completed. We are now ready to capture demand both in and outside Japan.

Future Initiatives

	AA/AES	SAP
Short term	<ul style="list-style-type: none"> ● Optimization of production for the entire group ● Obtain demand in India and Southeast Asia 	<ul style="list-style-type: none"> ● Customer intake due to domestic restructuring ● Demand capture in line with market growth in emerging countries ● Improve profitability through cost reduction
Medium and long term	<ul style="list-style-type: none"> ● Secure stable customers and implement cost reduction measures 	<ul style="list-style-type: none"> ● Study of supply system for medium- and long-term demand increase ● Sustainability (bio-based raw materials, recycle) ● Establishment of research system in Indonesia

*At the Board meeting held on July 30, 2024, a resolution was passed to expand NSI's manufacturing equipment to produce superabsorbent polymer (annual production capacity of 50,000 tons).

For more details, please see <https://www.shokubai.co.jp/en/news/2024080214262/>

Basic Materials

Market environment

It is expected to continuously secure a safe and stable supply of basic materials as raw materials used in many industries, including the consumer goods industry. In response to recent global trends to tackle climate change, in addition, it is important to take measures to reduce CO₂ and other greenhouse gas emissions.

It is expected that companies will implement initiatives to reduce CO₂ emissions throughout their supply chain—encompassing all the stages from raw materials, to distribution, use, and disposal—beyond the boundaries of industries.

Initiatives for FY2023

- Passing on the rising raw material and energy costs to the customers
- Response to climate change
 - EO and derivatives: Obtained ISCC PLUS certification for product supply using a mass balance system (bio-based products did not grow as much as initially expected)
- EO Resilience Project
 - In addition to energy conservation, we are working to improve logistics efficiency and increase contracted production.

Future Initiatives

	EO
Short term	Maintain a stable supply system as the largest EO manufacturer in Japan
Medium and long term	Fully consider to form alliances with upstream, downstream and other companies in the industry



Promote climate change response

Aiming to Achieve Carbon Neutrality in 2050

Basic Approach

Nippon Shokubai recognizes the issue of climate change as a major social issue that must be resolved and states “Strategic Transformation for Environmental Initiatives” to proceed a variety of initiatives to achieve carbon neutrality by 2050. In March 2021, we endorsed the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and are enhancing disclosure of information in line with them.

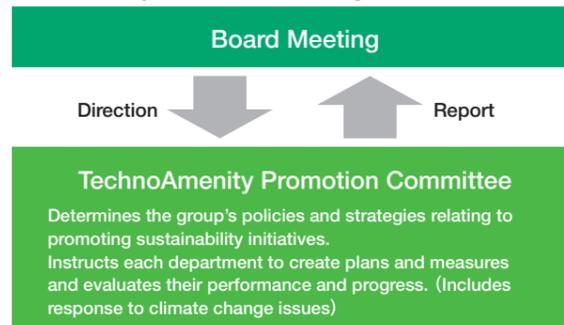
For more details, please see https://www.shokubai.co.jp/en/wordpress/wp-content/uploads/2024/03/TCFD-Report-202403_en.pdf

System (Governance)

Governance System for Climate Change Issues

We recognize the promotion of sustainability activities as a core theme of our management. Promoting climate change response is one of our important initiatives, and the TechnoAmenity Promotion Committee determines the related policies and strategies, provides instructions to relevant departments, and evaluates the performance of their activities. The TechnoAmenity Promotion Committee is chaired by the president and consists of several designated members.

Governance System for Climate Change Issues



Strategy

Strategy on Climate Change Issues

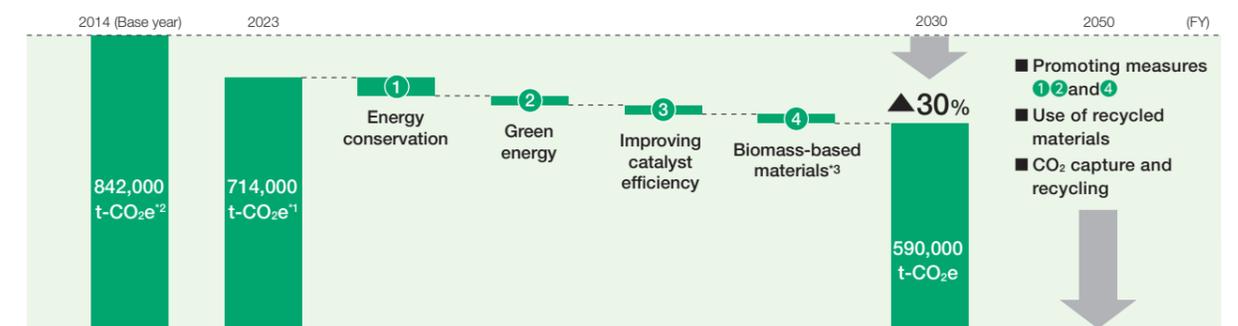
We assess the financial impact on a three-level scale based on scenario analysis that takes into consideration various factors, including: changes in the market and corporate activities, policies and legal regulations to promote the transition to a decarbonized society and circular economy, and stakeholder evaluations. Business opportunities include increasing demands for materials that contribute to the realization of a decarbonized society. For example, we believe that our lithium-ion battery-related materials can contribute to accelerate the transition from gasoline engines to electric motors.

Business risks include the loss of business opportunities as we fail to be selected by customers due to delays in the development of technologies related to climate change and the greening of energy and raw materials. We will focus on decarbonization-related development themes to meet market demand, and promote the adoption of non-fossil raw materials and fuels.

Indicator and Goal

Reduce Greenhouse Gas (GHG) Emissions (Scope 1 & Scope 2)

KPI and their ideal state	FY2023 result	Year of Achievement
Reduce GHG emissions by 30% (from the 2014 level, in Group companies in Japan)	Reduced by 15% ^{*1}	End of FY2030



^{*1} Including a carbon credit offset of 62,000 t-CO₂ (7.3% from the 2014 level) due to the purchase of carbon-neutral city gas
^{*2} The calculation method has been revised.
^{*3} Regarding biomass-based materials, direct emissions were calculated (distinguished from Scope 3).

By 2030, we will reduce GHG emissions through measures centering on the promotion of energy conservation with manufacturing process improvements, the use of green energy, the partial conversion of raw materials into biomass, and the improvement of catalyst efficiency.

While we will promote the above measures from 2030 to 2050, we also plan to promote the expanded use of biomass raw materials, as well as the use of recycled raw materials and green fuels (hydrogen, ammonia), and demonstrate carbon recycling technology (CO₂ capture and recycling).

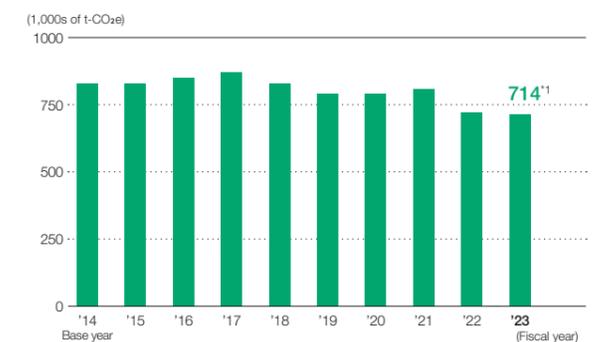
Trend in GHG Emissions (in Japan)

We 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 goal for FY2030, the final year of our long-term vision, we set a goal 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-CO₂e,^{*1} a 15%^{*1} reduction from FY2014 levels. We are currently considering setting goal for GHG emission reductions including Group companies outside Japan.

^{*1} Including an offset of 62,000 tons of carbon credits (equivalent to 7.3% of GHG emissions in FY2014) from the introduction of carbon-neutral city gas



Implementation of third-party verification on GHG emissions

We have prepared a Calculation Report based on measurements and calculation methods stipulated in the Greenhouse Gas (GHG) Emissions Calculation Manual, which was formulated to be consistent with domestic and international guidelines.

The FY2023 Calculation Report was also subjected to third-party verification by the Japan Quality Assurance Organization (JQA) in FY2024, and it has been verified that the GHG emissions of the Nippon Shokubai Group in Japan were 776,000 t-CO₂e.

For more details, please see https://www.shokubai.co.jp/en/wordpress/wp-content/uploads/2023/11/Third-party-Verification-Report-on-GHG_2023.pdf

Promote climate change response

Scope 3* GHG Emissions

Nippon Shokubai discloses Scope 3 emissions for specific categories that is possible to collect data and calculate.

For more details, please see

▶ https://www.shokubai.co.jp/en/wordpress/wp-content/uploads/2024/07/esgdata2023_240711_en.pdf

We will continue to calculate Scope 3 emissions and explore the possibility of reducing CO₂ emissions resulting from all corporate activities.

The GHG Protocol classifies GHG emissions into three classes: Scope 1, Scope 2, and Scope 3.

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)

Trends in Scope 3 Emissions (Data for Nippon Shokubai alone)

No.	Category	Emissions (1,000 t-CO ₂ e)		
		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

Examples of Environmental Contribution Products



IONEL™ (Lithium-ion battery materials)



VEEA™ (UV-curable reactive diluent)



AQUALOC™ (Concrete admixtures)

Applications in parentheses

TOPICS

Acquisition of ISCC PLUS Certification

In February 2023, Nippon Shokubai obtained ISCC PLUS certification for the acrylic acid, superabsorbent polymer (SAP), ethylene oxide, and other products produced at Himeji and Kawasaki Plants.

Our Belgian subsidiary, NIPPON SHOKUBAI EUROPE N.V., and our Indonesian subsidiary, PT. NIPPON SHOKUBAI INDONESIA have also obtained ISCC PLUS certification. Our Group is developing a global supply system for manufacturing and selling certified products wherein biomass-derived raw materials are allocated using the mass balance system.

Establishing a Calculation System for Product Carbon Footprint (CFP)

The chemical industry supplies products to a wide range of industries, and is required to calculate and disclose the CFP of its numerous chemical products by various stakeholders, including customers, financial markets, and governments, in order to contribute to reduce GHG emissions throughout the supply chain.

Our new system, which was established in August 2023, complies with not only the traditional life cycle assessment, ISO standards, which are international standards for CFP, and GHG Protocol Product Standards, but also newly published domestic and international guidelines for CFP calculation and reporting. We also used the Product Carbon Footprint Calculation Tool CFP-TOMO provided by Sumitomo Chemical Co., Ltd. to organize the calculation rules.

This enables us to calculate CFP properly and efficiently, and to respond to client requests in a timely manner.

Internal Carbon Pricing (ICP)

We implemented the internal carbon pricing (ICP) system on February 1, 2023. We utilize this system to raise awareness of decarbonization within the Nippon Shokubai Group as well as promoting energy conservation, and studying business opportunities and risks related to reducing CO₂ emissions.

In FY2023, we conducted investments studies using ICP in multiple projects, including facility renewal and new construction.

- ICP: ¥10,000/t-CO₂ (shadow price based on market prices in Japan and abroad)
- Method of application: The costs will be calculated using ICP based on a change of CO₂ emissions, and used as a criterion for investment decisions.
- Scope of application: Nippon Shokubai Group
- GHG Scope: Scope 1 & Scope 2

Expand the Use of Environmental Contribution Products

KPI and their ideal state	FY2023 result	Year of achievement
Environmental Contribution Products Revenue (1) 55 billion yen (2) 135 billion yen	45 billion yen	(1) End of FY2024 (2) End of FY2030

Extent of the Impact of Scope 3 on the Supply Chain (Image)



In order to solve the issue of climate change, it is important to reduce CO₂ emissions not only from the manufacturing stage of our products but also throughout the entire supply chain, including the stages of use and disposal.

We internally certify products that contribute to reduce CO₂ emissions throughout the entire supply chain as Environmental Contribution Products, after internal review based on checklists and data of evidence. We have also set the sales revenue from these products as a KPI to promote their widespread use.

For example, the following products contribute to the reduction of CO₂ emissions in the stage of use by customers: IONEL™, a lithium-ion battery material; VEEA™, a UV-curable reactive diluent; and AQUALOC™, a raw material for concrete admixtures.

We are also proceeding the development of new Environmental Contribution Products and technologies, such as the development of new recycling technologies for superabsorbent polymer (SAP) in used disposable diapers, aiming to reduce CO₂ emissions by recycling carbon.

