Chemistry at work

ANNUAL REPORT 2023

Shin-Etsu Chemical Co., Ltd.

Contents

Editorial Policy

This report is compiled and published annually for the purpose of providing shareholders, investors, and other stakeholders with an overview of the Shin-Etsu Group's corporate activities. The organizations covered by this report are Shin-Etsu Chemical Co., Ltd. (Shin-Etsu Chemical) and its consolidated subsidiaries in Japan and overseas. In editing this report, we consulted the International Integrated Reporting Framework published by the Value Reporting Foundation (VRF) and Guidance for Collaborative Value Creation published by Japan's Ministry of Economy, Trade and Industry.

In the 2023 edition, we have expanded the sections on each of the six forms of capital that constitute the source of the Group's competitive advantage, focusing on human capital, intellectual capital, and natural capital. We also added a new section, "Messages from Outside Directors."

For more detailed information, follow the links below:

IR Information
https://www.shinetsu.co.jp/en/ir/

Sustainability Information
https://www.shinetsu.co.jp/en/sustainability/

Shin-Etsu Chemical has committed to carbon neutrality by 2050

At the end of May 2023, the Company committed to becoming carbon neutral by 2050 and formulated a plan to reduce greenhouse gas emissions generated in the course of Shin-Etsu Group's business activities (Scope 1*1 and 2*2) to net zero. We will also further focus on reducing greenhouse gas emissions through the Shin-Etsu Group's products and technologies to help achieve carbon neutrality around the world.

*1 Scope 1: Direct emissions from facilities owned and controlled by the Company (e.g., emissions generated during the combustion of substances such as heavy oil and natural gas)
*2 Scope 2: Emissions generated when producing energy purchased by the Company (e.g., emissions triggered when generating purchased electricity)

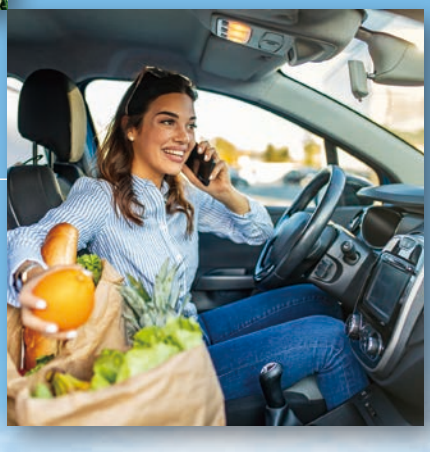
For more information on our commitment to carbon neutrality by 2050, please see "Sources of Our Competitiveness: Natural Capital" (page 26) in this report.

Business Principle

The Group strictly complies with all laws and regulations, conducts fair business practices and creates unrivaled value for society and industry through the provision of key materials and technologies.

Vision

Contribution to the Earth's future



Five areas for sustainable growth

Connectivity	Smart infrastructure	Productivity enhancement	Health enhancement	Energy/ Resource efficiency

At a Glance

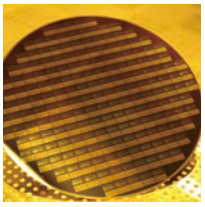
Our Business Portfolio

PVC

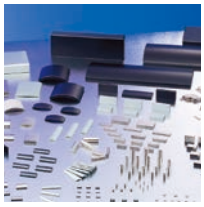
Infrastructure Materials

In addition to polyvinyl chloride (PVC) resin, which is widely used in categories that are essential to our lives, from water supply and sewerage systems and other infrastructure (social infrastructure) to housing, agriculture, and everyday products, we also supply caustic soda, polyvinyl alcohol (POVAL), and other products. For PVC in particular, we have a combined annual production capacity of 4.44 million tons at our three bases in the United States, Europe, and Japan, providing a stable supply worldwide.

Silicon Wafers



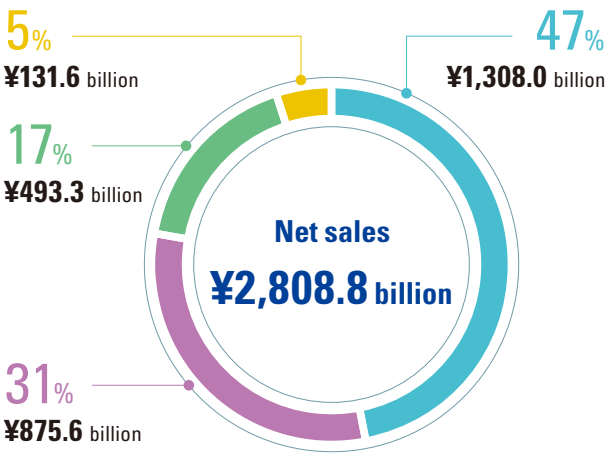
Photoresist

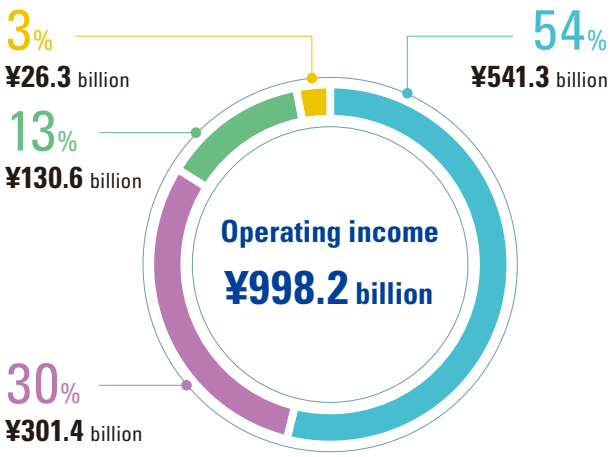


Rare Earth Magnets

Electronics Materials

We produce silicon wafers, a key semiconductor material, as well as photoresists, photomask blanks, and encapsulant materials used in the semiconductor manufacturing process. We also supply rare earth magnets, which are essential for power-saving motors used in eco-friendly vehicles and electrical appliances, and high-purity synthetic quartz, which is used as a raw material for optical fibers and for other applications.





Infrastructure Materials　Electronics Materials　Functional Materials　Processing & Specialized Services

(Fiscal year ended March 31, 2023)

Silicones

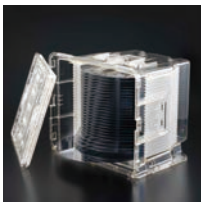
Cellulose Derivatives

Silicon Metal

Functional Materials

In 1953, we were the first Japanese company to commercialize silicone, which is used in a wide range of industries, and since then we have continued to develop our product lineup, which now includes more than 5,000 varieties. We also supply a wide variety of materials that deliver superior functionality, including cellulose derivatives, which are widely used in pharmaceuticals, food products and industrial applications, as well as synthetic pheromones, silicon metal, liquid fluoroelastomers, pellicles, and anode material for lithium ion batteries.

Input Devices



Wafer Cases

Wrapping Films

Processing & Specialized Services

As a processing manufacturer of various resins such as PVC and silicone, Shin-Etsu Polymer Co., Ltd. meets the diverse needs of customers in a wide range of fields including the automotive, information equipment, semiconductor, packaging material, and construction material industries. Shin-Etsu Engineering Co., Ltd. is involved mainly in the design and construction of the Group's manufacturing plants.

Profile (Fiscal year ended March 31, 2023)

In business
97 years

Market capitalization
¥8,653.1 billion

Operating income ratio
36%

Number of employees (consolidated)
25,717

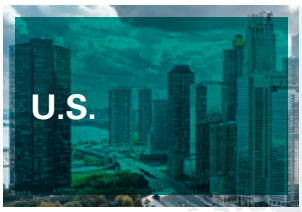
Overseas bases
22 countries

Composition ratio of overseas sales
81%

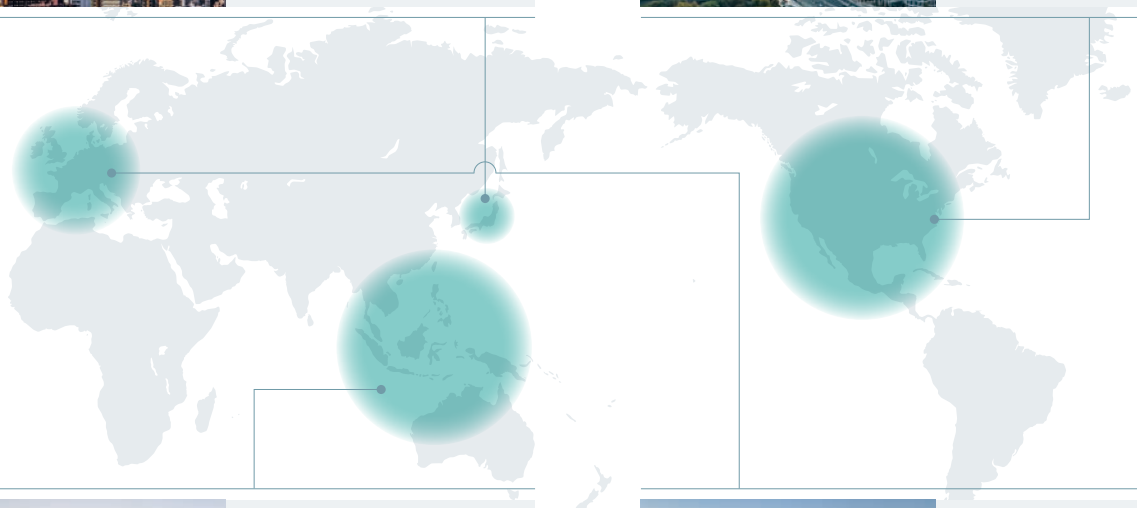
Ratio of employees outside Japan
63%

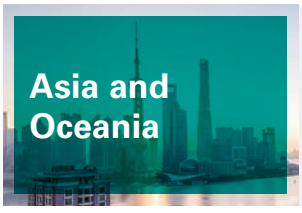
Net sales and number of employees by region (Fiscal year ended March 31, 2023)

Net sales
¥538.7 billion (19%)
Employees
9,401



Net sales
¥979.8 billion (35%)
Employees
3,745





Net sales
¥805.1 billion (29%)
Employees
10,935

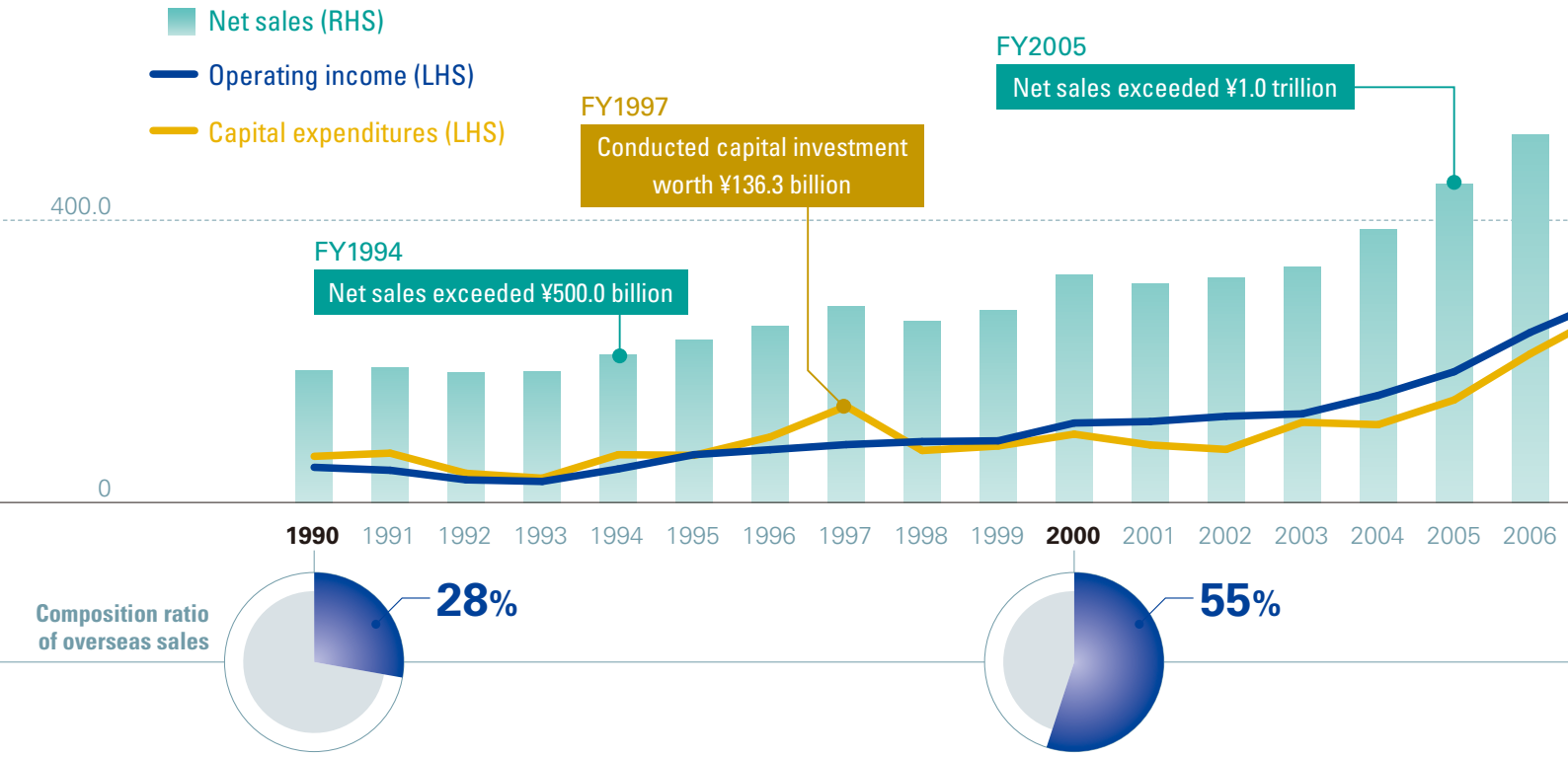
Net sales
¥277.7 billion (10%)
Employees
1,636

Other Regions

Net sales
¥207.2 billion (7%)

Milestones in Establishing and Strengthening Business Foundations

Since its establishment in 1926 as Shin-Etsu Nitrogen Fertilizer Co., Ltd., the Shin-Etsu Group has continually transformed its business with an eye to the future, and today holds the top share of the global market for many products, including PVC and semiconductor silicon.



History of major capital investment and commercialization

Formation of business foundation

Silicone products when production first started

Enhancement of existing businesses and global expansion

Shintech Freeport Plant (Texas, USA)

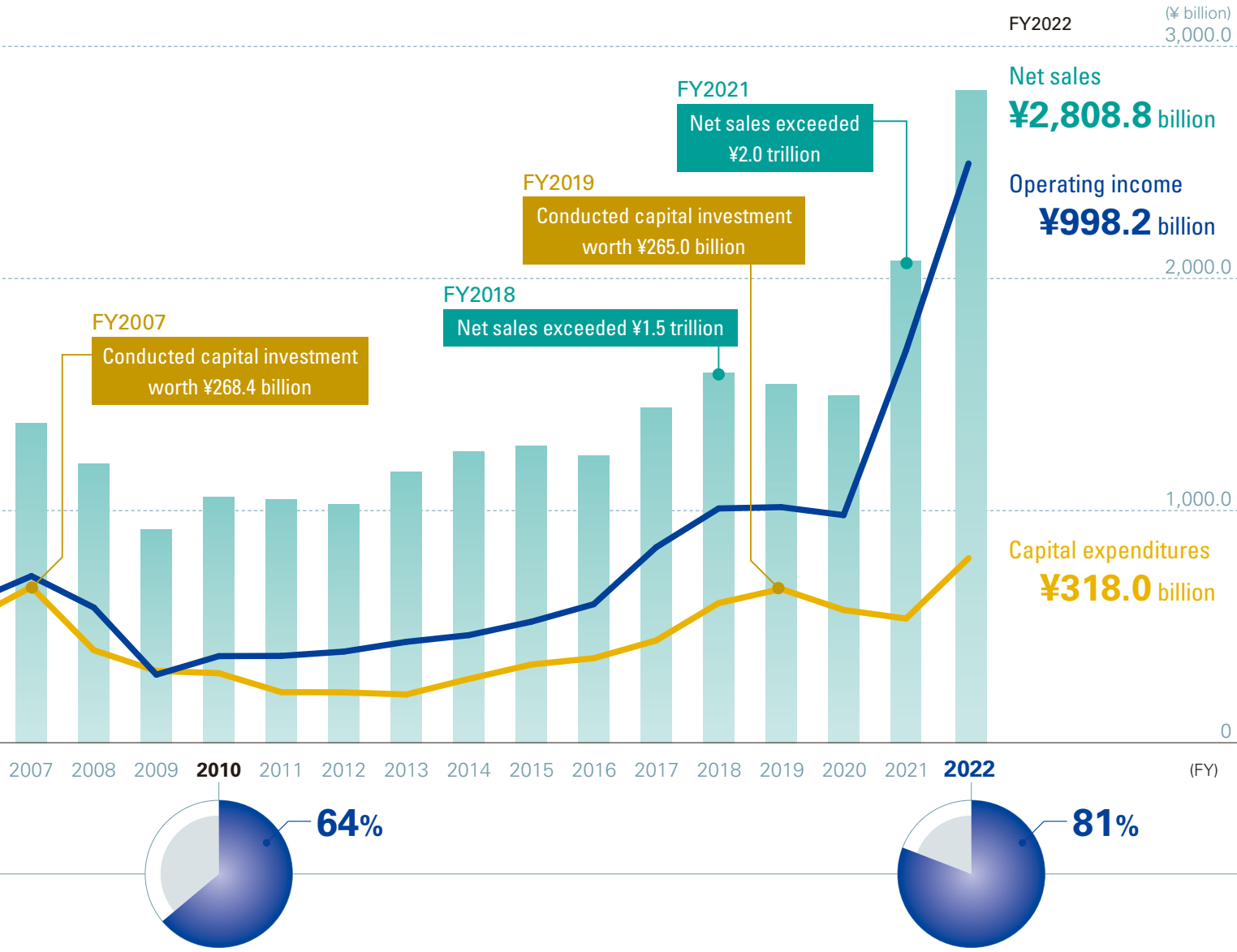
Former Chairman Kanagawa (front row, second from right) when he was appointed president of Shintech

1950s–1960s

- Launched PVC production
- Began production of silicon wafers
- Started production of silicones
- Launched production of cellulose derivatives

1970s–1980s

- Started production of PVC in Texas, USA
- Overseas expansion of semiconductor silicon business (Malaysia, U.S., U.K.)
- Overseas expansion of silicones business (U.S., Korea, Taiwan, Netherlands)
- Began production of rare earth magnets
- Launched production of optical fiber preform



Corporate structure reform/Enhancement of international competitiveness

Shin-Etsu Handotai's Shirakawa Plant

New growth strategy development

Shintech's ethylene plant that started operations in 2020 (Louisiana, USA)

1990s–2000s

- Acquired PVC and cellulose businesses in Europe
- Built two PVC plants in Louisiana, USA
- Started mass production of 300 mm silicon wafers
- Began production of silicone monomers and polymers in Thailand
- Commercialized photoresists and photomask blanks businesses

2010s–2020s

- Started production of ethylene in the US (ensured stable and flexible product supply by establishing an integrated production system for PVC from raw materials)
- Began integrated production of rare earth magnets in Vietnam
- Started mass production of low-dielectric resins (5G-related products)
- Commercialized anode materials for lithium-ion batteries

Our Competitive Advantage

The Shin-Etsu Group has built solid financial foundations by supplying product lines with high market shares around the world and improving profitability.

Strength 1

Leading Market Share

We hold the leading market share of key materials essential to society, including PVC and semiconductor silicon.

Polyvinyl chloride (PVC) **resins**

No. 1 globally

Semiconductor silicon (Silicon wafers)

No. 1 globally

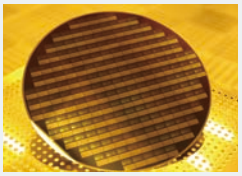
Silicones

No. 1 in Japan

No. 4 globally

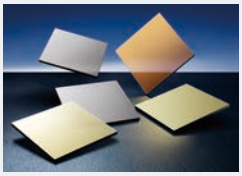
Cellulose derivatives (Methylcellulose)

No. 2 globally



Photoresists

No. 2 globally



Advanced photomask blanks

No. 2 globally

Synthetic quartz (for photomask substrates for LCD)

No. 1 globally

Synthetic pheromones

No. 1 globally

(Based on Shin-Etsu Chemical research)

Strength 2

High Profitability and Solid Financial Foundations

Our high level of profitability is driven by tireless efforts aimed at enhancing productivity and our lineup of competitive products.

Operating income to net sales ratio	ROIC	ROE	Net assets	Equity ratio
35.5%	33.6%	19.7%	¥4,026.2 billion	81.8%

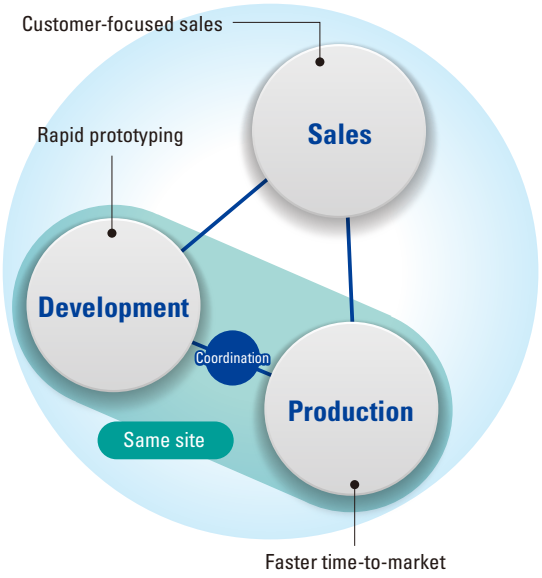
(Fiscal year ended March 31, 2023)

For details, see "Financial Capital" on page 15.

Strength 3

Triangular Link Manufacturing

Our manufacturing is based on a triangular link of customer-focused sales, development, and production, with the latter two located in the same site, to speedily respond to customer needs.



All our R&D facilities are located on the same premises as our plants, allowing for smooth coordination between development and production in response to customer needs obtained from sales. In addition to rapidly developing products that meet customer needs, coordinating with production departments allows us to make use of plant facilities to carry out hands-on development and prototyping for quality stabilization and mass production.

For details, see “Manufacturing Capital” on page 16 and “Intellectual Capital” on page 22.

Strength 4

High Productivity

High productivity is achieved through an optimal staffing and capital investment in pursuit of efficient processes.

By appropriately assigning personnel with deep expertise, the Group has built a lean organizational structure that maximizes the capabilities of its employees. We also strive to improve productivity by thoroughly pursuing efficient methods when updating or improving existing facilities or building new ones.

For details, see “Manufacturing Capital” on page 16 and “Human Capital” on page 18.

Value Creation Process

By harnessing its strengths in the triangular link manufacturing of sales, development, and production, the Shin-Etsu Group helps solve societal issues by creating unrivaled value with materials indispensable to industry and people's lives.

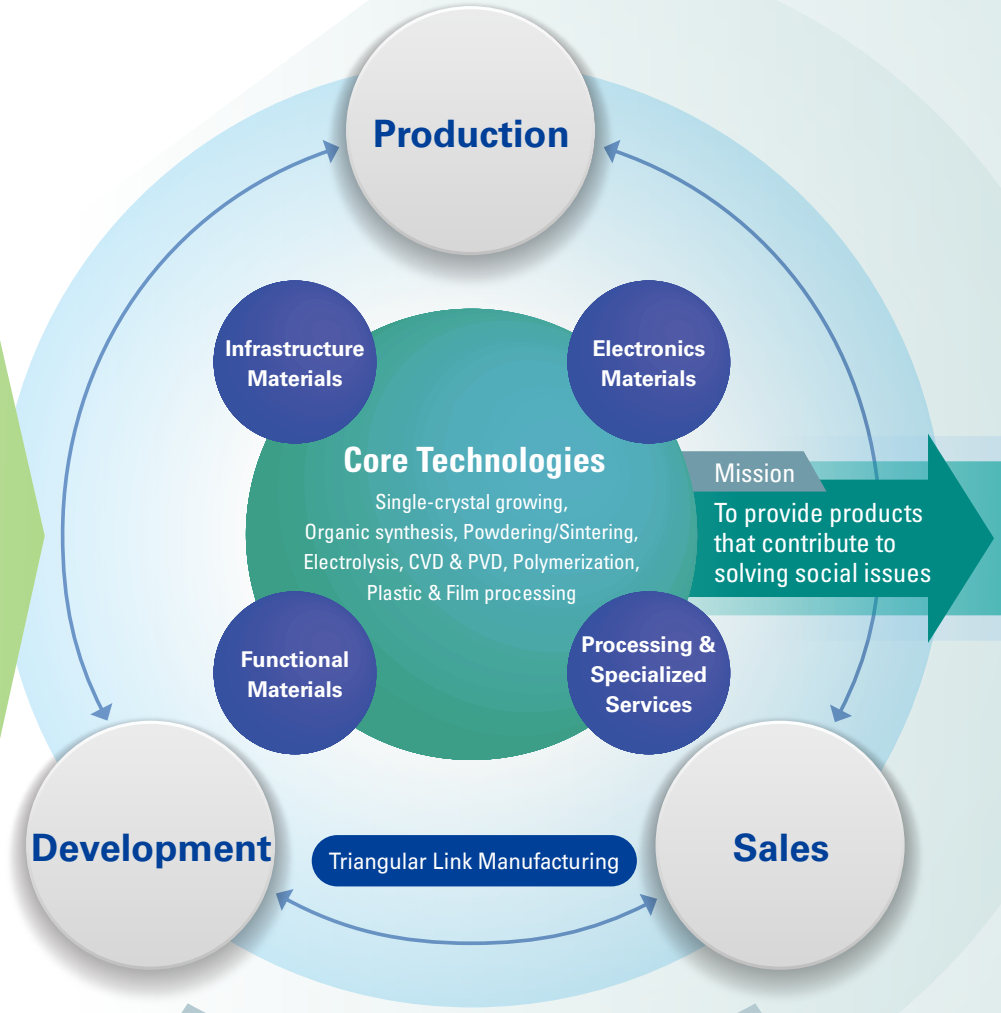
Sources of Our Competitiveness

P.14

- Financial Capital
- Manufacturing Capital
- Human Capital
- Intellectual Capital
- Social and Relationship Capital
- Natural Capital

Business Activity

P.31



Management Foundation

Corporate Governance

P.44

Sustainability

P.52

- Health and safety of employees and contractors
- Energy-saving, resource-saving, and reduction of environmental impacts
- Product quality improvements and product safety control
- Promoting CSR procurement and the diversification of supply sources

The foundation of all activities: Legal compliance, fair corporate activities

- Respect for human rights, the development of human resources, and the promotion of diversity
- Respect for and protection of intellectual property
- Contribution to industry and social initiatives
- Accurate and timely information disclosure and communication with stakeholders

Value Created

As of March 31, 2023

Operating income	**¥998.2 billion**
Net income	**¥708.2 billion**
ROIC	**33.6%**
ROE	**19.7%**
Cash dividend per share*1	**¥500**
Total shareholder return over the past five years	**209% (TOPIX132%)**
Market capitalization	**March 31, 2013** ¥2,700.7 billion ↓ **March 31, 2023** **¥8,653.1 billion**
Moody's Long-term Ratings	**Aa3**
Sales composition ratio of environmental products*2	**approx. 70%**
Greenhouse gas emission intensity (compared with FY1990)	**45.8% reduction**
Composition ratio of overseas sales	**80.8%**
Intangible asset value ratio*3	**53.4%**

*1 On April 1, 2023, the Company executed a 5-for-1 stock split of its common stock. "Cash dividend per share" shows the amount for shares before the stock split because the record date is prior to the stock split date (April 1, 2023).

*2 Products that contribute to the 14 areas identified by the Japanese government in 2021 as being essential to achieving the goal of carbon neutrality

*3 An indicator for measuring the value of intangible assets in capital markets
Intangible asset value ratio = (intangible fixed assets [book value] + market capitalization – net assets [book value]) ÷ market capitalization

Vision

Contribution to the Earth's future

Connectivity

AI, IoT, 5G, Metaverse
Semiconductor silicon, silicones, optical fiber preforms, low-dielectric resins, etc.

Smart infrastructure

Infrastructure developments
PVC, cellulose derivatives, silicones

Productivity enhancement

Robots, Industrial motors
Semiconductor silicon, rare earth magnets, silicones, etc.

Health enhancement

Pharmaceutical materials, Materials for medical apparatus and equipment
Cellulose derivatives, POVAL, silicones, rare earth magnets

Food, Sanitation
Synthetic pheromones, cellulose derivatives, photocatalysts

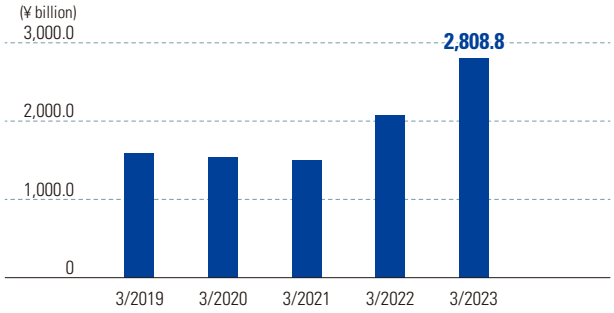
Energy/Resource efficiency

Electric vehicles
Rare earth magnets, anode materials for lithium-ion batteries, silicones, etc.

