

Chemistry at Work

Shir Etsu

Business Principle

The Group strictly complies with conducts fair business practices well as to the advance of industry provision of key materials and tec

Corporate Resources



Number of employees

22,783



Locations

Plants in Japan:

27 plants at 16 companies

Plants and sales bases overseas:

93 locations in 19 countries



Research laboratories

12 locations



Equity ratio

82.1%



Business partners

Partnerships and relationships based on mutual trust



Corporate culture

A spirit of compliance and fair corporate activities

The Triangular Link

Business activities targeting stable long-term growth

Production

- Thorough safety and risk management
- Improvement of productivity and quality assurance techniques
- Stable procurement of raw materials and cost reduction

Development

- Conducting development based on customer needs
- Increasing the number of new projects
- Acquiring patents that protect our businesses

Sales

- Discovering and responding promptly to potential needs
- · Investing swiftly to achieve sales growth
- Expanding sales opportunities by leveraging Group-wide capabilities

all laws and regulations, and contributes to people's daily lives as and society by creating value through the hnologies.

Results and Value Created



Financial results

,	FY2009	FY2019
Net sales	¥916.8 billion	¥1,543.5 billion
Operating income	¥117.2 billion	¥406.0 billion
Net income after taxes	¥83.8 billion	¥314.0 billion
ROIC	7.0%	19.4%
ROE	6.0%	12.3%
Cash dividends per share	¥100	¥220



Patents acquired and held

Patents acquired

1,892

Patents held

21,261



Market share

PVC, semiconductor silicon, advanced photomask blanks and pheromone formulations

Global rank: No. 1

Cellulose derivatives Global rank: No. 2

Japan rank: No. 1

Silicones

Global rank: No. 4 Japan rank: No. 1



Sales share of environmental products*

Share of overseas sales



73.1%

12.1%

As of March 31, 2020

Contents

HIGHLIGHTS

FY2019 (Year ended March 31, 2020)
Financial Highlights2
Non-Financial Highlights3
Management's Message
Chairman's Message ··················4
President's Message 6
Tresident's Message
Pursuit of Sustainable Societal Growth9
Business Overview
Business at a Glance 10
PVC/Chlor-Alkali Business·····11
Semiconductor Silicon Business ······14
Silicones Business ······16
Electronics and Functional Materials Business $\cdots 18$
Specialty Chemicals Business22
Processing, Trading & Specialized Services Business ··· 23
Semiconductor Manufacturing Process and
Products of the Shin-Etsu Group24
R&D and Quality Management Initiatives25
Sustainability Initiatives
Environmental, Social and
Governance (ESG) Enhancement26
Key ESG Issues28
Enhancement of Governance······37
Activity Status of Outside Directors and Outside
Audit & Supervisory Board Members40
Board of Directors and Audit &
Supervisory Board Members ······41
Financial Information
Ten-Year Summary ······42
Consolidated Balance Sheet44
Consolidated Statement of Income46
Consolidated Statement of Comprehensive Income ···· 46
Consolidated Statement of Changes in Net Assets47
Consolidated Statement of Cash Flows49
Company Data
Shin-Etsu Group Companies50
Investor Information

For more details:

Investor information

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

Sustainability information

https://www.shinetsu.co.jp/en/csr/

^{*}Products that contribute to the achievement of Sustainable Development Goals. 7 (affordable and clean energy) and 13 (climate action)

Chairman's Message



We are striving to enhance our corporate value by leveraging the capabilities the Shin-Etsu Group has built up to now.

I would like to express my deepest gratitude to our customers, as well as to our shareholders, suppliers and the local communities hosting us for your support and cooperation.

The fiscal year 2019 posed a severe challenge with the global economic slowdown. Despite this, the Shin-Etsu Group achieved record high earnings thanks to its unremitting management efforts.

Shintech, a core of the Group's PVC business, completed the work to build an ethylene plant in February 2020, and it has now started operations. This has further reinforced Shintech's fully integrated production plant that starts from raw materials. As the world's largest merchant supplier of PVC, we will further enhance our foundation for achieving greater stability in supplying our products to customers in coming years.

Shintech started operations in October 1974 in Freeport, Texas. Since then, it has steadily captured the global PVC demand, and grown through repeated large-scale expansions to the facilities located there. Following the completion of a series of expansions in Freeport in 1997, the company recognized the need for a new production base and decided to act accordingly. The decision was to disperse the manufacturing bases so that we can reliably fulfill our supply responsibility to customers even in the event of natural disasters or other unavoidable circumstances.

As the first phase toward this goal, Shintech started PVC production in Addis, Louisiana in December 2000. Following this, the company worked on plans for an integrated production project starting from raw materials, with the aim of achieving further growth. Vast stretches of land were required to achieve this project, and after surveying several possible locations in the U.S., Shintech found an industrial site in

Plaquemine, Louisiana that was ideal for both railway and waterway transport. In July 2008, at this location, Shintech started integrated production from chlorine, one of the main raw materials for PVC. The site in Plaquemine underwent two large-scale expansions after this, and Shintech's production capacity has now reached as much as three million tons annually.