Recycling used SAP is expected to reduce CO₂ emissions not only at the disposal stage, but also at the manufacturing stage by using recycled raw materials.

Develop and Empower Human Resources

Promote Transformation into an Organization with Sustainable Growth and a Company Where Diverse Human Resources Are Motivated to Work

Basic Stance

Talent Development Policy (excerpts) Our talent development policy and what is expected of employees

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

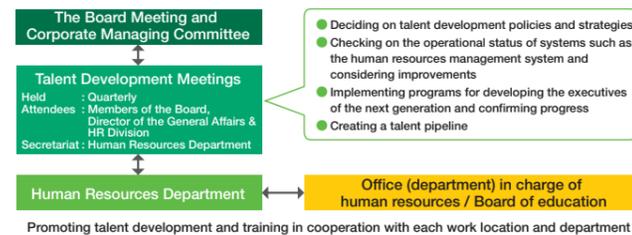
In talent development, the Company and employees are on equal footing: the Company provides employees with opportunities for growth and expects them to have high aspirations and motivation to grow as well as to contribute to the Company. The three points on the right are the focus of our talent development. 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.

- 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

System (Governance)

Talent Development Meetings

We hold a "talent development meeting" with the participation of all internal members of the board on a periodic basis. Its purpose is to check the progress of initiatives for talent development, the operation of the human resources management system, and the fostering of the leaders of the next generation, thereby leading to the implementation and review of various measures.



Strategy

Ideal talent

We have established the five definitions for ideal talent as shown below.

To achieve the organizational transformation (transformation into an organization with sustainable growth and a company where diverse human resources are motivated to work) outlined in our long-term vision "TechnoAmenity for the Future," we expect all employees to be conscious of the ideal talent, think and learn on their own accord, and take the initiative to think and act autonomously toward solutions.

Every employee is expected to keep in mind the five points stated in the definition of ideal talent, and perform at his/her full potential.



① Utilizing the individuality, willingness, and abilities of diverse talent

We aim to encourage the autonomous think and act of each employee with diverse values and career-mindedness. To this end, we actively promote the creation of the environment and systems that enable employees to continuously work and play an active role at Nippon Shokubai Group, by appropriately allocating human resources and introducing various systems, such as self-reporting and the continuation of work locations.

Point

- Suitable assignments of talent (self-reporting system, the continuity of work location system, etc.)
- Individual motivation (development of female leaders, career support for female employees and seniors, etc.)
- Diverse and autonomous work styles

D&I Promotion Policy

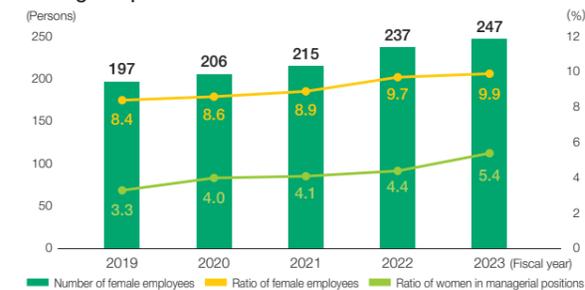
1. We will create a working environment and culture where employees can work with diversity and mutual respect, and grow together.
2. Each employee, as a professional, will make every effort to show their individuality and ability, which will lead to innovation.
3. By enriching and balancing employee's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

Promoting women's participation and advancement in the workplace

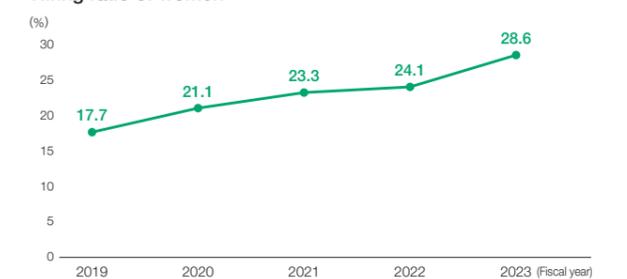
We have been proactively hiring female employees in clerical and chemical positions and for assignment to manufacturing plants. In this way, we have been working to promote the advancement of women into various business activities, regardless of job type. At the same time, we are focusing on fostering a corporate culture in which women can continue working by, for example, improving our systems.

Currently, our biggest challenge is to increase the number of women in decision-making positions. To achieve this, we need to enhance the leadership pipeline of female employees. To increase the number of female candidates for managerial positions, we need to increase the ratio of female employees across the company.

Number & ratio of female employees, ratio of women in managerial positions



Hiring ratio of women*



* Clerical and chemical positions: mainly hiring graduates from technical colleges, junior colleges, and universities

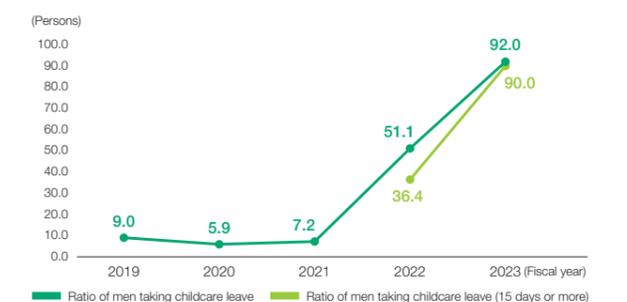
Increasing the rate of male employees taking childcare leave

Toward a target of 30% or more of male employees taking childcare leave by the end of fiscal 2024, we worked to foster a D&I mindset among employees in managerial positions and to raise awareness of the childcare leave system by creating a handbook.

We have now set a more challenging goal* of 100% of men taking childcare leave of 15 days or more, and are further promoting the creation of a corporate culture and system that makes it easy for all eligible employees to take childcare leave, regardless of their department structure or work situation.

* In our Mid-Term Management Plan, we are revising the standard for the number of days of leave taken for calculating the childcare-leave take-up ratio from one day or more to 15 days or more from fiscal 2022, and the target ratio from 30% to 100% from fiscal 2023.

Rate of male employees taking childcare leave



Develop and Empower Human Resources

② Providing support to talent who think, act, and grow on their own initiative

Talent development system

Based on the roles and ability requirements in the rating system, we systematize topics, scopes, details, and methods of training, and implement various programs.

Point

- Level-based training
- Career support
- Elective program
- Company-wide training (DX, D&I, mental health, compliance, human rights, etc.)
- Autonomous learning programs (ALPs)

Employee training programs

We have been carrying out various training/programs specified under the talent development system. For level-based training, we have been implementing the training programs designed for each target level from new employees to managers, according to their expected roles. Participation in each program is mandatory for all eligible employees.

ALPs consists of five programs: (1) company-recommended training, (2) external open seminars, (3) subscription-based video training, (4) correspondence courses, and (5) global talent development programs. ALPs enables employees to select and participate in programs depending on their needs (participation style, period, etc.) to improve their abilities and skills. In FY2023,

when the programs were revamped, a total of 500 employees participated in the five programs. We will continue to improve training programs to further increase the participation rates.

Regarding elective talent development programs, we held the NLDP (Next Leaders Development Program) and the FLDP (Future Leaders Development Program) for general managers and section managers selected on a company-wide basis. These are approximately one-year training programs, in which participants are required to work on specific issues and make a presentation to the management at the end of the programs. We will continue to work on developing talent who can serve as a driving force for Nippon Shokubai Group in the next generation.

KPI and their ideal state	FY2023 results	Year of achievement
<ul style="list-style-type: none"> Improve the employee engagement score (transformation and growth of people and workplaces through early establishment of a new human resources management system, linkage with multi-layered measures, and organizational improvement) 	Participation rate in ALPs: about 20% (total number of participants [about 500] / total number of employees [2,500]) We will seek to raise the participation rate and offer programs that lead to participants' career advancement.	End of FY2024
<ul style="list-style-type: none"> Increase in the number of applicants for ALPs (e-learning, skill development training, online English conversation classes, etc.) and make these programs better known within the company 		

TOPICS

Global Talent Development Program

At any one time, we have more than 50 Japanese employees seconded to our overseas affiliates. With overseas sales accounting for more than 50% of the Group's total sales, it is becoming increasingly important to develop human resources who can thrive on a global scale.

We have set the following three characteristics as those that global talent should possess:



As part of the ALPs menu, we have established and are implementing programs to develop English proficiency to allow program participants to converse in English, as well as intercultural communication programs to help participants work together with people from different cultures.

In fiscal 2023, we held the Global Talent Development Program Level 2 to develop global leaders who can autonomously expand businesses on the international stage. The program was targeted at 14 people who wished to participate, and ran for a total of nine days.

Conducting engagement surveys

Once a 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 visualize 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.

Initiatives to improve engagement

The results for fiscal 2022 and 2023 show that, although there are strengths in the management and support from supervisors at the workplace, there are some weaknesses in terms of prospects in business and the effective posting of human resources.

The results were shared by all employees, and specific commitments were announced by the president. At each workplace, an action plan toward improvement was prepared and implemented. The focus survey to measure progress has indicated that in some workplaces, scores were significantly improved. This has led to a steady improvement in Group invigoration and employees' engagement.

Evaluation by Motivation Cloud (Link and Motivation Inc.)

	[Reference] Relationship between engagement score and rating											
FY2023 implementation results: CCC (response rate: 98.5%)	Score	33	39	42	45	48	52	55	58	61	67	
FY2022 implementation results: CCC (response rate: 98.0%)	Rating	DD	DDD	C	CC	CCC	B	BB	BBB	A	AA	AAA

* Each score represents a deviation from the national average of B 50.

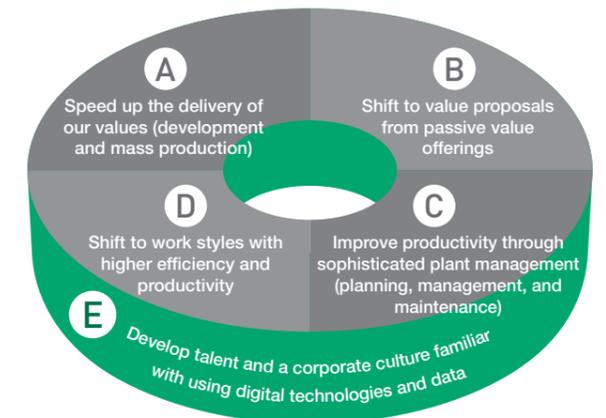
DX promotion: Foster talent familiar with using digital technologies and data

Talent development program for DX promotion

Point

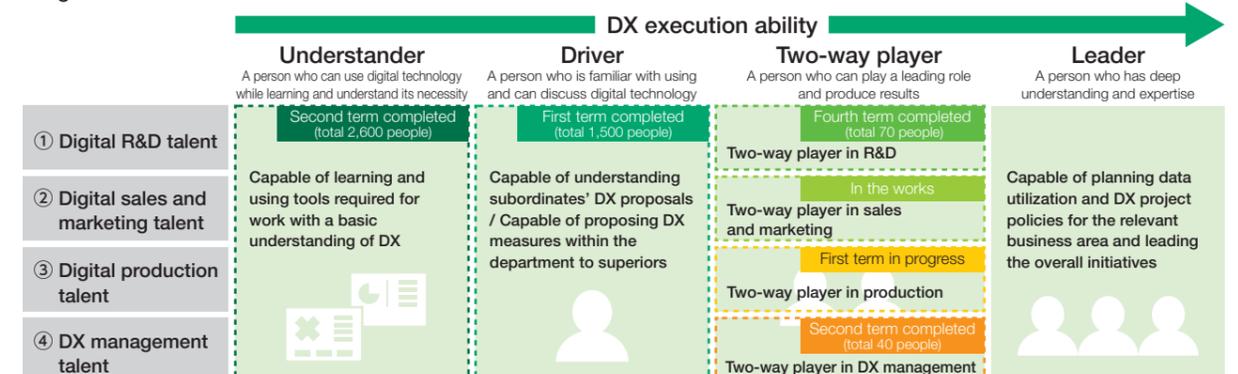
- Conduct company-wide basic training to enhance employees' understanding and basic skills of DX
- Provide training according to the roles and expertise that are required for DX in each area
- Foster talent who can drive DX

Scope of transformation in DX promotion



We issue an Open Badge certification to those who have completed a designated training program, which is closely linked to the DX skill levels set by the Information-technology Promotion Agency (IPA). Programs for the "Understander" and "Driver" levels have already been conducted. We are now promoting a program for the "Two-way player" level.