Energy-efficient home appliances, Renewable energy
Rare earth magnets, semiconductor silicon, silicones, LED packaging materials, etc.

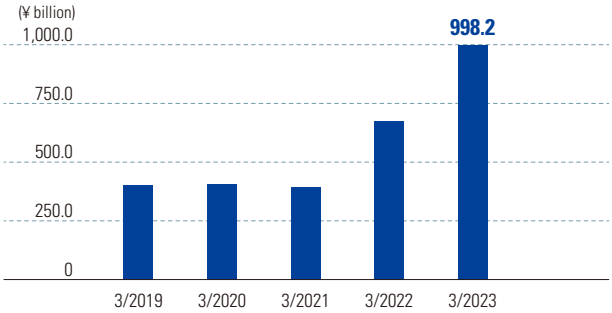
Financial Highlights

Net sales



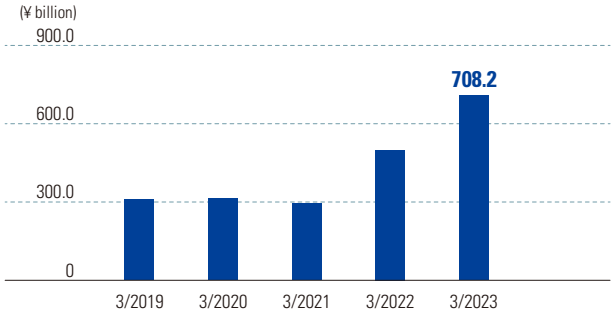
Consolidated net sales for the fiscal year ending March 31, 2023 (FY2022) increased 35.4% from the previous fiscal year, achieving over 30% of growth for the second consecutive year, thanks to an increase in sales volume of PVC resin and other products and price negotiations that closely reflected market fluctuations.

Operating income



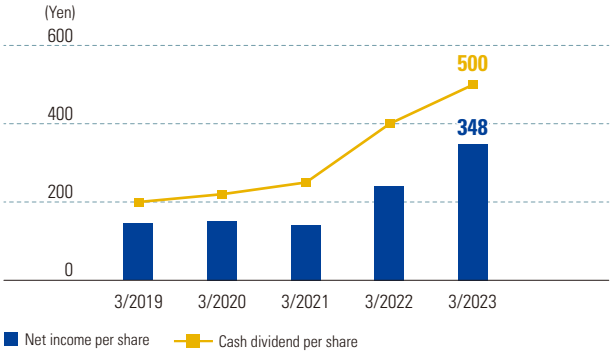
Consolidated operating income for FY2022 increased 47.6% over the previous year, far exceeding the previous year's record high. All business segments achieved double-digit profit growth, with the Infrastructure Materials business in particular leading the overall growth with a 70.3% increase.

Net income attributable to owners of parent



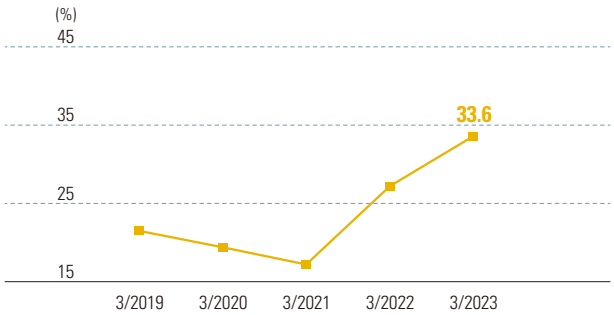
Net income attributable to owners of parent in FY2022 rose 41.6% from the previous fiscal year to a record high, reflecting a substantial increase in operating income.

Net income per share/Cash dividend per share*



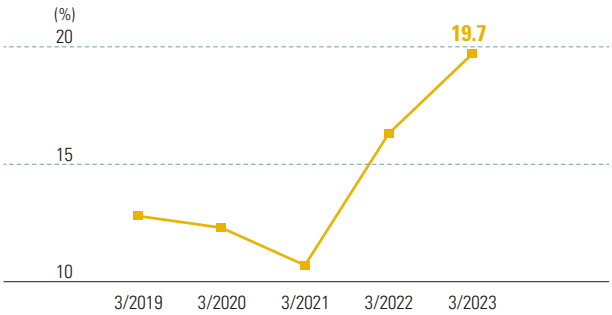
In light of the substantial increase in net income per share, the annual dividend for FY2022 was increased by ¥100 from the previous fiscal year, representing the eighth consecutive year of dividend increase (payout ratio of 28.7%).

ROIC



FY2022 ROIC increased 6.4 percentage points year on year on the back of sharp growth in operating income after taxes.

ROE

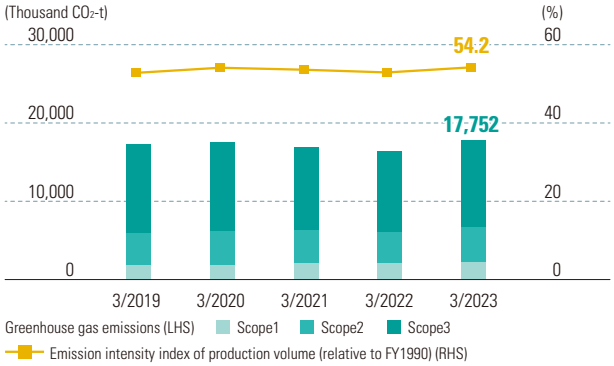


FY2022 ROE rose 3.4 percentage points as a result of sharp growth in net income attributable to owners of parent, despite an 16.3% year-on-year increase in shareholders' equity.

*On April 1, 2023, the Company executed a 5-for-1 stock split of its common stock. "Net income per share" is calculated based on the number of shares after the stock split from the fiscal year ended March 31, 2019, in accordance with the "Accounting Standard for Earnings per Share." "Cash dividend per share" shows the amount for shares before the stock split because the record date is prior to the stock split date (April 1, 2023).

Non-Financial Highlights

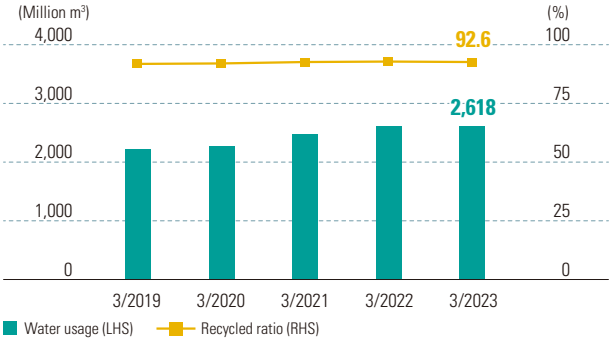
Greenhouse gas emissions/ Emission intensity index of production volume*



We are working to reduce the greenhouse gas emission intensity index to 45% of our FY1990 level by 2025 and achieve net-zero greenhouse gas emissions (Scope 1 and 2) by 2050.

*Emission intensity index of production volume reflects Scope 1 and Scope 2.

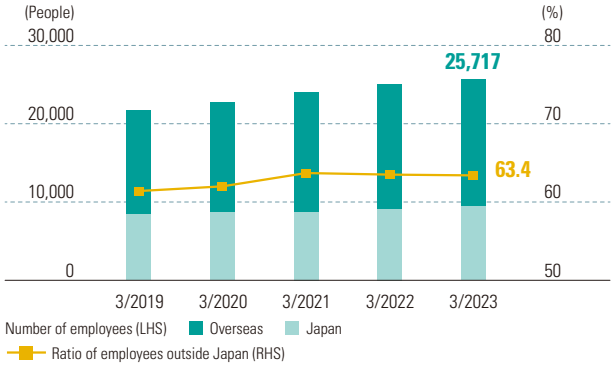
Water usage*/Recycled ratio



Since manufacturing products requires a large amount of water, we have set a target of "reducing water withdrawal intensity by an annual average of 1%," and are thoroughly promoting the recycling of water and making effective use of rainwater, etc.

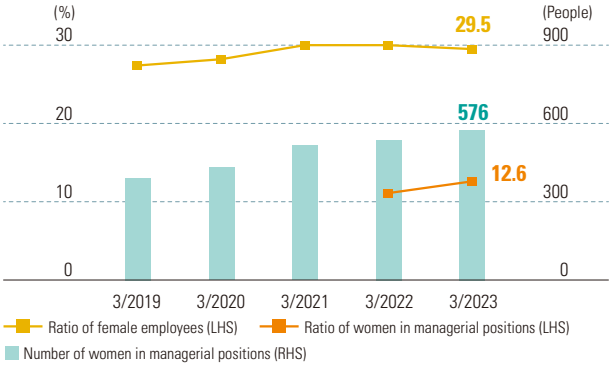
*Total quantity of water withdrawal and recycled water

Number of employees/Ratio of employees outside Japan



In accordance with international labor standards, each year we survey our consolidated subsidiaries to ensure compliance with laws and regulations, making sure that we respect human rights and properly manage labor and employment in accordance with the laws and regulations of each country and region.

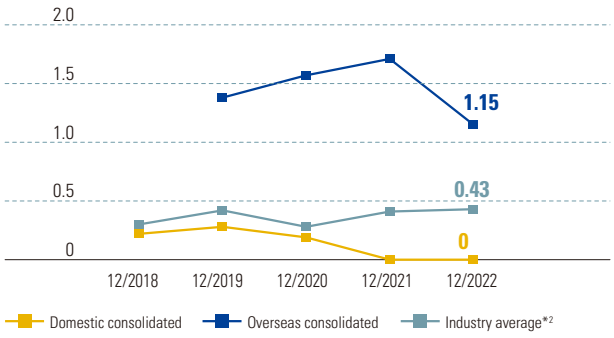
Ratio of female employees/ Number and ratio of women in managerial positions*



To promote the advancement of women, we have set goals to "increase the hiring ratio of women in administrative positions to 40% and in engineering positions to 10%" and "quadruple the number of women in managerial positions, including junior managers, compared to FY2014."

*Figures for ratio of women in managerial positions calculated starting from FY2021

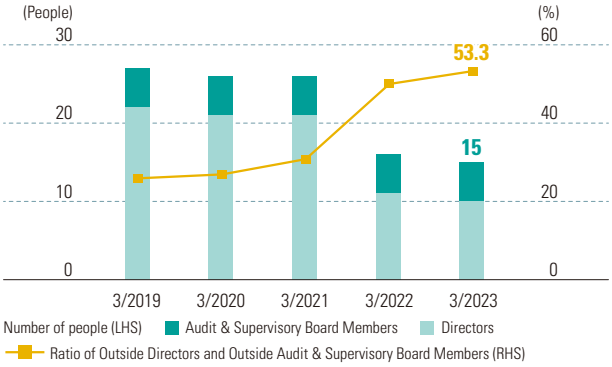
Lost-time accident rate*1



Although we had no serious accidents in FY2022, there were 57 lost-time accidents at overseas Group companies, and we promptly implemented countermeasures after analyzing the causes of each of them.

*1 The lost-time accident rate is calculated per calendar year.
*2 Averages for the chemical industry in Japan as compiled by the Japan Chemical Industry Association (JCIA).

Number of Directors and Audit & Supervisory Board Members/ Ratio of Outside Directors and Outside Audit & Supervisory Board Members



In FY2021, we substantially downsized the Board of Directors and raised the ratio of Outside Directors and Outside Audit & Supervisory Board Members to improve our ability to promptly respond to changes in the business environment and strengthen our monitoring functions.

President's Message

President
Yasuhiko Saitoh

Mobilizing our strengths to provide products that help solve customer and societal issues in an effort to achieve sustainable growth

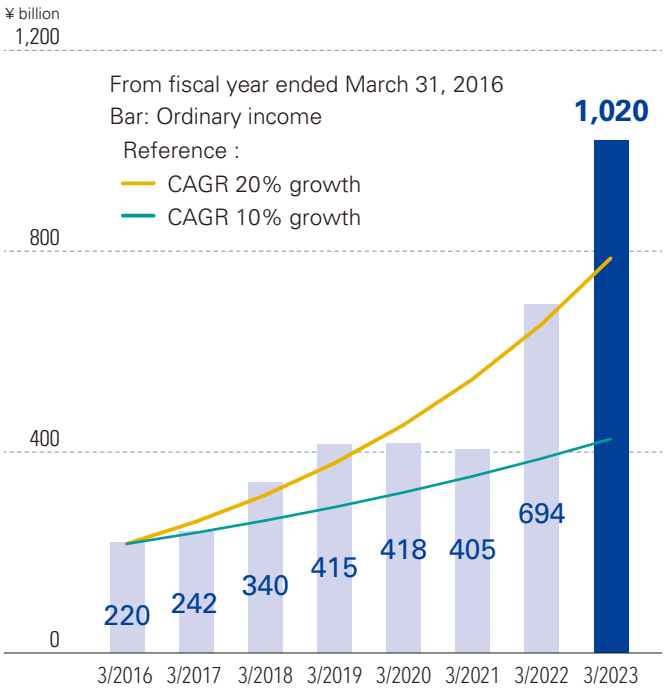
Record performance by leveraging our strengths

In the fiscal year ending March 31, 2023 (FY2022), our company extended its growth path with another set of monumental results. I would like to reiterate that the results reflect the underlying strength of our line of products, technology, operational system, and our people's professionalism. We are very pleased that we have contributed to the well-being of our communities while renewing the records across the top line and bottom line and in key financial ratios.

Shareholder returns and future growth

With this performance and further enhanced financial strength, we declared an annual dividend of ¥500 per share (before the share split), which is 25% higher than last year and records the highest mark in the company's dividend history. It represents our sincere appreciation to our shareholders for their understanding and support.

Ordinary income



There may be some concern among our shareholders and investors about how we will sustain this level of earnings and grow from it. In this regard, with a strong sense of purpose, we keep our focus on providing our customers with products which make it attainable for them to do what they pursue. We tirelessly help solve what our customers need to solve. As changes take place fast and our customers' needs constantly evolve, opportunities present themselves for us. With a strong market-in mindset and aspiration, we work with our customers more closely than ever. We are determined to be a most reliable supplier to all our customers with best-in-class quality, technology and practice.

Current situation and outlook for each business segment

If I may elaborate on it by laying out our prospects and on-going endeavors in each of our business segments,

Infrastructure Materials Business

We are determined to maintain our capacity edge and cost competitive edge. Building upon it, we will reinforce our engagement in broader applications and to make our products the greenest infrastructure materials, we will reduce the carbon footprint in our manufacturing of the products.

Electronics Materials Business

The demand for semi-conductor devices will keep expanding in an appreciable manner. As the growth is not only quantitative but also qualitative, we will stay tuned to capacity increases and product developments. There is an evolving array of new ways of device making, to which we apply our expertise and ingenuity. Electrification is rapidly expanding and the so-called green transformation is irreversible. To this end, we will exploit the periodic table as much as we can for our customers and industries. Furthermore, initiatives for economic security are being taken by major nations. We play an essential role every aspect of all these developments.

Functional Materials Business

We are bringing more of new products to various markets and are broadening our capabilities for our customers. We add touch points in industries and markets so that our total addressable markets will be greater. We develop our product offerings with this focus and make contributions in such a manner that the more our products are used, the better the industries and human society become.

Processing & Specialized Services Business

With this group of businesses and operations, we enhance the synergy within the group.

Being a good partner for society

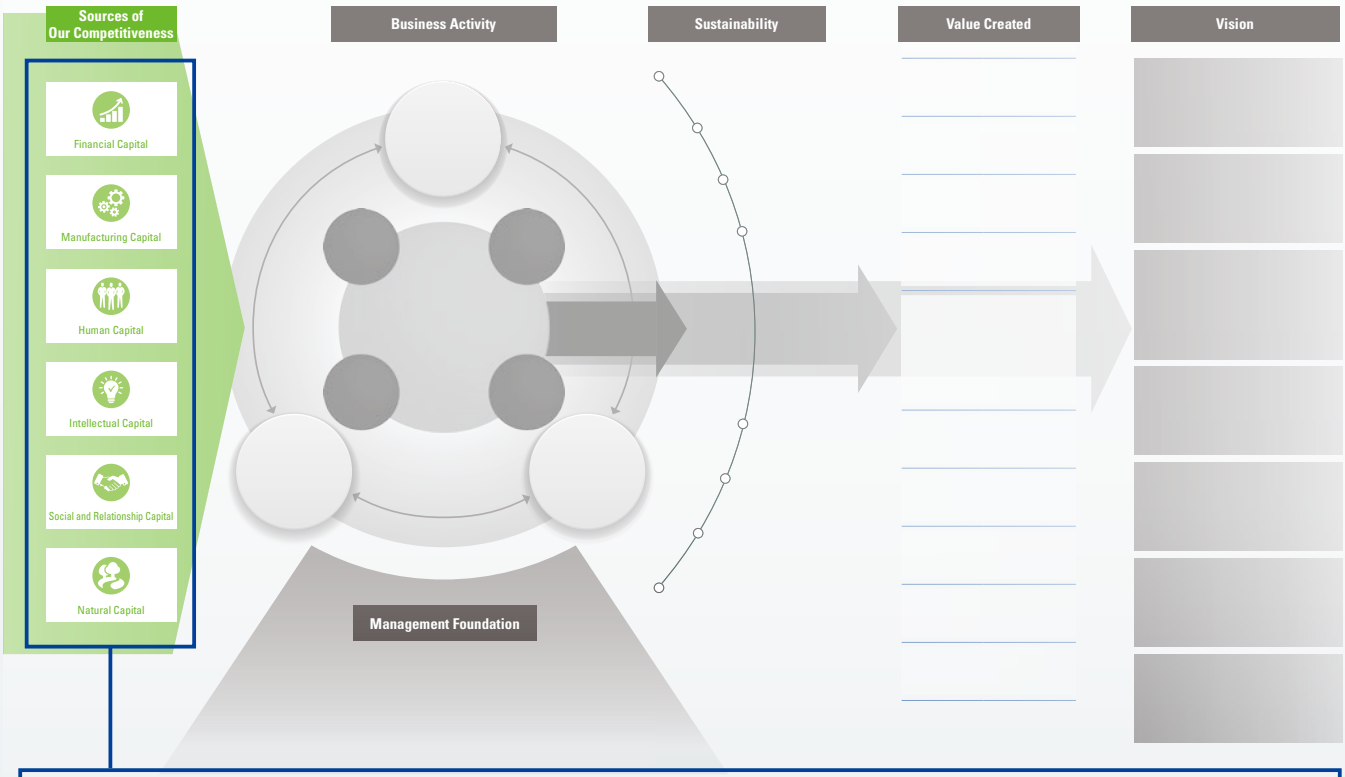
Concerning carbon neutrality, we have recently announced our plan. We are determined to do our part as an essential supplier to human life and industries in the world.

To continue to do what we have been able to do for our customers, our shareholders and our communities, it is essential that the company continues to grow. We will remain focused on our customers and their needs to be relevant to them, will remain committed to governance to be relevant to our shareholders and will remain responsible to be relevant to our communities.

Succession of "Kanagawa management" and appreciation to all stakeholders

I must mention that the passing of Mr. Kanagawa at the beginning of the year was a great loss for our company. We will carry on his torch and move forward with vigor. Our board, newly realigned, will assure you of it. I sincerely thank our shareholders for their confidence, our customers for their partnership and our entire Shin-Etsu team for their dedication to our operations.

Sources of competitiveness that support the sustainable development of the Shin-Etsu Chemical Group



Financial Capital

We will promote capital investment for sustainable growth while further strengthening our financial base through earnings growth

- Equity ratio **81.8%**
- Net assets **4,026.2 billion yen**
- Capital expenditures **318.0 billion yen**

Manufacturing Capital

We aim to achieve sustainable growth by monitoring global demand trends and making timely and appropriate capital investments

- Domestic production bases: **17 companies, 40 bases**
- Overseas production bases: **17 countries, 65 bases**

Human Capital

Developing optimal staffing with T-shaped skill human resources in pursuit of a more efficient, smarter, and leaner way of working

- Operating income per employee **38.8 million yen**

Intellectual Capital

Promoting rapid, field-linked R&D and strategic IP management to protect our business

- Equity ratResearch centers located inside plants
- Selected as Clarivate Top 100 Global Innovator™ for **12 consecutive years**

Social and Relationship Capital

Respecting human rights and emphasizing the building of healthy relationships with local communities

Natural Capital

Having planned to achieving carbon neutrality by 2050, we will focus even more on efforts to reduce greenhouse gas emissions

- Greenhouse gas emissions (emission intensity index of production volume relative to FY1990) **54.2%**

Financial Capital

We will promote capital investment for sustainable growth while further strengthening our financial base through earnings growth

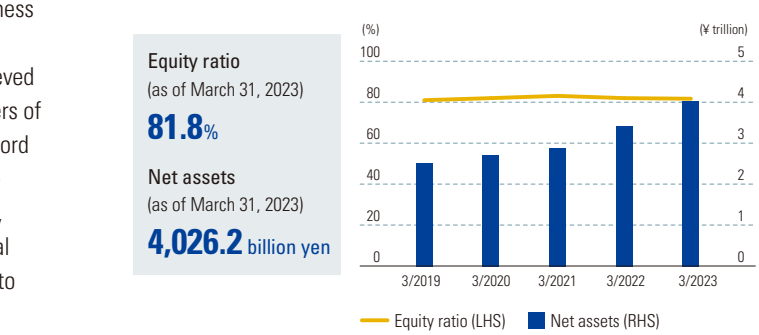
Improved profitability through full production effect and sales capabilities

For the fiscal year ended March 31, 2023 (FY2022), as in the previous fiscal year, operating income in the Infrastructure Materials business grew significantly thanks to our full production effect and sales capabilities in PVC resin, and other business segments also achieved double-digit profit growth rates. Net income attributable to owners of parent was ¥708.2 billion (up 42% year on year), a significant record high for the second consecutive fiscal year. Total net assets were ¥4,026.2 billion (up 17% from the end of the previous fiscal year), and the equity ratio remained above 80%. On these solid financial foundations, the Company further improved its capital efficiency to 33.6% ROIC and 19.7% ROE.

Equity ratio/Net assets

Equity ratio
(as of March 31, 2023)
81.8%

Net assets
(as of March 31, 2023)
4,026.2 billion yen

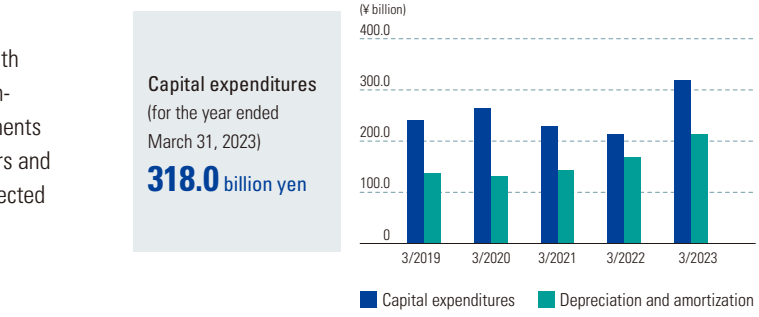


Continued capital investment for sustainable growth

To enhance competitiveness and sustain growth, we seek to enhance corporate value through the active and timely use of internal reserves. The Shin-Etsu Group's capital investment in FY2022 totaled ¥318 billion (up 48.7% year on year). We made progress as planned with investments to increase capacity in Shintech's PVC resin and high-performance silicone product lines, and promoted capital investments to ensure a stable supply and improve the quality of silicon wafers and other electronics materials. Capital investment for FY2023 is expected to be ¥380 billion.

Capital expenditures/Depreciation and amortization

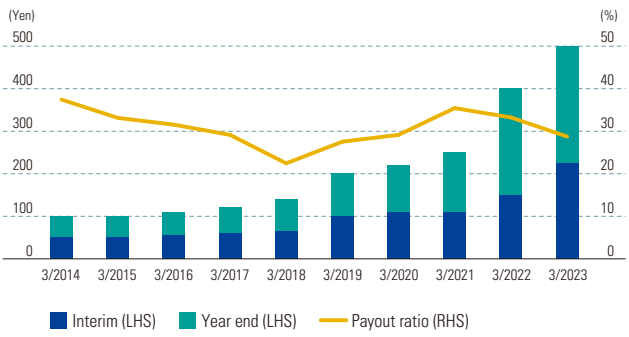
Capital expenditures
(for the year ended
March 31, 2023)
318.0 billion yen



Flexible share buybacks on top of eighth consecutive year of dividend hikes

Our basic policy is to focus on growing business earnings and maintaining solid financial foundations while returning the results of our management efforts to our shareholders in a long-term and stable manner, with a medium- to long-term dividend payout ratio of around 35% as a guide. Accordingly, in FY2022 we paid an annual dividend of ¥500 per share, an increase of ¥100 from the previous fiscal year and a payout ratio of 28.7%. This was the eighth consecutive year of increased dividends. Furthermore, as part of our efforts to return profits to shareholders, we repurchased and retired 11.83 million shares of treasury stock (valued at approximately ¥200 billion), representing 2.8% of the total number of issued shares. Note that on April 1, 2023, the Company executed a 5-for-1 stock split of its common stock.

Cash dividends per share/Payout ratio



Manufacturing Capital

We aim to achieve sustainable growth by monitoring global demand trends and making timely and appropriate capital investments

Basic policy on capital investment

In order to fulfill its supply responsibilities as a material manufacturer, the Shin-Etsu Group makes timely and appropriate capital investments to strengthen stable supply and improve quality based on long-term demand forecasts and requests obtained from industry-leading companies around the world. Our solid financial base and ability to generate cash flow enable us to make flexible decisions and aggressively invest even in an ever-changing business environment.

Current status of capital investment

We are steadily making capital investments that support the growth of the Group, including a PVC resin facility expansion project at Shintech Inc. in the U.S., as well as production capacity enhancement, productivity improvements and streamlining, quality improvement, maintenance, upgrades, and environmental measures. The status of major capital investments is as follows.

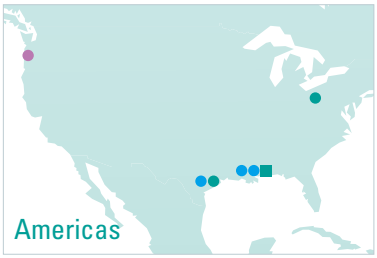
Investments from 2019 onward (that have been announced)

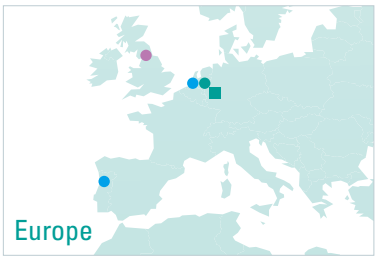
●: Completion ○: Completion Schedule

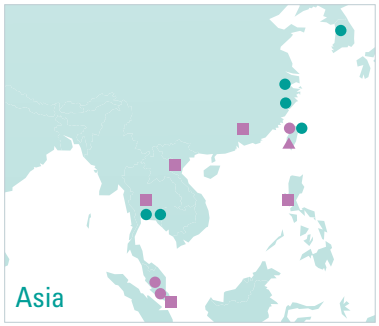
Business Segment	Products	Projects	Investment Amount	2019		2020		2021		2022		2023		2024	
				1H	2H	1H	2H	1H	2H	1H	2H	1H	2H	1H	2H
Infrastructure Materials	Ethylene	New plant built (U.S.)	$1.4 billion			●									
	PVC	New facility expansion [Phase 1] (U.S.)	$1.49 billion						●						
	〃	New facility expansion [Phase 2] (U.S.)	$1.25 billion										○		
Electronics Materials	Photoresists	Production capacity enhancement (Japan, Taiwan)	¥30 billion					Taiwan ●			Naoetsu ●				
	Photomask blanks	Production capacity enhancement (two sites in Japan)	¥14 billion		Naoetsu ●			Takefu ●							
	Preform for optical fiber	Production capacity enhancement (Japan, two sites in China)	¥18 billion	Kashima, Hubei ●			Jiangsu ●								
	Low dielectric constant thermosetting resins for 5G products	Investment in mass production (Japan)	¥3 billion						●						
Functional Materials	Silicones	Production capacity enhancement for various silicone products (U.S.)	¥2.4 billion	●											
	〃	Production capacity enhancement for monomers and polymers (Japan, Thailand, etc.)	¥110 billion	Sequential start-up and completion →						●					
	〃	Investments contributing to reducing greenhouse gas emissions (Japan) (Expansion of gas turbine power generation facilities and products that contribute to the environment)	¥20 billion						Sequential start-up and completion →			●			
	〃	Production capacity enhancement for high-performance products (three sites in Japan)	¥80 billion								Sequential start-up, completion date undecided →			○	
	Cellulose derivatives	Expansion of manufacturing facilities (Japan, Germany)	¥20 billion		●										

Production bases for major products

- PVC
- Silicones
- Cellulose derivatives
- Semiconductor silicon
- Rare earth magnets
- Photoresists







Overseas production bases: 17 countries, 65 bases

In addition to building a local production system directly linked to local demand, the Shin-Etsu Group has 65 overseas production bases in 17 countries, mainly in regions with low country risk, to ensure that our production costs are the most competitive in the world. By establishing multiple production bases globally, we are strengthening our ability to ensure a stable supply to our overseas customers, who account for approximately 80% of our sales.