This February, Shintech started in Plaquemine the production of ethylene, which is another major raw material used for PVC. Thus this step has marked the completion of Shintech's plans for achieving a fully integrated production system starting from raw materials. Of course, Shintech's journey does not end here. The company is currently proceeding with subsequent major expansions to achieve further development, which it seeks to finish by the end of 2020.

Currently, the global economy is severely impacted by the spread of Covid-19. The economic impact of the pandemic may well have surpassed the global financial crisis in 2008, and it is said that we are facing the challenging crisis. Looking at the company's history, one can see that we have applied our management capabilities to overcome many crises in the past and have ultimately

succeeded in achieving further growth. These achievements have only been possible through the strengths that we have cultivated in the following areas within the Shin-Etsu Group:

- Avoiding over-reliance on a single product or customer; instead, focusing our efforts to strengthen our core businesses in PVC, semiconductor silicon and silicones, as well as all of our other businesses.
- Building solid financial foundations so that we can make timely and appropriate capital expenditures and R&D investments with our own funds.
- Continuously pursuing technological innovation and improving productivity so as to develop a strong, resilient company that can overcome depressions.
- Ensuring that management and employees work together towards the shared goal of sustainable growth.

As we look ahead, we will continuously strive to enhance our corporate value. More than ever, we sincerely request your understanding and support.

Chairman Chihiro Kanagawa

President's Message



Placing the utmost priority on safety and quality, we achieved high rates of operation and maintained record high levels of income.

We are determined to build a stronger and more resilient company and provide better value to our customers.

As I prepare this year's message to you, the world is confronting one of the greatest health threats of a generation, one that profoundly impacts the global economy and the livelihood of all of us. My thoughts go to individuals and communities deeply hit by the COVID-19 pandemic. I must say how proud I am of our 23,000 employees around the world. They have been doing excellent jobs to keep our work place safe and our facilities running, and serve our customers during this extraordinary time. I am grateful to see them working hard with a strong sense of purpose. Their attention, focus and teamwork are unrivalled. We as a company certainly place our utmost priority on their health and safety. I also would like to express my sincere appreciation to our executive team for the exceptional leadership they have been exhibiting.

FY2019 was another successful year for our company. We managed to maintain the record level of earnings. When you look around, you

will notice that not recording an earnings decrease was in itself a very rare feat in the chemical and material industries in 2019. We retained the levels of return on invested capital and of return on equity, which were 19.4% and 12.3%, respectively. Since March 2010, the cumulative growth in earnings was ¥230.2 billion on an after-tax basis, which is equal to a compound annual growth rate of 14.1%. This result and the preceding accumulative achievements allow us to tackle the very difficult ongoing challenges from a position of strength. In FY 2019, we completed our capital plans in the amount of ¥265.0 billion. We are executing capital projects in the amount of ¥240.0 billion for FY 2020 to advance our capabilities and position. We are doing so in a prioritized and disciplined manner. We have been managing basic business requirements and addressing various issues while keeping our objective intact. The objective remains to build a stronger and more resilient company with our dedicated people, so that we can serve our customers better, innovate well and reward our shareholders.

In the PVC/chlor-alkali business segment, we first of all report to you that the ethylene plant commenced its operation at our Shintech Inc.'s facilities in the US. The greater integration will enhance our long-term competitiveness. At the same site, Shintech is constructing a new integrated chlor-vinyl plant as planned. Meanwhile, we have begun evaluating its second phase. In the silicones business, the planned expansion of production capacity for silicone monomers and final products at our major sites is continuing. With the capital projects, we strengthen the supply capabilities and product lineups for customers worldwide. Turning to the specialty chemicals business, while we expand our cellulose business in pharmaceutical and industrial fields, we will increase our presence in food application markets. We are adding more products to the pheromone offerings to facilitate agricultural yield increase in an environmentally sustainable manner. Our work of differentiating the polyvinyl alcohol product lines will continue. Although semiconductor device industries are experiencing some short-term fluctuations, we are certain of the growth of the industries on a long run. We will employ every effective means to assure our customers of the supply of high-quality and advanced silicon wafers. We serve the same industries with our photoresists, photomask blanks and some other products. We are close

to being a one-stop shop of high-end materials for semiconductor device industries and will extend the path forward. As the use of rare earth magnets continues to rise and evolve, we are elevating the integration and capabilities of supply. We are adding new products which meet 5G requirements to our encapsulant and substrate product lines. We will continue to serve optical fiber markets as the only merchant supplier and we will swiftly meet the growing demand for high purity synthetic quartz substrates in all sizes.

We have been running all the plants as hard as we can. We do so with our strong commitment to safety and quality. We have 23,000 highly motivated people working day in day out to deliver our commitments. Our success comes from the energy and passion of all those team members. By enhancing the employee experience, we foster a culture where everyone is respected and valued, and has an equal opportunity to contribute. We invest in our employees through managerial interactions, various training programs and career development opportunities.