Progress of the initiatives



Promote safe and stable production activities

Promote RC initiatives based on our Safety Philosophy of “Safety takes priority over production”

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 environment, safety, and health in all processes, from the development to the manufacture, distribution, and industrial and consumer use of chemical substances, and to their disposal and recycling. By doing so, they engage in dialogue and communication with society, which is collectively known as “Responsible Care” (RC). The Nippon Shokubai Group 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

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.

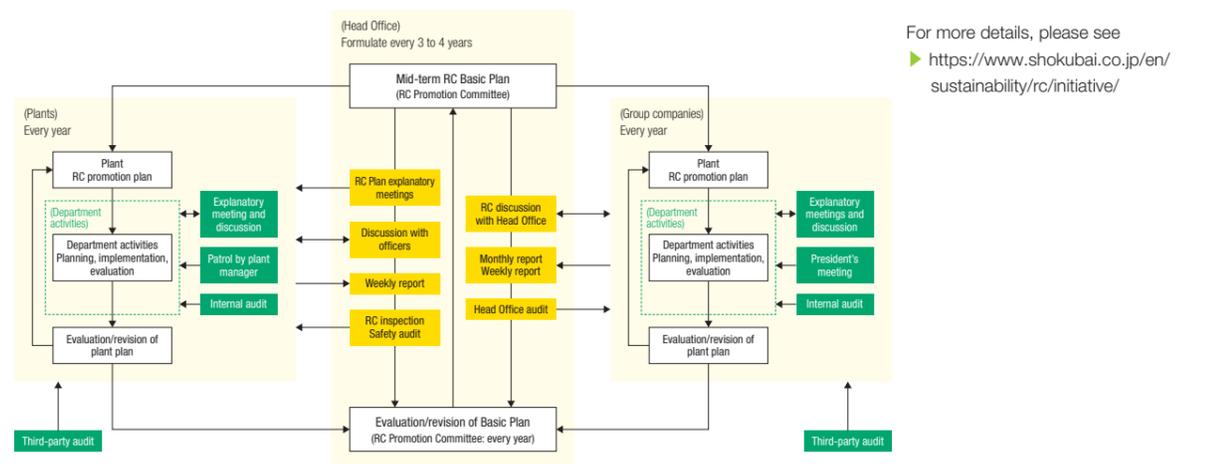
RC Promotion System

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 Nippon Shokubai 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.



Environmental Protection Initiatives

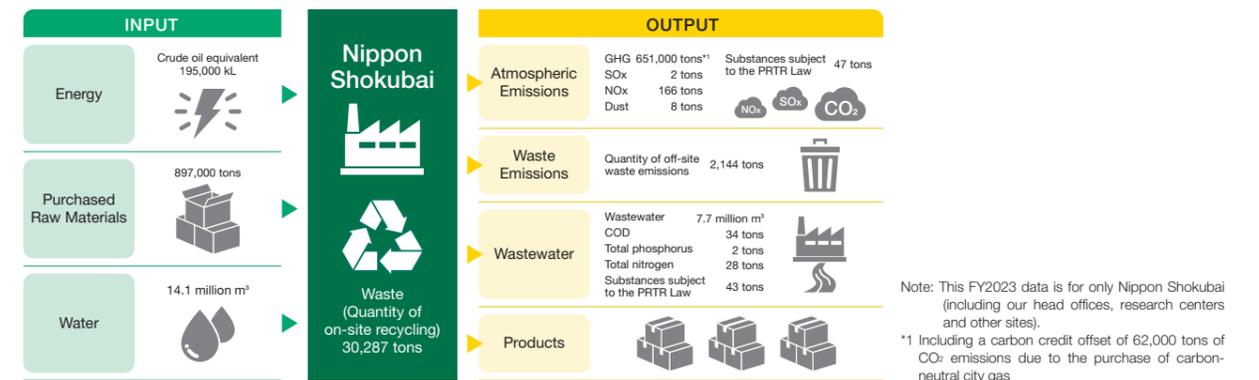
Environmental Protection Policy

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.

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.



Overview of FY2023

In FY2023, following on from last fiscal year, we underwent third-party verification of our greenhouse gas (GHG) emissions in Japan, established a new system to calculate product carbon footprints more accurately and efficiently, and participated in the GX League. As part of our energy-saving initiatives, we achieved a reduction of approximately 6,700 kL (crude oil equivalent) through the optimization of operating conditions and deployment of advanced process control systems at production site. However, the energy intensity worsened due to decrease in production volume of major products. Nevertheless, GHG emissions have decreased due to the continued use of carbon-neutral city gas and renewable energy.

Objectives for FY2022–FY2024	FY2023 results
● Energy saved: 6,000 kL (over 3 years)	● Energy saved: 6,703 kL ^{*5}
● Energy consumption intensity: 5% reduction from FY2019 levels (annual reduction of 1%, 96.9 L/t-production)	● Energy consumption intensity: Increased 15.3% ^{*5&6}
● CO ₂ emissions ^{*1} for FY2030: 30% or greater reduction from FY2014 levels (including Group companies in Japan)	● CO ₂ emissions: Decreased 15.2% ^{*5&7}
● Fuel consumption intensity for road transport: 4% reduction from FY2020 levels (annual reduction of 1%, 33.7 L/1,000 t-km)	● Fuel consumption intensity for road transport: Increased 1.7%
● Promote modal shifts	● Modal shift promotion ongoing
● Water use intensity: reduction to at least FY2020 levels (8.45 m ³ /t-production)	● Water use intensity: Increased 9.1% from FY2020 levels
● Maintain zero emissions ^{*2} : (Quantity of final off-site landfill) ≤ (Total amount of waste generated × 0.1%)	● Zero emissions maintained
● Emissions of substances subject to the PRTR Law ^{*3} : 99 t/y ^{*4} or less	● Emissions of substances subject to the PRTR Law: 90.1t/y

^{*1} The emissions reduction target is in fact for greenhouse gases (GHG), but most GHG is actually carbon dioxide (CO₂). Therefore, it is referred to as CO₂ here.
^{*2} 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
^{*3} PRTR Law: Act on the Assessment of Releases of Specified Chemical Substances in the Environment and the Promotion of Management Improvement
^{*4} Due to amendment of the PRTR Law, this objective was re-set.
^{*5} 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.
^{*6} 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.
^{*7} Including a carbon credit offset of 7.3% due to the purchase of carbon-neutral city gas

Promote safe and stable production activities

Process Safety and Disaster Prevention Initiatives

Basic Approach to Safety Issues

Nippon Shokubai has 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

Overview of FY2023

Objectives for FY2022–FY2024	Targets for FY2023	FY2023 results
Zero Class A* ¹ or Class B* ² process safety accidents (aiming to completely avoid serious process safety accidents)	Zero Class A or Class B process safety accidents	Class A process safety accidents: 0 Class B process safety accidents: 2

*1 Class A: Level 9 or higher according to the Nippon Shokubai method on the Japan Petrochemical Industry Association chart
*2 Class B: Level 3 to 8 according to the Nippon Shokubai method on the Japan Petrochemical Industry Association chart

In FY2023, there was no Class A process safety accident, but two Class B process safety accidents occurred. To strengthen our safety infrastructure, we have been making efforts to prevent process accidents by further enhancing the management of change and the risk assessment and safety culture development.

Trends in the Number of Process Safety Accidents



Occupational Safety and Health Initiatives

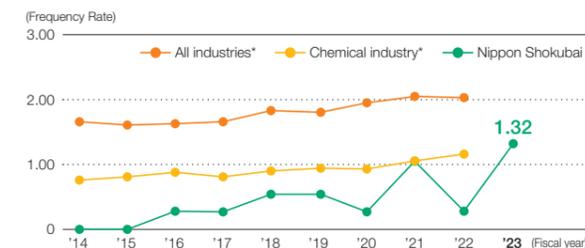
Occupational Safety and Health Policy

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.

Overview of FY2023

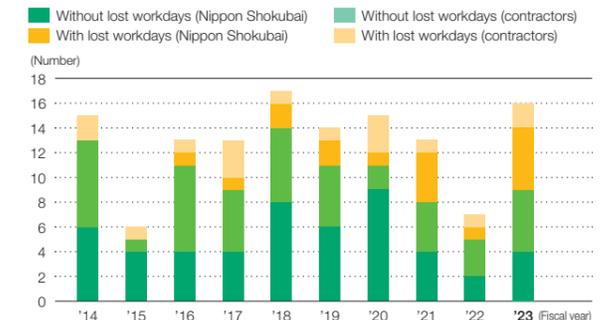
Objectives for FY2022–FY2024	Targets for FY2023	FY2023 results
<ul style="list-style-type: none"> Zero injuries with lost workdays Zero injuries without lost workdays (including contractors) 	<ul style="list-style-type: none"> Zero injuries with lost workdays Zero injuries without lost workdays (including contractors) 	Nippon Shokubai <ul style="list-style-type: none"> Injuries with lost workdays: 5 Injuries without lost workdays: 4 Contractors <ul style="list-style-type: none"> Injuries with lost workdays: 2 Injuries without lost workdays: 5

Trends in Lost-time Injury Frequency Rate



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

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



In the past several years, occupational injuries at the Company have often involved younger employees. Similarly, our contractors have reported many injuries among relatively inexperienced workers. To improve risk awareness among younger and inexperienced employees and contractors, we incorporate experience-based education into our safety training. We also tackle to prevent occupational injuries by ensuring all employees and contractors put following basic safety behaviors into practice: 1) Think before you act; 2) Pointing and calling; and 3) Hold the handrail when stepping on stairs.



Group training (explosion hazard of organic solvents)



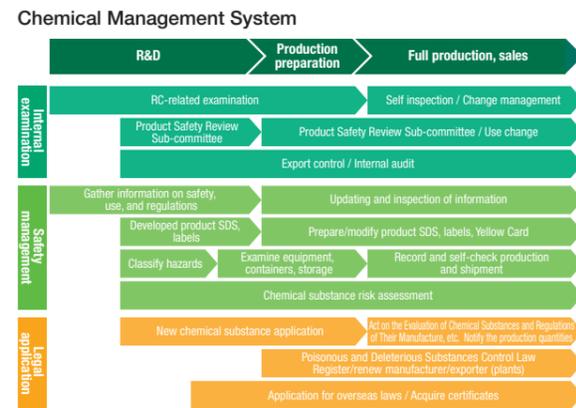
Poster about the basic safety behaviors

Promote safe and stable production activities

Chemical Safety Initiatives

Basic Approach

As per RC Basic Plan, which was formulated in light of both domestic and international situation regarding chemicals management, the Nippon Shokubai Group has been enhancing chemical management through keeping legal compliance and providing information to stakeholders, in order to maintain Zero legal and/or social problems related to chemicals safety throughout the entire life cycle of our products.



Overview of FY2023

Objectives for FY2022–FY2024	Target for FY2023	FY2023 result
Zero legal/social problem related to chemicals safety	Zero legal/social problem related to chemicals safety	Legal/social problem related to chemicals safety: 0

In FY2023, under the trend that the requirements for chemicals management have been getting stricter due to domestic and international regulations, and industry standards, we made every effort to ensure product safety and legal compliance, then we could maintain Zero legal and/or social problems.

We will continue to strengthen our chemical management system in order to respond to further complexity of laws and regulations, and diversifying social conditions.

Quality Initiatives

Basic Approach

Nippon Shokubai makes 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.

Overview of FY2023

Objectives for FY2022–FY2024	Targets for FY2023	FY2023 results
<ul style="list-style-type: none"> To achieve zero serious quality complaints To improve customer satisfaction by strictly complying with quality-related laws and promoting priority initiatives regarding quality 	<ul style="list-style-type: none"> To achieve zero serious quality complaints To improve customer satisfaction by strictly complying with quality-related laws and promoting priority initiatives regarding quality 	<ul style="list-style-type: none"> Serious complaints about quality: 0 Accomplished quality priority initiatives designed to improve customer satisfaction

All our plants and all the 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.

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.

Communication with Society

Nippon Shokubai promotes information sharing with stakeholders through disclosure. In addition, guided by our Group Mission of "TechnoAmenity: Providing prosperity and comfort to people and society, with our unique technology," we are implementing and promoting various initiatives, including community co-creation and the training of next-generation human resources, as part of our CSR activities.