Message from our production site employee

Further boosting capacity at the world's No. 1 PVC plant

Mr. SI

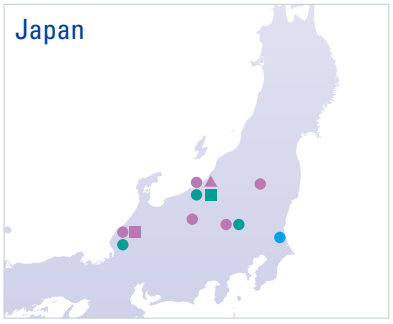
Technology Department, International Division, Shin-Etsu Chemical Co., Ltd.

I'm in charge of the expansion of the PVC manufacturing plant at Shintech's Plaquemine Plant in Louisiana. My main responsibilities are manufacturing process design, procurement of manufacturing facilities and equipment, on-site construction supervision, comprehensive construction process management, and commissioning to confirm plant performance as designed. The current expansion represents approximately 10% of Shintech's PVC production capacity (an increase of 380,000 tons/year) and is expected to further expand sales and strengthen our competitiveness worldwide.

The current global uncertainty has led to soaring material prices and delays in delivery dates, requiring us to adapt our construction work. Nevertheless, the facility expansion project team is working together to complete the construction within the specified budget and timeframe, while adhering to safety first and environmental compliance.

Domestic production bases: 17 companies, 40 bases

We have 17 companies, including Group companies such as Shin-Etsu Handotai Co., Ltd. and JAPAN VAM & POVAL Co., Ltd., as well as 40 production bases in Japan, including Shin-Etsu Chemical's four production bases in Naoetsu (Niigata Prefecture), Takefu (Fukui Prefecture), Gunma Complex (Gunma Prefecture) and Kashima (Ibaraki Prefecture). Especially in Japan, the R&D division is located on the premises of each plant, which quickly develops products that meet the needs of customers and is the starting point of cutting-edge technology as a mother plant.



Message from our production site employee

Increasing the productivity of high-value-added products and contributing to the expansion of our global market share in silicones

Mr. YN

Isobe Plant Silicone Production Dept. 2, Gunma Complex, Shin-Etsu Chemical Co., Ltd.

I've been consistently involved in the expansion of our silicone manufacturing processes from formulation study to equipment design, construction, and even trial runs. The series of expansions being carried out are for silicone products with particularly high added value, and this expansion will contribute to expanding our global market share in silicones.

Our strength lies in our advanced technological capabilities. Instead of reproducing existing facilities, we always treat building facilities as an innovative process. The process of this current facility expansion will not only increase capacity to meet the needs of our customers, but also increase productivity by up to an order of magnitude and drastically reduce the utilities and waste we use, making it friendlier to both people and the environment.

All project members are working together to boost our silicones to the world's No. 1 market share.

Human Capital

Developing optimal staffing with T-shaped skill human resources in pursuit of a more efficient, smarter, and leaner way of working

The Shin-Etsu Group, believing that human resources provide the basis for all business activities, is working to strengthen human capital with "respect for human rights, the development of human resources and promotion of diversity" and "health and safety of employees and contractors" as key issues.

Key Issues Respect for human rights, the development of human resources, and the promotion of diversity

Respect for human rights

The Shin-Etsu Group complies with international codes of conduct and always respects human rights at all its business sites around the world. The Shin-Etsu Group Human Rights Policy stipulates the prohibition of discrimination, the prohibition of damaging human dignity, the protection of privacy, the respect for basic labor rights, and the prohibition of child labor and forced labor. In order to thoroughly enforce these policies, the Human Rights Due Diligence* Subcommittee, established within the Sustainability Committee, establishes a system for investigating human rights risks and consulting and reporting on human rights and promotes human rights awareness and education in cooperation with the Shin-Etsu Chemical's Human Rights Enlightenment Promotion Committee. (See page 25.)

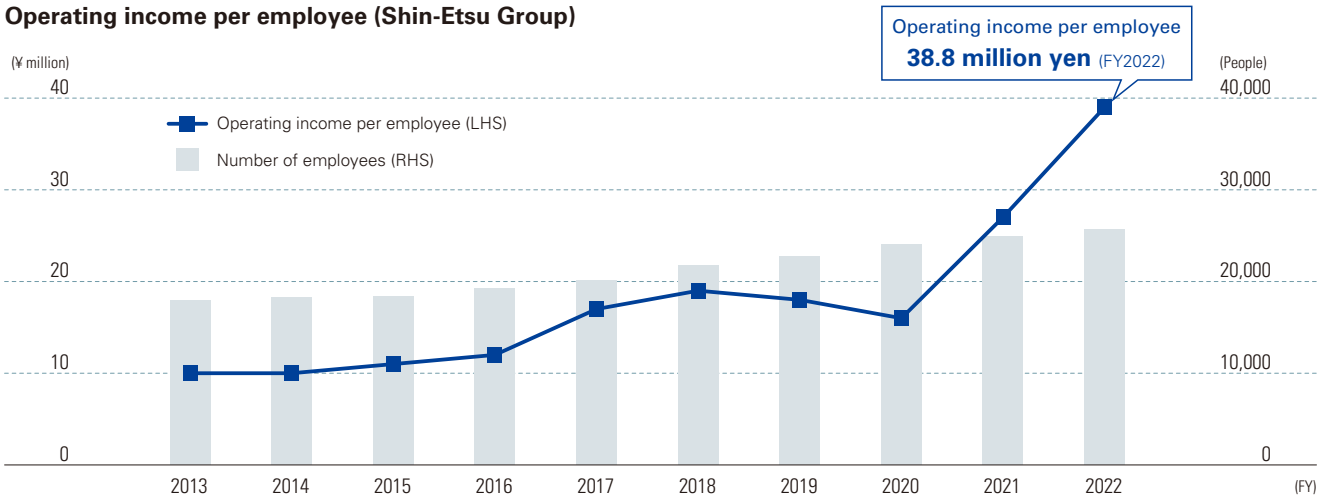
*Human rights due diligence: What companies should do to recognize, prevent and address adverse human rights-related impacts, including developing human rights policies, assessing the impact of corporate activities on human rights, and tracking and disclosing performance.

Developing optimal staffing with T-shaped human resources

One of the major factors supporting the Group's profitability is the development of "T-shaped human resources." The vertical bar of the "T" represents deep expertise in a specific department and field, while the cross bar represents the ability to perform a wide range of work while pursuing a more efficient, smarter, and leaner way of working. In order to develop such human resources, the Group does not carry out one-size-fits-all personnel transfers, but rather places the right people in the right positions over the long term, emphasizing site-driven human resource development centered on on-the-job training (OJT).

This development of T-shaped human resources is what enables our human resources strategy, which places the highest priority on respect for the individual. By accumulating highly specialized knowledge, we have been able to maximize economies of scale during periods of strong demand and maximize the capabilities of existing personnel during periods of weak demand, enabling management to overcome difficult times. In fact, the growth rate of operating income in recent years has greatly exceeded the growth rate of the number of employees, and the productivity per employee has also increased significantly. In addition, our system of allowing each individual to take on a variety of tasks as they gain experience is working to enhance employee competence and engagement.

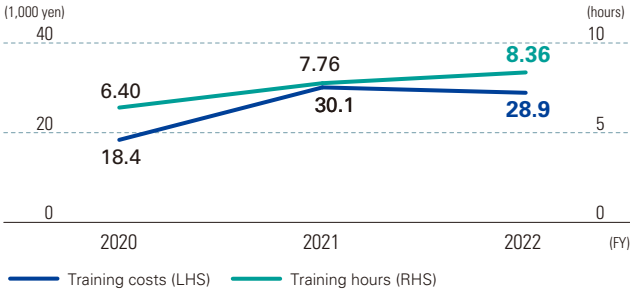
Operating income per employee (Shin-Etsu Group)



Performance-based personnel evaluation system

The Group values the ability to set high goals without fear of failure, and employees' compensation reflects both performance and attitude, with due consideration of the business environment and the difficulty of the goals. We also conduct evaluation training for all managers in charge of performance review to ensure their evaluations are fair and reasonable. Transparency is increased by informing employees about the evaluation criteria. In addition, an interview system is implemented between evaluators and direct reports to facilitate successful communication. During these interviews, each staff member and their immediate supervisor use Communication Sheets to ensure mutual awareness of expectations and set half-year goals. Furthermore, feedback on progress is given for further development of skills.

Training costs and training hours per employee (Shin-Etsu Chemical)



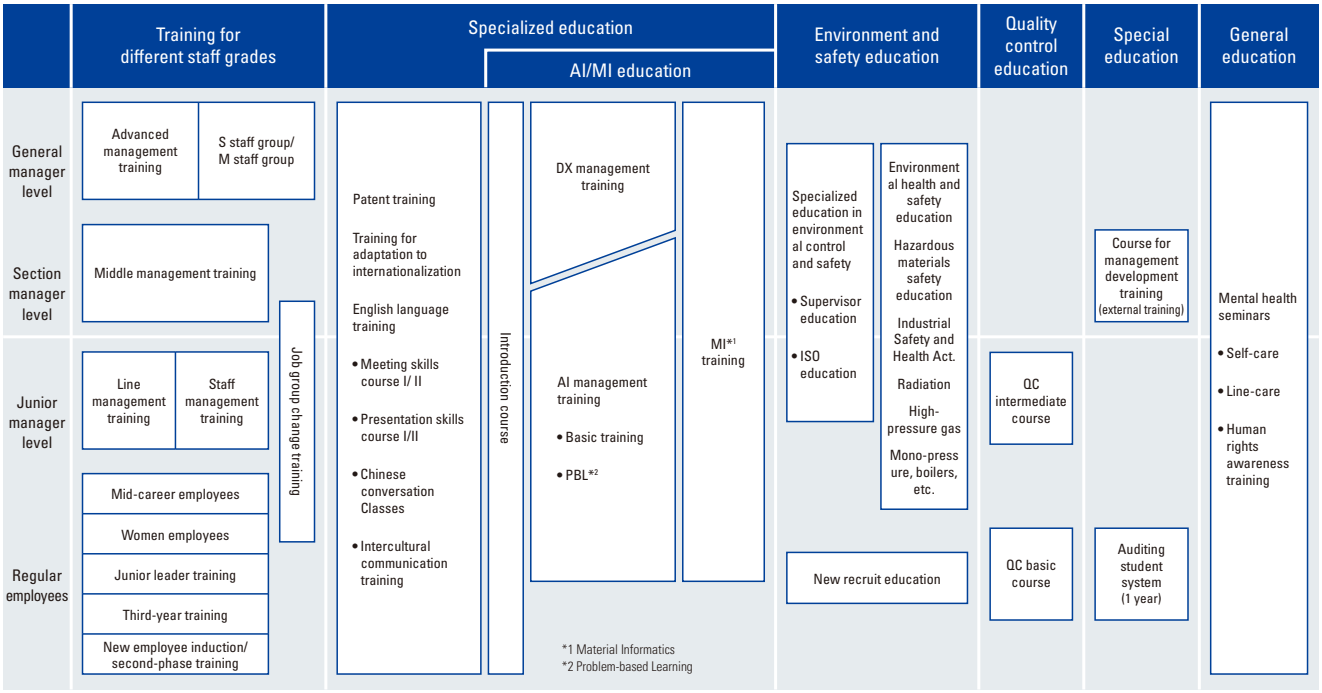
Scope: Employees and seconded employees of Shin-Etsu Chemical
Excludes the auditing student system that was discontinued in FY2021 due to COVID-19.

Human resource development

Recognizing that employee growth leads to company growth, the Shin-Etsu Group supports employee growth through a variety of training programs, including training for each staff level, global communication training, an auditing student system, environmental education, safety education, and mental health education. For example, to ensure smooth business operations around the world, we offer global communication training to improve communication skills in foreign languages. Furthermore, as part of our digitalization efforts, in FY2021 we started digital literacy training for new and young employees, as well as hands-on training in data analysis skills to solve practical problems and AI training for problem-solving learning, both targeted at mid-level employees.

In addition to this kind of systematic training, the Group also places great importance on individualized training that is not one-size-fits-all. On the operational front lines in particular, we believe that true growth is achieved through the accumulation of daily experience. We therefore emphasize OJT, aiming to develop human resources who can demonstrate flexible creativity and initiative.

Training system list

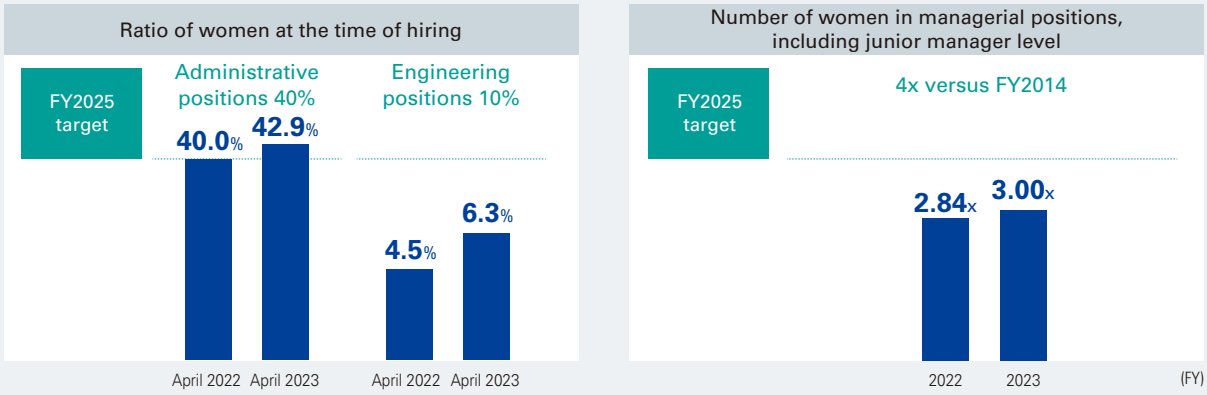


Human Capital

Promoting the active participation of diverse human resources

The Group is working to promote the active participation of women and create a workplace environment where employees of all walks of life can work to their full potential. So that we can expand our business globally, we are focused on local recruitment overseas as well as the hiring of foreign nationals living in Japan. In April 2019 we raised our mandatory retirement age for employees from 60 to 65 so that more seasoned workers at our production plants can pass on their skills and experience to the next generation.

Five-year targets and progress (starting in FY2021) in the action plan based on the Act on Promotion of Women's Participation and Advancement in the Workplace



Scope: Employees and seconded employees of Shin-Etsu Chemical

Work-life balance

Childcare support system

Employees can take childcare leave up until their children turn three. They can also choose to work shorter hours using our short-time work system as long as their children are still attending elementary school. We also encourage employees to make use of our teleworking system. In FY2022, 151 female employees and 156 male employees utilized our childcare leave system.*

*The length of childcare leave differs depending on the laws of each country or region.

Nursing care support system

We have established a nursing care support system for employees who care for their families and other important individuals as part of our efforts to create an environment in which employees can balance their work duties with nursing care obligations. In FY2014 we started providing a "Health Management and Nursing Care Support" service and set up a consultation hotline through which employees can seek the advice of external experts. In FY2022, three employees (from all consolidated companies in Japan) utilized our nursing care leave system.

Employee message

As a manager, I work with the whole organization in mind

I work in Shintech's HR department in the Texas area, where my work includes improvements to organizational capabilities, HR development, workplace development, pay and benefits, employee health and safety, and employee risk management.

Shintech complies with regulations – federal, state and local – including equal employment opportunity, discrimination and harassment related to race / religion / sex / national origin, etc. Our employee handbook is one of our initial points of contact in our employer / employee relationship, supported by HR policies in which we communicate our commitment to ensuring a fair and equitable work environment. In addition, Shintech aligns our initiatives with Shin-Etsu's Sustainability Key Issues and Management Objectives.

The HR department aims to be a strategic business partner to the management team. Going forward, we will continue to analyze our position and implement various measures necessary for the development of the Company.

Ms. SF
HR Manager
Shintech Inc.

Key Issues Health and safety of employees and contractors

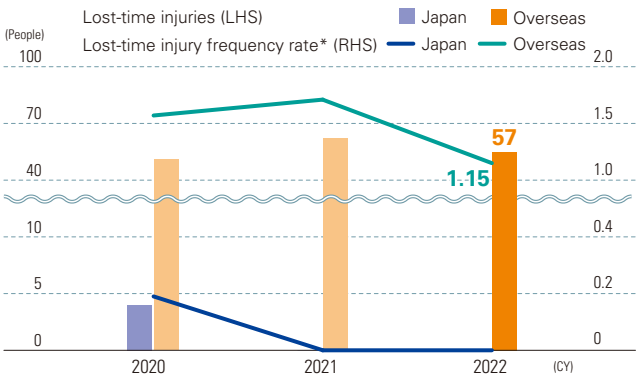
Creating safe and secure workplaces

In aiming to prevent all serious and lost-time accidents, the Group conducts risk assessments to comprehensively identify risks that could lead to injury or illness and is working to create safe and comfortable workplaces by eliminating or minimizing risks.

Participants of safety education programs

(FY)	2018	2019	2020	2021	2022
Shin-Etsu Chemical	11,774	19,411	32,527	39,348	59,343
Consolidated companies	28,013	39,328	46,998	56,236	75,406

Lost-time injuries and changes in frequency rate

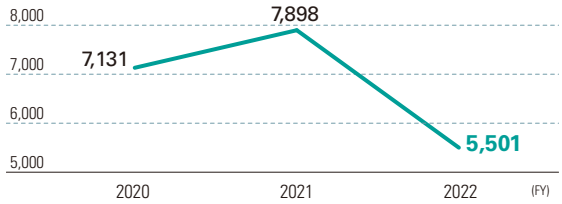


*Rate of recordable injuries per million hours worked

Accident prevention initiatives

As a bottom-up initiative implemented at each worksite, the Group accepts suggestions from and listens to the concerns of workers who have experienced close-call incidents themselves and employs measures to address even the slightest of concerns. At the same time, by sharing the information within and outside of the Group, we strive to roll out safety measures as well as preventive measures for similar incidents.

Suggestions regarding close-call incidents or other concerns



Please visit the following website page for the suggestions disclosed thus far.
https://www.shinetsu.co.jp/en/sustainability/esg_safety/management/

Physical and mental health of employees

We actively provide health guidance on lifestyle-related diseases, mental health measures, and hold events to improve physical fitness so that our employees can lively work. We've also prepared countermeasure manuals against COVID-19 and other important infectious diseases so we can prevent their spread. In addition, we've set up health and safety committees at the head office and branch offices, as well as health and safety committees at each plant site. These committees get information and guidance from industrial physicians and are working to improve the work environment and promote health.

Employee message

The safety of all employees is our top priority

I have worked for the Shin-Etsu Group as the plant manager for the PVC plant in Pernis in the Netherlands. As a plant manager I am responsible for the operation of the plant. This also includes the health and safety of the people working on site. In the Pernis plant the safety of all employees is our top priority. Plant safety is addressed at all levels in the organization by using well defined procedures and working processes.

HR department reports monthly on the trends of our employee's health to the plant management team.We also conduct regular health checks on all our employees.

To further enhance our focus on working safely in the plant a new safety program was started in January 2023. Working together with an experienced safety consultant the whole organization is involved in this program. Collaboration between own employees and subcontractors is included in this program.

Ms. SS
PVC Plant Manager
Shin-Etsu PVC (Netherlands)

Intellectual Capital

Promoting rapid, field-linked R&D and strategic IP management to protect our business

The Shin-Etsu Group considers R&D to be an important "asset" as well as a "challenge" to pioneer the future, and we are promoting R&D to meet the needs of the times while asking ourselves what the future world will need. We are also strategically managing the valuable intellectual property (IP) obtained through R&D in order to make effective use of it.

The "triangular link" system for rapid response to customer needs

The Shin-Etsu Group's R&D department rapidly develops products tailored to customer needs while keeping an eye on mass production after product development. This is made possible by our unique R&D system that integrates sales, development, and production in a triangular link, with an R&D center located on the production sites. We also promote R&D projects under the direct control of the President in order to meet customer needs and generate new solution ideas. In addition, we are focusing on recruiting and developing human resources who are familiar with digital technology such as AI and are working to improve development efficiency and shorten development time by utilizing materials informatics.

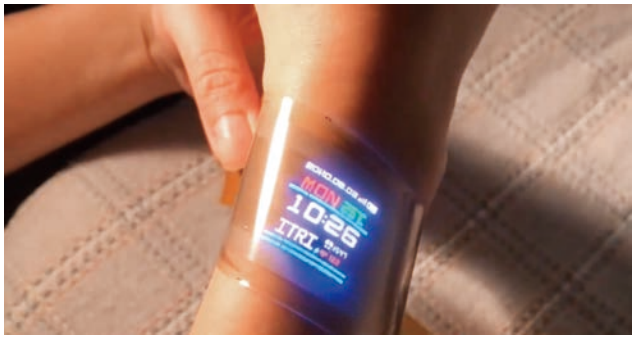
As examples of R&D in existing businesses, we lead the PVC industry in the development of polymerization technology using our proprietary large-scale polymerization reactor and non-scale technology, and in silicon wafers, we are advancing crystal growth technology and solidifying our competitive advantage through R&D that is one step ahead of the competition.

Aggressive product development in new areas with growth potential

In terms of new business areas, we are focusing our R&D efforts on five major priority areas in growth markets where we can leverage our strengths: energy, semiconductor-related materials, high-speed communications at 5G and beyond, healthcare, and materials that contribute to achieving SDGs and carbon neutrality.

In FY2022, we developed a new process technology to realize mass production of micro-LED displays and developed an encapsulant material for mini-LED displays in collaboration with Taiwan's Industrial Technology Research Institute (ITRI). In addition, for electric and hybrid vehicles, where voltages are becoming increasingly high, we developed a new silicone rubber for molding product, the KE-5641-U, which is an ideal sheathing material to improve the flexibility and reduce the weight of high-voltage cables, as well as the TC-BGI series of thermal interface silicone rubber sheets. We also developed the industry's first silicone film-forming emulsion for fiber-treatment applications. Furthermore, we developed a new coating material Sicle™ (pronounced "Cycle") that adds a water-resistance property to paper products such as cardboard and dramatically facilitates their recyclability, and Tersus™ RN, an inorganic thin-film coating liquid which possesses antibacterial/antivirus functions for use in building materials for housing and buildings.

High-voltage cables used in electric vehicles



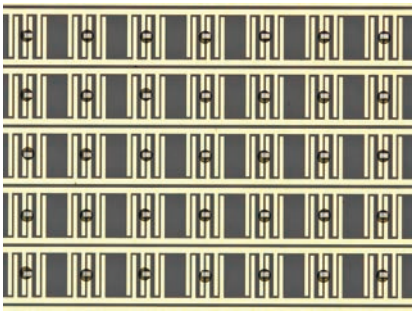
Flexible mini-LED display using materials from Shin-Etsu Chemical

Development of new process technology and transfer parts for micro-LED displays

To achieve mass production of micro-LED displays, which are the most promising candidates for next-generation displays, the key challenge is to improve the complexity and low yield of the microchip transfer process. In response, we have developed, in collaboration with Dexerials Corporation, an innovative technology that can transfer singulated anisotropic conductive film (ACF) with a diameter of 80 μm or less onto the targeted location by laser equipment. Employing this technology, it becomes possible to transfer the singulated ACF only to the designated plate and mount the micro-LED chip on it, facilitating the repair process to remove and compensate for defective chips, which has been a major challenge in the past.

In addition, in collaboration with Group companies Shin-Etsu Engineering and Shin-Etsu Polymer, we developed new transfer parts and transfer equipment. By combining these, it is possible to provide optimal processes to customers. As a one-stop solution provider in the manufacture of micro LEDs, Shin-Etsu Chemical is working to promote and expand the market for micro-LED displays by proposing solutions to customers' problems.

Excimer laser mass transfer equipment



Micro LED chips (34×58 μm) connected by anisotropic conductive film transferred to target location by laser

Strategically protect IP and promote research with acquiring rights in mind

The Shin-Etsu Group protects its IP gained through R&D from infringement by third parties by securing intellectual property rights both in Japan and overseas. At the same time, we search patent publications related to existing and new businesses to avoid infringement of rights. We also strategically manage our intellectual assets by, for example, keeping information that should not be disclosed as confidential knowledge. At present, there are no cases where business operations are hindered by IP.

In addition, we encourage researchers to conduct research with patent rights and other IP rights in mind, and educate them so that they can prepare documents for rights acquisition. We also have a system in place to reward and recognize personnel who have made significant contributions to the Company in the form of patents and other inventions and ideas. As a result of these and other efforts, Clarivate, a global information services company, has recognized Shin-Etsu Chemical as a Clarivate Top 100 Global Innovator™ for 12 consecutive years. The award recognizes companies and institutions that protect original invention ideas with IP rights and successfully commercialize them. We are one of only three companies in the chemical field to have received the award for 12 consecutive years.

From left: Mr. Takashi Kojima, Vice President of Clarivate Analytics (Japan) Co., Ltd., Mr. Matsui, Managing Corporate Officer of Shin-Etsu Chemical, and Mr. Kubota, General Manager, Patent Department

Intellectual Capital

Message from an employee of the R&D Department

Transcending the boundaries of research fields and departments to develop materials for carbon neutrality

Mr. AE
2nd Development Office
Silicone-Electronic Materials
Research Center
Shin-Etsu Chemical Co., Ltd.

In recent years, electronic components have become ever more sophisticated and smaller, leading to new amenities that enhance our daily lives across a wide range of domains. At the same time, this evolution of electronic component technology has led to a dramatic increase in the amount of heat generated by the components, requiring new thermal countermeasures to protect the electronic components from heat.

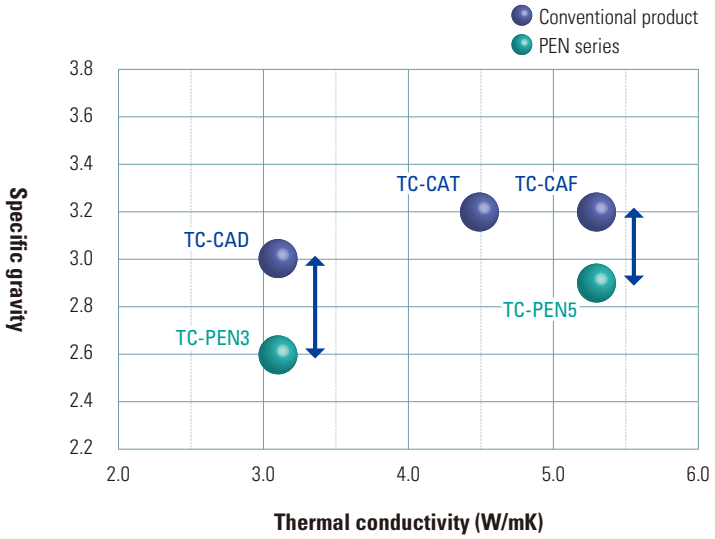
Thermal interface materials we are researching and developing conduct the heat generated by the components to a cooling structure, such as a heat sink, to quickly cool the components. Thermal interface materials have become an indispensable part of our smartphones, computers, cars, trains, LED lighting, and other devices that are essential to everyday life and therefore play a very important role in the development of science and technology.

Thermal interface materials require not only high thermal conductivity, but also long-term durability, strength, and sometimes electrical insulation and flame resistance. We also aim to develop materials that are more efficient and eco-friendlier. Our goal is to develop materials that make effective use of the world's resources and are carbon neutral. Satisfying these requirements and goals requires a thorough knowledge of the properties of materials and their optimal combination. The discovery and synthesis of new materials is very important too. We also need to focus on reducing energy consumption and waste in the production process.

R&D involves many difficulties, but Shin-Etsu Chemical is staffed with professionals from every field. Our day-to-day discussions bring new insights, and the manufacturing and sales departments provide strong support. It's no exaggeration to say that these cross-boundary cooperative relationships are what make Shin-Etsu Chemical a top manufacturer.

If we're able create new high-performance thermal interface materials, we can expect applications in a variety of fields. I hope our R&D will give new perspectives to those who are tackling heat issues and contribute to the development of society as a whole.

Low specific gravity of the TC-PEN series of thermal conductive pads



The TC-PEN series achieves low specific gravity with the same thermal conductivity as conventional products, contributing to weight reduction and fuel efficiency in automotive batteries and other applications that use thermal interface materials over a large area.