Our research and development activities are on the rise. We invested ¥48.5 billion or 3.1% of the yearly sales in the FY2019. Roughly one thousand new products were introduced and 1,892 patents were granted. More than thirty percent of our revenue comes from patent-advantaged product sales. In 2019 we launched several new products, which include

quartz cloth, thermoset ultra-low dielectric resin, gallium nitride related products and materials for micro LEDs.

Our technical and engineering expertise is the backbone of our operation. Coupled with our employees' commitment to safety and quality, it enables us to deliver quality products consistently in a timely manner. Our entire team is customer centric and our customers find it easy to work with us. We continue to deploy our ingenuity and enabling technologies to serve our customers' needs and help solve their issues.

Our product portfolio and developmental direction are in line with SDGs. We believe that our product offerings facilitate the achievement of SDGs, and SDGs will in turn facilitate our business. For the parallel pursuit of sustainable development of human society, improvement of its quality, and greater lessening of the burden on the environment, we believe that it is essential to maximize efficiency. Connectivity, resource efficiency, productivity advancement, smart infrastructure, and health enhancement are the key themes that we are working on. In this endeavor, we commit ourselves to applying and

improving what we have and produce and innovating further throughout our operation. It is our daily mission to provide materials of value of which users will say that it is owing to those products that human life has been enhanced and problems markets and customers experienced have been solved.

We pay great attention to shareholders return. In this regard, we declared an annual dividend of ¥220 per share, which is the highest mark in the company's dividend history.

In order for this great company to continue to do what it has been able to do for our customers, our shareholders and the communities we are in, the company will have to grow. We are working on various initiatives to broaden our business portfolio and expand our footprints. 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.

I sincerely thank our shareholders for your confidence, our customers for their partnership and our entire Shin-Etsu team for their dedication to our operations.

President Yasuhiko Saitoh

Pursuit of Sustainable Societal Growth

The maximization of efficiency is essential to realizing sustainable development of human society and the improvement of its quality while lessening environmental burdens and building healthy, safe and secure living environments.

The Shin-Etsu Group will respond to these challenges and contribute to the achievement of the SDGs by launching products in a variety of fields, including communication network "Connectivity", "Energy and Resource Efficiency", "Productivity Enhancement", "Smart Infrastructure" and "Health Enhancement".

Connectivity

Applications

Semiconductors, data centers, smartphones, 5G circuits, optical fibers, etc.

······ Example products ······

- Semiconductor silicon
- Rare earth magnets
- TIM (Thermal interface materials)
- Silicone electromagnetic noise suppression sheets
- Low dielectric resin
- Quartz fabric
- Lithium tantalite substrates
- Optical fiber preform

Energy / Resource Efficiency

Applications

Automobile motors, eco tires, exhaust gas treatment filters, etc.

······ Example products

- Rare earth magnets
- Silane coupling agents for eco tires
- Silicone lubricating oil
- Cellulose for exhaust gas treatment filters
- Packaging materials for cutting-edge semiconductors
- Anode materials for lithium-ion hatteries

Health Enhancement

Applications

Pharmaceuticals and foodstuffs, pest control, cosmetics, contact lenses, etc.

···· Example products ···

- Cellulose for use in pharmaceuticals and foodstuffs
- Cellulose for use in personal care products
- Synthetic pheromones
- Silicone for use in cosmetics
- Silicone for use in contact lenses

Smart Infrastructure

Applications

Water and sewerage systems, concrete, cement, air conditioners, self-cleaning walls, construction, tap water systems, etc.

···· Example products ·····

- PVC
- Cellulose for construction materials
- Rare earth magnets
- Photocatalyst coatings
- Silicone sealant
- Caustic soda
- Sodium hypochlorite

Productivity Enhancement

Applications

Industrial robots, semiconductor manufacturing equipment, encapsulant film, etc.

Example products

- Rare earth magnets
- E-CAP®
- Silicone release agents
- Silicone defoamers
- Silicone-based additive agents
- FPD panel vacuum assembling equipment
- Nanoimprint equipment
- Laser debonding equipment

Backbone of Our Manufacturing

Legal compliance, fair business activities, a safety-first policy, environmental conservation, respect for human rights, product safety, quality assurance

Business at a Glance



PVC/Chlor-Alkali Business



















Business Overview

Polyvinyl chloride (PVC) resins are general-purpose resins used in a wide range of applications from everyday products to all kinds of industrial materials. With three production bases, in the United States, Europe and Japan, the Shin-Etsu Group has the capacity to produce 4.15 million tons of PVC resins each year. Shintech, a PVC manufacturing subsidiary based in the United States, started operation in 1974 at a production capacity of 0.1 million tons per year. Since then, Shintech has completed several expansion projects and become the largest PVC manufacturer in the world, with an annual production capacity of 2.95 million tons. The Group is stably supplying products to customers throughout the world. Shintech is supporting it by further increasing its capacity by establishing a new ethylene plant with the goal of achieving stable procurement of raw materials and constructing an integrated PVC complex for processing from the raw materials stage.