Overview of FY2023

Objectives for FY2022–FY2024	FY2023 results
Engage in dialogue with and disclose information to stakeholders	Issuance of the RC Report and revision of the TCFD Report Participation in RC dialogue with local communities

Community Co-Creation

We have established opportunities to communicate with local communities around each of our plants based on our belief that trust-based relationships with community members are essential for stable plant operation.

- Community cleanup activities
- Potato harvesting
- Dialogue with local communities

We participate in the community dialogue 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, we participated in RC dialogue held in the Kawasaki area.



Children harvest potatoes

Developing the Next Generation

We participate and engage in various events and activities to promote learning and fun environments while making chemical technology more relatable. We have also created internship opportunities to give people hands-on experiences of what it is like to work for us. These activities that leverage the qualities of our business contribute to the development of tomorrow's leaders.

- Demonstrations of Chemistry Experiments for Children
- Internship Program
- Delivery class for junior high schools
- Riko* Challenge (an initiative led by the Gender Equality Bureau of the Cabinet Office to support female students in seeking out higher learning opportunities in the STEM field)

* Riko means science and engineering in Japanese.



Riko Challenge

Supply Chain Management

In our supply chain, from the procurement of raw materials to the manufacture, sale, use, and disposal of products, we aim to put into practice our Group Mission, “ **TechnoAmenity** : Providing prosperity and comfort to people and society, with our unique technology,” and are conducting supplier surveys and various other initiatives based on our sustainable procurement policy and guidelines.

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.

For more details, please see ► https://www.shokubai.co.jp/en/wordpress/wp-content/uploads/2024/03/CSR-Procurement-Guidelines_en_2403.pdf

Initiative ① 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 respond 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.

Initiative ② Promote Responsible Procurement

We endeavor to steadily respond to human rights, labor practices, health and safety, the 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 the Supply Chain Ethical Information Sharing Platform, such as Sedex*1 and EcoVadis,*2 to disclose sustainability information. We have acquired RSPO*3 (Roundtable on Sustainable Palm Oil) certification.

*1 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.

*2 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.

*3 RSPO stands for Roundtable on Sustainable Palm Oil, a non-profit organization promoting the sustainable production and use of palm oil.

Governance

To pursue value creation over the medium to long term and achieve sustainable growth, Nippon Shokubai Group works to strengthen and enhance its corporate governance by improving the effectiveness of its Board Meetings, thereby establishing a solid management foundation.

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Messages from Outside Members of the Board

Introducing new members of the board



Akiko Ikeda
Outside Member of
the Board

Career

After graduating from university, I joined Daimaru Department Store Co., Ltd. After working as a buyer for 16 years, I moved to Australia, then joined Ito-Yokado Co., Ltd. in 2003. In 2011, I began serving as Executive Officer and General Manager of the Clothing Business Division, where I was involved in marketing, private brand product development, and profit improvement. I then experienced managerial positions as President and Representative Director, first of Jolly-Pasta Co., Ltd. and then of Coco's Japan Co., Ltd., and in 2018 became Director and General Manager of the Product Division of Okamoto Corporation before going independent. I am currently serving as a senior partner at a human resources consulting firm and as an outside director at listed companies.

Please tell us about your image of Nippon Shokubai Group and the challenges it faces in your opinion.

I already had the impression that it is a quality company that has repeatedly taken on challenges and innovations throughout its long history, has strong research and development capabilities, and continues to manage its business in a solid manner. Also, under the Mission “**TechnoAmenity**: Providing prosperity and comfort to people and society, with our unique technology,” I feel that the company’s intent to grow and increase its value is clear. In this VUCA era of uncertainty, we will need to not only maintain our strong foundation but also respond quickly to change. I think future challenges will include expanding the Solutions Business from existing fields to growth fields and promoting human capital management.

Please tell us about your intentions and goals for the future.

Throughout my career, I have been involved in business management in B2C retail and national chains, where daily performance is closely watched. I believe that commitment and passion for performance at the workplace are directly linked to the company’s growth. Nippon Shokubai Group is in an industry where it takes time to see results, but I would like to support its growth by bringing a perspective from a completely different industry.

Furthermore, now that we have transitioned from an era of “people, things, and money” to one of “people, people, people,” strategic personnel reform that is consistent with our business strategies is essential. I have a guiding principle that I adhere to when I work, which is: “Always start with people and always end with people.” Based on this principle, I would like to contribute to the promotion of human capital management with the aim of developing human resources and improving engagement.



Tetsuo Setoguchi

Outside Member of
the Board

The Board meeting share the understanding that the essence of medium- to long-term issues should be clarified and the direction of business should be discussed. Furthermore, in the formulation of the next Mid-term Management Plan, which is currently under consideration, reporting and discussions have been taking place at the Board meeting at each step of the formulation from the early stages onward, and I feel that I am substantially involved in the deliberation process as an outside member of the board. In addition, I was given the opportunity to participate in the final report session of the training to develop next-generation executives, which provided me, as a member of the Nomination and Remuneration Committee, with the chance to learn about the experience, skills, values, etc. of the executive candidates and verify the selection process.

On the other hand, more in-depth discussion is needed to clarify the essence of the challenges faced by the group. To that end, as outside members of the board, we are expected to tap into our diverse perspectives and experience to stimulate multifaceted discussions, but I also believe that I need to take active initiative myself in understanding the issues and needs of all stakeholders, including shareholders and investors. In order to continue to increase value for all stakeholders, I intend to involve myself in the efforts to improve the effectiveness of the Board meeting by closely monitoring management from an external perspective.

In the next Mid-term Management Plan, I believe we need to have outside-the-box discussions about what our strengths will be, what value we will create, in which markets we will gain a competitive advantage, and how we can evolve our business while generating high profits in an increasingly severe business environment. Perhaps the company will be required to make even more drastic changes than those under the current Mid-term Management Plan, but I believe that it should remain firmly committed to its Mission, “**TechnoAmenity**: Providing prosperity and comfort to people and society, with our unique technology.” Clarify the vision for using technology to provide prosperity and comfort to people and society while making a profit. Then share that vision in a manner that resonates with all stakeholders. This is what is necessary. Bringing about change from within can be challenging, so I remain committed to fulfilling my mission and responsibilities as an outside member of the board.



Miyuki Sakurai

Outside Member of
the Board

At the Board meeting, we are now able to engage in more focused and in-depth discussions than last year, not only on important execution matters and management decisions, but also on major themes such as the current situation and issues of each business division, the medium- to long-term management strategies, and the future direction of the company as a whole. I feel that there are now more questions and opinions being voiced, not only by outside members of the board but also by internal members.

Additionally, the outside members of the board participated in the training to develop next-generation executives and had the opportunity to listen to excellent, passionate presentations

by the candidates. It has been pointed out that the process for developing directors and executives was unclear, but in response to our requests as outside members of the board, the Nomination and Remuneration Committee has made progress in sharing information about the type of people it looks for in executive candidates, development plans, and evaluation approaches, which I think is commendable.

Of the three transformations outlined in “TechnoAmenity for the future,” “Business Transformation” is one of the areas in which the company is continuing to make its utmost efforts despite being unable to draw up a clear growth strategy due to the impact of market conditions and other factors. I believe that what is important in the next Mid-term Management Plan is to increase the profitability of the Solutions Business in particular and to nurture the seeds of new growth businesses. To do this, I am of the opinion that it is important to specifically and persuasively show what went wrong and how it could be resolved.

Maybe an unprecedented and significant change in perspective is in order. The group is a company with extraordinary technology and human resources. To ensure the steady growth of such a company, I will daringly express opinions that may, in a sense, seem unorthodox, such as how something that is common knowledge within the company might look like from the perspective of external stakeholders, or how it might be thought of in this way, so as to involve myself in and support the formulation of the next Mid-term Management Plan.

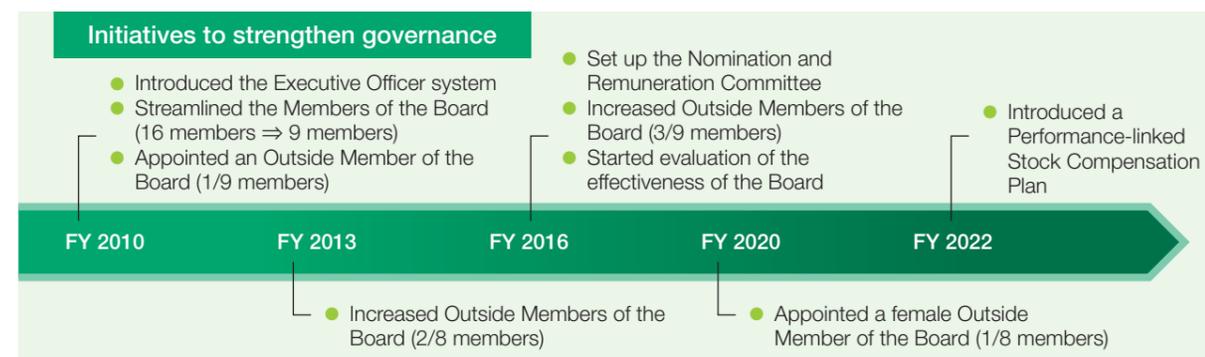
Corporate Governance

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.

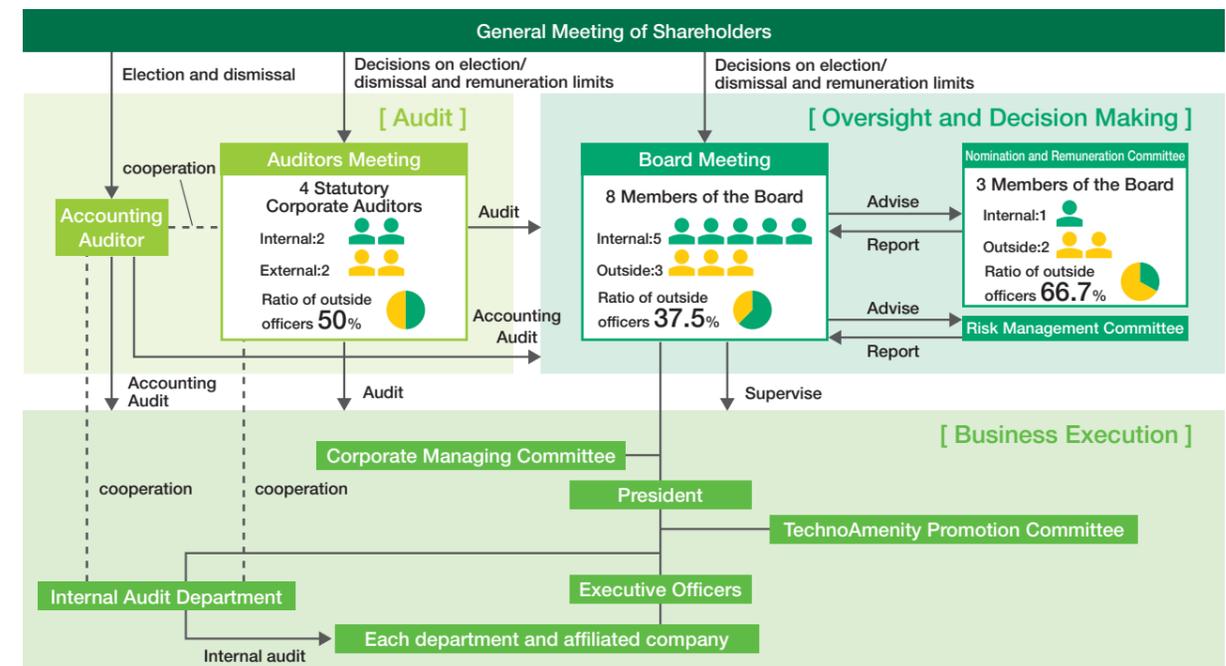


Our basic information on corporate governance system (as of June 20, 2024)

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)	15 times (100%)
Executive Officer system	Have already been introduced
Number of Executive Officers	15, including 5 who concurrently serve as 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.

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.

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%

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	Takashi Kobayashi	●	●			●			
	Teruhisa Wada				●				● HR / Labor relations
	External Tsukasa Takahashi				●				
	External Kazumasa Murai			●		●			

*In the table above, up to three main areas of specialty and experience are marked for each person.
*SCM is an acronym for Supply Chain Management and DX is an acronym for Digital Transformation.