Social and Relationship Capital

Respecting human rights and emphasizing the building of healthy relationships with local communities

We are strongly committed to respecting human rights, not only within the Shin-Etsu Group, but across the entire supply chain, to guarantee the stable supply of high-quality products to our customers. We are also endeavoring to build healthy relationships with local communities to ensure smooth business operations in each region.

Respect for human rights

The Shin-Etsu Group respects basic human rights in accordance with the core labor standards established by the International Labour Organization (ILO). In May 2019 we formulated the Shin-Etsu Group Human Rights Policy. In order to confirm the status of compliance with our Human Rights Policy, we conduct an annual survey of our consolidated companies regarding items related to respecting human rights*, labor management, and whether employment is properly implemented in accordance with the laws and regulations of each country and region. Furthermore, we consider human rights impacts on local communities when building new plants.

*Items related to respecting human rights: the prohibition of forced labor and child labor; appropriate working hours and fair wages; fair employment contracts in written form; prohibition of inhumane treatment and discrimination; and freedom of association and the right to collective bargaining.

Strengthening efforts to respect human rights in the supply chain

In 2022 we started providing our major suppliers with a copy of the Shin-Etsu Group Human Rights Policy, our Basic Procurement Policy, and our CSR Procurement Guidelines in an effort to raise awareness about the Group's policies concerning sustainability activities, including respect for human rights. In addition, we asked for cooperation in responding to a questionnaire regarding sustainability initiatives, including human rights, and confirmed the status of sustainability initiatives at our suppliers.

Human rights awareness training

In FY2022 we organized 40 training sessions on the topic of respecting human rights, which were attended by 988 employees overall. In the training, basic knowledge and countermeasures regarding power harassment, sexual harassment, LGBTQ, etc. were explained, and efforts were made to raise employee awareness of human rights.

Training participants learning about harassment

Building healthy relationships with local communities

We are also making an effort to build healthy relationships with nearby local communities to ensure smooth business operations in each region worldwide. As part of this process, employees at each site actively participate in local events so as to interact with members of the local community. We also invite local residents to put forward their views and take part in our plant tours. Also, we provide information about our environmental conservation efforts, how we prioritize safety in our operations, and our contributions to employment and the local economy. And we hope to facilitate positive communication mainly by listening to the opinions and requests of our stakeholders.

Briefing visitors about our initiatives

Natural Capital

Having planned to achieving carbon neutrality by 2050, we will focus even more on efforts to reduce greenhouse gas emissions

The Shin-Etsu Group's efforts to contribute to the value of natural capital focus on addressing climate change, conserving water resources, and reducing waste. In the case of climate change in particular, the issue is increasingly serious and responding has becomes a global challenge. In this context, in May 2019, we announced our support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Furthermore, at the end of May 2023, we planned to becoming carbon neutral by 2050 and formulated a plan to reduce greenhouse gas emissions (Scope 1 and 2) to net zero. Meanwhile, we will continue to focus on developing and expanding sales of our own products that contribute to the reduction of greenhouse gas emissions.

Results that exceed the targets set by japan's energy conservation law

The Group established the medium-term goal in FY2010, which is to "reduce greenhouse gas emissions in terms of intensity to 50% of the FY1990 level by FY2015." Furthermore, the Group established the new medium-term goal in FY2016, which is to "reduce greenhouse gas emissions in terms of intensity to 45% (i.e., down 55%) of the FY1990 level by FY2025," and has strived to attain this objective through energy conservation and the introduction of a cogeneration system. Against this backdrop, the actual results for FY2022 are 54.2% (i.e., down 45.8%) from the FY1990 level for the Group, and 46.8% (i.e., down 53.2%) for Shin-Etsu Chemical from the same level.

Energy usage accounts for 94% of the Group's greenhouse gas emissions. Japan's Act on Rationalizing Energy Use (Energy Conservation Law) sets a target of attempting to reduce energy consumption by at least 1% per year in terms of intensity. If the annual reduction is 1% from FY1990, the "to-date" reduction rate in FY2022 would be approximately 28% compared to the FY1990 level. Our track record of reducing greenhouse gas emissions, however, significantly exceeds the target set by the Energy Conservation Law.

Measures to achieve carbon neutrality by 2050

To date, the Group has been working to reduce greenhouse gas emissions per unit of production volume (i.e., emission intensity). However, we have also developed a plan to achieve carbon neutrality by cutting greenhouse gas emissions in absolute terms.

As part of our commitment to reducing greenhouse gas emissions, we are undertaking the reduction measures shown in Table 1) on the right. Furthermore,

Plan for realizing carbon neutrality

Reduction measures	Details
1) Current reduction measures	
(1) Power-related	Reduce CO_2 emission factor Purchase of renewable energy Installation of solar power generation equipment
(2) Improvement and innovation of manufacturing technologies, etc.	Improvement of heat recovery capacity Introduction of energy-efficient equipment Switching from boilers to heat pumps Expansion in order to increase the production of charcoal reducing agents
(3) Utilization of carbon-neutral natural gas (natural gas with emission credits), hydrogen, etc.	Co-firing in cogeneration systems
(4) Promotion of recycling	Further promotion of recycling of PVC products and rare-earth contained in rare-earth magnets that has already been implemented
2) Anticipated reduction measures for carbon neutrality by 2050	
(1) Power-related	Carbon neutralization of electricity
(2) Utilization of green and blue hydrogen	Single fuel firing in cogeneration systems Use as boiler fuel
(3) Continued improvement of manufacturing technologies, etc.	Continuous thorough rationalization and efficiency improvement
(4) Separation, recovery, and utilization of CO_2	Full-scale introduction of separation and recovery equipment, and utilization of methanation technology
(5) Utilization of biomass fuel	Power and steam supply through introducing biomass cogeneration systems, etc.
(6) Promotion of recycling	Establishment of a recycling system for products other than PVC and rare-earth magnets that have already been implemented
(7) Carbon offset	Examination of a wide range of carbon offsets, including those from tree planting

since we are studying how to strengthen our efforts to achieve carbon neutrality by 2050, we also anticipate undertaking the reduction measures as shown in Table 2) on the previous page.

As our US subsidiary Shintech Inc. plans to increase its production capacity in the years ahead, the Group's greenhouse gas emissions are expected to increase around 2025, but then fall as these carbon neutrality measures take effect.

Other initiatives to help realize a carbon-neutral society

1) Initiatives for carrying out Life Cycle Assessment

By conducting life cycle assessment, the Group will contribute to the reduction of greenhouse gases throughout the supply chain.

2) Reduction of greenhouse gas emissions in logistics

We are working to reduce greenhouse gas emissions during product transportation. This will contribute to the reduction of scope 3 greenhouse gas emissions.

3) Expand manufacturing and sales of products that contribute to reducing greenhouse gas emissions

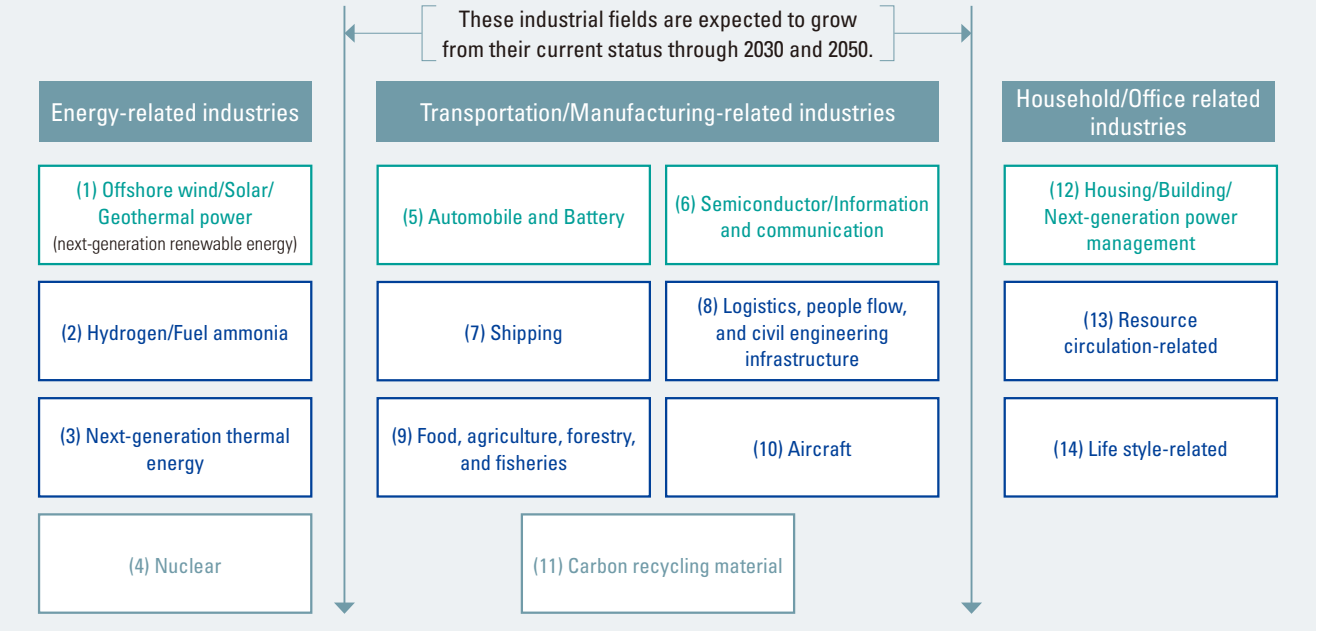
Our group's products are used in a wide range of fields, including housing, infrastructure, electric vehicles, digital transformation (DX), and green transformation (GX), and support the foundations of people's lives and industries. Many of these products also help reduce greenhouse gases. In June 2021, the Japanese government identified 14 essential areas to aim for carbon neutrality in 2050. The ratio of sales in these 14 areas to the Group's consolidated sales in FY2022 is approximately 70%. We will continue to contribute to the carbon neutrality of society as a whole by focusing on developing, manufacturing, and expanding sales of these products.

Reduction in logistics

Examples	Scope 3 emissions categories contributing to reductions
Modal shift* in methanol transport (switched from tank truck to railcar)	Category 4: "Emissions from product transport"
Modal shift in silicon wafer transport (switched from aircraft to ocean vessel)	
Modal shift in silicone products transport (switched from truck to railcar)	

*Modal shift: Shifting from trucks and other freight transports to railways or ships with less environmental impact.

14 growth sectors



Source: Green Growth Strategy Through Achieving Carbon Neutrality in 2050 (announced in June 2021 by the Japanese government)
https://www.meti.go.jp/english/policy/energy_environment/global_warming/ggs2050/pdf/ggs_full_en1013.pdf

Natural Capital

Disclosure under the TCFD

Based on the recommendations of the TCFD, we are working to enhance disclosure in four areas: Governance, Strategy, Risk Management, and Metrics and Targets.

Governance

The Sustainability Committee, which is one of the committees for each material management task in the Group's corporate governance system, is working with each of our business units to address climate change. The Committee is chaired by the President and consists of approximately 60 members, including our directors, corporate officers, department managers, and sustainability officers from Group companies, and promotes activities that integrate business activities and sustainability initiatives.

In FY2021, we established a Carbon Neutral Task Force within the Committee to examine each issue related to climate change. The Task Force holds a general meeting every three months and reports the latest information to the president, who receives this report and decides on policy. Based on this policy, the Task Force conducts investigations and deliberations, and reports on climate change-related initiatives at meetings of the Managing Directors' Meeting and the Board of Directors attended by all Directors, Audit & Supervisory Board Members, and Corporate Officers. After this process, in FY2022 we formulated a plan to achieve carbon neutrality in 2050 and announced it at the end of May 2023.

Strategy

The Group considers the promotion of plans to achieve carbon neutrality by 2050 as an important management issue, and is therefore promoting information disclosure based on the TCFD recommendations, including scenario analysis. At the same time, through this analysis, we identify important risks and opportunities that affect our business through these analyses, and reflect them in our management.

Scenario analysis of our business in 2050

Business Opportunities Stemming from Climate Change: A scenario for a 1.5°C rise

Application	Details	Revenue Impact
PVC-framed windows	Polyvinyl chloride resin is used for resin windows because of its excellent heat insulation properties. Demand for resin windows is expected to increase along with the spread of energy-saving homes.	Large
Electric, hybrid, and fuel-cell vehicles	Semiconductor silicon is used in power semiconductor devices such as inverters to control the number of rotations of motors, logic semiconductor devices for automatic driving system and AI. High-performance and compact rare-earth magnets can reduce the overall weight of a vehicle and improve its fuel efficiency, which will expand their use in the drive motors of electric, hybrid, and fuel cell vehicles, as well as in a variety of other motors in vehicles. Silicone heat-dissipating materials are used in lithium-ion batteries and various electronic control devices. Demand is expected to grow as it helps prevent malfunctions and failures caused by heat.	Large
Wind power generators	Demand for rare earth magnets is expected to grow as they contribute to higher efficiency in offshore wind turbines and lower maintenance costs for generators. Demand for vinyl chloride used for wire sheathing is also expected to increase due to the development and expansion of the power grid.	Large
Air conditioners	Demand for semiconductor silicon is expanding as it is used in inverter control devices for compressor motors and contributes to power saving by adjusting the rotation speed of the motor to an appropriate level. Demand for rare earth magnets is expected to grow as they improve the energy efficiency of air conditioner compressor motors and reduce energy consumption.	Medium
Aircraft	Rare earth magnets are indispensable for the electrification and hybridization of small aircraft and for the electrification of hydraulic drive units in large aircraft. Demand for rare earth magnets is expected to increase as their small size and high power will help reduce the weight of the aircraft and improve fuel efficiency.	Medium
Industrial motors	Demand for rare earth magnets is expected to grow as they increase the efficiency of industrial motors and reduce the amount of electricity consumed.	Medium
Service robots	Semiconductor silicon is increasingly being used in semiconductors for energy-saving robot control motors for manufacturing, logistics, agriculture, and other applications, as well as in medical and disaster response robots.	Medium
Binding agent for plant-based meat substitutes	A diet centered on plant-based foods may reduce CO_2 emissions by 1.6 gigatons per year*. Cellulose derivatives are used as a binding agent for plant-based meat substitutes. The global market for plant-based meat is expected to grow at a double-digit rate annually, and further market expansion is expected.	Medium

*Source: "DRAWDOWN–The Most Comprehensive Plan Ever Proposed to Reverse Global Warming," written and edited by Paul Hawken.

Business risks due to climate change and countermeasures: A scenario for a 1.5°C rise (transition risk)

Events	Risks to the Company	Revenue Impact	Countermeasures
Introduction of carbon taxes and establishment of carbon emission quotas around the world	• Payment of carbon tax • Incurring costs of purchasing emission credits to meet carbon emission quotas • Increase in cost of measures to reduce greenhouse gas emissions	Large	• Reduce scope 1 emissions (e.g., further promotion of more efficient production processes and introduction of highly efficient equipment; use of energy sources that do not emit CO_2, such as hydrogen and ammonia; use of CCUS) • Use of hydrogen-reduced iron materials as raw material • Achievement of reduction targets in the absolute amount of greenhouse gas emissions • Collection of information on environmental regulations such as carbon taxes in each country and implementation of countermeasures
Widespread use of electricity derived from renewable energy sources and rising electricity prices resulting from tightening regulations on greenhouse gas emissions	• Increase in electricity costs	Large	• Reduce Scope 2 emissions (further promotion of production processes that use less electricity, introduction of high-efficiency equipment, etc.)

Business risks due to climate change and countermeasures: A scenario for a 4°C rise (physical risk)

Events	Risks to the Company	Revenue Impact	Countermeasures
Increase in the frequency of extreme weather events Increased frequency of flooding caused by changes in precipitation patterns, etc.	• Flooding of production sites • Disruption of the supply chain	Large	• Raising the ground level of production sites, installation of watertight walls around critical facilities • Installation of instrument rooms in areas with low risk of flooding • Installation of seawalls at production sites close to ports • Multiple production sites • Diversification of raw material procurement sources • Securing product inventory • Enrollment in insurance
Introduction of carbon taxes and establishment of carbon emission quotas in some countries		Small	• Reduce scope 1 emissions (e.g., further promotion of more efficient production processes and introduction of highly efficient equipment; use of energy sources that do not emit CO_2, such as hydrogen and ammonia; use of CCUS) • Use of hydrogen-reduced iron materials as raw material • Achievement of reduction targets in the absolute amount of greenhouse gas emissions • Collection of information on environmental regulations such as carbon taxes in each country and implementation of countermeasures
Electricity prices	According to a scenario analysis by IEA* (a scenario with current measures), electricity prices will not rise. Therefore, there is no risk to us.	—	—

*International Energy Agency

Risk management

The Risk Management Committee works to prepare for and eliminate the various risks surrounding our business, including risks posed by climate change. The Committee is chaired by a managing corporate officer and consists of approximately 20 members, including our directors, corporate officers, and department managers.

Our Group has established Risk Management Regulations to identify potential risks associated with our business activities and address these risks appropriately. The Risk Management Regulations clearly state specific risks, risk management systems, and responses to risks that materialize. The Risk Management Committee reports to the Board of Directors, Managing Directors' Meeting, Audit & Supervisory Board, and relevant parties in a timely manner on important risk management issues, and works to address them appropriately. With regard to the risks related to climate change, which have become increasingly important in recent years, the Sustainability Committee works with the Risk Management Committee to ascertain risks through scenario analysis.

Climate-related physical risks include increased spending due to CO_2 emissions trading and carbon taxes, transition risks such as rising manufacturing costs due to rising energy prices, damage to equipment due to the wind disaster, and damage to electrical equipment due to flooding, or plant shutdown resulting from such cases. Among these risks, we defined serious risks such as accidents, explosions, fires, and other major disasters that cause operations to be stopped for one day or more, and environmental pollution incidents that exceed legal standards values or regulation values.

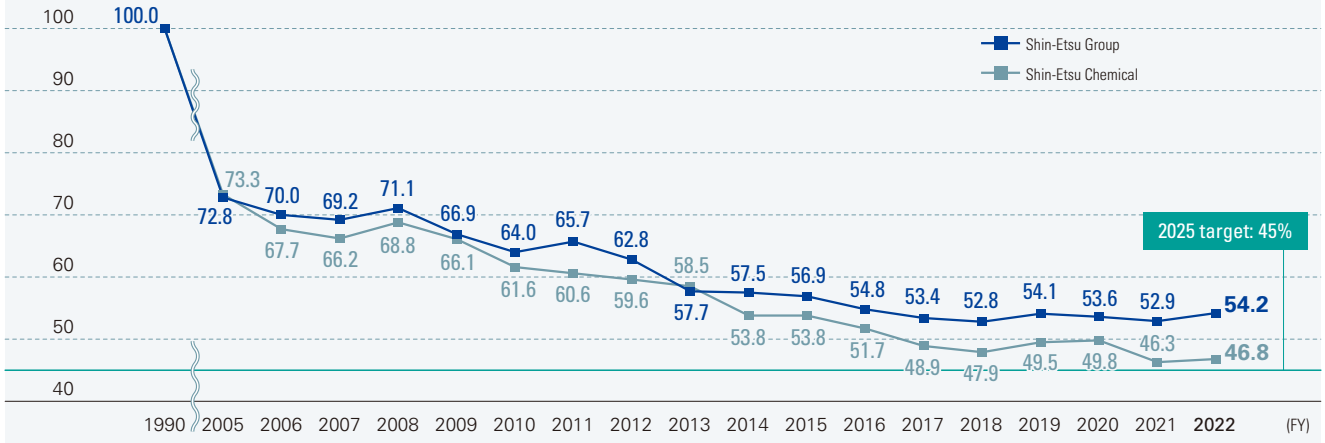
Metrics and targets

The Shin-Etsu Group aims to achieve net zero greenhouse gas emissions (Scope 1 and 2) by 2050. Furthermore, in order to achieve our medium-term target of "Reduce greenhouse gas emissions in terms of intensity to 45% of the FY1990 level by FY2025," we will continue to promote the reduction of greenhouse gas emissions in terms of intensity.

Natural Capital

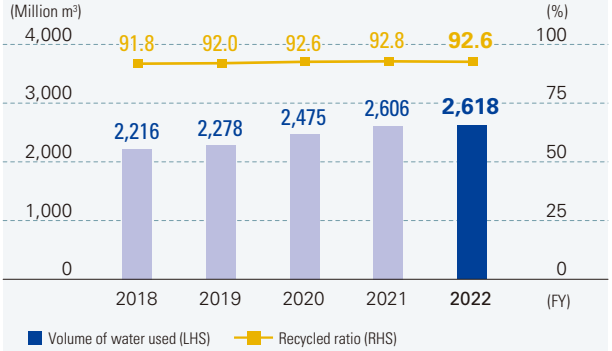
Indicators about energy-saving, resource-saving, and the reduction of the environmental impact

Changes in greenhouse gas emissions (emission intensity index of production volume relative to FY1990*)



*Greenhouse gas emission intensity index (FY1990 = 100)

Water usage*/Recycled ratio

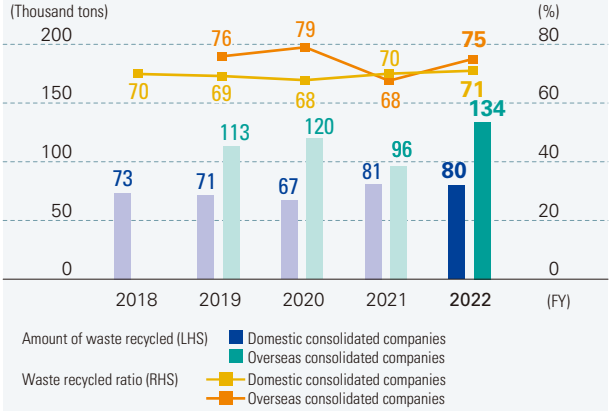


*Total quantity of water withdrawal and recycled water

Amount of waste generated

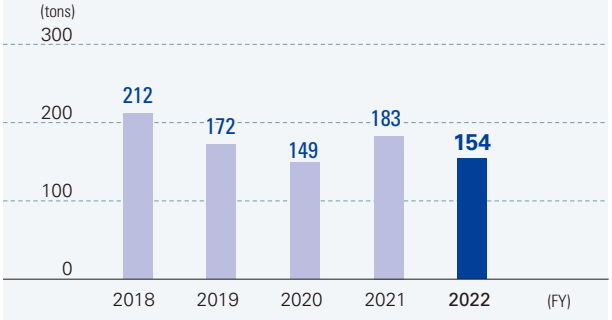
*FY2018 figures for overseas consolidated companies not shown as they have not yet been calculated.

Amount of waste recycled/Waste recycled ratio



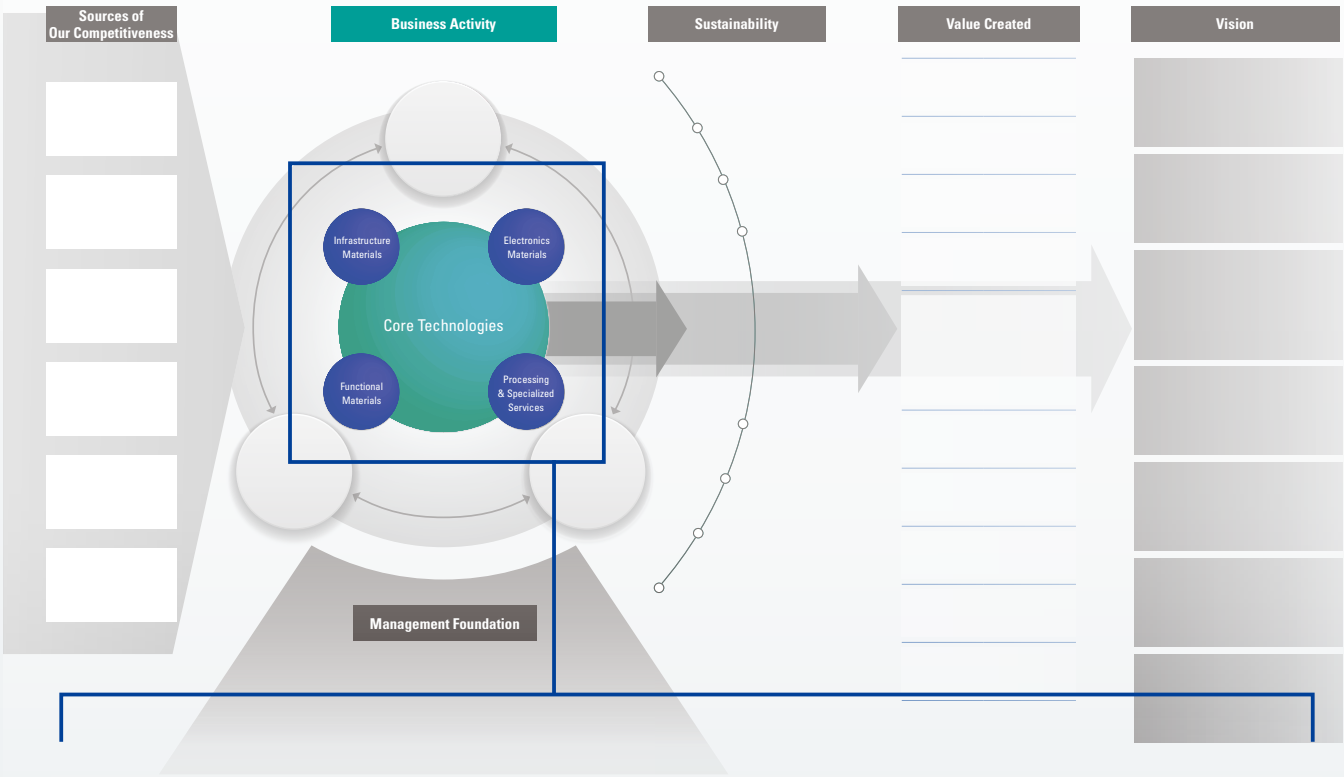
*FY2018 figures for overseas consolidated companies not shown as they have not yet been calculated.

Gross discharge of substances designated under the pollutant release and transfer register (PRTR) system



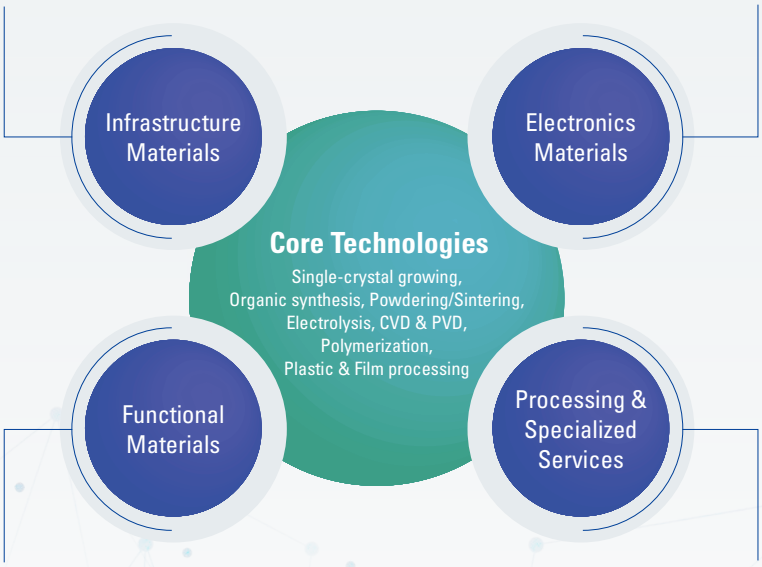
*Figures are totals for Shin-Etsu Chemical and domestic consolidated companies based on the PRTR system in the Law for Promotion of Chemical Management.

Leveraging our core technologies in four business fields to manufacture materials and products that underpin industries and livelihoods



PVC is indispensable to our lives mainly in the areas of infrastructure, housing, and agriculture. As the largest manufacturer of PVC, we provide a stable supply to customers around the world.

In addition to our world-leading share in silicon wafers, we provide various materials that are essential for semiconductor manufacturing. We contribute to the digital transformation and green transformation of industry.



Along with more than 5,000 different types of silicones that support people's lives and industries, we provide a stable supply of high value-added products. We also help alleviate environmental impacts and food shortages.

Meeting the diverse needs of customers by leveraging the advanced technological capabilities developed by the Shin-Etsu Group.

Technologies, Materials and Products of the Shin-Etsu Group

The Shin-Etsu Group makes a wide array of products for use in a broad range of industrial fields by drawing on the production technologies accumulated in the process of continuously diversifying and improving its product offerings. By reciprocally maintaining close relationships, our business mix extends across many different fields and we have built a robust business structure impervious to economic conditions.

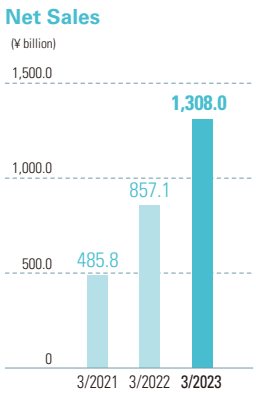
*1 Chemical vapor deposition (CVD)
A method for depositing thin film by chemical reaction on the substrate of precursors produced by applying energy such as heat, plasma, or light to raw material gases.