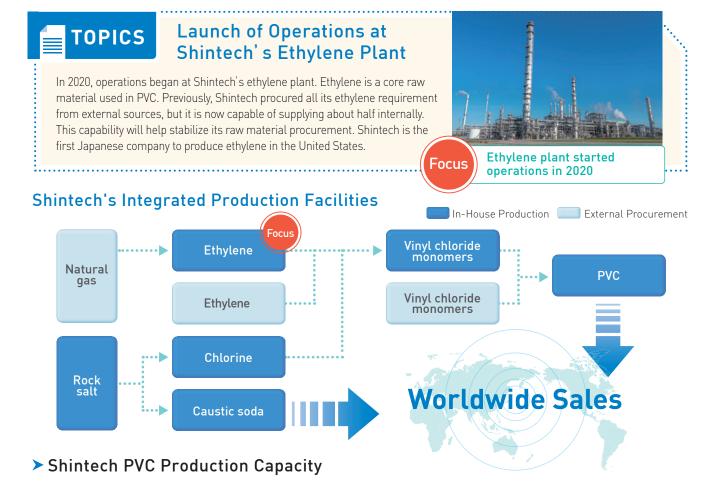


Contributing to the Achievement of SDGs Through Product Supply

Approximately 60% of the raw materials used in PVC are salts, which are abundant throughout the world. Compared to other general-purpose resins, the benefits of PVC include a low dependence on petroleum resources, placing a relatively small burden on the environment. The process of manufacturing PVC from raw materials uses around 60% of the energy required to make other general-purpose resins. Highly durable and easy to recycle, PVC is used for a wide range of social infrastructure materials, including vinyl windows, water and sewerage pipes, public works and other construction.



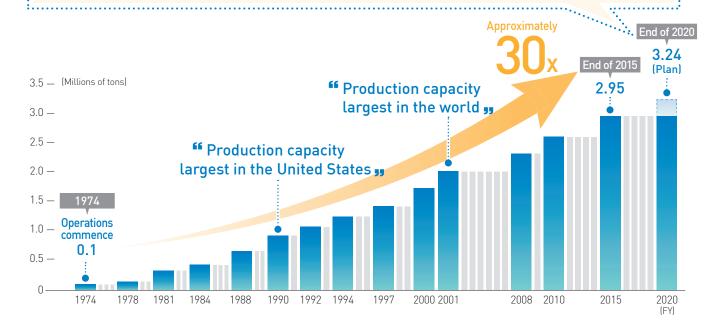
PVC/Chlor-Alkali Business



TOPICS

Increase in PVC Production Capacity

In response to the global PVC demand growth, Shintech is striving to increase its production capacity by the end of 2020. Once these efforts are complete, Shintech will be capable of producing 3.24 million tons of PVC annually, about 10% more than at present. The Group will endeavor to provide its customers with a stable supply of PVC while meeting ongoing demand increases.



Applications

PVC

PVC Pipes

Useful life of PVC water and sewerage pipes is more than 50 years, contributing to a long working life for infrastructure systems.



Paper and Pulp

Caustic soda is used for digesting and bleaching wood chips in the dissolved pulp manufacturing



Plastic Greenhouses for Agriculture

PVC is easy to recycle.In Japan, more than 50% of the PVC sheet used for agricultural greenhouses is recycled.



Electric Wire Coating Material

PVC, which is superior in insulation properties, durability and pliability, and is hard to damage, is used as a coating material for electric wires.



Super-Absorbent

These absorption agents are an essential element of paper diapers. Caustic soda is one of the raw materials used to manufacture super absorbent polymers.



PVC-Framed Windows

PVC is an excellent insulator that can reduce the amount of heat lost through windows by 70%. These insulation properties help conserve energy by improving the efficiency of heating and air conditioning.



Siding Materials

These decorative materials made from PVC are lightweight and easy to use for construction. They also provide excellent resistance to weather. shocks and corrosion.



Caustic Soda

Alumina

Aluminum hydroxide, made by dissolving bauxite with caustic soda, is a raw material for alumina (aluminum oxide).



process.



Detergents

Soaps and

Caustic soda is used as a raw material for soaps and synthetic detergents.

Polymers



Sodium Hypochlorite

Sodium Hypochlorite

Used to disinfect and protect the safety of foodstuffs and tap water, this material also helps prevent the spread of infectious diseases.



Semiconductor Silicon Business

Business Overview

The Shin-Etsu Group is the world's leading manufacturer of silicon wafers used as substrates for integrated circuits. Consistently leading the way in terms of wafer purification and flattening technologies, the Group provides the market with superior products while continuing to steer the silicon wafer industry through achievements such as its early mass production of 300mm wafers and silicon-on-insulator (SOI) wafers that realize high speed and low power consumption. Furthermore, the Group has received high praise from customers throughout the world for its high-precision, single-crystal and high-end processing technologies; high-quality epitaxial growth technology for cutting-edge image sensor and logic devices; and quality management and evaluation analysis techniques. As IoT, Al and 5G communications-related technologies develop, the Group will refine its technologies and improve quality while continuing to provide a stable supply of advanced silicon wafers that support the development and production of semiconductor devices.