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

Type	Fixed remuneration	Performance-linked remuneration	
	Basic remuneration	Bonuses	Stock compensation
Persons to be paid	Members of the Board	Members of the Board (excluding Outside Members of the Board)	Members of the Board (excluding Outside Members of the Board)
Method of payment	Money	Money	Shares and Money
Time of payment	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
Description	<ul style="list-style-type: none"> ● Paid based on the position and responsibilities. ● 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. 	<ul style="list-style-type: none"> ● 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. ● KPIs consist of "profit before tax" and "ROA (return on assets before tax)," with achievement ratings ranging from 0 to 150%. 	<ul style="list-style-type: none"> ● 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. ● Performance-linked points and fixed points shall be granted at a ratio of 1:1. ● 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 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	Stock compensation	
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.

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.



2. Items for improvement

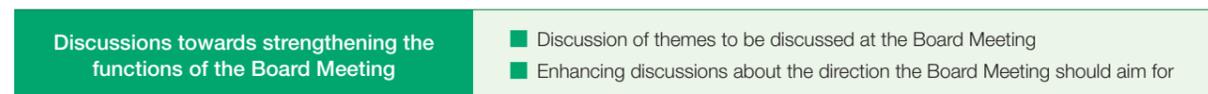
The items for improvement identified in the evaluation of the previous fiscal year are as follows:

- 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-!” launched in fiscal 2022, we are currently making the following efforts:



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, Our Company 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 shareholding 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.

Risk Management

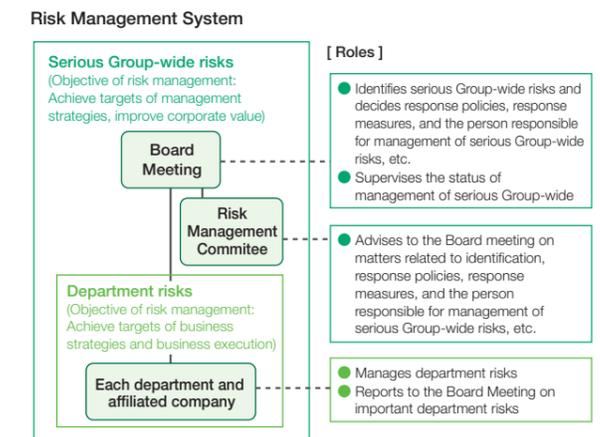
To correctly identify and respond to risks that may affect the Group’s business continuity due to changes in the management and business environment, we are implementing various measures in accordance with our Risk Management Regulations.

Our Group revised its Risk Management Regulations in December 2023.

We classify various internal and external risks that threaten our Group into “serious Group-wide risks” and “department risks,” and then develop a risk management system appropriate for each risk category, thereby maintaining and improving our corporate value.

Each department appropriately manages its own risks (department risks) and reports the results to the Board Meeting. Meanwhile, the Board Meeting receives advice from the Risk Management Committee, an advisory body, identifies risks that could have a significant impact on the management of the entire Group (serious Group-wide risks), and determines the persons responsible for managing the risks and the management system.

In addition, to ensure that we can respond quickly and appropriately to unforeseen circumstances, we regularly review our Business Continuity Plan (BCP) and conduct comprehensive earthquake response training.



TOPICS

Revising the Basic Policy on Human Rights and Promoting Initiatives to Respect Human Rights

As society becomes increasingly concerned about corporate human rights initiatives, our Group believes that it is important to respect the human rights of all stakeholders involved in the Group’s business activities, as they form the foundation for the sustainable growth of both the Group and society.

Based on this belief, the Group revised its Basic Policy on Human Rights following approval by the Board meeting in July 2024, and is working to establish a human rights due diligence system in accordance with procedures based on the United Nations Guiding Principles on Business and Human Rights in order to further strengthen its initiatives to respect the human rights of stakeholders as per international standards.

In fiscal 2023, we launched initiatives to identify and assess adverse impacts on stakeholders involved in our business activities and the related supply chains.

Going forward, we will identify salient human rights issues in our business activities, and move forward with initiatives aimed at preventing and mitigating any adverse impacts on the human rights of our stakeholders, as well as implementing remediation.



Management (as of June 20, 2024)

Members of the Board

	Profile	Reasons for appointment	Attendance at meetings
	<p>Kazuhiro Noda Member of the Board, President & CEO</p> <p>April 1986 Joined the Company. April 2005 General Manager of Superabsorbents Sales Department April 2011 General Manager of Corporate Planning Division April 2015 Deputy Director of Corporate Planning Division and General Manager of Group Management and Project Planning Department April 2017 Director of Superabsorbents Business Division June 2018 Executive Officer June 2020 Member of the Board, Managing Executive Officer Director of Corporate Planning Division June 2022 Member of the Board, President & CEO (current position)</p>	He has been serving as Member of the Board, President to play key role in the Company's management, including the execution of Mid-term Management Plans.	15/15 Board Meetings
	<p>Kuniaki Takagi Member of the Board, Managing Executive Officer</p> <p>Administration, HR, Finance, Accounting General Affairs & HR Div.</p> <p>April 1987 Joined Sumitomo Chemical Co., Ltd. April 2019 Joined the Company as an entrusted worker. May 2019 Director of General Affairs & HR Division June 2019 Executive Officer June 2020 Member of the Board, Managing Executive Officer (current position)</p>	He has been mostly engaging in planning, administration and finance divisions and overseas services for a long time and has achievements in strengthening the corporate governance system and executing management strategies from a global perspective. In addition, he has been serving as Executive Officer in charge of Administration, HR, Finance, and Accounting to play a central role in the formulation and introduction of a new human resource system to promote efforts to reform the organization.	15/15 Board Meetings
	<p>Masahiro Watanabe Member of the Board, Managing Executive Officer</p> <p>Business Sector, Purchasing & Logistics, Business Planning Basic Materials Business Div. Battery Business Solutions Div.</p> <p>April 1984 Joined the Company. April 2009 General Manager of Raw Materials Purchasing Department April 2013 General Manager of Performance Polymers Sales & Marketing Department April 2016 Director of Purchasing & Logistics Division June 2018 Executive Officer, President and Representative Director of Nishshoku Butsuryu Co., Ltd. June 2021 Member of the Board, Managing Executive Officer (current position)</p>	He has been engaging in purchasing & logistics divisions and sales & marketing divisions for a long time and has achievements in formulation and execution of purchasing and logistics strategies and strengthening the sales foundation, etc. In addition, he has been serving as Executive Officer in charge of Business Sector, Purchasing & Logistics, Business Planning to expand the Solutions business and to strengthen the Materials business.	15/15 Board Meetings
	<p>Yasutaka Sumida Member of the Board, Managing Executive Officer</p> <p>Innovation & Business Development Corporate Research Div. GX Research & Development Div. Health & Medical Business Div. Cosmetics Business Div. R&D Management Dept. Water & Environment Solutions Business Dept. Printing Materials Business</p> <p>April 1991 Joined the Company. April 2017 General Manager of Research Center April 2020 Director of Innovation & Business Development Division June 2020 Executive Officer June 2021 Member of the Board, Managing Executive Officer (current position)</p>	He has been engaging in research and development divisions for a long time and has achievements in strengthening the research and development capabilities and promoting open innovation, etc. In addition, he has been serving as Executive Officer in charge of Innovation & Business Development to accelerate the creation of new businesses and products and spearhead research and development toward the achievement of carbon neutrality.	15/15 Board Meetings
	<p>Yukihiko Matsumoto Member of the Board, Managing Executive Officer</p> <p>Production, Technology, Engineering DX Promotion Div. Responsible Care Production Div. Engineering Div. Indonesia Project IONEL Technology IONEL Domestic Location Preparation</p> <p>April 1988 Joined the Company July 2004 Vice President of Singapore Acrylic PTE. LTD. Vice President of SINGAPORE GLACIAL ACRYLIC PTE. LTD. (at present, NIPPON SHOKUBAI (ASIA) PTE. LTD.) April 2009 General Manager of Technology Department of Himeji Plant April 2014 Director of Production Division April 2016 Director of Corporate Planning Division June 2016 Member of the Board, Executive Officer June 2020 Managing Executive Officer Plant Manager of Himeji Plant June 2022 Director of Production Division June 2023 Member of the Board, Managing Executive Officer (current position)</p>	He has been engaging in the production and technology divisions and overseas services, for a long time and has achievements in launching manufacturing sites in Japan and overseas and promoting responsible care, etc. In addition, he has been serving as Executive Officer of Production & Technology to promote efforts to improve productivity through the introduction of highly efficient production technology in the acrylic business and other measures to strengthen the global production and supply system	11/11 Board Meetings
	<p>Tetsuo Setoguchi Member of the Board</p> <p>Outside Independent</p> <p>April 1981 Joined Osaka Gas Co., Ltd. April 2015 Representative Director, Executive Vice President of Osaka Gas Co., Ltd. April 2018 Director of Osaka Gas Co., Ltd. June 2018 Outside Member of the Board at the Company (current position) Advisor to Osaka Gas Co., Ltd. (current position) April 2020 Chairman and Director of OSAKA GAS URBAN DEVELOPMENT Co., Ltd. June 2021 Outside Auditor of YOMIURI TELECASTING CORPORATION (current position) April 2022 Chairman and Director of OGIS-RI Co., Ltd. (current position)</p>	The Company requests the reelection of Mr. Tetsuo Setoguchi for him to serve as Outside Member of the Board in the expectation that he will offer valuable opinions and proposals that would benefit the Company's management and provide supervision from an independent position based on his experience in corporate management in the manufacturing industry and at a company with high public utility properties, in addition to his past achievements as an Outside Member of the Board of the Company.	15/15 Board Meetings
	<p>Miyuki Sakurai Member of the Board</p> <p>Outside Independent</p> <p>April 1992 Registered as an attorney-at-law. Joined Nishimura Law and Accounting Office. May 2003 Partner of Hanamizuki Law Office (current position) March 2015 Auditor of Nissay Life Foundation (current position) April 2016 Auditor of Osaka University (current position) June 2017 External Director of Nippon Shinyaku Co., Ltd. (current position) June 2020 Outside Member of the Board at the Company (current position) June 2022 Outside Auditor of MBS MEDIA HOLDINGS, INC. (current position)</p>	The Company requests the reelection of Ms. Miyuki Sakurai for her to serve as Outside Member of the Board in the expectation that she will offer valuable opinions and proposals that would benefit the Company's management and provide supervision from an independent position based on her highly professional expertise and a wealth of experience as attorney-at-law and achievements as External Director of other companies, in addition to her past achievements as an Outside Member of the Board of the Company.	15/15 Board Meetings
	<p>Akiko Ikeda Member of the Board</p> <p>Outside Independent</p> <p>April 1983 Joined Daimaru Department Store Co., Ltd. (Currently Daimaru Matsuzakaya Department Stores Co., Ltd.) April 2003 Joined Ito-Yokado Co., Ltd. March 2011 Executive Officer of Ito-Yokado Co., Ltd. April 2016 President and Representative Director of JollyPasta Co., Ltd. June 2017 President and Representative Director of COCO'S JAPAN CO., LTD. April 2019 Director of Okamoto Corporation January 2023 Outside Director of Kura Sushi, Inc. June 2024 Outside Member of the Board of the Company (current position) Outside Member of the Board of J-Oil Mills, Inc. (current position)</p>	The Company requests the election of Ms. Akiko Ikeda for her to serve as an Outside Member of the Board in the expectation that she will offer valuable opinions and proposals that would benefit the Company's management and provide supervision from an independent position based on her wealth of experience in corporate management as well as sales and marketing at other companies, in addition to her past achievements as an Outside Member of the Board of a company.	Took the office in June 2024