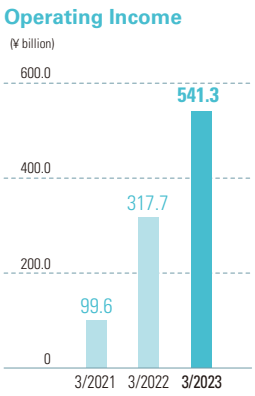
*2 Physical vapor deposition (PVD)
A method for adhering and depositing on the substrate surface by evaporating and scattering solid raw materials as atomic/molecular particles by heating, sputtering, ion beam irradiation, etc.

Business Overview

Infrastructure Materials

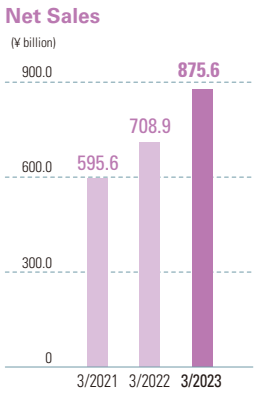
As for PVC, the signs of a global economic recession appeared in the market but bottomed out at the end of 2022. On the other hand, the caustic soda market remained firm but began to weaken after the turn of the year. Under these circumstances, we worked to achieve full production and full sales based on precise demand forecasts in the global market and to conduct detailed price negotiations reflecting market fluctuations.

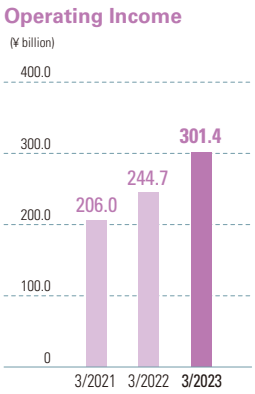




Electronics Materials

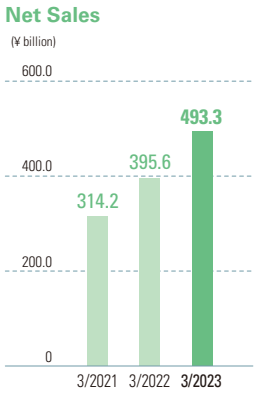
The semiconductor market had entered an adjustment phase since the autumn of last year, and a similar situation remained at the end of the year, but the semiconductor materials as a whole were supported by the performance in the first half of the year. Rare earth magnets were also affected by the semiconductor shortages in customer production and the adjustments in data center investment, but the shipments to other markets made up for it.

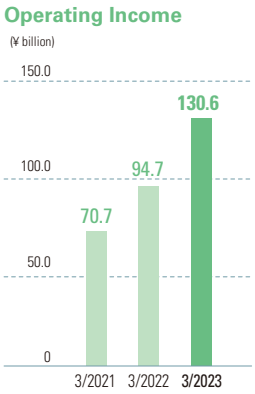




Functional Materials

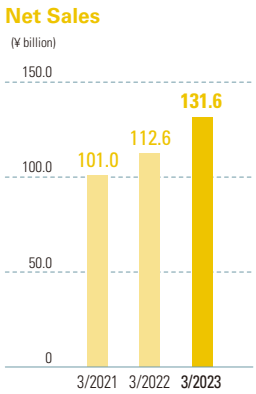
In silicone products, although some product lines were affected by inventory adjustments and declining market prices in the second half of the fiscal year, we worked to maintain profitability by increasing the proportion of high-performance products such as automotive, personal care etc., and by promoting the development and launch of products with reduced environmental impact. Shipments of cellulose products, particularly high-value-added pharmaceuticals, were firm.

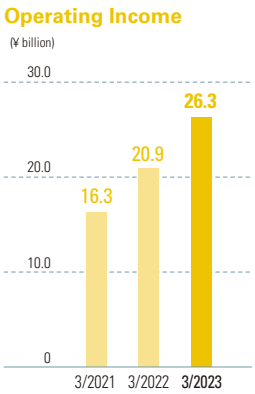




Processing & Specialized Services

The sales of semiconductor wafer-related containers were strong mainly for 300mm wafer use, and the sales of input devices for automobiles increased. The sales of PVC-related products such as PVC wrapping films for food packaging and construction materials increased due to the permeation of revised prices.





Infrastructure Materials

PVC is indispensable to our lives mainly in the areas of infrastructure, housing, and agriculture. As the largest manufacturer of PVC, we provide a stable supply to customers around the world.

Using Our Products to Solve Societal Issues (PVC)

Protecting the planet by reducing greenhouse gas emissions and expanding social infrastructure to cope with population growth

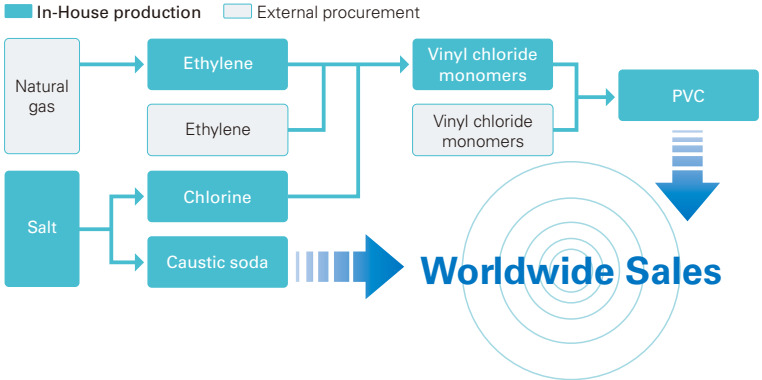
- Salt accounts for roughly 60% of the raw materials used to make PVC and is a commodity that still exists in abundance throughout the world. As the production of PVC does not rely heavily on petroleum resources, it makes effective use of the planet's limited resources. As such, CO_2 emissions during the PVC production process are lower than other plastics.
- The main applications of PVC are pipes and construction materials. Products made with PVC help conserve resources because they have a longer service life compared to other plastic products (PVC pipes last around 50 years*).
- PVC-framed windows boast superior thermal insulation and therefore help lower energy consumption and curb CO_2 emissions.
- PVC construction materials are much lighter than materials made from steel, for example, which leads to reductions in the amount of fuel required to transport them and move them into place during construction.
- In Japan, the material recycling rate for PVC is about 33%*, higher than that for other types of plastic.

*Source: Ministry of Land, Infrastructure, Transport and Tourism, Vinyl Environmental Council

Competitive Advantages (PVC)

- Efficient production with the world's largest production capacity
- Stable quality and stable supply to customers
- Favorable raw material situation and stable energy procurement in the U.S.
- Integrated production system starting from raw materials (ethylene)
- Three global bases, and production at multiple sites in three locations in the U.S.
- Global sales network

Integrated production system starting from raw materials (Shintech)



Major Products and Applications

PVC

PVC is extremely durable and easy to work with. It can also be easily recycled. For these reasons, it is used widely in items related to our daily existence. For example, PVC pipes in water supply and sewerage systems help extend the useful life of such infrastructure because they do not need to be replaced for at least 50 years.

PVC Pipes

PVC-Framed Windows

Plastic Greenhouses for Agriculture

Caustic Soda

Caustic soda is a base chemical produced from the electrolysis of salt and is indispensable to various industries for the purpose of alumina extraction, as a raw material in lithium-ion batteries and super-absorbent polymers, and for water treatment.

Alumina

Cathode Materials for Lithium-Ion Batteries

Polyvinyl Alcohol (POVAL)

Polyvinyl alcohol (POVAL) has many applications, including adhesives, various types of film, textile treating agents, interlayers of laminated glass, and pharmaceutical additives.

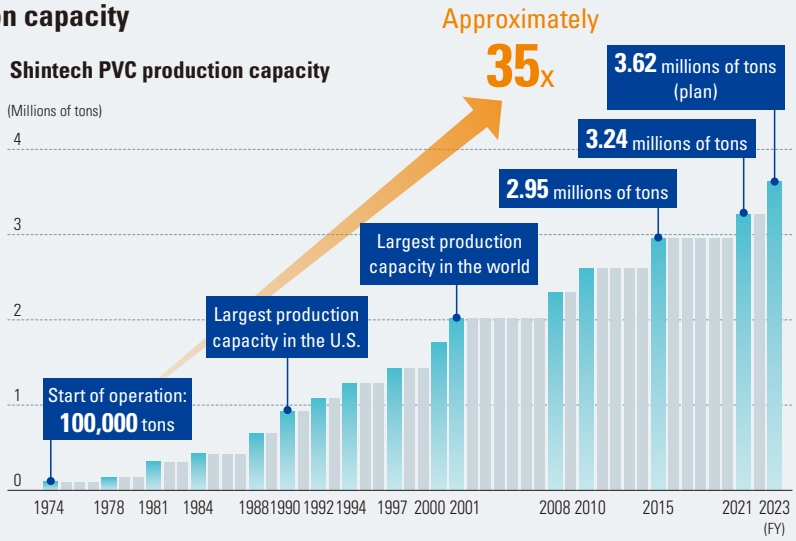
Car Windshields

Topic

Shintech: Augmenting PVC production capacity

Shintech, one of the Group's subsidiaries in the U.S. and the world's largest manufacturer of PVC, boosted its annual production capacity to 3.24 million tons by bringing online a new plant with an annual production capacity of 290,000 tons at the end of 2021 to meet brisk demand in mainly North America and emerging countries. Construction is underway on a PVC plant expansion that will have an annual production capacity of 380,000 tons after completion, thereby increasing Shintech's total production capacity to 3.62 million tons.
In order to stably supply PVC to customers worldwide, in 2020 the company established an integrated production system starting from raw materials, chiefly by producing in-house some of the ethylene required for PVC manufacturing.

Shintech PVC production capacity



Electronics Materials

In addition to our world-leading share in silicon wafers, we provide various materials that are essential for semiconductor manufacturing. We contribute to the digital transformation and green transformation of industry.

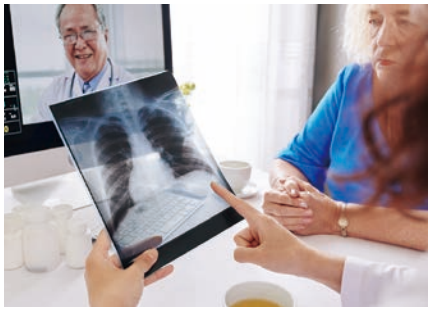
Using Our Products to Solve Societal Issues

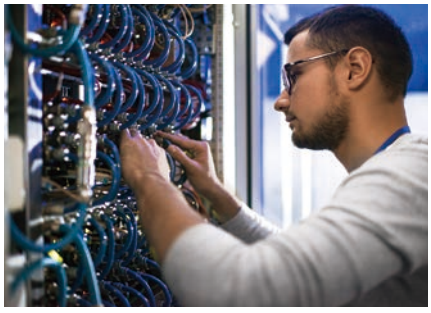
Development of AI, 5G, automated driving, IoT

To achieve fully automated driving and telemedicine, 5G-compatible communication devices and infrastructure are necessary, and many high-performance, energy-efficient semiconductors are used in these devices. Silicon wafers, the substrate material for semiconductors, and various other semiconductor materials provided by the Shin-Etsu Group not only help to enhance performance and reduce the size and weight of electronic devices, but also contribute to improving electric power conservation and efficiency, thereby supporting the expansion and continuous growth of semiconductors on multiple fronts.

Providing technologies and materials essential for carbon neutrality

Rare earth magnets, which have about 10 times more magnetic force than conventional ferrite magnets, help enhance motor efficiency and power consumption, contributing to improved energy efficiency and reduced greenhouse gas emissions.





Competitive Advantages

Overall business	• Stable quality and stable supply to customers • Responding to increasingly sophisticated technological requirements
Semiconductor-related products	• Synergies gained from an extensive lineup of semiconductor-related products (competitive edge in development and proposal capabilities)
Rare earth magnets	• Stable supply supported by operating multiple production bases and an established integrated production system starting from raw materials • Development of products that substantially reduce the use of heavy rare earth materials and promotion of recycling

Shin-Etsu Group Products Associated with the Overall Semiconductor Manufacturing Process

Semiconductor manufacturing process

Processes where our products are used

Raw materials

Polysilicon is produced from silicon metal (Si), made by removing the oxygen from quartzite (SiO_2), as the base material.

Single crystal silicon

Single crystal silicon is produced in a cylindrical format by melting polysilicon.

Cutting and polishing

Single crystal silicon is cut into thin slices and polished to a mirror finish.

Silicon wafers

The processes shown above are used to create silicon wafers.

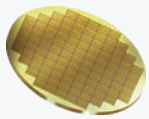
Wafers are shipped to device manufacturers

CVD, Oxidation

Wafers are put into a high-temperature furnace to produce a thin oxidation film on their surface.

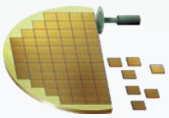
Pattern formation

Special photosensitive materials (photoresists) are applied, circuit patterns are baked in and developed, and the surface is processed. —> P38



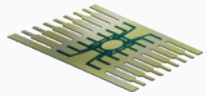
Dicing

Individual wafers are cut away and made into integrated circuit chips.



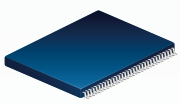
Assembly

Using wire, the chips are connected electrically to a circuit board.



Resin sealing

The chip is coated in resin to protect it from heat and shocks.



Semiconductor devices

The completed semiconductor device is now embedded in the final product.

Final product

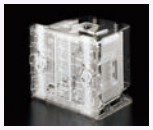
Products supplied by the Shin-Etsu Group

Silicon metal

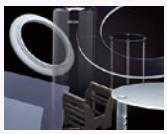
Quartz crucibles

Silicon carbide fine-ground powder

Silicon wafers



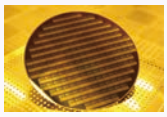
Wafer cases



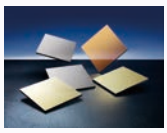
Quartz glass for use in the semiconductor manufacturing process

Rare earths (yttrium oxide)

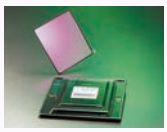
Synthetic quartz photomask substrates



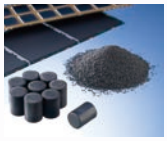
Photoresist



Photomask blanks



Pellicles (dust protection covers for photomask substrates)



Encapsulant materials

Liquid encapsulation materials

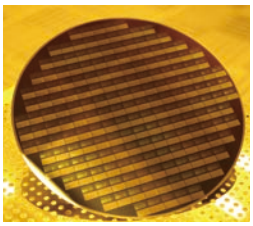
Thermal interface materials

Major Products and Applications

Silicon Wafers

Silicon wafers are the substrate material for semiconductors and are used in all kinds of devices, from smartphones, home appliances, automobiles and other devices that we see in our daily lives, to cutting-edge fields such as AI and IoT. Shin-Etsu Group's silicon wafers, including our quality control and evaluation analysis, have earned high praise from customers around the world, along with our high-precision single crystal technologies, high-end processing technologies, and high-quality epitaxial growth technologies for advanced logic and imaging devices.

Photoresists

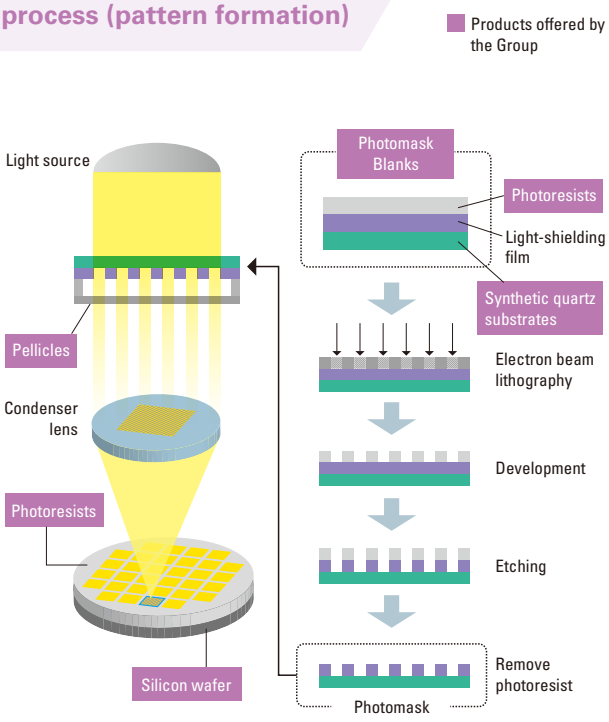


A circuit pattern is formed by applying photoresists to the surface of a silicon wafer and then passing light through a photomask to expose the surface in that pattern. In addition to photoresists for excimer lasers (KrF, ArF) and EUV, we also supply spin-on middle/under-layer hardmasks used in the nanofabrication process.

Photomask Blanks

Photomask blanks are the material that forms a thin metallic film on the surface of a synthetic quartz substrate and serve as patterning templates when drawing circuits on silicon wafers. In addition to providing photomask blanks for use with krypton fluoride (KrF) and argon fluoride (ArF) lasers, we have established state-of-the-art photomask blank mass production technologies, including multilayer film structures and permeable membrane structures with excellent light resistance properties.

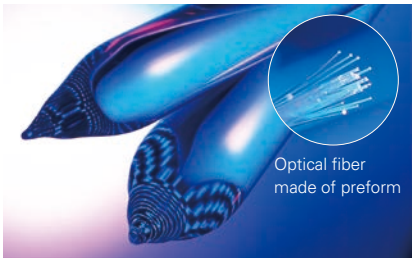
Semiconductor lithography process (pattern formation)



Synthetic Quartz

Synthetic quartz, the key material of optical fiber, provides superior light transmission. In an ordinary glass plate, light attenuates in about two meters. However, synthetic quartz allows light to reach a distance of about 100 km. The Group was the first in the world to mass produce synthetic quartz, which is higher in purity than natural quartz. Due to these attributes, it is used as an optical fiber, a photomask substrate for semiconductor lithography and a stepper lens for semiconductor lithography. In addition, it is used as a large-scale photomask substrate for flat panel display (FPD) lithography, including liquid crystal and OLED displays.

Large-size photomask substrate for FPD



Preform for optical fiber

Rare Earth Magnets

Rare earth magnets are used in products such as automobile motors, power generators, industrial robots, compressor motors for air conditioners, motors for hard disk drives utilized in data centers and other facilities and wind power generator motors. We are engaged in the manufacture of these magnets from the separation and refinement of rare earths as raw materials to the magnet product. Furthermore, it is reliably supplying high-quality rare earth magnets with advanced features by means of the development of its own grain boundary diffusion method, which reduces the amount of heavy rare earth used, while maintaining high performance.

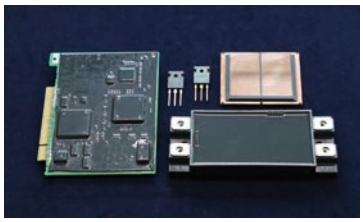
Electric vehicle


Data center

Rare Earths

Known as the "vitamins of the high-tech industry," rare earth elements are used in a variety of applications depending on their individual characteristics. They are used in the light-emitting devices installed in diagnostic imaging systems such as CT scanners and contribute to improved testing safety at medical sites.

Encapsulant Materials for Semiconductor Devices



These materials are notable for their superior heat and crack resistance and are used in general semiconductors, automotive power modules and devices for home appliances. Furthermore, the encapsulant materials we have developed for large-scale packaging improve the rate at which materials are effectively utilized, contributing to the reduction of device manufacturing costs.

LED Packaging Materials

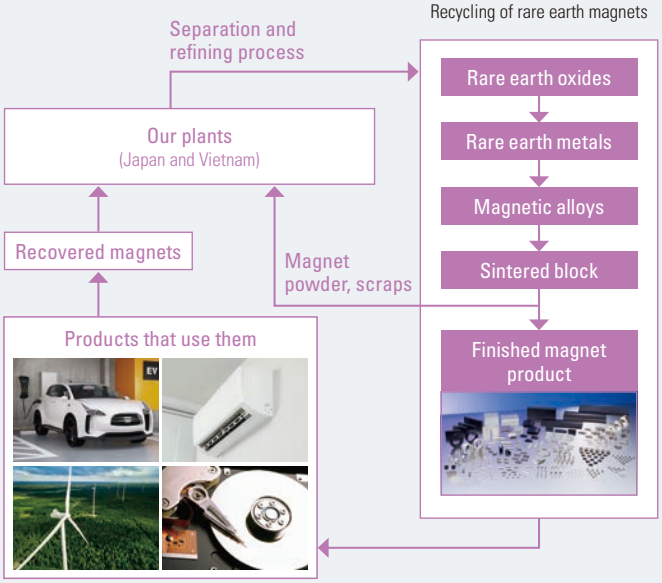
These materials offer high transparency, heat resistance, and other excellent properties, and help prevent the degradation of LED brightness over a long period of time.

Topic

Strengthening the supply chain for rare earth magnets in anticipation of further increase in demand

The goal of a carbon-neutral society has created strong demand for rare earth magnets, and further growth in the global market for rare earth magnets is expected due to the spread of electric vehicles, the increase in renewable energy such as wind power generation, and the growing demand for energy-saving home appliances and industrial equipment associated with factory automation. We are strengthening our supply chain to meet this demand.

In recent years, it has also become increasingly important from the perspective of economic security to secure a stable supply of rare earths as raw materials. The Shin-Etsu Group has technologies for separating and refining rare earths, and in addition to recycling magnet powder from the processing of rare earth magnets, we are also working to utilize rare earth magnets recovered from end-of-life products, also known as "urban mining."



Functional Materials

Along with more than 5,000 different types of silicones that support people's lives and industries, we provide a stable supply of high value-added products. We also help alleviate environmental impacts and food shortages.

Using Our Products to Solve Societal Issues

Low environmental impact of silicone

Silicone primarily consists of silicon (Si), which is the second-most abundant element found in the outer layer of the earth's crust, behind oxygen. As a raw material, it is associated with a low dependence on petroleum resources and a low environmental footprint. Silicones' outstanding properties are used in environmentally friendly products such as electric vehicles, fuel-efficient tires, solar power generation, and LED lighting.

Addressing food shortages and environmental issues (cellulose derivatives)

Cellulose derivatives are an environmentally friendly material made from natural polymer cellulose. They help address the food shortage and environmental problems caused by population growth, with one of their uses being a binding agent for plant-based meat substitutes.

Improving food safety (synthetic pheromones)

Synthetic pheromones are an environmentally friendly agricultural pest control agent that has no impact on beneficial insects or other organisms, and helps improve food safety by reducing the amount of insecticides and pesticides sprayed on fields.

Competitive Advantages

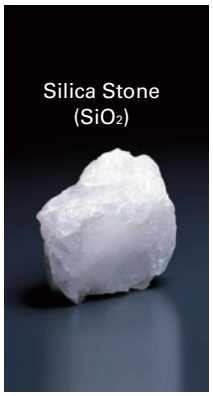
Overall business	• Ability to develop a variety of high value-added products by leveraging our technological capabilities • High quality products and stable supply system
Silicones	• Thorough response to customer needs through the triangular link of sales, research, and production divisions • Use of advanced technological capabilities and know-how cultivated over 70 years • Global production bases and a sales network in 13 countries • Continuous expansion of production capacity
Cellulose derivatives	• Stable supply system supported by three global bases

Major Products and Applications

Silicones

Silicone is a man-made compound created from silica stone, which is abundantly available on our planet. It is a highly functional material with unlimited possibilities, as it features both inorganic and organic properties and has numerous excellent characteristics, as well as a high degree of freedom in product design. Silicone is used in a wide range of fields, including electricals and electronics, automobiles, construction, cosmetics, healthcare, and foods.

Core raw material used in silicone



Silicone representative configurations

Major characteristics of silicone

- Heat resistance
- Cold resistance
- Adhesion properties
- Defoaming properties
- Electrical insulation properties
- Water repellency
- Release properties
- Weather resistance

Cosmetics

Electric Vehicles

Contact Lenses

Buildings

Plastic Products

Textile Treatments

Cellulose Derivatives

This is made from pulp, a natural material derived from wood and cotton linter. In the pharmaceutical field, it is used, for example, as a coating agent for pills to control where drugs dissolve in the body and to make them dissolve gradually. In industrial applications, cellulose derivatives are used as a molding aid for automotive exhaust gas filters, contributing to the prevention of air pollution, and in the food industry, it is used as an additive to thicken, gelatinize, stabilize foam, and prevent deformation during cooking.

Pharmaceutical

Industrial

Food

Silicon Metal

Silicon metal is the main raw material for silicone, semiconductor silicon, and synthetic quartz, and is produced by SIMCOA Operations Pty Ltd in Australia.

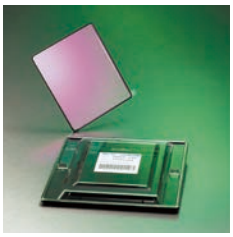
Synthetic Pheromones

Synthetic pheromones are artificially synthesized from pheromones emitted by insects, and are used as environmentally friendly pest control agents as they obstruct the mating process between male and female pests, thereby suppressing reproduction.

Liquid Fluoroelastomers SHIN-ETSU SIFEL®

We were the first company in the world to succeed in developing the SHIN-ETSU SIFEL® liquid fluoroelastomers, which by using silicone addition-reaction technology can be made into a form that hardens into a flexible, solid synthetic rubber upon heating. It possesses excellent process ability and such superior properties as resistance to oils, solvents and chemicals together with good durability against heat and stability at cold temperatures, and is used in a wide range of fields, including automotive, aircraft, electronics and optical applications.

Pellicles



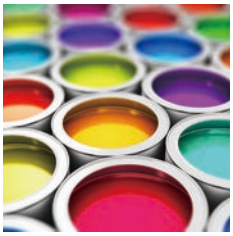
We provide high quality pellicles for use as dust protection covers for photomasks used in both ArF and KrF excimer lasers. In addition to having excellent light resistance properties and uniform rates of light transmittance, our pellicles have been thoroughly treated to ensure low outgassing. With these attributes, our pellicles support the increasingly intricate production of semiconductor devices. Furthermore, we also mass produce ultra-large pellicles used in flat panel display (FPD) manufacturing.

Anode Material of Lithium Ion Batteries

SiO is a greatly promising material as an anode material of next-generation lithium-ion batteries that have high capacity and excellent power properties. We have successfully improved battery characteristics by controlling the structure and surface of SiO particles and by developing our own lithium pre-doping technology.

SOLBIN®

SOLBIN is a copolymer resin from Nissin Chemical Industry Co., Ltd. that is prepared primarily from vinyl chloride and vinyl acetate, which are notable for their superior adhesiveness and solubility. It is mainly utilized in coatings, paints, inks and adhesives.



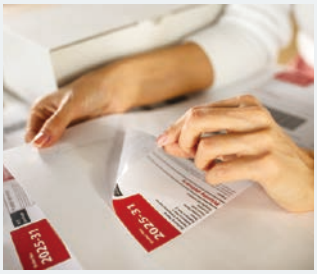
Topic

Strengthening the development of silicone products that contribute to SDGs and carbon neutrality

We are actively working to reduce greenhouse gases during silicone production and are strengthening our development of silicone products that contribute to SDGs and carbon neutrality.

For example, our reduced platinum reactive-type silicone release coatings used in seals, labels, and other types of release paper enable curing with half of the conventionally required amount of platinum, thereby contributing to resource conservation. In addition, our silicone rubber for molding that does not require post cure (heating treatment) contributes to energy conservation and reduction of greenhouse gas emissions while improving the quality and productivity of molded products.

Due to its molecular structure, silicone not only has a wide variety of features, but also offers a high degree of freedom in product design, which has led to active development of new products and new technologies. At present, the Group produces over 5,000 silicone products.



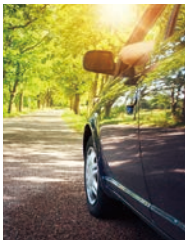
Silicone release paper used as backing for labels

Processing & Specialized Services

Meeting the diverse needs of customers by leveraging the advanced technological capabilities developed by the Shin-Etsu Group.

Using Our Products to Solve Societal Issues

- Creating a next generation mobile society by facilitating technological innovations in automobiles, such as the spread of automated driving and environmentally friendly vehicles
- Advancing IoT in society by developing communications infrastructure and improving the performance of facilities and equipment



Competitive Advantages

Shin-Etsu Polymer Co., Ltd.

- Comprehensive capabilities to handle everything from material development to processing as a member of the Shin-Etsu Group
- Technological capabilities to create high-valued-added products with core technologies in processing various resins

Shin-Etsu Engineering Co., Ltd.

- Technological capabilities to handle design, construction, and maintenance of domestic and overseas plants in-house

Mainstay Products and Applications

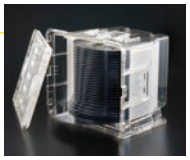
Shin-Etsu Polymer Co., Ltd.

Input Devices

Providing input devices for automobile steering, power windows, etc.

Wafer Cases

Providing cases for shipping silicon wafers and for inprocess wafer conveyance at device manufacturers.



Wrapping Films

Providing PVC wrapping films with superior stretchiness and excellent adhesive properties.