Contributing to the Achievement of SDGs Through Product Supply

As a basic material supporting our modern high-speed information society, silicon wafers contribute to the improvement of electronic device performance, the miniaturization of electrical equipment and energy conservation. Silicon wafers are a particularly essential material in the automotive field, where they are utilized to reduce environmental impact, improve safety and fully automate vehicle operation. Furthermore, they are useful for the stable supply of electric power, mainly to electronic equipment, as power semiconductors can minimize power consumption and accommodate high voltage and high currents. Group products also are used to accurately regulate motor drive controls from high to low speeds and used as power-saving transistors enabling the efficient transfer of power from generators to transmission lines.







Semiconductor device installed in a final product

Silicon Wafers

Electrical components for digital equipment and automotive parts

These items are used as a substrate material for semiconductor devices in smartphones, personal computers and other electronic devices; data centers; and automobiles.

Compound Semiconductor Products

LED components

Used in a wide range of applications including outdoor displays, traffic lights, in-vehicle stop lamps and sensor light sources.











Applications



Smartphones



Tablet-Type Devices



Personal Computers



Data Center



Hybrid Cars



Electric Vehicles



Car Navigation Systems



Electronic Toll Collection System



Televisions



Game Devices



Smart Watches



Digital Cameras



Drum-Type Washing Machines



Energy-Saving Air Conditioners



Rice Cookers



Microwave Ovens



Industrial Robots



Bullet Trains



Bank ATMs



Vending Machines

Silicones Business

Business Overview

The Shin-Etsu Group became the first Japanese company to commercialize silicone in 1953. Since then, the Group's share of the Japanese and global markets has risen, due to quality, technological capabilities and meticulous response to the needs of the market. Silicone is a highly functional material that has both organic and inorganic characteristics and many superior features. The Group has more than 5,000 silicone products that are used in a wide range of industries, including electronics and electric applications, automobiles, construction, cosmetics, healthcare and food.



Contributing to the Achievement of SDGs Through Product Supply

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. It is associated with a low dependence on petroleum resources and a low environmental footprint. Furthermore, it contributes to the achievement of sustainable societies, as it is used in solar power generation and other environmentally friendly products, including electric vehicles, eco tires and LED lights.



Production Capacity Enhancement through Large-Scale Capital Investment Worth ¥110.0 Billion

The Shin-Etsu Group is conducting large-scale capital investment worth ¥110.0 billion in stages at global locations. With this investment, the Group is strengthening its capacity to produce silicone monomer, an intermediate material, while responding to growth in demand for high-value-added silicone products used in fields that are expected to continue growing, including the automotive, cosmetics and healthcare fields. The Group is further enhancing its global supply system for silicone products, which are used in a wide variety of fields.



Silicone Representative Configurations



Major Characteristics of Silicone

Heat resistance

Adhesion properties

Cold resistance

Defoaming properties

Electrical insulation properties

Water repellency

Release properties

Weather resistance















Applications

Cosmetics

Improving the usability and functionality of various cosmetics to meet the diverse needs of the marketplace.



Buildings

Widely used as waterproof sealing material around window glass.



Lithium-lon **Batteries**

Used in thermal interface materials found in lithium-ion batteries for electric vehicles and other devices



Plastic Products

Utilized in resin modifiers, which raise the performance and effectiveness of plastic products.



Contact Lenses

Essential as a material for contact lenses because of its oxygen permeability characteristics.



Textile Treatments

Adds functional attributes, including soft texture and water-repellency.



CPAP* Devices

Silicone is used in masks attached to CPAP devices, which help treat sleep apnea. Silicone is soft and easy on the skin, making these masks comfortable.



Ship-Bottom Paints

Helps raise fuel efficiency by preventing marine organisms from attaching to ship drafts and contributes to the conservation of marine environments due to its high product safety.



*Continuous positive airway pressure



Silicone can lower rolling resistance and help improve fuel efficiency as a tire modifier.



Toys

Utilizing the safety and transparency of silicones, it is used as a material for toys.

Photograph provided by SEGA TOYS CO., LTD.



Electronics and Functional Materials Business

Business Overview

We supply rare earth magnets, which are essential for reducing the size and weight of motors used in a variety of devices, including hybrid cars, electric vehicles, industrial equipment and home appliances. In addition, we provide photoresists, photomask blanks, encapsulation materials, pellicles and other products used in the semiconductor manufacturing process. Furthermore, we respond to the needs of advanced information societies by supplying products such as optical fiber preform and high-grade synthetic quartz used in large-scale photomask substrates for LCD and other flat-panel displays.



Contributing to the Achievement of SDGs Through Product Supply

Rare earth magnets have about 10 times the magnetic force of conventional ferrite magnets and are used to reduce the weight of motors and increase electrical power regeneration. These magnets help reduce greenhouse gas emissions while increasing the power efficiency of a variety of products, including environmentally friendly vehicles and energy-saving air conditioners.