Statutory Corporate Auditors

	Profile	Reasons for appointment	Attendance at meetings
	<p>Takashi Kobayashi</p> <p>April 1986 Joined the Company April 2006 General Manager of Corporate Planning Division April 2011 General Manager of Accounting Department April 2015 Director of Finance & Accounting Division June 2018 Executive Officer June 2020 Managing Executive Officer April 2022 Finance & Accounting Division June 2022 Full-time Statutory Corporate Auditor (current position)</p>	Based on his extensive experience in the Corporate Planning and Finance & Accounting Divisions, we believe that Mr. Takashi Kobayashi can provide useful opinions to the Board meeting of the Company and properly audit the legality of management execution, etc.	15/15 Board Meetings 16/16 Auditors Meetings
	<p>Teruhisa Wada</p> <p>April 1985 Joined the Company March 2006 General Manager of HR Department April 2010 General Manager of General Affairs Department October 2018 Senior Principal Staff attached External to Statutory Corporate Auditors June 2019 Full-time Statutory Corporate Auditor (current position)</p>	Based on his past achievements as a Statutory Corporate Auditor of the Company and his extensive experience in the General Affairs & HR Division, we believe that Mr. Teruhisa Wada can continue to provide useful opinions to the Board meeting of the Company and properly audit the legality of management execution, etc.	15/14 Board Meetings 16/16 Auditors Meetings
	<p>Tsukasa Takahashi</p> <p>External Independent</p> <p>April 1989 Registered as attorney-at-law. Joined Katsube Law Office (at present, Katsube Takahashi Law Office) June 2008 Outside Director of Inaba Denki Sangyo Co., Ltd. April 2010 Deputy Chairman of the Osaka Bar Association June 2010 External Auditor of Nippon Paint Co., Ltd. (currently Nippon Paint Holdings Co., Ltd.) July 2012 Representative of Katsube Takahashi Law Office (current position) April 2013 Special Professor of National University Corporation Kyoto University Law School (current position) May 2015 Non-Executive Auditor of AEON DELIGHT CO., LTD. (current position) April 2016 Part-time lecturer of National University Corporation Kyoto University Law School (current position) March 2019 Outside Corporate Auditor of Nippon Electric Glass Co., Ltd. June 2020 External Statutory Corporate Auditor of the Company (current position) March 2024 Outside Audit & Supervisory Board Member of Toyo Tire Corporation (current position)</p>	Based on his past achievements as an External Statutory Corporate Auditor of the Company, his highly professional expertise and wealth of experience as an attorney-at-law, and achievements as an outside auditor at other companies, we believe that Mr. Tsukasa Takahashi can continue to provide useful opinions to the Board of Directors of the Company and audit the legality of management execution, etc. from an objective standpoint.	15/15 Board Meetings 16/16 Auditors Meetings
	<p>Kazumasa Murai</p> <p>External Independent</p> <p>October 1990 Tohmatsu Audit Firm (at present, Deloitte Touche Tohmatsu LLC) August 1995 Registered as certified public accountant August 2006 Registered as tax accountant Representative of Murai Certified Public Accountant Office (current position) June 2017 External Statutory Corporate Auditor of Technical Denzhi Co., Ltd. (at present Parking Solutions Co., Ltd.) May 2019 Senior Partner of Tax Accountant Corporation Murai Accountant Office (current position) June 2021 Outside Director of Daiiei Kankyo Co., Ltd. June 2024 Outside Auditor of the Company (current position) Outside Director (Audit and Supervisory Committee Member) of Daiiei Kankyo Co., Ltd. (current position)</p>	Based on his highly professional expertise and his wealth of experience as a certified public accountant and as a certified public tax accountant, as well as his achievements as an outside auditor at other companies, we believe that Mr. Kazuo Murai can provide useful opinions to the Board of Directors of the Company and audit the legality of management execution, etc. from an objective standpoint.	Took the office in June 2024

Managing Executive Officers

Katsunori Kajii	(Director of Acrylics Business Div.)
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Executive Officers

Naoki Hijikuro	(President of SINO-JAPAN CHEMICAL CO.,LTD.)
Yoshihisa Oka	(Plant Manager of Kasawaki Plant)
Kenta Kanaida	(President of Nippon Shokubai America Industries, Inc.)
Kazuhiro Sakuma	(Director of Industrial & Household Solutions Div.)
Shinya Kataoka	(Director of Purchasing & Logistics Div. President of Nishshoku Butsuryu Co., Ltd.)
Tokihiro Yokoi	(Plant Manager of Himeji Plant)
Kenjiro Komoda	(Director of Business Planning Div.)
Shigeru Harada	(Director of Finance & Accounting Div.)
Tomiyuki Sawada	(Director of Electronics & Environmental Solutions Div.)

11-Year Consolidated Financial Data

(Unit: Millions of yen)

Japanese GAAP	2013	2014	2015	2016	2017
For the fiscal year					
Net sales	302,136	374,873	323,124	293,970	322,801
Gross profit	48,955	65,738	70,001	60,471	66,137
Operating profit	13,752	26,133	31,234	21,151	26,727
Ordinary profit	16,647	29,941	34,342	24,664	32,293
Profit attributable to owners of parent	10,503	19,089	26,003	19,361	24,280
Cash flows from operating activities	16,992	32,697	53,264	37,474	38,823
Cash flows from investing activities	- 25,141	- 18,941	- 12,963	- 44,515	- 27,498
Cash flows from financing activities	- 2,519	- 10,237	- 20,012	- 3,533	- 9,762
Depreciation	16,995	18,971	17,875	17,957	16,997
Capital investments	25,067	12,346	15,156	37,289	25,827
R&D expenses	11,161	11,948	12,303	13,283	13,266
As of the end of the fiscal year					
Total assets ^{*1}	398,396	419,634	407,997	433,610	467,386
Net assets	242,193	270,128	282,485	292,275	310,762
Interest-bearing debt	68,553	66,842	50,680	58,040	58,064
Per share information					
Profit attributable to owners of parent per share (Yen) ^{*2}	51.74	470.28	640.69	478.36	608.84
Diluted earnings per share	—	—	—	—	—
Net assets per share (Yen) ^{*2}	1,164.10	6,535.66	6,870.84	7,238.33	7,705.05
Dividends (Yen) ^{*2}	16.00	120.00	150.00	150.00	160.00
Payout ratio	30.9%	25.5%	23.4%	31.4%	26.3%
Management index					
Shareholders' equity ratio ^{*1}	59.3%	63.2%	68.3%	66.6%	65.7%
ROA (Ratio of ordinary profit to total assets) ^{*3}	4.4%	7.3%	8.3%	5.9%	7.2%
ROE (Ratio of profit to shareholders' equity) ^{*4}	4.7%	7.6%	9.6%	6.8%	8.1%
Overseas sales ratio	47.3%	51.3%	49.8%	49.0%	48.0%

*1: The Company has applied "Partial Amendments to Accounting Standard for Tax Effect Accounting" (ASBJ Statement No. 28, February 16, 2018) from the beginning of FY 2018. Accordingly, the total assets and shareholders' equity ratio for FY 2017 are the values that were revised retrospectively after the application.

*2: The Company conducted a stock consolidation of its common shares at a ratio of one share for every five shares on October 1, 2015. Dividend is the value that was presented on the assumption that the relevant stock consolidation had been implemented at the beginning of FY 2014. Accordingly, profit per share and net asset per share were calculated. The Company carried out a four-for-one stock split effective from April 1, 2024.

*3: ROA (Ratio of ordinary profit to total assets) = Ordinary profit/Total assets (average of beginning and ending balance of the year)

*4: ROE (Ratio of profit to shareholders' equity) = Profit attributable to owners of parents/Shareholders' equity (average of beginning and ending balance of the year)

*5: The payout ratio is not presented for FY 2020 because the Company reported a net loss.

*6: ROA (Ratio of profit before income tax to total assets) = Profit before income tax/Total assets (average of beginning and ending balance of the year)

*7: ROE (Ratio of profit to equity attributable to owners of parent) = Profit attributable to owners of parents/Total equity attributable to owners of parent (average of beginning and ending balance of the year)

(Unit: Millions of yen)

IFRS	2017 ^{*8}	2018	2019	2020	2021	2022 ^{*9}	2023 ^{*9}
For the fiscal year							
Revenue	313,939	338,869	302,150	273,163	369,293	419,568	392,009
Gross profit	67,544	66,577	53,484	48,047	77,707	80,392	68,004
Operating profit (loss)	25,610	26,170	13,178	- 15,921	29,062	23,528	16,562
Profit before income tax (loss)	29,805	32,119	15,748	- 12,926	33,675	26,175	15,744
Profit attributable to owners of parent (loss)	22,641	23,849	11,094	- 10,899	23,720	19,392	11,008
Cash flows from operating activities	44,206	35,918	37,499	35,277	35,058	41,447	57,880
Cash flows from investing activities	- 31,563	- 31,316	- 32,806	- 30,623	- 23,158	-25,976	-15,684
Cash flows from financing activities	- 10,601	- 9,982	- 7,859	- 12,750	- 10,751	-17,321	-28,364
Depreciation and amortization	22,918	25,626	28,653	29,470	28,875	29,312	31,853
Capital investments	30,355	29,919	30,440	26,726	16,522	17,720	16,849
R&D expenses	14,251	13,996	14,774	14,603	15,182	15,753	15,138
As of the end of the fiscal year							
Total assets	480,316	481,668	475,641	471,617	518,151	523,319	544,060
Total equity	316,188	329,227	326,108	323,725	351,123	369,998	392,562
Interest-bearing debt	58,474	56,633	63,375	61,572	59,677	57,612	45,612
Per share information							
Basic earnings per share (loss) (Yen)	567.71	598.05	278.21	- 273.33	594.86	122.07	70.48
Diluted earnings per share	—	—	—	—	—	122.06	70.46
Equity attributable to owners of parent per share (Yen)	7,750.24	8,099.97	8,017.17	7,959.07	8,624.02	2,303.48	2,482.45
Dividends (Yen)	160.00	170.00	180.00	90.00	180.00	180.00	180.00
Payout ratio ^{*5}	28.2%	28.4%	64.7%	—	30.3%	36.9%	63.9%
Management index							
Rate of equity attributable to owners of parent	64.3%	67.1%	67.2%	67.3%	66.4%	69.2%	70.5%
ROA (Ratio of profit before income tax to total assets) ^{*6}	6.4%	6.7%	3.3%	- 2.7%	6.8%	5.0%	2.9%
ROE (Ratio of profit to equity attributable to owners of parent) ^{*7}	7.6%	7.5%	3.5%	- 3.4%	7.2%	5.5%	3.0%
Overseas sales ratio	52.8%	53.8%	53.9%	55.1%	56.9%	56.6%	55.9%

*8: The Group has prepared its consolidated financial statements in accordance with the International Financial Reporting Standards (IFRS) from FY 2018 (Date of transition: April 1, 2017).

*9: Basic earnings per share, diluted earnings per share, and equity attributable to owners of the parent per share are calculated assuming that a four-for-one stock split of common stocks was carried out at the beginning of fiscal year 2022. (The figures shown are from the annual securities report for the 112th fiscal period [April 1, 2023 to March 31, 2024].)

Overview of Operating Results, etc.

Overview of Operating Results for the Fiscal Year under Review

In the current fiscal year, the global economy saw further normalization of economic activity due to containment of the novel coronavirus infection (COVID-19). Meanwhile, uncertainty about the future continued due to the further escalation of the invasion of Ukraine by Russia, growing tensions in the Middle East, financial instability caused by policy rate hikes in various countries, and other factors, and there were discrepancies among the economic trends of various countries.

In the United States, personal consumption was solid against a backdrop of rising real wages and other factors. In Europe, personal consumption was sluggish due to monetary tightening and other factors, and exports to China and other markets declined. In China, economic recovery stalled due to the downturn of the real estate market, stagnant exports, and other factors. In emerging Asian countries, exports declined due to a decline in demand for semiconductors, the Chinese economic slowdown, and other factors.

In Japan, although corporate earnings continued to improve, personal consumption stalled due to rising prices that exceeded the rate of wage increases and other factors.

In the chemical industry, uncertainty about the future continued due to significant fluctuations in crude oil and domestic naphtha prices and other factors.

Overview

Under these conditions, the Group's revenue in the current fiscal year decreased 6.6% year-on-year to 392,009 million yen, down 27,559 million yen, due to lower selling prices in line with declines in overseas product markets and raw material prices as well as a decrease in sales volume.

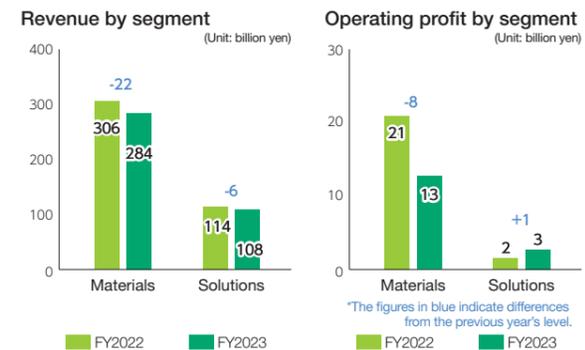
With regard to profits, operating profit decreased 29.6% year-on-year to 16,562 million yen, down 6,966 million yen mainly due to a narrowing of spreads on certain products as a result of falling sales prices and a decline in inventory valuation gains that occurred in the previous fiscal year as a result of soaring raw material prices during the current fiscal year, despite a decrease in selling, general and administrative expenses due to a fall in marine transportation costs, etc.