Topic

Increased production capacity of containers for 300 mm wafers

In anticipation of the expansion of semiconductor-related markets, we are expanding the production building at the Itoigawa Plant (Itoigawa City, Niigata Prefecture), which is our main plant of this product. Phase 1 of the area expansion kicked off in January 2023, with Phase 2 to be completed in 2024. As a result, we plan to increase production capacity by 20% compared to FY2022, rising to 40% in FY2024. In addition to establishing a more stable supply system, we are also working to strengthen the BCP system.

Shin-Etsu Engineering Co., Ltd.

Engineering

Shin-Etsu Engineering conducts plant design and construction and equipment maintenance for the Shin-Etsu Group.

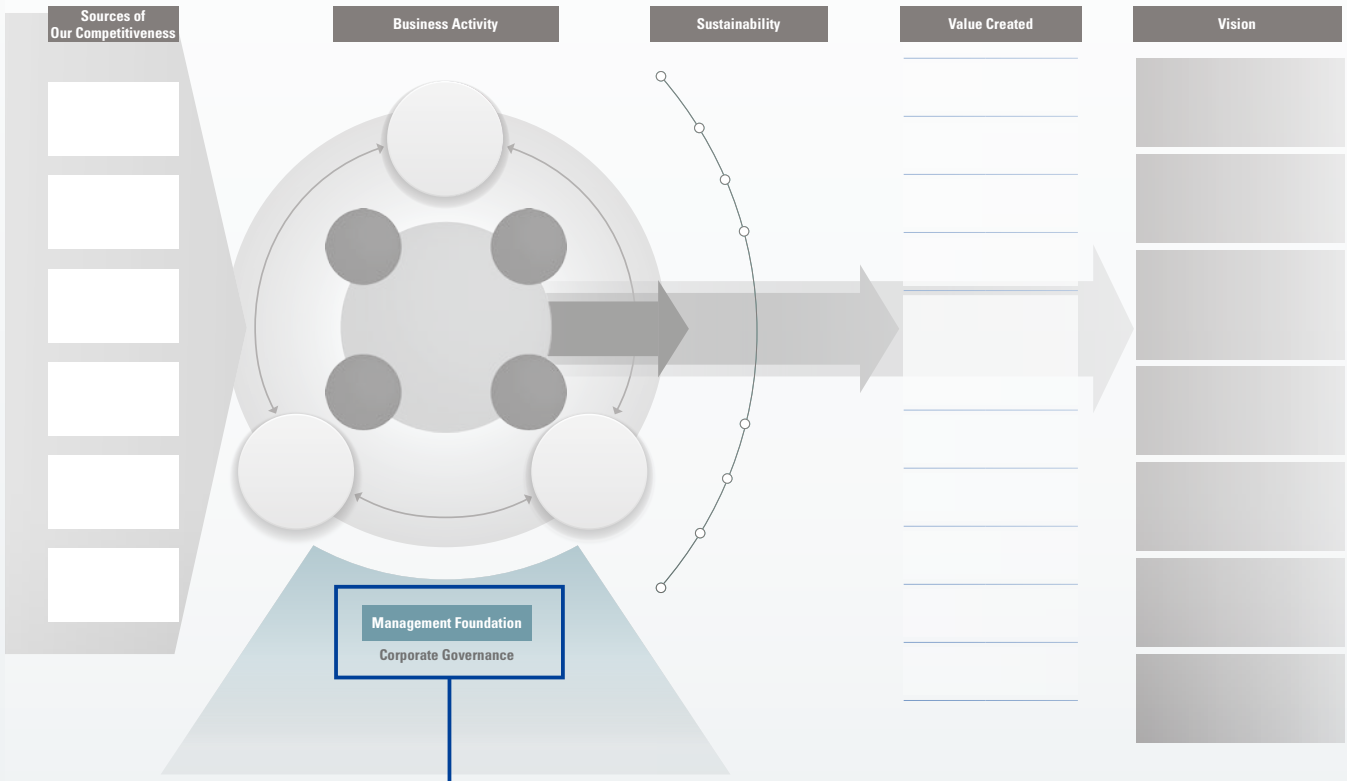
Vacuum Assembling Equipment

Shin-Etsu Engineering also designs and manufacturers vacuum assembling equipment for LCD panels, enabling large-scale liquid crystal panel production.

Micro LED Chip Transfer Equipment

This equipment transfers micro-LED chips quickly and accurately, thereby promoting the widespread use of micro-LED displays.

Build a robust corporate governance structure to sustainably increase corporate value



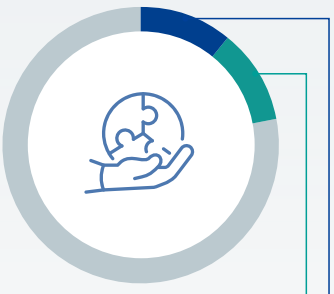
Three Features of Corporate Governance

Ratio of Outside Directors on the Board of Directors:

56% (5 persons)

Up 11 percentage points from the previous fiscal year

Diversity of Directors:



Female
11% (1 person)

Foreign national
11% (1 person)

Female Director appointed

Attendance ratio of Outside Directors at the Board of Directors Meetings:

100%
(fiscal year ended March 31, 2023*)

*After 2022 General Meeting of Shareholders

Active participation of Outside Directors

Corporate Governance Approach and Initiatives

Basic Approach

Our basic management policy is to continuously enhance our corporate value and meet shareholder expectations. To carry out this policy, we have established an efficient organizational structure and various systems designed to respond to changes in the business environment. In addition, to improve transparency in management and strengthen oversight functions, our basic approach to corporate governance is to accurately disclose information to shareholders and investors, and we consider this to be one of our highest management priorities.

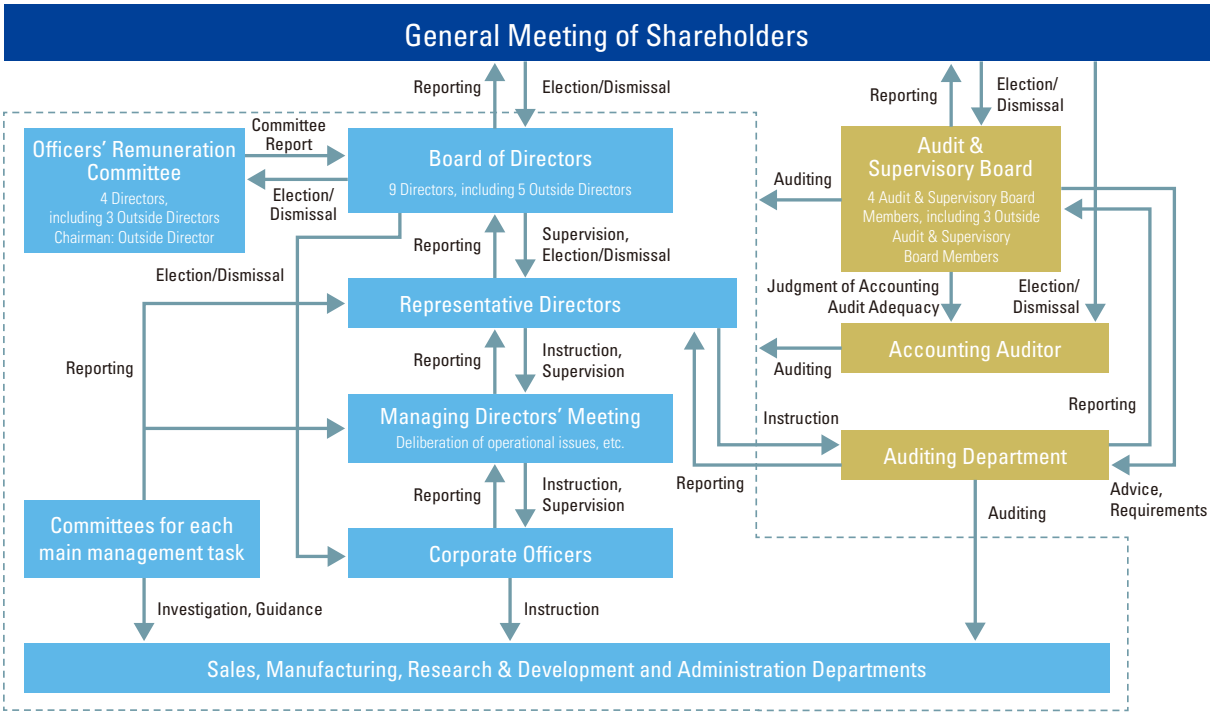
For more detailed information, please see the Governance section on the Group's website.
https://www.shinetsu.co.jp/en/sustainability/esg_governance/

Corporate Governance Structure

The Board of Directors consists of nine directors, five of whom are Outside Directors with extensive corporate and organizational management experience and outstanding insight.

In addition to the Board of Directors, we have established the Managing Directors' Meeting to function as another deliberation and decision-making body for business execution. In principle, both organizations meet once per month. The Board of Directors deliberates and makes decisions on important matters related to management, including the Company's basic policies and matters required to be resolved by laws, regulations, and the Articles of Incorporation of the Company. The Managing Directors' Meeting deliberates and makes decisions on all aspects of the Company's operations (excluding matters submitted to the Board of Directors) in order to ensure the speedy and efficient execution of the Company's business operations. Furthermore, the Company has formed the Officers' Remuneration Committee, which is chaired by an Outside Director and serves as an advisory body to the Board of Directors. In these ways, we strive to ensure transparency and appropriateness in the remuneration of officers and the nomination of candidates for Directors and Audit & Supervisory Board Members.

Shin-Etsu Chemical has adopted the Company with Audit & Supervisory Board Members system as its organizational structure. The Audit & Supervisory Board consists of four Audit & Supervisory Board Members, including three Outside Audit & Supervisory Board Members. In addition to attending important internal meetings such as meetings of the Board of Directors and the Managing Directors' Meeting, Audit & Supervisory Board Members receive reports from Directors, Corporate Officers, employees, and others on the status of execution of their duties and audit the execution of duties by Directors through on-site inspections of business sites and subsidiaries and other investigations. Audit & Supervisory Board Members also receive quarterly reports and explanations regarding accounting audits from an accounting auditor, and ensure proper collaboration by exchanging information and opinions as necessary. They also regularly receive reports and explanations regarding the status of internal auditing from the Internal Auditing Department and work cooperatively with it, exchanging views and ideas.



Officers' Remuneration

Shin-Etsu Chemical established the Officers' Remuneration Committee as an advisory body to the Board of Directors. With Outside Director Toshihiko Fukui serving as chairman, the Committee consists of four directors, including three Independent Outside Directors and comprehensively examines and evaluates every director's contributions to performance and general management each fiscal year and reports results to the Board of Directors.

Basic Fundamental Policy Regarding Remuneration and Its Calculation Method

The remuneration system of Directors shall be designed to contribute to the mid- to long-term enhancement of the corporate value of the Company, and the remuneration of Directors shall be determined by the Board of Directors based on the results of the review and evaluation by the Officers' Remuneration Committee as well as its opinion thereon. The remuneration shall consist of "fixed remuneration" determined as appropriate for each individual's position, job responsibilities, etc., and "performance-based remuneration" that takes into consideration the annual financial performance of the Company as an incentive for the enhancement of corporate value, as well as "stock options" as an incentive for higher motivation and morale to execute one's duties and to improve performance, and ultimately for the enhancement of shareholder value (stock price-linked remuneration).

On the other hand, the remuneration of Audit & Supervisory Board Members shall be determined through their mutual consultation. The remuneration shall consist of "fixed remuneration" determined as appropriate for each individual's job responsibilities as an Audit & Supervisory Board Member. Outside Directors and Audit & Supervisory Board Members are not entitled to any "performance-based remuneration" or "stock options" as they are expected to perform supervisory and checking functions over management.

Remuneration amount by Director type and its detail, number of applicable Directors (for the year ended March 31, 2023)

Designation	Amount of remuneration, etc. by type (¥ million)			Number of recipients (People)	Amount of remuneration, etc. by type (¥ million)	Number of recipients (People)
	Fixed	Performance-based	Total		Non-monetary remuneration, etc.	
Directors (excluding Outside Directors)	755	328	1,084	6	184	5
Audit & Supervisory Board Members (excluding Outside Audit & Supervisory Board Members)	38	—	38	2	—	—
Outside Directors and Outside Audit & Supervisory Board Members	185	—	185	9	—	—

Notes: 1. The above includes one director who retired at the conclusion of the 145th Ordinary General Meeting of Shareholders held on June 29, 2022 and one director who left office due to death on January 1, 2023.
2. The Officers' Retirement Benefits Program was repealed at the conclusion of the 131st General Shareholders' Meeting held on June 27, 2008.
3. The amount of non-monetary remuneration, which consists of stock options, is an expensed amount calculated for the current fiscal year based on the accounting standards. Therefore, it does not represent the amount paid in cash or the amount the Company guarantees to pay in cash, either.
4. The total amount of remuneration issued to Directors (excluding Outside Directors), which consists of fixed, performance-based and non-monetary remuneration, etc., was ¥1,269 million.

Assessment of Board of Directors Effectiveness

At every meeting of our Board of Directors, Outside Directors ask questions and make suggestions regarding agenda items, and there is a lively exchange of opinions and discussion. A total of 13 Board of Directors meetings were held in FY2022, at which matters stipulated by law, the Articles of Incorporation, and the Company's Board of Directors Regulations were discussed, deliberated, and resolved without omission. In addition, the Board of Directors receives individual opinions each year from Outside Directors regarding the effectiveness of the Board of Directors as a whole. As a result, the Board of Directors of the Company was evaluated as being effective and received valuable feedback on "Further Enhancement of Agenda Items and Discussions at Board of Directors Meetings" and "Responsibilities and Roles of Outside Officers."

Management (As of June 29, 2023)

Board of Directors

Representative Director-Chairman of the Board Meeting
Fumio Akiya
In charge of Semiconductor Materials and Technologies
Representative Director & President of Shin-Etsu Handotai Co., Ltd.

Representative Director-President
Yasuhiko Saitoh
Director & President of Shintech Inc.
Director & President of Shin-Etsu Handotai America, Inc.

Director, Senior Managing Corporate Officer
Susumu Ueno
General Manager, Silicone Div.

Director, Senior Managing Corporate Officer
Masahiko Todoroki
In charge of Semiconductor Materials Dept.,
Senior Managing Director of Shin-Etsu Handotai Co., Ltd.

Director
Toshihiko Fukui*1
President, The Canon Institute for Global Studies;
Outside Director, Kikkoman Corporation

Director
Hiroshi Komiyama*1
Chairman, Mitsubishi Research Institute, Inc.

Director
Kuniharu Nakamura*1
Director & Chairman,
SUMITOMO CORPORATION;
Outside Director, NEC Corporation

Director
Michael H. McGarry*1
Executive Chairman & Director of PPG Industries, Inc.;
Director, United States Steel Corporation

Director
Mariko Hasegawa*1
President of Independent Administrative Agency, the Japan Arts Council

*1. Indicates an Outside Director as defined in Item 15, Article 2, of the Corporations Law.

Audit & Supervisory Board Members

Full-time Audit & Supervisory Board Member
Hidenori Onezawa

Audit & Supervisory Board Member
Yoshihito Kosaka*2
C.P.A., Certified Public Tax Accountant;
Representative Partner, HIYU Certified Tax Accountants' Corporation

Audit & Supervisory Board Member
Mitsuko Kagami*2
Lawyer; Partner Lawyer, KAGAMI Law Office;
Outside Director, MEDIPAL HOLDINGS CORPORATION; Outside Director, Sotetsu Holdings, Inc

Audit & Supervisory Board Member
Hiroko Kaneko*2
C.P.A.; Member of the Business Accounting Council, Financial Services Agency; Outside Director, Audit & Supervisory Committee Member, Mitsubishi HC Capital Inc.; Outside Director, The Yokohama Rubber Co., Ltd.; Outside Director, Audit & Supervisory Committee Member, Kanagawa Chuo Kotsu Co., Ltd.; Outside Audit & Supervisory Board Member, Development Bank of Japan Inc.

*2. Indicates an Outside Audit & Supervisory Board Member as defined in Item 16, Article 2, of the Corporations Law.

Areas of expertise and involvement of directors

Name	Attributes	Growth strategy	Production technology and productivity	Product development	Risk management	Capital policy	Human capital	ESG
Fumio Akiya		●	●	●	●		●	
Yasuhiko Saitoh	ORC	●		●	●	●	●	●
Susumu Ueno		●	●	●	●			●
Masahiko Todoroki		●		●	●			●
Toshihiko Fukui	Outside ORC (Note)				●	●	●	●
Hiroshi Komiyama	Outside ORC				●	●	●	●
Kuniharu Nakamura	Outside				●	●	●	●
Michael H. McGarry	Outside ORC				●	●	●	●
Mariko Hasegawa	Outside				●	●	●	●

Outside Independent Outside Director ORC Member of the Officers' Remuneration Committee

(Note) Director, Mr. Toshihiko Fukui is the chaireman of the Officers' Remuneration Committee

Messages from Outside Directors

Providing advice to sustain strong earnings through innovation and pricing policies

Outside Director
Toshihiko Fukui

Follower of Shin-Etsu Chemical for more than 60 years

My connection with the Company goes all the way back to 1959, one year after I joined the Bank of Japan. I was then posted to the Niigata Branch, and as part of my work, I was required to gain an understanding of the economic situation in Niigata Prefecture by visiting some of the different companies there. It was then that I visited the Company's Naoetsu Plant. At the time, the Company was mainly manufacturing nitrogen fertilizer, but I was fortunate enough to be given a detailed explanation of its operations, which frankly led me to take an interest in the Company and keep abreast of its developments ever since. I later learned about its successful foray into the US market before any other chemical company and had the opportunity to talk with then-President Kanagawa who spearheaded the Company's expansion overseas.

A company with a firm grip on the abacus

Long before I assumed my position as an Outside Director of the Company, I became aware of one of its strong points—namely, that its management foundation is broad-ranging and daring in terms of scope, even though it is a professional and meticulous company when it comes to manufacturing. Its sights are always set on the global market and the most admirable thing is that it leverages innovation to develop high added-value products. In addition, it adheres to a profitable pricing policy of appropriately reflecting this added value in product prices. Metaphorically speaking, Shin-Etsu Chemical is a company that has a firm grip on the abacus. And when the cash generated is allocated to the next investment, it creates a dynamic, virtuous cycle, driven by innovation and pricing policies. You could probably say that this is the biggest factor underpinning the strong earnings at present. I believe my role, as an Outside Director, is to closely monitor corporate governance and make sure that managerial vigilance is maintained with a firm grip on the abacus and to do everything I can to sustain the positive cycle of the Company's business model.

Keeping up to date to deliver even better advice

I also recognize that I am expected to provide advice to management based on my experience and knowledge from my time at the Bank of Japan. The insight I have gained as president of the Canon Institute for Global Studies, a position I currently hold, is also quite useful. This think tank employs up-and-coming researchers who undertake independent research in a wide variety of specialized fields. I engage in discussions with the researchers on a daily basis and comment on their papers before they are published. This process keeps updating my thinking and views in a variety of fields.

Anticipating changes and taking action is key

The Company has another commendable strength that I would like to mention: its belief that whoever strikes first wins. Amid the increasingly intense changes in the world economy and other situations, merely reacting to changes after they have occurred will not suffice for the Company to become a frontrunner and keep that position. This is why I always emphasize the importance of forecasting changes to stay ahead of the curve, even though it might mean some adjustments will be needed later if the predictions turn out to be somewhat wrong. It is the hallmark of a sustainable company to have a steadfast approach to anticipate changes in the world, take on associated risks, and work out how to act accordingly. I hope the Company will persevere with this basic policy without being swayed by changes immediately in front of it and continue to grow as a corporation that contributes to the advancement of global industries with its materials by upholding the dynamic, virtuous cycle model driven by innovation and pricing policies.

Overseeing responsible business management for future earnings growth as a technology and sustainability expert

Outside Director
Hiroshi Komiyama

Understanding the Company from a longer-term point of view and vigilantly upholding my supervisory responsibilities

I knew a great deal about the Company because as a researcher myself, I used to conduct research on the technology for producing membranes essential to the vinyl chloride monomer manufacturing process and for semiconductor applications. I was also among the first scientists to ring the alarm bells about global environmental issues at a time when there was still a lot of skepticism. I founded the Engineering Research Laboratory on Global Environment at the University of Tokyo, and I was also a driving force behind the establishment and management of the Alliance for Global Sustainability, the world's first initiative for universities to jointly undertake research on sustainability issues. I also currently serve as chairman of the STS Forum, an international platform for discussing matters concerning science, technology, and the future of humankind. It is in this capacity as well that I have access to the latest information about science and technology. As such, I am confident that I am as good as anyone in supervising the management of the Company, which is why I have been an Outside Director since 2010.

I am aware that when an Outside Director remains in office for a long time, concerns may be raised about his or her independence. I therefore approach my job with a firm intention to fulfil my management oversight responsibilities with a constant sense of vigilance. The Company has built a competitive advantage through its steady accumulation of technology. And it provides industries with not just PVC, but many other materials, ranging from semiconductor and electronic materials to functional materials. In fact, these materials have been created through the fusion of various different technologies. It is imperative that we understand the Company's technological superiority from a long-term point of view. The Company would not exist today if management had been focused only on the near term and made changes to its business operations without looking at the bigger picture.

Corporate governance based on understanding of production sites and technology

In addition to the Board of Directors, the Company has a Managing Directors' Meeting to discuss matters in more detail. As I actively participate in discussions at these meetings, I am impressed by Chairman of the Board Meeting Fumio Akiya and President Yasuhiko Saitoh directly answering my questions and often providing additional information after the presentations of business managers. This is certainly a good example of the Company's corporate governance functioning effectively, because it demonstrates that top management has an accurate understanding of production site operations and technology and that informed decisions are being made.

At Shin-Etsu Chemical, sophisticated technology is deployed across different business units, which would not be possible without effective governance.

I propose that the Company draw more public attention to how its products and technologies are contributing to a reduction in environmental impacts. For instance, the technology that enhances the purity of silicone rubber is not only improving the Company's bottom line, but it is also driving decarbonization in society by reducing the manufacturing processes for customers.

Carbon neutral declaration is praiseworthy

The Company declared that it is committed to achieving carbon neutrality by 2050. And in seeking to create products with less energy, it has roughly doubled its energy efficiency since 1990. Achieving carbon neutrality will be a tough challenge for any chemical manufacturer, but that is precisely why the Company—which possesses the technologies and track record—should take the lead. I applaud the bold decision the Company has mace to take the first step towards carbon neutrality.

Questioning true sustainability

Though Chairman Kanagawa has passed away, Kanagawa-ism or his credo certainly lives on in the current management team. It is thought that the rapid advancement of generative AI will largely transform the way humans work, but corporate sustainability, in the true sense of the term, is about aptly turning these societal changes into growth opportunities. Unlike traditional manufacturing, digital technologies are evolving at a phenomenal speed and there is a pressing need to secure and nurture the talent that can skillfully harness them. I believe my key mission is to train human resources with a 10-year time horizon and question how management ought to take responsible action to generate future earnings growth.

Activity Status of Outside Directors and Outside Audit & Supervisory Board Members

	Status of activities	Attendance at Board Meetings (Year ended March 31, 2023)
Outside Director		
Tsuyoshi Miyazaki Important concurrent positions: Adviser, Mitsubishi Logistics Corporation	Mr. Miyazaki shared his beneficial recommendations concerning capital investment initiatives that are conscious of the global situation, capitalizing on his management experience at Mitsubishi Logistics Corporation, a global logistics company, and based on his wealth of experience and outstanding knowledge as a corporate manager. He also provided thorough supervision from an independent standpoint.	Board of Directors Meetings 100%
Toshihiko Fukui Important concurrent positions: President, The Canon Institute for Global Studies Outside Director, Kikkoman Corporation	Mr. Fukui shared his beneficial recommendations concerning the Shin-Etsu Group's response to the world economic outlook, geopolitical risks, and other topics, capitalizing on his outstanding knowledge and wealth of experience related to global finance and economics as an ex-Governor of the Bank of Japan. He also provided thorough supervision from an independent standpoint.	Board of Directors Meetings 100%
Hiroshi Komiyama Important concurrent positions: Chairman, Mitsubishi Research Institute, Inc.	Mr. Komiyama, who has served as President of the University of Tokyo, as well as in a variety of distinguished positions, shared his beneficial recommendations concerning the importance of the impact of products on the environment, ways of thinking about venture investment, and other topics, capitalizing on his outstanding knowledge and wealth of experience in a wide range of disciplines, including chemical engineering, the global environment, and natural resources and energy. He also provided thorough supervision from an independent standpoint.	Board of Directors Meetings 100%
Kuniharu Nakamura Important concurrent positions: Director & Chairman, SUMITOMO CORPORATION Outside Director, NEC Corporation	Mr. Nakamura shared his beneficial recommendations concerning the need to secure overseas talent, governance issues, capital policies, and other topics, capitalizing on his management experience at SUMITOMO CORPORATION, a general trading company, and based on his prominent knowledge of and abundant experience in international business in a wide variety of fields. He also provided thorough supervision from an independent standpoint.	Board of Directors Meetings 100%
Michael H. McGarry Important concurrent positions: Executive Chairman & Director of PPG Industries, Inc. Director, United States Steel Corporation	Mr. McGarry shared his beneficial recommendations concerning the development of high-value-added products, approaches to pricing, and other topics, capitalizing on his management experience at PPG Industries, Inc., a U.S. company that sells paints, coatings, and other products worldwide, and based on his prominent knowledge of and abundant experience in a wide range of chemical fields. He also provided thorough supervision from an independent standpoint.	Board of Directors Meetings 100%*

*Percentage of attendance at the ten Board of Directors meetings held after his appointment

Outside Audit & Supervisory Board Member		
Yoshihito Kosaka Important concurrent positions: C.P.A. Certified Public Tax Accountant Representative Partner, HIYU Certified Tax Accountants' Corporation	At the Audit & Supervisory Board meetings, Mr. Kosaka shared his comments from a finance and accounting specialist's point of view. In addition, he received reports from Directors, Corporate Officers, employees, and others on the status of execution of their duties and conducted investigations of offices/factories and subsidiaries of the Company, thereby exercising his audit function thoroughly.	Board of Directors Meetings 100% Audit & Supervisory Board Meetings 100%
Kiyoshi Nagano Important concurrent positions: Outside Director, LEC, INC.	At the Audit & Supervisory Board meetings, Mr. Nagano shared his comments from an extensive viewpoint based on his management experience at the former Jasdaq Securities Exchange, Inc. In addition, he received reports from Directors, Corporate Officers, employees, and others on the status of execution of their duties and conducted investigations of offices/plants and subsidiaries of the Company, thereby exercising his audit function thoroughly.	Board of Directors Meetings 100% Audit & Supervisory Board Meetings 100%
Mitsuko Kagami Important concurrent positions: Lawyer Partner Lawyer, KAGAMI Law Office Outside Director, MEDIPAL HOLDINGS CORPORATION Outside Director, Sotetsu Holdings, Inc.	At the Audit & Supervisory Board meetings, Ms. Kagami shared her comments from a legal specialist's point of view. In addition, she received reports from Directors, Corporate Officers, employees, and others on the status of execution of their duties and conducted investigations of offices/plants and subsidiaries of the Company, thereby exercising her audit function thoroughly.	Board of Directors Meetings 100% Audit & Supervisory Board Meetings 100%

Risk Management

Group Risk Management

Risk Management Committee

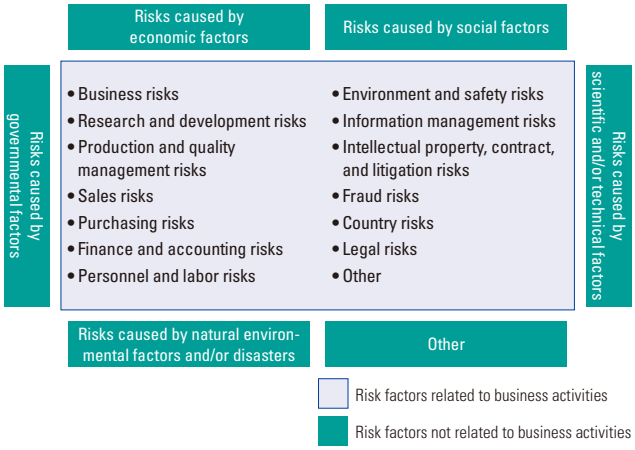
We have established a Risk Management Committee consisting of approximately 20 members, including directors, corporate officers, and department managers, to establish a risk management system, develop rules and regulations, and identify and prevent risks that may arise in the course of business activities. In addition, we promote cross-functional activities among divisions and Group companies, including the formulation of business continuity plans, training, and information sharing. Furthermore, important matters in risk management are reported to the Board of Directors, the Managing Directors' Meeting, and the Audit & Supervisory Board.

In FY2022, the Risk Management Committee met three times and monthly meetings were held by the secretariat. At the meetings, manufacturing and quality management risks, as well as risks related to information leakage, are discussed and shared within the Committee in order to enhance risk preparedness. In addition, opinions are exchanged within the Committee to formulate priority risk management issues to be addressed in FY2023 onward.