Various types of rare earth magnets in shapes such as squares, rings and cylinders



Enhancing the Rare Earth Magnet Manufacturing Plant in Vietnam

Vietnam-based Shin-Etsu Magnetic Materials Vietnam Co., Ltd., started operation in 2013, initially separating and refining raw materials. Afterward, taking our business continuity plan (BCP) into account, it became the first Group company to implement material process outside Japan, including melting, molding and sintering. In response to growing demand for environmentally friendly vehicles and energy-saving air conditioners, it is strengthening manufacturing capabilities associated with material-related production processes. Furthermore, the company is enhancing its integrated production system,



Shin-Etsu Magnetic Materials Vietnam Co., Ltd.

which covers processes ranging from raw material refinement to final product manufacturing, by adding processing operations, while aiming to improve its stable supply system.















Major Products and Applications

Rare Earth Magnets

Rare earth magnets are used in such products as automobile motors, power generators, compressor motors for air conditioners, industry robots and motors for the hard disk drives of digital home appliances, thus helping to save energy. Shin-Etsu Chemical is engaged in the manufacture of these magnets from separation and refinement of rare earths as raw materials to processing. 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.

Industrial robot



Energy-saving air conditioner



Hard disk drive



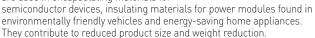
Plug-in hybrid car (Mercedes-Benz S560e)

These cars have drive motors that are equipped with rare earth magnets and help conserve energy and reduce CO₂ emissions.



Encapsulant Materials for Semiconductor Devices

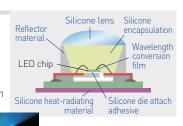
Highly pressure-resistant and reliable liquid, sheet and tablet-shaped epoxy encapsulants are used in encapsulating materials for





Packaging Materials for LED

These silicone-based materials offer superior transparency and heat resistance and are utilized in a wide variety of devices, including high-brightness lighting and LEDs used in automobiles.



LED Structure (blue characters are products provided by Shin-Etsu)

Low Dielectric Materials

SLK Resin

SLK resin has the lowest dielectric dissipation factor of any thermosetting resin and achieves extremely low levels of transmission loss when utilized as encapsulants for organic substrates for 5G and other high-speed communications technologies and for semiconductor devices.



Quartz Fabric

Quartz fabric has dielectric characteristics that are ideal for use with high-frequency bands. A toughening agent (prepreg molding material) for high-speed communication equipment and antenna substrates, quartz fabric also is used in a wide variety of resin substrates, including thermoplastic and



heat-curable resin substrates. It greatly contributes to improved communication performance in the high-frequency and high-speed transmission domains.

Optical Fiber Coatings

Extremely fine optical fibers have a cross-sectional diameter of only 125 microns. These coatings are used to protect delicate surfaces of optical fibers and to improve their strength.



High-Purity Silane for Semiconductors

High-purity silane is used in manufacturing process of semiconductor insulating films, epitaxial wafers and other commodities. Using sophisticated refinement technologies, we ensure stable supply of this product.



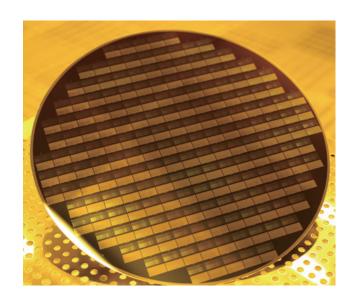
Electronics and Functional Materials Business

Major Products and Applications

Photoresists

Shin-Etsu Chemical, by utilizing its strengths as a materials maker, carries out integrated manufacturing from synthesis process of raw material polymer to compounding. We make photoresists (KrF, ArF) for excimer lasers that are used as photosensitive material for etching on semiconductor circuits, and our thick film i-line photoresists are used widely for thin-film magnetic heads and MEMS applications. Furthermore, for cutting-edge miniaturization processes we have lineups of multilayer material products. These are used as essential key materials in lithography processes for semiconductor manufacturing, and they help to enable the high integration, high speed and high functions of semiconductors. To steadily capture the growth of the photoresist market, we established a new plant in Taiwan, one of the main areas of demand.

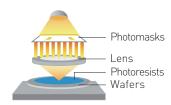
In combination with our existing Naoetsu Plant in Japan, we now have two production bases. As a result, we will be able to disperse business risk and strengthen our business foundation.



Photomask Blanks

Photomask blanks are the base material of photomasks, which are used as the patterning templates when IC patterns are printed on silicon wafers during the semiconductor lithography process. The light-shading layer is formed on the surface of synthetic quartz, which is the substrate of photomask blanks. Targeting improvement in the quality and performance of key raw materials, Shin-Etsu Chemical has developed innovative technologies for mass producing the most advanced photomask blanks, including multilayer film structures that provide the single-nanometer coverage essential for manufacturing devices

and silicon nitride-permeable membrane structures. The Company also responds to the needs of device manufacturers with half-tone phase shift photomask blanks.





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. SHIN-ETSU SIFEL® 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.

SHIN-ETSU SIFEL® contributes to the improvement of products in a wide range of fields, including the automotive, aircraft, electronics and optical applications.



Fluorinated Anti-Smudge Coating

Fluorinated anti-smudge coating is applied to the surface of eyeglasses and cover glasses/protective films for smartphones. A nano-scale fluorinated thin layer formed on the surface repels water and oil, and stains such as fingerprints can be wiped off easily. Due to its low dynamic friction, fluorinated coating

contributes to improving the operability of smartphones. In addition, the Company supplies a fluorinated anti-smudge additive that can obtain excellent surface properties by adding to hard coatings.