Profit before tax was 15,744 million yen, a year-on-year decrease of 10,431 million yen or 39.9%, due to a decrease in operating profit and a decrease in share of profit (loss) of investments accounted for using equity method.

As a result, profit attributable to owners of parent of 11,008

million yen was posted, down 8,384 million yen (-43.2%) year-on-year.

Outline of Sales by Business Segment



[Materials Business]

Sales of acrylic acid and acrylates decreased due to lower selling prices caused by a decline in product overseas market conditions and raw material prices despite an increase in sales volume.

Sales of superabsorbent polymers decreased due to lower selling prices in line with a decline in raw material prices despite an increase in sales volume.

Sales of ethylene oxide decreased due to lower sales volume despite higher selling prices.

Sales of ethylene glycol increased due to an increase in sales volume.

Sales of special acrylates decreased due to lower selling prices in line with a decline in product overseas market conditions, and a decline in sales volume.

Sales of maleic anhydride decreased due to lower sales volume.

Sales of process catalysts decreased due to lower sales volume. As a result, revenue in the materials business decreased 7.2% year-on-year to 283,808 million yen.

Operating profit decreased 39.2% year-on-year to 12,732 million yen due to negative factors such as the narrowing of spreads on certain products due to a decline in overseas market prices and inventory valuation gains that occurred in the previous fiscal year as a result of soaring raw material prices turning to valuation losses during the current fiscal year, despite factors contributing to higher profits, such as a decrease in selling, general and administrative expenses due to lower marine transportation costs and other factors.

[Solutions Business]

Sales of polymers for concrete admixtures, secondary alcohol ethoxylates, and water-soluble polymers such as raw materials

for detergents decreased due to lower sales volume.

Sales of resins for paints and ethyleneimine derivatives increased due to higher sales volume and higher selling prices.

Sales of iodine compounds increased due to higher selling prices despite lower sales volume.

Sales of De-NOx catalysts decreased due to lower sales volume. Sales of electronic and information materials increased due to the product sales mix.

Sales of materials for batteries increased due to the product sales mix.

As a result, revenue in the solutions business decreased 5.0% year-on-year to 108,201 million yen.

Operating profit increased 81.8% year-on-year to 2,732 million yen due to factors contributing to higher profits such as the widening of spreads resulting from lower raw material prices, etc. and a gain of 1,306 million yen on the sale of land at SINO-JAPAN CHEMICAL CO., LTD., a consolidated subsidiary, despite negative factors such as a decrease in production and sales volume and a decline in inventory valuation gains that occurred in the previous fiscal year as a result of soaring raw material prices during the current fiscal year.

Overview of Financial Position for the Fiscal Year under Review

Total assets at the end of the current fiscal year increased by 20,741 million yen from the end of the previous fiscal year to 544,060 million yen. Current assets increased by 15,626 million yen from the end of the previous fiscal year. This was mainly due to an increase in cash and cash equivalents reflecting the fact that financial institutions were closed on the last day of the current fiscal year despite a decrease in inventories due mainly to a decline in raw material prices. Non-current assets increased by 5,115 million yen from the end of the previous fiscal year. This was mainly due to an increase in other financial assets as a result of changes in the fair value of stocks held.

Total liabilities decreased by 1,823 million yen from the end of the previous fiscal year to 151,498 million yen. This was mainly due to decreases in borrowings and income taxes payable as a result of a decrease in taxable profit, despite an increase in trade payables reflecting the fact that financial institutions were closed on the last day of the current fiscal year.

Total equity increased by 22,564 million yen from the end of the previous fiscal year to 392,562 million yen. This was mainly due to an increase in exchange differences on translation of foreign operations caused by exchange rate fluctuations.

The ratio of profit to equity attributable to owners of parent

increased by 1.3 percentage points from 69.2% at the end of the previous fiscal year to 70.5%. Equity attributable to owners of parent per share increased by 178.97 yen from the end of the previous fiscal year to 2,482.45 yen.

Overview of Cash Flows for the Fiscal Year under Review

Cash and cash equivalents at the end of the current fiscal year amounted to 55,129 million yen, an increase of 16,094 million yen from the end of the previous fiscal year, as cash flows provided by operating activities exceeded cash flows used in investing activities including capital investment and cash flows used in financing activities.

Cash flow from operating activities

Net cash provided by operating activities in the current fiscal year amounted to 57,880 million yen, an increase of 16,433 million yen from a cash inflow of 41,447 million yen in the previous fiscal year. This was mainly due to a decrease in inventories which increased in the previous fiscal year due to higher raw material prices, and an increase in trade payables which decreased in the previous fiscal year, due to effects of closure of financial institutions and other factors, although profit before tax was lower than the previous fiscal year.

Cash flow from investing activities

Net cash used in investing activities in the current fiscal year totaled 15,684 million yen, a decrease of 10,291 million yen from a cash outflow of 25,976 million yen in the previous fiscal year. This was mainly due to a decrease in purchase of property, plant and equipment, and a year-on-year increase in proceeds from sale of investment securities.

Cash flow from financing activities

Net cash used in financing activities in the current fiscal year amounted to 28,364 million yen, an increase of 11,044 million yen from a cash outflow of 17,321 million yen in the previous fiscal year. This was mainly due to a decrease in proceeds from long-term borrowings and net increase (decrease) in short-term borrowings.

Consolidated Financial Statements

Consolidated Statement of Financial Position

	(Unit: Millions of yen)	
	March 31, 2023	March 31, 2024
Assets		
Current assets:		
Cash and cash equivalents	¥ 39,035	¥ 55,129
Trade receivables	98,571	98,181
Inventories	86,056	84,446
Other financial assets	14,151	16,661
Other current assets	6,239	5,262
Total current assets	244,053	259,679
Non-current assets:		
Property, plant and equipment	189,520	188,436
Intangible assets	8,358	4,959
Investments in associates and joint ventures accounted for using equity method	27,088	26,531
Other financial assets	40,195	45,718
Net defined benefit assets	9,129	13,700
Deferred tax assets	3,404	3,846
Other non-current assets	1,573	1,192
Total non-current assets	279,266	284,381
Total assets	¥ 523,319	¥ 544,060

	(Unit: Millions of yen)	
	March 31, 2023	March 31, 2024
Liabilities and equity		
Liabilities		
Current liabilities:		
Trade payables	¥ 53,138	¥ 61,351
Borrowings	23,044	17,100
Other financial liabilities	9,539	10,355
Income taxes payable	3,970	1,534
Provisions	6,672	6,239
Other current liabilities	5,278	4,667
Total current liabilities	101,641	101,246
Non-current liabilities:		
Borrowings	27,867	21,924
Other financial liabilities	5,961	5,634
Net defined benefit liability	8,941	8,968
Provisions	2,582	3,051
Deferred tax liabilities	6,330	10,676
Total non-current liabilities	51,681	50,252
Total liabilities	153,321	151,498
Equity:		
Share capital	25,038	25,038
Capital surplus	22,520	22,513
Treasury shares	-9,298	-2,358
Retained earnings	301,940	298,424
Other components of equity	22,030	39,830
Total equity attributable to owners of parent	362,231	383,448
Non-controlling interests	7,767	9,114
Total equity	369,998	392,562
Total liabilities and equity	¥ 523,319	¥ 544,060

Consolidated Statement of Income and Consolidated Statement of Comprehensive Income

	(Unit: Millions of yen)	
	Years ended March 31,	
	2023	2024
Consolidated Statement of Income		
Revenue	¥ 419,568	¥ 392,009
Cost of sales	339,176	324,005
Gross profit	80,392	68,004
Selling, general and administrative expenses	56,844	51,243
Other operating income	3,057	5,814
Other operating expenses	3,076	6,012
Operating profit	23,528	16,562
Finance income	1,856	2,280
Finance expenses	1,134	2,141
Share of profit of investments accounted for using equity method (loss)	1,925	-958
Profit before income tax	26,175	15,744
Income tax expense	6,015	3,369
Profit	¥ 20,160	¥ 12,374
Profit attributable to:		
Owners of parent	19,392	11,008
Non-controlling interests	769	1,367
Profit	¥ 20,160	¥ 12,374
Earnings per share:		
Basic earnings per share (Yen)	122.07	70.48
Diluted earnings per share (Yen)	122.06	70.46

	(Unit: Millions of yen)	
	Years ended March 31,	
	2023	2024
Consolidated Statement of Comprehensive Income		
Profit	¥ 20,160	¥ 12,374
Other comprehensive income		
Items that will not be reclassified to profit or loss:		
Net changes in financial assets measured at fair value through other comprehensive income	-199	4,964
Remeasurements of defined benefit plans	1,604	3,287
Share of other comprehensive income of associates and joint ventures accounted for using equity method	154	-10
Subtotal of items that will not be reclassified to profit or loss	1,559	8,240
Items that may be reclassified to profit or loss:		
Exchange differences on translation of foreign operations	6,888	12,592
Share of other comprehensive income of associates and joint ventures accounted for using equity method	1,402	831
Subtotal of items that may be reclassified to profit or loss	8,290	13,424
Total other comprehensive income	9,848	21,664
Comprehensive income	¥ 30,009	¥ 34,038
Comprehensive income attributable to:		
Owners of parent	28,889	32,239
Non-controlling interests	1,120	1,799
Comprehensive income	¥ 30,009	¥ 34,038

Consolidated Financial Statements

Consolidated Statement of Changes in Equity

FY2021 (April 1, 2022 to March 31, 2023)

(Unit: Millions of yen)

	Share capital	Capital surplus	Treasury shares	Retained earnings	Other components of equity	
					Net changes in financial assets measured at fair value through other comprehensive (loss) income	Remeasurements of defined benefit plans
Balance as of April 1, 2022	¥ 25,038	¥ 22,472	¥ -6,291	¥ 288,124	¥ 4,874	¥ —
Profit	—	—	—	19,392	—	—
Other comprehensive income	—	—	—	—	-201	1,664
Comprehensive (loss) income:	—	—	—	19,392	-201	1,664
Purchase of treasury shares	—	—	-3,007	—	—	—
Disposal of treasury shares	—	—	—	—	—	—
Cancellation of treasury shares	—	—	—	—	—	—
Transactions in stock-based compensation	—	41	—	—	—	—
Cash dividends	—	—	—	-7,581	—	—
Increase/decrease in non-controlling interests	—	8	—	—	—	—
Transfer from other components of equity to retained earnings	—	—	—	2,005	-342	-1,664
Total transactions with owners	—	49	-3,007	-5,575	-342	-1,664
Balance as of March 31, 2023	¥ 25,038	¥ 22,520	¥ -9,298	¥ 301,940	¥ 4,331	¥ —

(Unit: Millions of yen)

	Other components of equity		Total equity attributable to owners of parent	Non-controlling interests	Total equity
	Exchange differences on translation of foreign operations	Total			
Balance as of April 1, 2022	¥ 9,664	¥ 14,538	¥ 343,882	¥ 7,241	¥ 351,123
Profit	—	—	19,392	769	20,160
Other comprehensive income	8,035	9,497	9,497	351	9,848
Comprehensive (loss) income:	8,035	9,497	28,889	1,120	30,009
Purchase of treasury shares	—	—	-3,007	—	-3,007
Disposal of treasury shares	—	—	—	—	—
Cancellation of treasury shares	—	—	—	—	—
Transactions in stock-based compensation	—	—	41	—	41
Cash dividends	—	—	-7,581	-571	-8,152
Increase/decrease in non-controlling interests	—	—	8	-24	-16
Transfer from other components of equity to retained earnings	—	-2,005	—	—	—
Total transactions with owners	—	-2,005	-10,539	-595	-11,134
Balance as of March 31, 2023	¥ 17,699	¥ 22,030	¥ 362,231	¥ 7,767	¥ 369,998

FY2022 (April 1, 2023 to March 31, 2024)

(Unit: Millions of yen)