Risk Management Regulations

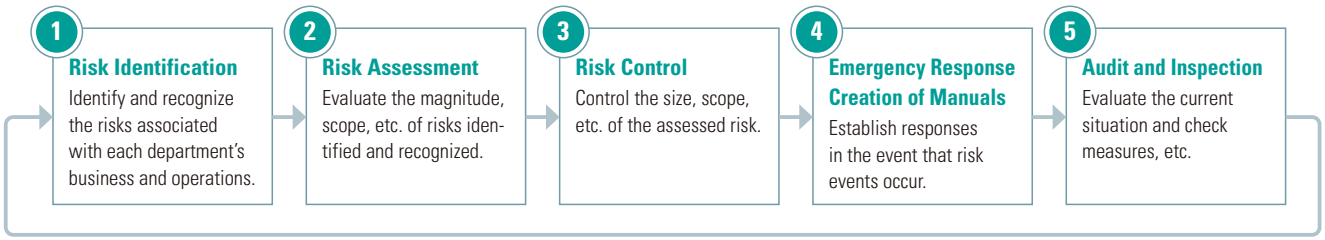
The Company has established Risk Management Regulations that anticipate comprehensive risks that may arise in the course of the Shin-Etsu Group's business activities from a long-term perspective and has established a risk management system and responses to any risks that materialize.

Risks anticipated in the Risk Management Regulations



Risk Management Procedures

Risk management is basically carried out following the procedures of the PDCA cycle shown in the diagram below in accordance with the characteristics of each risk.



Activities of the Risk Management Committee in FY2023

The Risk Management Committee works in a multifaceted and company-wide effort to preemptively eliminate risks that may affect management and business activities, and to minimize the impact of risks when they do occur and prevent their recurrence.

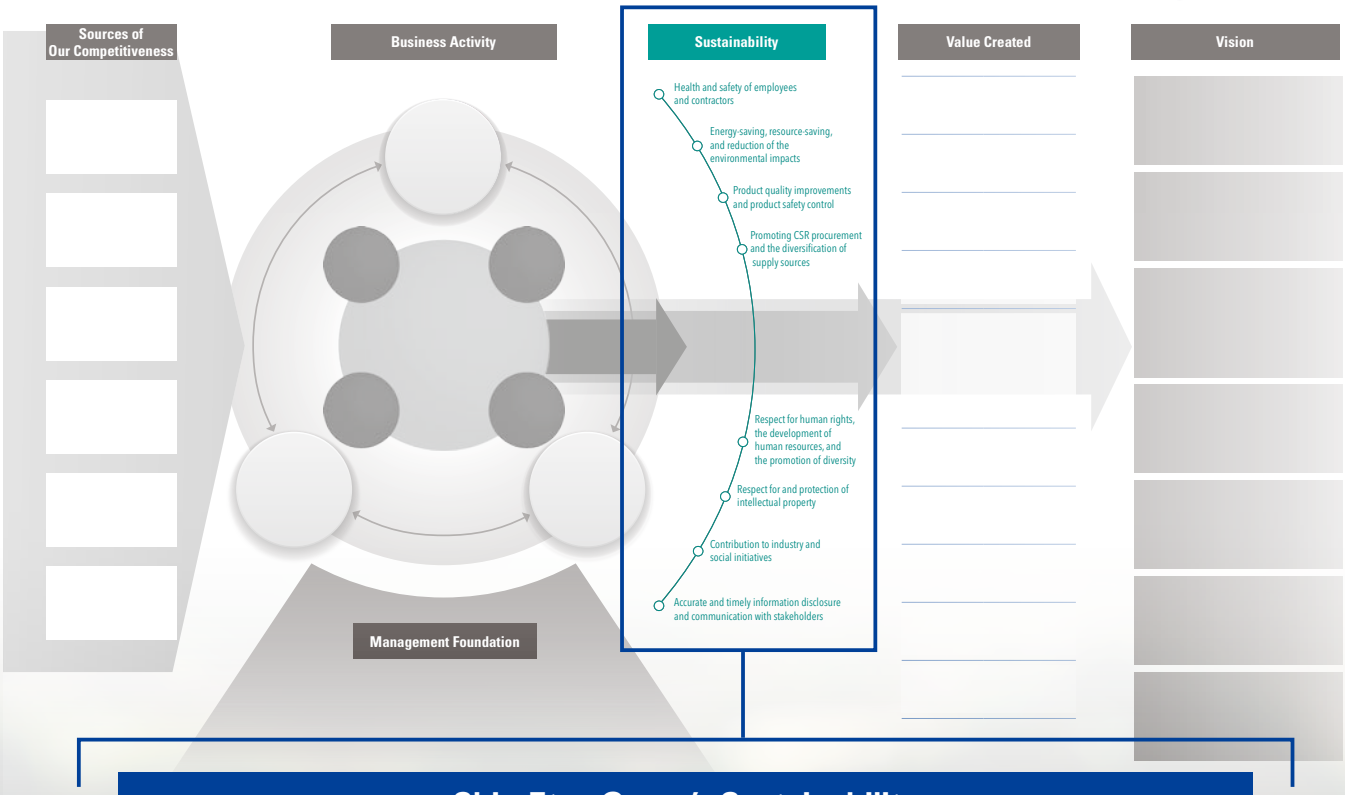
In FY2022, the Committee investigated and strengthened the business continuity plan (BCP) of each Group company in Japan and overseas as well as Group cybersecurity measures, called attention to product liability risks, studied how to handle the winter power supply-demand crunch in Japan, and worked to identify and address geopolitical risks.

In light of the volatile international situation in FY2023, the Committee will continue its efforts to prevent and strengthen measures against the following risks:

- Addressing risks related to electricity, water, and other infrastructure at plants (BCP)
- Stable procurement of raw materials
- Recruitment and retention of employees
- Strengthening countermeasures against information leaks, cyberattacks, etc.
- Enhanced compliance, etc.

In addition, we will check the status of efforts to address these risks in each of our core business divisions and Group companies and proceed with necessary countermeasures together with the relevant business unit. The Risk Management Committee will continue to support the sustainable development of the company by eliminating risks before they occur and enhancing risk preparedness.

We will create a sustainable society and achieve sustainable corporate growth



Shin-Etsu Group's Sustainability

What We Strive for

Contribution to the Earth's future

Our Mission

To provide products that contribute to solving social issues

Business Principle

The Group strictly complies with all laws and regulations, conducts fair business practices and creates unrivaled value for society and industry through the provision of key materials and technologies.

Basic Sustainability Policy

The Foundation of Activities

The foundation of all activities: Legal compliance, fair corporate activities	Health and safety of employees and contractors	Energy-saving, resource-saving, and reduction of the environmental impacts
Product quality improvements and product safety control	Promoting CSR procurement and the diversification of supply sources	Respect for human rights, the development of human resources, and the promotion of diversity
Contribution to industry and social initiatives	Respect for and protection of intellectual property	Accurate and timely information disclosure and communication with stakeholders

Basic Sustainability Policy

The Group views the implementation of its Business Principle and the making of contributions that benefit shareholders, investors, customers, business partners, local communities, employees, and all other stakeholders as its social responsibility. To fulfill this responsibility, we have established a Basic Sustainability Policy and various internal regulations, and are carrying out activities accordingly.

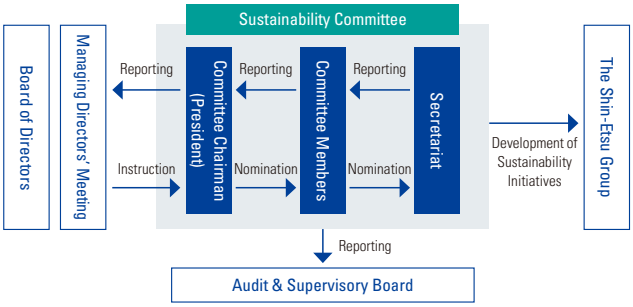
Basic Sustainability Policy

The Shin-Etsu Group will:

1. Do our best to increase the Group's corporate value through sustainable growth and make multifaceted contributions to society.
2. Carry out all of our company activities by always placing the utmost priority on safety.
3. Expand those businesses that contribute to the reduction of greenhouse gas emissions.
4. Maximize the efficiency of product development and manufacturing, and contribute to higher efficiency of society by supplying our products thus produced.
5. Engage in business activities while taking biodiversity into account and seeking harmony with the global environment.
6. Strive to respect human rights, assure equality in employment opportunities, and support the self-fulfillment of our employees.
7. Appropriately disclose information in a timely manner.
8. Carry out healthy, trustworthy, transparent corporate activities based on the integrity of the Group's ethical values.

Structure of Sustainability Initiatives

To promote sustainability activities in all aspects of our corporate activities, we have formed a Sustainability Committee consisting of approximately 60 members, including our directors, corporate officers, and department managers, as well as sustainability managers from Group companies, with the president of Shin-Etsu Chemical serving as the chairman.



List of Executives in Charge of Sustainability Initiatives

Position	Name	Current Positions (related to Sustainability)	Key Sustainability Issues
Representative Director-Chairman of the Board Meeting	Fumio Akiya	In charge of Technologies	Product quality improvements and product safety control
Representative Director-President	Yasuhiko Saitoh	Chairman of Sustainability Committee	
Managing Corporate Officer	Toshiya Akimoto	Vice Chairman of Sustainability Committee In charge of Public Relations, Legal Affairs General Manager of Office for Digitization and Digitalization Chairman of Risk Management Committee	The foundation of all activities: Legal compliance, fair corporate activities Respect for and protection of intellectual property Accurate and timely information disclosure and communication with stakeholders Risk management
Managing Corporate Officer	Fumio Arai	In charge of Purchasing	Promoting CSR procurement and the diversification of supply sources
Managing Corporate Officer	Yukihiro Matsui	In charge of Patents	Respect for and protection of intellectual property
Managing Corporate Officer	Masaki Miyajima	In charge of Business Auditing	Corporate governance
Corporate Officer	Toshiyuki Kasahara	General Manager of Finance & Accounting Dept. In charge of Office of the President	Corporate governance (Fair tax payment, Operation of Group Companies)
Corporate Officer	Yoshimitsu Takahashi	In charge of General Affairs, Environmental Control & Safety	Corporate governance Health and safety of employees and contractors Energy-saving, resource-saving, and reduction of the environmental impact
Corporate Officer	Kai Yasuoka	In charge of Personnel & Labor Relations	Respect for human rights, the development of human resources, and the promotion of diversity

Identifying Key Issues (Materiality)

In FY2015, the Sustainability Committee identified "key sustainability issues" that the Shin-Etsu Group needs to focus its efforts on in particular. Subsequently, in December 2018, all of our departments and major domestic Group companies reviewed the key issues and their importance, which were then reviewed again by the Sustainability Committee. As a result, we decided to carry on with the key issues we identified in 2015. We continue to view legal compliance and fair corporate activities as the foundation of all of our activities, and focus on these nine key issues.

Materiality Identification Process

Step 1 Clarify key issues

In all of Shin-Etsu Chemical's divisions and major group companies in Japan, key issues were clarified by the following three steps: (1) review and organize stakeholders; (2) list key sustainability issues with reference to the central themes of ISO 26000; and (3) score the importance of each key issue to the Group and to its stakeholders.

Step 2 Prioritize importance of key issues and organize the issues

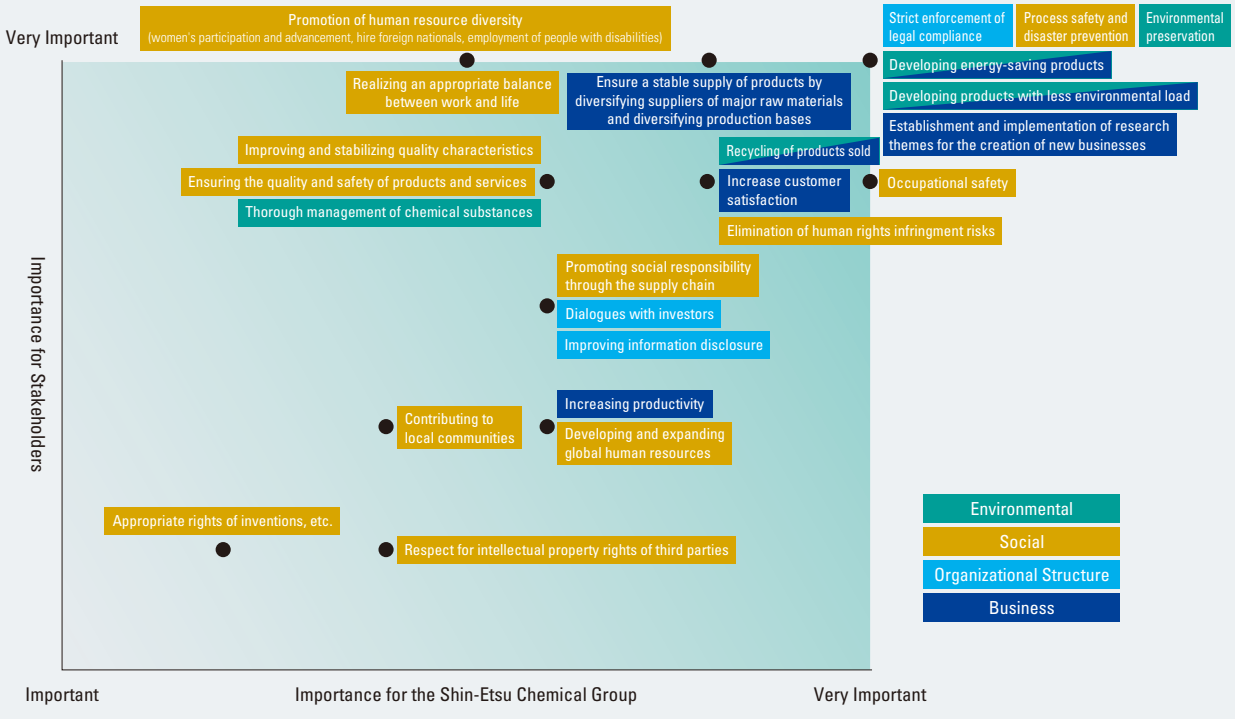
Based on the key issues and their importance as submitted by the divisions and companies, the Sustainability Committee reorganized them based on two axes: importance to the Group and importance to stakeholders.

Step 3 Conduct a hearing with Outside Directors

We conducted interviews with all Outside Directors regarding the reorganized key issues and their positioning. As a result, we received the following suggestions: (1) Compliance with laws and regulations is related to all issues; (2) All of the key issues listed are equally important to the Group and difficult to rank; and (3) We should also state what our goals are.

Step 4 Review by the Sustainability Committee and final decision by the Managing Directors' Meeting

Based on the suggestions of the Outside Directors, the Sustainability Committee reviewed the issues once again, and the nine key issues were identified following deliberations by the Managing Directors' Meeting, a decision-making body for business execution. In addition, it was decided that all these important issues would be tackled equally, in no particular order.



Risks and Opportunities Related to the Key Issues

	Key issue		Risks and opportunities (typical examples)	Corresponding initiatives	KPIs
	The foundation of all activities: Legal compliance, fair corporate activities	Risks	Legal violations, unjust conduct or fraud, damages to corporate value caused by loss of societal trust, etc.	● Raising compliance awareness through methods including training ● Thorough bribery and corruption prevention measures, etc. ▶ P.56 Main Sustainability Initiatives	● Number of serious legal or regulatory violations: 0
		Opportunities	Formation of the foundation of corporate value, risk elimination, customer confidence creation, business opportunity expansion, hiring and retaining excellent human resources, etc.		
E	Energy-saving, resource-saving, and reduction of the environmental impacts	Risks	Strengthening of greenhouse gas regulations, raw material price rises, procurement difficulties, etc.	● Acceleration of environmental burden reduction, response to climate change ● Water resource conservation ● Waste reduction, etc. ▶ P.26 Natural Capital	● GHG Emissions (Scope1+Scope2): 6,613 thousand tons of CO_2 ● Emissions intensity index of production volume relative to 1990: ● 54.2% (Shin-Etsu Group), 46.8% (Shin-Etsu Chemical) ● Percentage of Group's product sales that contribute to CN: approx. 70% ● Water recycle ratio: 92.6% ● Waste recycling ratio: 71% (Japan), 75% (Overseas)
		Opportunities	Enhancement of competitiveness through environmental burden reduction and productivity improvement, expansion in demand for products that contribute to environmental protection, etc.		
S	Health and safety of employees and contractors	Risks	Impact on local communities and employees caused by accidents and environmental issues, damage to equipment and facilities resulting from natural disasters, impact on operations associated with infectious diseases, etc.	● Safety training implementation ● Execution of environmental safety audits ● Improvement of workplace environments, etc. ▶ P.18 Human Capital	● Number participants in safety training: 75,406 ● Number of work-related employee fatalities: 0 ● Serious accidents: 0 ● Lost-time accidents rate:0.00 (Japan), 1.15 (Overseas) ● Lost-time accidents severity rate:0.00 (Japan), 0.03 (Overseas)
		Opportunities	Stable production and higher productivity achieved through accident prevention measures and new process development, etc.		
	Product quality improvements and product safety control	Risks	Loss of customer trust due to issues concerning product quality or safety, etc.	● Quality management ● Quality audits and technical support ● Product safety management, etc. ▶ P.56 Main Sustainability Initiatives	● Number participants in product safety training: 71,142
		Opportunities	Fostering of customer trust through continuous timely delivery of products at pledged levels of quality, etc.		
	Promoting CSR procurement and the diversification of supply sources	Risks	Production suspensions and shipment delays caused by difficulties in procuring raw materials, etc.	● Revision of the Shin-Etsu Group CSR Procurement Guidelines ● Compliance with the Act against Delay in Payment of Subcontract Proceeds, etc., to the subcontractors ● Initiatives aimed at eliminating conflict minerals, etc. ▶ P.25 Social and Relationship Capital	● Percentage of suppliers surveyed on sustainability: approx. 70%
		Opportunities	Stable procurement at fair prices through diversified suppliers, gaining trust from customers and society through thorough adherence to CSR procurement, etc.		
	Respect for human rights, the development of human resources, and the promotion of diversity	Risks	Human rights violations committed through the Company's business activities or within its supply chain, etc.	● Promotion of respect for human rights ● Creating an environment where a diverse workforce can play an active role ● Enhancing work-life balance systems ● Conducting human rights due diligence, etc. ▶ P.18 Human Capital ▶ P.25 Social and Relationship Capital	● Percentage of Group employees who are familiar with the Group's human rights policy: approx. 90% ● Number of child labor cases: 0 ● Number of forced labor cases: 0 ● Percentage of women in managerial positions at the section manager level and above: 12.6%
		Opportunities	Hiring and retaining excellent human resources through business activities grounded in respect for human rights, etc.		
	Respect for and protection of intellectual property	Risks	Delay in business progress caused by intellectual property infringement, etc.	● Appropriate management of intellectual property and information assets ● Cybersecurity enhancement, etc. ▶ P.22 Intellectual Capital	● Patents acquired: 1,714 ● Patents held: 22,310 *Scope: major consolidated manufacturing companies
		Opportunities	Acceleration of in-house business development by safeguarding and utilizing intellectual property, etc.		
	Contribution to industry and social initiatives	Risks	Loss of trust when business activities do not align with society's needs, etc.	● Fund-raising activities ● Local contribution activities, etc. ▶ P.25 Social and Relationship Capital	
		Opportunities	Employment promotion and tax payment through stable business operations, fostering of trust-based relationships with local communities, etc.		
	Accurate and timely information disclosure and communication with stakeholders	Risks	Damage to corporate value stemming from nondisclosure or incomplete disclosure of information, loss of stakeholder confidence, etc.	● Timely and appropriate disclosure of corporate information ● Promotion of dialogue with stakeholders, etc. ▶ P.56 Main Sustainability Initiatives	● Earnings briefings and conference calls for institutional investors and analysts: 4 ● Plant tours for analysts and institutional investors / Business briefing session: 1 ● One-on-one meetings with analysts: 312 ● Small meetings for investors hosted by securities companies: 5
		Opportunities	Establishment of appropriate market valuation, corporate value improvement, acquisition of trust from stakeholders and society, etc.		

For more details regarding our initiatives, please visit our sustainability site.
https://www.shinetsu.co.jp/en/sustainability/

Main Sustainability Initiatives

The mission of the Shin-Etsu Group is to contribute to the sustainable development of the world through its business activities. In line with this mission, the Group engages in sustainability activities around the world in all of its business activities, including the provision of products. For details of the Group's sustainability activities, please consult the "Sustainability" site on our website as well as the "Shin-Etsu Sustainability Report 2023".

"Sustainability" site (Shin-Etsu Chemical website)
https://www.shinetsu.co.jp/en/sustainability/

"Shin-Etsu Sustainability Report 2023"
https://www.shinetsu.co.jp/en/sustainability/esg_bn/

Key Issues The foundation of all activities: Legal compliance, fair corporate activities

Ensuring full compliance awareness

The Group is thoroughly committed to compliance with laws and regulations as stated in its Business Principle and annual Management Objectives. All officers and employees submit written oaths of compliance to the Company, and in the unlikely event of inappropriate behavior, disciplinary action is taken. In addition, it is stipulated that officers and employees who discover a violation of laws or regulations must report it to the "Compliance Consultation Office".

Whenever laws and regulations related to corporate activities are enacted or revised, the Legal Department notifies internally and ensures that all employees are fully aware of the changes. In addition, to promote understanding of important laws and regulations, we serialize explanatory articles in the Company newsletter and intranet and host lectures by outside experts. In 2022, 515 employees of Shin-Etsu Chemical's head office, plants, and Group companies in Japan attended the training course for promoting appropriate subcontracting transactions conducted by the Japan Fair Trade Commission and the Small and Medium Enterprise Agency. Our legal staff also attended a seminar by the Fair Trade Institute. In addition, in response to the revision of the Whistleblower Protection Act, we revised our Compliance Consultation and Reporting Rules, translated it into 14 languages, and disseminated it to all Group companies along with our Guideline for Compliance Consultation Office.

Initiatives to prevent corruption

In 2015, the Group established an Anti-Bribery Regulations to send a clear statement that it does not engage in any form of bribery. By having officers and employees submit written oaths of compliance, we make every effort to prevent the improper provision of favors and requests to public officials, customers, and business partners in Japan and overseas. Furthermore, to raise awareness of employees' legal compliance, we make compliance with ethics in general one of our personnel evaluation items. We also conduct regular internal audits on corruption, embezzlement, and bribery.

The Shin-Etsu Group was among the first Japanese companies to agree to the Tokyo Principles for Strengthening Anti-Corruption Practices of the Global Compact Network Japan (GCNJ) and signed the letter of endorsement in February 2018.

For overseas Group companies, we conduct risk assessments on bribery and corruption prevention based on country-specific corruption perception indices published by Transparency International, an international organization working to combat corruption. In FY2022, we surveyed 36 Group companies.

Anti-Corruption Collective Action

Key Issues Product quality improvements and product safety control

Product quality improvements

Excellent quality is a non-price competitive advantage not only for high value-added products but also for general-purpose products. With this in mind, the Group has conducted quality audits every year since 2000, believing that it is essential to have both "defensive quality management" to prevent the production and shipment of substandard products and "offensive quality management" to minimize quality variability and create quality that cannot be matched by competitors. The 2022 quality audit prioritized items (1) to (3) below.

Quality audit

(1) Efforts to reduce variability in the manufacturing process: In addition to improving the precision of conventional manufacturing techniques, we are introducing DX and AI to check the progress of quality improvement.
(2) Automation of inspection process: We promote automation of measurement to prevent careless mistakes and eliminate measurement variability caused by misunderstandings by quality measurement personnel and check the improvement of quality measurement accuracy.
(3) Promotion of quality improvement activities: We check the progress of ongoing quality improvement activities such as "yield Improvement" and "zero careless mistakes."

We are also implementing six sigma activities* throughout the Company to improve quality standards.

*Six sigma activities: A quality improvement method developed at Motorola (USA) in the 1980s. Activities to prevent the occurrence of quality defects and improve quality by focusing on processes in which variability occurs and reducing that variability.

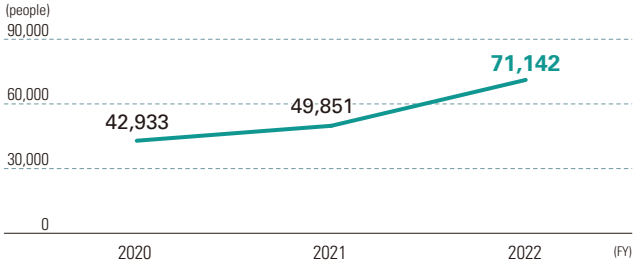
Product safety control

The Group has established strict chemical substance safety control regulations at each stage of procurement, development, manufacturing, and sales. We are also actively involved in the acquisition of research data and fact-finding surveys related to the manufacture, use, and disposal of chemical substances in cooperation with the government and organizations to which we belong.

We conduct environmental and health risk assessments at the development stage to assess the safety of new chemical substances. Furthermore, when developing new chemical substances, we focus on products and manufacturing technologies that do not use hazardous substances as specified in the Industrial Safety and Health Act, the Chemical Control Act*1, and the EU RoHS Directive*2. In addition, we provide SDS*3 information on product hazards and toxicities in order to communicate appropriate information to customers and transportation companies.

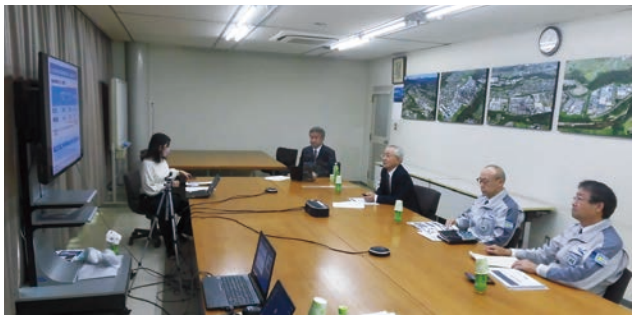
*1 Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Chemical Substances Control Law): A law aimed at preventing environmental pollution by chemical substances that may affect human health and ecosystems.
*2 RoHS (Restriction of the use of certain Hazardous Substances) Directive: An EU directive that restricts the use of certain hazardous substances in electric and electronic equipment.
*3 SDS (Safety Data Sheet): A safety data sheet that describes chemical and physical properties of chemical substances as well as information on toxicity and emergency measures.

Number of participants in product safety training



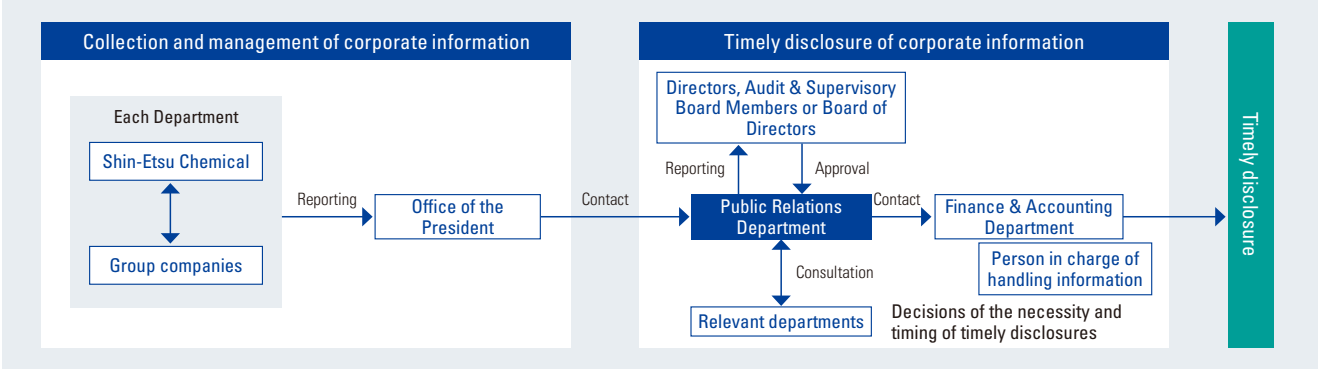
Key Issues Accurate and timely information disclosure and communication with stakeholders

We believe that timely and accurate disclosure of corporate information promotes understanding among stakeholders and leads to appropriate market valuation. In FY2022, we held an online briefing on our silicones business for securities analysts and investors. The briefing session provided an overview of the silicones business, its focus, growth areas, development of carbon neutral products, and other initiatives to reduce environmental impact at the Gunma Complex. The event was attended by 116 analysts and investors and provided a good opportunity to deepen their understanding of our business.