Synthetic Quartz

Synthetic quartz, the key raw 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. Synthetic quartz contributes to the development of an advanced information society.



Oxide Single Crystals (Lithium Tantalite: LT)

Lithium tantalite (LT) is used in mobile communication devices such as SAW* devices, which screen electromagnetic waves and pick up only specific frequencies. Oxide single crystals are currently contributing to the popularization of smartphones and serve an important role in our modern, increasingly

information-drive n society.

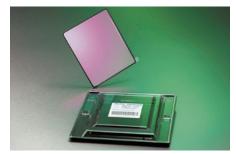


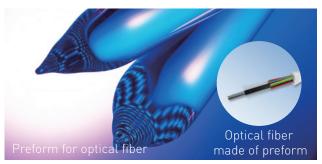
*Surface Acoustic Wave

Pellicles

The Company provides high-quality pellicles for ArF and KrF excimer laser lithography. Its pellicles support customers' semiconductor device production with their excellent performance, such as high light resistance, good transmission uniformity and low outgassing. In addition, it has succeeded in

the development of superlarge pellicles for the production of liquid crystal display (LCD) panels.







Pyrolytic Boron Nitride (PBN)

PBN is a high-purity ceramic with excellent chemical resistance and strength at high temperatures. Shin-Etsu Chemical was the first company to successfully produce PBN domestically. In addition to making use of PBN's excellent characteristics in crucibles for compound semiconductors and molecular-beam

epitaxy, PBN's application fields are expanding to such areas as MOCVD systems and organic EL systems.



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. The Company has succeeded in putting electrical conductivity on SiO particles via our own proprietary method.



Specialty Chemicals Business





















Business Overview

Cellulose derivatives, environmentally friendly materials made from natural polymer cellulose, are a core product of the Specialty Chemicals Business. Cellulose derivatives are versatile, with applications ranging from such fields as pharmaceuticals and foods to materials for construction and civil engineering work, coatings, ceramics and toiletries. Currently, we have the largest share of the cellulose derivatives market in Japan and meet global needs as the world's foremost manufacturer with bases in Japan, Europe and the United States. In addition, we provide synthetic pheromones used for agricultural pest control and the functional resin POVAL. We also provide a variety of other products, including silicon metal, a main ingredient in silicones and synthetic quartz.



Contributing to the Achievement of SDGs Through Product Supply

Industrial cellulose derivatives reduce the separation of concrete in water, enabling concrete to be poured without polluting water. This contributes to environmental preservation by preventing water pollution. Synthetic pheromones are very safe, environmentally friendly and eliminate agricultural pests. They are useful for making food safer through the reduction of insecticides and agricultural chemicals sprayed in fields.



Construction of New Cellulose Derivatives Plant Completed

Silicon Metal

silicon metal in Australia.

In the autumn of 2019, construction of a new cellulose plant at Shin-Etsu Chemical's Naoetsu Plant was completed. This new plant will specialize in cellulose derivatives (METOLOSE®), the Naoetsu Plant's core product, and will produce cellulose products at an even higher level of quality using improved and new technologies. With the addition of this new plant, the Company will be able to offer an increasingly diverse product lineup, with particularly numerous varieties The completed New of pharmaceutical and food application and will aim to further expand its cellulose business.



METOLOSE® Plant

Major Products and Applications

Cellulose Derivatives

Cellulose derivatives provide a variety of functions such as controlling the location where the drugs dissolve in the body and dissolving drugs slowly.

Synthetic Pheromones

Synthetic pheromones prevent male

Obstructing their mating process in

this fashion reduces the volume of

pests from finding their partners.

They are also used as a binder for the molding process to manufacture exhaust gas purifiers for automobiles. This technology contributes to the prevention of global warming





Polyvinyl Alcohol (POVAL)

Silicon metal is a key raw material of

silicone, semiconductor silicon and

synthetic quartz. Simcoa Operations Pty.

Ltd., our group company, manufactures

JAPAN VAM & POVAL Co., Ltd., manufactures and sells this material. Due to its properties as a water-soluble synthetic resin, it is used in a wide range of applications such as adhesives, various types of films, fiber treatment agents, paper processing agents, and additives



for cosmetics and pharmaceuticals.



Aroma Chemicals

agricultural pests.

Leaf alcohol is widely used in a variety of products, including aroma products, cosmetics and foodstuffs.



SOLBIN®

This is a denatured resin supplied by Nissin Chemical Industry Co., Ltd., with excellent adhesion and solubility. Used in products such as paints, inks and adhesives.



Processing, Trading & Specialized Services Business



















Business Overview

Shin-Etsu Polymer Co., Ltd., develops and supplies products that are easy to use and highly functional products making use of materials processing technologies.

Shin-Etsu Engineering Co., Ltd., is involved mainly in the design and construction of the Group's manufacturing plants, and its engineering technology has a strong reputation with customers outside the Group.