	Share capital	Capital surplus	Treasury shares	Retained earnings	Other components of equity	
					Net changes in financial assets measured at fair value through other comprehensive (loss) income	Remeasurements of defined benefit plans
Balance as of April 1, 2023	¥ 25,038	¥ 22,520	¥ -9,298	¥ 301,940	¥ 4,331	¥ —
Profit	—	—	—	11,008	—	—
Other comprehensive income	—	—	—	—	4,960	3,271
Comprehensive (loss) income:	—	—	—	11,008	4,960	3,271
Purchase of treasury shares	—	—	-3,966	—	—	—
Disposal of treasury shares	—	-3	23	—	—	—
Cancellation of treasury shares	—	—	10,882	-10,882	—	—
Transactions in stock-based compensation	—	-5	—	—	—	—
Cash dividends	—	—	—	-7,072	—	—
Increase/decrease in non-controlling interests	—	1	—	—	—	—
Transfer from other components of equity to retained earnings	—	—	—	3,431	-160	-3,271
Total transactions with owners	—	-7	6,940	-14,524	-160	-3,271
Balance as of March 31, 2024	¥ 25,038	¥ 22,513	¥ -2,358	¥ 298,424	¥ 9,131	¥ —

(Unit: Millions of yen)

	Other components of equity		Total equity attributable to owners of parent	Non-controlling interests	Total equity
	Exchange differences on translation of foreign operations	Total			
Balance as of April 1, 2023	¥ 17,699	¥ 22,030	¥ 362,231	¥ 7,767	¥ 369,998
Profit	—	—	11,008	1,367	12,374
Other comprehensive income	13,000	21,231	21,231	432	21,664
Comprehensive (loss) income:	13,000	21,231	32,239	1,799	34,038
Purchase of treasury shares	—	—	-3,966	—	-3,966
Disposal of treasury shares	—	—	—	—	20
Cancellation of treasury shares	—	—	—	—	—
Transactions in stock-based compensation	—	—	-5	—	-5
Cash dividends	—	—	-7,072	-451	-7,523
Increase/decrease in non-controlling interests	—	—	1	-1	-0
Transfer from other components of equity to retained earnings	—	-3,431	—	—	—
Total transactions with owners	—	-3,431	-11,022	-452	-11,474
Balance as of March 31, 2024	¥ 30,699	¥ 39,830	¥ 383,448	¥ 9,114	¥ 392,562

Consolidated Statement of Cash Flows

(Unit: Millions of yen)

	Years ended March 31,	
	2023	2024
Cash flows from operating activities:		
Profit before income tax	¥ 26,175	¥ 15,744
Depreciation and amortization	29,312	31,853
Loss (gain) on sale of property, plant and equipment	-22	-1,593
Impairment loss	1,554	3,602
Interest and dividend income	-1,837	-2,214
Interest expenses	558	1,741
Share of profits of associates and joint ventures accounted for using equity method	-1,925	958
Decrease (increase) in trade receivables	7,371	3,589
Increase in inventories	-8,926	4,926
Increase in trade payables	-5,923	6,289
Other	71	28
Subtotal	46,407	64,923
Interest and dividends received	5,401	3,114
Interest paid	-454	-1,718
Income taxes paid	-9,907	-8,440
Net cash flows provided by operating activities	41,447	57,880
Cash flows from investing activities:		
Purchase of property, plant and equipment	-21,652	-19,149
Proceeds from sale of property, plant and equipment	331	1,993
Purchase of intangible assets	-1,433	-1,418
Purchase of investments	-383	-128
Proceeds from sale and redemption of investments	821	3,028
Acquisition of shares of subsidiaries and affiliates	—	-570
Payment for investments in capital of subsidiaries and associates	-3,963	—
Other	302	559
Net cash flows used in investing activities	-25,976	-15,684
Cash flows from financing activities:		
Net decrease in short-term borrowings	544	-3,031
Proceeds from long-term borrowings	9,000	500
Repayments of long-term borrowings	-13,621	-12,531
Payments of lease liabilities	-2,110	-1,814
Purchase of treasury shares	-3,007	-3,966
Dividends paid	-7,581	-7,072
Dividends paid to non-controlling interests	-571	-451
Other	25	-0
Net cash flows used in financing activities	-17,321	-28,364
Effect of exchange rate changes on cash and cash equivalents	1,522	2,263
Net increase (decrease) in cash and cash equivalents	-327	16,094
Cash and cash equivalents at the beginning of the year	39,363	39,035
Cash and cash equivalents at the end of the year	¥ 39,035	¥ 55,129

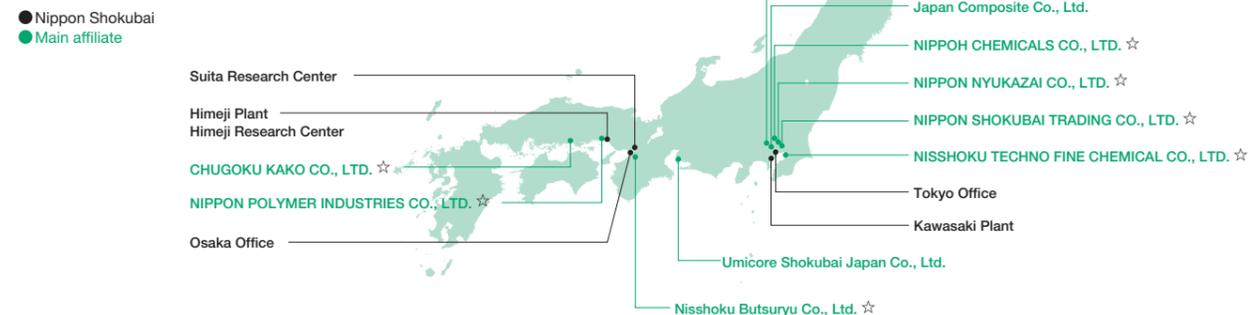
Outline

Established	August 21, 1941	Osaka Office	Kogin Bldg., 4-1-1 Koraibashi, Chuo-ku, Osaka 541-0043, Japan Tel: +81-6-6223-9111 Fax: +81-6-6201-3716
Share capital (as of March 31, 2024)	¥25,000 million	Tokyo Office	Hibiya Dai Bldg., 1-2-2 Uchisaiwai-cho, Chiyoda-ku, Tokyo 100-0011, Japan Tel: +81-3-3506-7475 Fax: +81-3-3506-7598
Revenue (FY2023)	¥392,000 million (consolidated) ¥229,300 million (non-consolidated)	Main Plants and Research Centers	Himeji Plant, Kawasaki Plant, Suita Research Center, Himeji Research Center
Number of employees (as of March 31, 2024)	4,607 (consolidated) 2,491 (non-consolidated)		

Business Locations

Nippon Shokubai has established a group network encompassing the fields of chemical manufacturing, processing and transportation, which can provide prompt, safe and secure supply in response to customer needs. Our Group was formed to ensure improved global production and a more effective supply chain (as of April 1, 2024).

Domestic Network



Global Network



* For both domestic and overseas networks: ☆ Consolidated subsidiary

Stock Information (as of March 31, 2024)

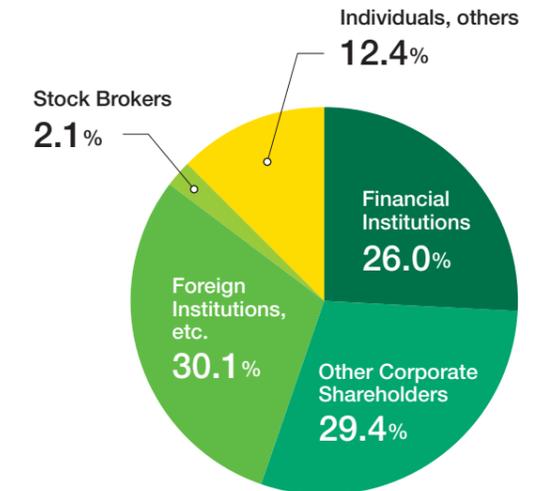
- Number of Shares Authorized Common stock 127,200,000 shares
- Number of Shares Issued Common stock 39,000,000 shares
- Number of shareholders 13,928

Major Shareholders (Top 10)

As of March 31, 2024

Name	umber of Shares Owned (thousand shares)	Ratio of capital Contribution (%)
The Master Trust Bank of Japan, Ltd. (trust account)	3,717	9.61
SUMITOMO CHEMICAL COMPANY, LIMITED	2,450	6.33
NORTHERN TRUST CO. (AVFC) RE SILCHESTER INTERNATIONAL INVESTORS INTERNATIONAL VALUE EQUITY TRUST	2,398	6.20
ENEOS Holdings, Inc.	2,129	5.50
Custody Bank of Japan, Ltd. (trust account)	1,699	4.39
Resona Bank, Limited	1,373	3.55
Sanyo Chemical Industries, Ltd.	1,267	3.27
NORTHERN TRUST CO. (AVFC) RE U.S. TAX EXEMPTED PENSION FUNDS	1,097	2.83
Mizuho Bank, Ltd.	948	2.45
artience Co., Ltd.	904	2.33
Total	17,986	46.52

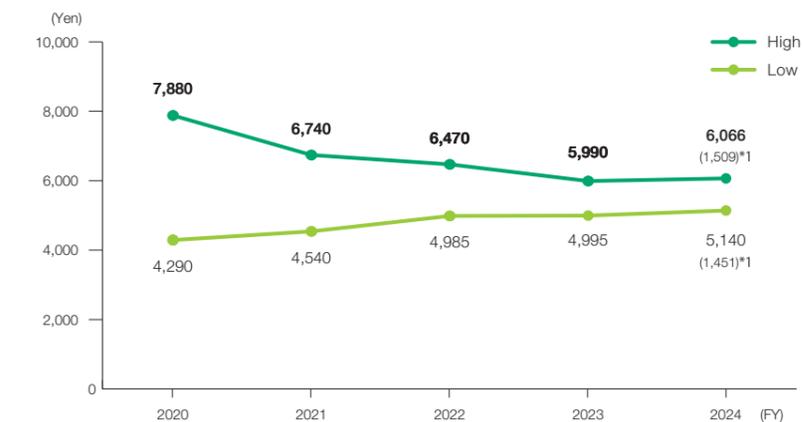
Distribution of Shareholders



* Treasury stock is included in "Individuals, others."

(Notes) 1. In addition to the above, the Company has treasury shares of 339 thousand shares. Treasury shares do not include 44 thousand shares of the Company's stock held by Custody Bank of Japan, Ltd. (Trust Account) in connection with the Performance-linked Stock Compensation Plan.
 2. In calculating the ratio of capital contribution, the number of treasury shares is deducted.
 3. Figures in "Number of Shares Owned" and "Shareholding Ratio of the Total Shares Outstanding" are truncated.
 4. The Company carried out a four-for-one stock split effective from April 1, 2024.
 The total number of authorized shares, total number of issued shares, and number of shares owned are the number of shares before the stock split.
 (1) The Company cancelled 1,800,000 treasury shares on November 30, 2023 according to the resolution at the Board meeting held on November 7, 2023.
 (2) The Company conducted a four-for-one stock split effective from April 1, 2024 according to the resolution at the Board meeting held on December 18, 2023 and amended its Articles of Incorporation regarding the total number of authorized shares. Accordingly, the total number of authorized shares amounts to 508,800,000 shares, and the total number of shares issued amounts to 156,000,000 shares.

Historical Share Prices (5 years)



* The high and low share prices are from the first section or the Prime Market of the Tokyo Stock Exchange.
 *1 The Company has carried out a four-for-one stock split of common stocks, with an effective date of April 1, 2024.
 The share prices for the 112th fiscal period are the high and low share prices after the ex-rights due to the stock split, and the high and low share prices before the stock split are shown in parentheses.

TechnoAmenity

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

NIPPON SHOKUBAI CO.,LTD.

Osaka Office

Kogin Bldg., 4-1-1 Koraibashi, Chuo-ku, Osaka
541-0043, Japan
TEL : +81-6-6223-9111 FAX : +81-6-6201-3716

Tokyo Office

Hibiya Dai Bldg., 1-2-2 Uchisaiwai-cho, Chiyoda-ku, Tokyo
100-0011, Japan
TEL : +81-3-3506-7475 FAX : +81-3-3506-7598

Website: <https://www.shokubai.co.jp/en/>



NIPPON
SHOKUBAI

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