Online briefing on the silicones business

Diagram of internal system for timely disclosure of financial information



Ten-Year Summary

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES for the fiscal years ended March 31, 2014 through 2023

	3/2014	3/2015	3/2016	3/2017
For the year:				
Net sales	¥ 1,165,819	¥ 1,255,543	¥ 1,279,807	¥ 1,237,405
Cost of sales	873,879	940,399	930,019	868,404
Selling, general and administrative expenses	118,130	129,814	141,262	130,383
Operating income	173,809	185,329	208,525	238,617
Ordinary income	180,605	198,025	220,005	242,133
Net income attributable to owners of parent	113,617	128,606	148,840	175,912
Capital expenditures	83,155	109,903	134,753	145,647
R&D costs	43,546	47,165	53,165	49,020
Depreciation and amortization	91,445	96,918	100,466	93,087
At year-end:				
Total assets	¥ 2,198,912	¥ 2,452,306	¥ 2,510,085	¥ 2,655,636
Working capital (Current assets – Current liabilities)	981,667	1,100,999	1,170,679	1,232,607
Common stock	119,419	119,419	119,419	119,419
Net assets	1,822,135	2,012,711	2,080,465	2,190,082
Interest-bearing debt	15,638	14,328	13,470	14,642
Per share (Yen and U.S. dollars):				
Net income per share—basic (Note 3)	¥ 53.44	¥ 60.41	¥ 69.89	¥ 82.57
Net income per share—fully diluted (Note 3)	53.41	60.40	69.88	82.57
Cash dividends (Note 4)	100.00	100.00	110.00	120.00
Payout ratio (%)	37.4	33.1	31.5	29.1
Net assets (Note 3)	833.06	920.56	952.30	1,000.43
General:				
Operating income to net sales ratio (%)	14.9	14.8	16.3	19.3
Net income attributable to owners of parent to net sales ratio (%)	9.7	10.2	11.6	14.2
ROIC (%)	9.4	9.9	11.4	14.0
ROE (%)	6.8	6.9	7.5	8.5
ROA (%)	8.8	8.5	8.9	9.4
Equity ratio (%)	80.6	79.9	80.8	80.3
PBR (times)	1.4	1.7	1.2	1.9
PER (times)	22.1	26.0	16.7	23.4
Number of employees	17,892	18,276	18,407	19,206
Number of shares issued (Thousands) (Note 3)	432,106	432,106	432,106	432,106

Notes: 1. The U.S. dollar amounts represent conversion of yen, for convenience only, at the rate of ¥134 = US$1, the approximate rate of exchange on March 31, 2023.
2. The "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29, March 31, 2020) and other standards were applied from the beginning of the fiscal year ended March 31, 2022. Accordingly, the main management indicators, etc., from the fiscal year ended March 31, 2022 are those after application of said Accounting Standard, etc.
3. The Company enacted a five-for-one stock split of its common stock with an effective date of April 1, 2023. "Number of shares issued" shows the number of shares before the stock split, while "Net income per share-basic", "Net income per share-fully diluted" and "Net assets per share" are calculated based on the assumption that the stock split was implemented at the beginning of the fiscal year ended March 31, 2014, based on "Accounting Standard for Earnings Per Share".
4. As the record date was prior to the stock split date (April 1, 2023), "Cash dividends per share" is based on the shares before the stock split.

For more detailed information, please see the investor information on our corporate website.

WEB **https://www.shinetsu.co.jp/en/ir/ir-data/**

					Millions of yen	Thousands of U.S. dollars (Note 1)
3/2018	3/2019	3/2020	3/2021	3/2022	**3/2023**	**3/2023**
¥ 1,441,432	¥ 1,594,036	¥ 1,543,525	¥ 1,496,906	¥ 2,074,428	**¥ 2,808,824**	**$ 20,961,378**
963,008	1,039,979	987,782	953,203	1,206,425	**1,594,717**	**11,900,873**
141,601	150,352	149,702	151,489	191,680	**215,905**	**1,611,232**
336,822	403,705	406,041	392,213	676,322	**998,202**	**7,449,272**
340,308	415,311	418,242	405,101	694,434	**1,020,211**	**7,613,517**
266,235	309,125	314,027	293,732	500,117	**708,238**	**5,285,359**
176,283	240,618	265,018	228,801	213,918	**318,046**	**2,373,482**
51,768	56,436	48,536	51,264	62,455	**67,201**	**501,500**
112,016	137,570	131,172	143,807	168,788	**213,632**	**1,594,275**
¥ 2,903,137	¥ 3,038,717	¥ 3,230,485	¥ 3,380,615	¥ 4,053,412	**¥ 4,730,394**	**$ 35,301,451**
1,324,495	1,358,614	1,446,724	1,551,662	1,960,216	**2,355,713**	**17,579,954**
119,419	119,419	119,419	119,419	119,419	**119,419**	**891,191**
2,413,025	2,532,556	2,723,141	2,886,625	3,429,208	**4,026,209**	**30,046,336**
15,814	14,920	30,383	34,456	38,957	**47,097**	**351,474**
¥ 124.86	¥ 145.20	¥ 151.03	¥ 141.35	¥ 240.76	**¥ 347.84**	**$ 2.596**
124.82	145.18	151.00	141.25	240.55	**347.61**	**2.594**
140.00	200.00	220.00	250.00	400.00	**500.00**	**3.731**
22.4	27.5	29.1	35.4	33.2	**28.7**	**28.7**
1,102.40	1,183.09	1,275.59	1,353.94	1,601.45	**1,918.37**	**14.316**
23.4	25.3	26.3	26.2	32.6	**35.5**	**35.5**
18.5	19.4	20.3	19.6	24.1	**25.2**	**25.2**
18.2	21.5	19.4	17.2	27.2	**33.6**	**33.6**
11.9	12.8	12.3	10.7	16.3	**19.7**	**19.7**
12.2	14.0	13.3	12.3	18.7	**23.2**	**23.2**
81.0	81.1	82.1	83.2	82.1	**81.8**	**81.8**
2.0	1.6	1.7	2.7	2.3	**2.2**	**2.2**
17.6	12.8	14.2	26.3	15.6	**12.3**	**12.3**
20,155	21,735	22,783	24,069	24,954	**25,717**	**25,717**
432,106	427,606	416,662	416,662	416,662	**404,824**	**404,824**

Shin-Etsu Group Major Companies

Note: The number in parentheses next to each country's name is that country's international telephone country code.

North America

United States (1)	Shintech Inc.	Production and sales of PVC resin	#3 Greenway Plaza, Suite 1150, Houston, TX 77046, U.S.A.	Tel. 713-965-0713
	Shin-Etsu Handotai America, Inc. (S.E.H. America)	Production and sales of semiconductor silicon wafers	4111 NE 112th Ave., Vancouver, WA 98682-6776, U.S.A.	Tel. 360-883-7000
	Shin-Etsu Silicones of America, Inc.	Production and sales of silicone products	1150 Damar Drive, Akron, OH 44305, U.S.A.	Tel. 330-630-9860
	K-Bin, Inc.	Production and sales of PVC compounds	#3 Greenway Plaza, Suite 1150, Houston, TX 77046, U.S.A.	Tel. 713-965-0713
	Shin-Etsu MicroSi, Inc.	Sales of electronics materials	10028 South 51st St., Phoenix, AZ 85044, U.S.A.	Tel. 480-893-8898
	SE Tylose USA, Inc.	Production and sales of cellulose derivatives	26270 Highway 405 Plaquemine, LA 70764, U.S.A.	Tel. 225-309-0110
	Shin-Etsu Magnetics, Inc.	Sales of rare earths and rare earth magnets	2372 Qume Drive, Suite B, San Jose, CA 95131, U.S.A.	Tel. 408-383-9240

South America

Brazil (55)	Shin-Etsu do Brasil Representação de Produtos Químicos Ltda.	Sales support of silicone products and cellulose derivatives	Rua Coronel Oscar Porto, 736 – 8° Andar – Sala 84 Paraíso São Paulo – SP Brasil CEP: 04003-003	Tel. 11-3939-0690 (silicones) 11-3939-0692 (cellulose derivatives)

Europe

The Netherlands (31)	Shin-Etsu Silicones Europe B.V.	Production and sales of silicone products	Bolderweg 32, 1332 AV, Almere, The Netherlands	Tel. 36-549-3170
	Shin-Etsu International Europe B.V.	Sales of chemical products, electronics materials and others	World Trade Center Amsterdam, Strawinskylaan B-827 1077 XX, Amsterdam, The Netherlands	Tel. 20-662-1359
	Shin-Etsu PVC B.V.	Production and sales of vinyl chloride monomer and PVC resin	Building Noorderhaeve, Noorderweg 68 1221 AB, Hilversum, The Netherlands	Tel. 35-689-8010
Portugal (351)	CIRES, Lda. (Companhia Industrial de Resinas Sintéticas, LDA.)	Production and sales of PVC resin	Rua da Cires nr.8, 3860-160 Avanca, Estarreja, Portugal	Tel. 234-811-200
United Kingdom (44)	Shin-Etsu Handotai Europe, Ltd. (S.E.H. Europe)	Production and sales of semiconductor silicon wafers	Wilson Road, Toll Roundabout, Eliburn, Livingston, West Lothian EH54 7DA, U.K.	Tel. 1506-41-5555
Germany (49)	SE Tylose GmbH & Co. KG	Production and sales of cellulose derivatives	Kasteler Strasse 45, 65203 Wiesbaden, Germany	Tel. 611-962-04
	Shin-Etsu Magnetics Europe GmbH	Sales of rare earths and rare earth magnets	Gerbermuehlstrasse 7, 60594 Frankfurt am Main, Germany	Tel. 69-8700-31611

Asia & Oceania

Malaysia (60)	S.E.H. Malaysia Sdn. Bhd.	Production, processing and sales of semiconductor silicon wafers	Lot No.2, Lorong Enggang 35, Ulu Klang Free Trade Zone, 54200 Selangor Darul Ehsan, Malaysia	Tel. 3-4259-6600
	Shin-Etsu (Malaysia) Sdn. Bhd.	Production and sales of rare earth magnets and VCM	Lot 50, Jalan Serendah 26/17, HICOM Industrial Estate, 40400 Shah Alam, Selangor Darul Ehsan, Malaysia	Tel. 3-5191-2233
	S.E.H. (Shah Alam) Sdn. Bhd.	Production and processing of semiconductor silicon wafers	Lot No.8, Jalan Sementa 27/91, Seksyen 27, 40400 Shah Alam, Selangor Darul Ehsan, Malaysia	Tel. 3-5123-7000
	Shin-Etsu Electronics (Malaysia) Sdn. Bhd.	Production and sales of epoxy molding compounds	Lot 50, Jalan Serendah 26/17, HICOM Industrial Estate, 40400 Shah Alam, Selangor Darul Ehsan, Malaysia	Tel. 3-5192-1081
	Shin-Etsu Electronics Materials Penang Sdn. Bhd.	Technical support for silicone and epoxy products	Lot P22, Phase 4, Free Industrial Zone, Bayan Lepas, 11900, Penang, Malaysia	Tel. 4-6437008
Australia (61)	Simcoa Operations Pty. Ltd.	Production and sales of silicon metal	973, Marriott Road, Wellesley, WA 6233, Australia	Tel. 897-80-6744
Vietnam (84)	Shin-Etsu Electronics Materials Vietnam Co., Ltd.	Production and sales of materials for LED	Plot No. A-7, Thang Long Industrial ParkII Yen My district, Hung Yen province, Viet Nam	Tel. 221-3974-880/881
	Shin-Etsu Magnetic Materials Vietnam Co., Ltd.	Production of rare earths and rare earth magnets	Lot CN5.2D, Petro-chemical Area, Dinh Vu industrial Zone, Dong Hai 2 Ward, Hai An District, Hai Phong, Viet Nam	Tel. 225-325-0518
Philippines (63)	Shin-Etsu Magnetics Philippines, Inc.	Production and sales of rare earth magnets	125 East Main Avenue, Special Export Processing Zone, Laguna, Technopark Binan, Laguna 4024, Philippines	Tel. 49-502-3190
Singapore (65)	Shin-Etsu Singapore Pte. Ltd.	Sales of silicone products	1 Kim Seng Promenade #15-05/06 Great World City, Singapore 237994	Tel. 6743-7277
	Shin-Etsu Handotai Singapore Pte. Ltd. (S.E.H. Singapore)	Sales of semiconductor silicon wafers	8 Temasek Boulevard, #21-05 Suntec Tower Three, Singapore 038988	Tel. 6293-5160
	Shin-Etsu Electronics Materials Singapore Pte. Ltd.	Sales of rare earth magnets, silicone and epoxy products	1 Maritime Square, #11-20A HarbourFront Centre, Singapore 099253	Tel. 6297-9211

For locations other than those listed below, please see our website.

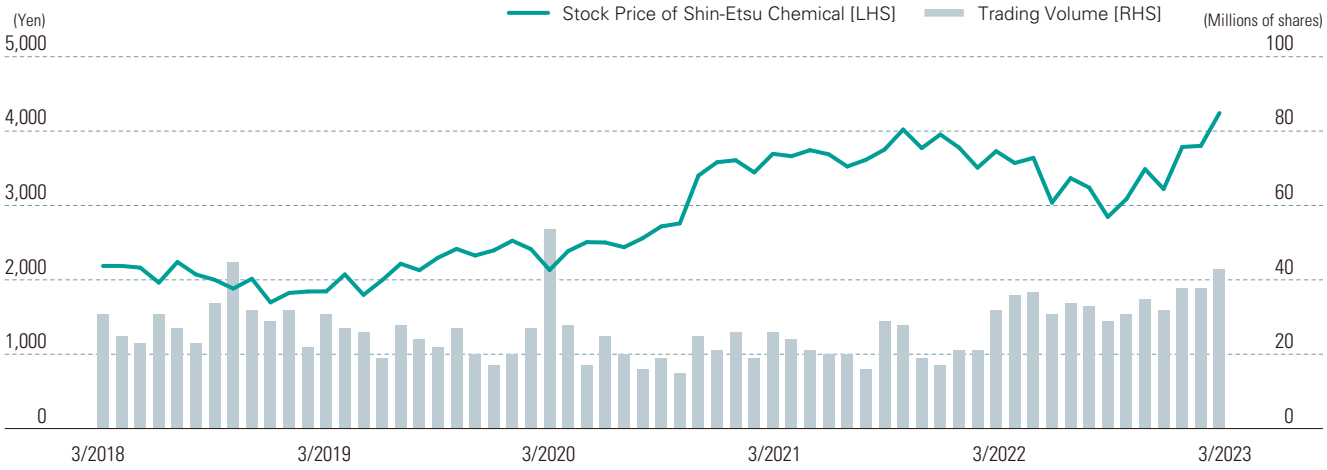
WEB **https://www.shinetsu.co.jp/en/company/network/**

Thailand (66)	Shin-Etsu Silicones (Thailand), Ltd.	Production and sales of silicone products	7th Floor, Unit 7F, Harindhorn Tower, 54 North Sathorn Road, Silom Bangrak, Bangkok 10500, Thailand	Tel. 2-632-2941
	Asia Silicones Monomer Ltd.	Production and sales of silicone monomer	1 Moo 2 Asia Industrial Estate, Tambol Banchang, Ampher Banchang, Rayong 21130, Thailand	Tel. 38-687-050
	Shin-Etsu Magnetics (Thailand), Ltd.	Production of VCM	60/120, 122, 123 Moo19, Tambol Klongnueng, Amphur Klongluang, Pathumthani 12120, Thailand	Tel. 2-520-4293
Japan (81)	Shinano Electric Refining Co., Ltd.	Production and sales of silicon carbide products	Kanda Urban Bldg., 4-2, Kanda-Tsukasamachi 2-chome, Chiyoda-ku, Tokyo 101-0048, Japan	Tel. 03-5298-1601
	Nissin Chemical Industry Co., Ltd.	Production and sales of synthetic resin emulsions and other products	17-33, Kitago 2-chome, Echizen-shi, Fukui 915-0802, Japan	Tel. 0778-22-5100
	Shin-Etsu Polymer Co., Ltd.	Production and sales of synthetic resin products	Ote Center Bldg., 1-3, Ohtemachi 1-chome, Chiyoda-ku, Tokyo 100-0004, Japan	Tel. 03-5288-8400
	Shin-Etsu Astech Co., Ltd.	Construction businesses and sales of chemical products and others	Kamakuragashi Bldg., 2-1, Uchikanda 2-chome, Chiyoda-ku, Tokyo 101-0047, Japan	Tel. 03-5298-3211
	Nagano Electronics Industrial Co., Ltd.	Production, processing and sales of semiconductor silicon wafers and other products	1393, Yashiro, Chikuma-shi, Nagano 387-8555, Japan	Tel. 026-261-3100
	Shin-Etsu Handotai Co., Ltd.	Production and sales of semiconductor silicon wafers and compound semiconductors	Shin-Otemachi Bldg., 2-1, Ohtemachi 2-chome, Chiyoda-ku, Tokyo 100-0004, Japan	Tel. 03-3243-1500
	Kashima Chlorine & Alkali Co., Ltd.	Electrolysis business (production and sales of caustic soda and chlorine)	Towada 3, Kamisu-shi, Ibaraki 314-0102, Japan	Tel. 0299-96-2311
	Kashima Vinyl Chloride Monomer Co., Ltd.	Production and sales of vinyl chloride monomer	Towada 2, Kamisu-shi, Ibaraki 314-0102, Japan	Tel. 0299-96-3415
	Naoetsu Electronics Co., Ltd.	Production, processing and sales of semiconductor silicon wafers	596-2, Jonokoshi, Kubiki-ku, Joetsu-shi, Niigata 942-0193, Japan	Tel. 025-530-2631
	Naoetsu Precision Co., Ltd.	Production, processing and sales of photomask substrate and other electronics materials	Aza-Gokawari 935-1, Shibukakihama, Ohgata-ku, Joetsu-shi, Niigata 949-3115, Japan	Tel. 025-534-4980
	Shin-Etsu Quartz Products Co., Ltd.	Production and sales of quartz glass products	East Tower, Gate City Ohsaki, 1-11-2 Osaki, Shinagawa-ku, Tokyo 141-0032, Japan	Tel. 03-6737-0221
	Shin-Etsu Film Co., Ltd.	Production and sales of films for condensers and other applications	1-5, Kitago 2-chome, Echizen-shi, Fukui 915-0802, Japan	Tel. 0778-23-8066
	Shin-Etsu Engineering Co., Ltd.	Engineering services for plant construction and produce mechatronics systems for the production of flat-panel displays (FPDs) such as LCDs and PDPs	Comfort Yasuda Bldg., 9, Kanda-Nishikicho 2-chome, Chiyoda-ku, Tokyo 101-0054, Japan	Tel. 03-3296-1080
	JAPAN VAM & POVAL Co., Ltd.	Production and sales of vinyl acetate monomer and polyvinyl alcohol	11-1, Chikko Shinmachi 3-chome, Nishi-ku, Sakai-shi, Osaka 592-8331, Japan	Tel. 072-245-1131
	Maruki Chemical Ind. Co., Ltd.	Production, processing and sales of synthetic resin sheets and synthetic leather	Naka 403-14, Shiroi-shi, Chiba 270-1406, Japan	Tel. 047-491-9566
	Tatsuno Chemical Industries, Inc.	Production, processing and sales of various types of synthetic resin	Asahi-Sumida Bldg. Narihira 1-21-9, Sumida-ku, Tokyo 130-0002, Japan	Tel. 03-5637-2022
Korea (82)	Shin-Etsu Silicone Korea Co., Ltd.	Production and sales of silicone products	GT Tower 15F, 411, Seocho-daero, Seocho-gu, Seoul 06615, Korea	Tel. 2-590-2500
	Shin-Etsu Advanced Materials Korea Co., Ltd.	Sales of photoresists and photomask blanks products	Keungil Tower 17F, 223, Teheran-ro, Gangnam-gu, Seoul 06142, Korea	Tel. 2-6964-7750
China (86)	Zhejiang Shin-Etsu High-Tech Chemical Co., Ltd.	Production and sales of silicone products	No.66, Lizheng Road, Jiashan Economic Development Zone, Zhejiang Sheng 314116, China	Tel. 573-8475-5071
	Shin-Etsu Silicone (Nantong) Co., Ltd.	Production and sales of silicone products	Tongdalu 85, Economic & Technological Development Area, Nantong City, Jiangsu Province, P.R. 226017, China	Tel. 513-5108-8688
	Shin-Etsu Silicone International Trading (Shanghai) Co., Ltd.	Sales of silicone products	29F Junyao International Plaza, No.789, Zhao Jia Bang Road, Shanghai 200032, China	Tel. 21-6443-5550
	Shin-Etsu Silicone International Trading (Shanghai) Co., Ltd. Guangzhou Branch	Sales of silicone products	Room 2409-2410, Tower B, China Shine Plaza, 9 Linhexi-road, Tianhe, Guangzhou, Guangdong, China 510610	Tel. 20-3831-0212
	Shin-Etsu Technology (Suzhou) Co., Ltd.	Sales of rare earth magnets	Block4, No.1 of Qiming Road, Suzhou Industrial Park, Jiangsu 215126, China	Tel. 512-6276-3270
	Shin-Etsu (Changting) Technology Co., Ltd.	Production of alloys for rare earth magnets	Post Code 366300 Main Road of Rare-earth Industrial Park 1 period in Changting, Longyan, Fujian province, China	Tel. 597-6688270
	Shin-Etsu (Jiangsu) Optical Preform Co., Ltd.	Production and sales of preforms for optical fiber	No.8, Runhua Road, Ligang Zhen, Jiangyin, Jiangsu 214444, China	Tel. 510-8609-6060
	Shin-Etsu (Jiangyin) Optical Preform Trading Co., Ltd.	Sales of preforms for optical fiber and purchase and sales of raw materials for preforms	No.8, Runhua Road, Ligang Zhen, Jiangyin, Jiangsu 214444, China	Tel. 510-8609-6108
	Shin-Etsu YOFC (Hubei) Optical Preform Co., Ltd.	Production and sales of preforms for optical fiber	Extra No.1 Changfei Avenue, Jianghan Salt & Chemical Industrial Park, Qianjiang, Hubei, China	Tel. 728-670-9777
Taiwan (886)	Shin-Etsu Silicone Taiwan Co., Ltd.	Production and sales of silicone products	11F-D, No.167, Tun Hua N. Road, Taipei, 105406 Taiwan, R.O.C.	Tel. 2-2715-0055
	Shin-Etsu Handotai Taiwan Co., Ltd. (S.E.H. Taiwan)	Production, processing and sales of semiconductor silicon wafers	No.12, Industry East Road 9, Hsin-Chu Science Park, Hsin-Chu, 30075, Taiwan, R.O.C.	Tel. 3-577-1188
	Shin-Etsu Opto Electronic Co., Ltd.	Production and sales of compound semiconductors	3F, No.10 Dusing Rd 1, Hsin-Chu Science Park, Hsin-Chu, 30078, Taiwan, R.O.C.	Tel. 3-578-4566
	Shin-Etsu Electronics Materials Taiwan Co., Ltd.	Production and sales of photoresists products	No.28, Kejia 6 Rd., Douliu City, Yunlin County 64057, Taiwan R.O.C.	Tel. 5-551-1122

Note: The Shin-Etsu Group consists of 146 companies as of March 31, 2023.

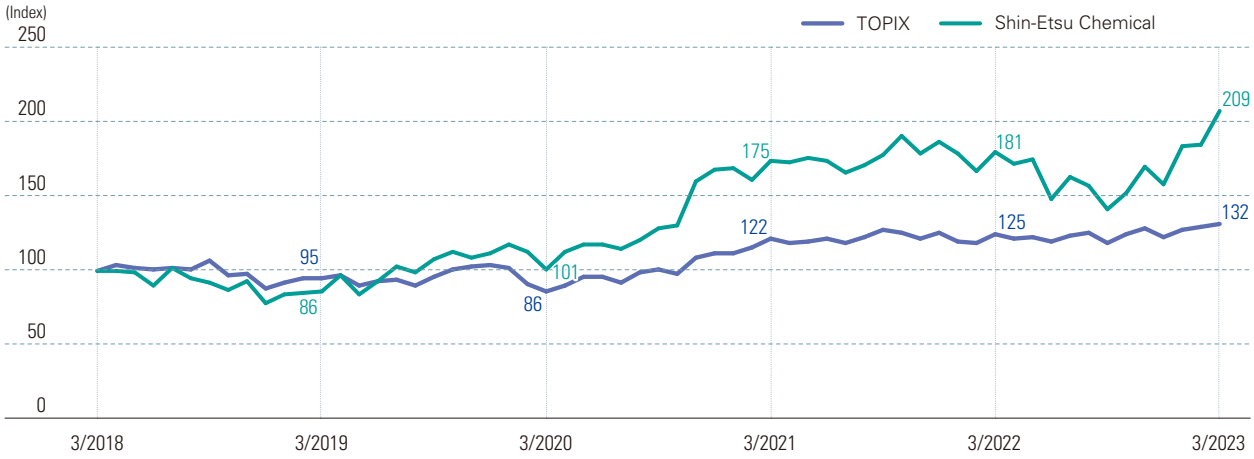
Investor Information

Stock Price Movement over the Past Five Years



Note: On April 1, 2023, the Company executed a 5-for-1 stock split of its common stock. The stock price after March 31, 2018 has been converted based on the number of shares after the stock split.

Total Shareholder Return over the Past Five Years



Notes: 1. Stock index of Shin-Etsu Chemical and TOPIX (March 31, 2018 = 100)
2. This index shows the rate of return taking into consideration the dividend as of March 31, 2023, and the stock price when an investment was conducted on March 31, 2018. Investment performance including dividends has been added to the Shin-Etsu Chemical stock price and indexed at 100 as of March 31, 2018. The TSE Stock Price Index (TOPIX), which is a comparative index, also uses indexed data and is indexed in the same way.

Major Shareholders (As of March 31, 2023)

(*Rounded down to the nearest 1,000.)

Name of Shareholder	Number of Shares Held (Thousand shares*)	Holding Ratio (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	74,320	18.4
Custody Bank of Japan, Ltd. (Trust Account)	29,011	7.2
JP MORGAN CHASE BANK 385632	23,105	5.7
Nippon Life Insurance Company	15,353	3.8
The Hachijuni Bank, Ltd.	11,790	2.9
Meiji Yasuda Life Insurance Company	10,687	2.6
SSBTC CLIENT OMNIBUS ACCOUNT	10,197	2.5
GOVERNMENT OF NORWAY	8,230	2.0
STATE STREET BANK WEST CLIENT - TREATY 505234	6,442	1.6
JP MORGAN CHASE BANK 385781	5,169	1.3

Note: The holding ratios are computed net of the treasury shares (1,315,240 shares).

Corporate Information

Corporate Data (As of March 31, 2023)

Company Name	Shin-Etsu Chemical Co., Ltd.
Head Office	4-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-0005, Japan.
Date of Establishment	September 16, 1926
Capital	¥119,419 million
Number of Employees	25,717 (Consolidated)
Common Stock (Note)	Number of Shares Authorized 1,720,000,000 Number of Shares Issued 404,824,593 Share Unit of Exchange 100 stocks Number of Stockholders 77,808
Stock Listings	Tokyo, Nagoya (Ticker Code: 4063)
Fiscal Year-End	March 31
Ordinary General Meeting of Shareholders	June
Transfer Agent	Mitsubishi UFJ Trust and Banking Corporation
Contact	Public Relations Department Phone : +81-3-6812-2340 Fax : +81-3-6812-2341 e-mail : sec-pr@shinetsu.jp

Notes: 1. The total number of issued shares decreased by 11,838,200 shares due to the cancellation of treasury shares implemented as of November 8, 2022 and January 11, 2023.
2. The total number of issued shares includes 1,315,240 treasury shares.
3. The Company carried out a 5-for-1 share split of its common shares as of April 1, 2023. As a result, the total number of issued shares amounted to 2,024,122,965.
4. In line with the above share split, the total number of shares authorized to be issued changed to 8,000,000,000 shares in accordance with Article 6 of the Company's Articles of Incorporation as of April 1, 2023, pursuant to Paragraph 2, Article 184 of the Corporations Law.

Third-Party Evaluations

Inclusion in socially responsible investment indexes

2023 CONSTITUENT MSCI JAPAN EMPOWERING WOMEN INDEX (WIN)

S&P/JPX Carbon Efficient Index

FTSE4Good

FTSE Blossom Japan

2023 Sompo Sustainability Index

Recognition of research and innovation

Top 100 Global Innovator 2023 Clarivate

Note: The inclusion of Shin-Etsu Chemical Co., Ltd. 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 Shin-Etsu Chemical Co., Ltd. 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.

Overall Picture of Communication

	Dialogue	Report	Website
Financial information / Non-financial information	▶ **Announcement of financial statements** ▶ **General meeting of shareholders** ▶ **Briefings for individual investors** ▶ **For securities analysts and investors** - Financial results briefings - Individual meetings - Business briefings - Plant tours	▶ **Annual securities report** ▶ **Quarterly report** ▶ **Business report** (The aforementioned three reports are published in Japanese only.) ▶ **Annual report** This annual report comprehensively describes our main products, business overview, financial information, etc. ▶ **Sustainability report** This report presents Shin-Etsu Group's approach and initiatives regarding sustainability.	▶ **IR Information** https://www.shinetsu.co.jp/en/ir/ ▶ **Sustainability Information** https://www.shinetsu.co.jp/en/sustainability/

Shin-Etsu

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innovative mind on materials for better life

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Easy-to-read universal design fonts
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