Contributing to the Achievement of SDGs Through Product Supply

The construction material (corrugated rigid polycarbonate sheets) manufactured by Shin-Etsu Polymer Co., Ltd. is used as an exterior roofing material. Using more than 50% reclaimed raw materials, this product contributes to recycling.



Enhancement of Production Capacity at Shin-Etsu Polymer India

Shin-Etsu Polymer Co., Ltd., is strengthening its ability to supply automotive input devices, which are core products. To respond to growth in demand associated with accelerating vehicle electrification, the company will expand its automotive key switch production facilities in India. By establishing a sturdier production system, Shin-Etsu Polymer will respond to expansion in demand within India and export goods to Europe while aiming for further business growth.



Shin-Etsu Polymer India, which is expanding its facilities (Building No. 3, at right)

Major Products and Applications

Input Devices

Providing input devices such as automobile dashboard audio and air conditioners



Wafer Cases

Providing cases for shipping silicon wafers and for intra-process wafer conveyance at device manufacturers.



Silicone Catheters

Using our silicone processing technologies, we are providing increasingly intricate catheters.



Various Rollers for OA Equipment

Providing semi-conductive developing rollers and fuser rollers with proprietary processing technologies including conductivity, foaming and compositing technologies using silicone rubber as a raw material.



shupua

This glass is made with extremely transparent silicone rubber.





Shin-Etsu Engineering Co., Ltd.

Engineering

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

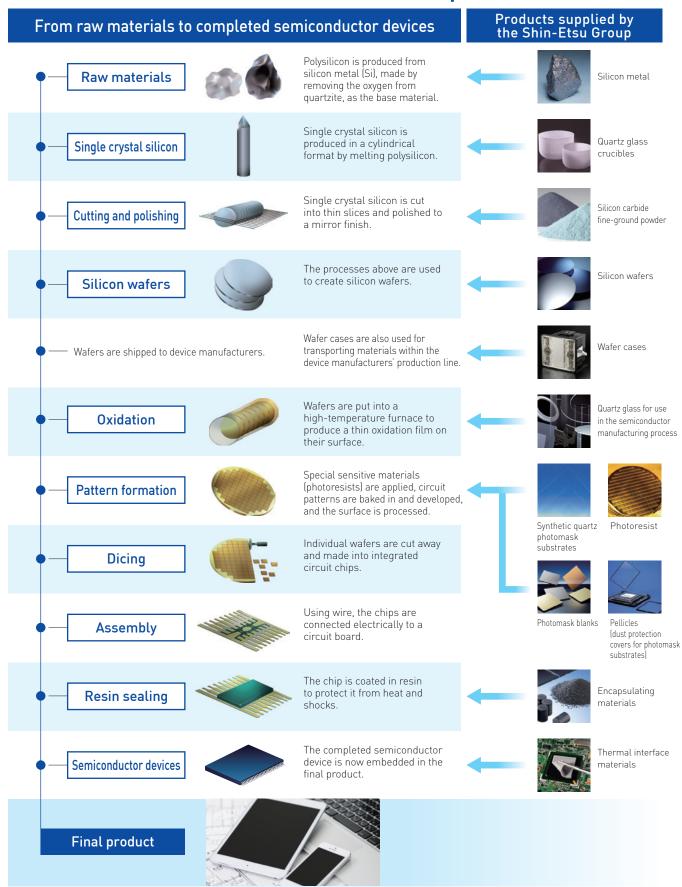


Vacuum Assembling Equipment

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



Semiconductor Manufacturing Process and Products of the Shin-Etsu Group



R&D and Quality Management Initiatives

R&D

Given the growing need today to realize the sustainable development of human society and the improvement of its quality while minimizing the burden on the environment, it is essential to maximize efficiency. Technologies such as the high-speed processing of data, automatic driving, IoT, 5G and AI should be utilized and continue to evolve for these purposes. We believe we have a significant role to play in this regard. We will make efforts so that many of our products will contribute to these objectives and will pursue tangible results in developing new products to this end.

5G Products

In anticipation of vigorous demand growth, we are striving to develop new 5G products and expand our product lineup.

Quartz Fabric

We are developing quartz fabric, which is optimal for use as a core material used in circuit boards that enable ultra-high-speed communication. This fabric is composed primarily of extremely thin threads of quartz glass,



which enables film thinning on multilayer substrates and is effective in terms of preventing device malfunction caused by radioactivity, as it generates extremely low levels of alpha radiation. Quartz fabric also is garnering expectations as a component of fiber-reinforced plastic used in 5G antennas and other products.

Low Dielectric Constant Thermosetting Resins (SLK series)

The SLK series is high strength and has a low modulus and low dielectric constant. In fact, its dielectric constant and dielectric loss tangent are lower than those of any other thermosetting resin when used with superhigh-frequency 5G



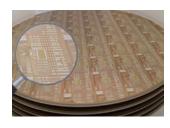
(10–80 GHz). It is also ideal for use in materials such as flexible copper-clad laminate (FCCL) and adhesives.

Heat Dissipation Sheets

To achieve the increasing levels of heat dissipation required by 5G technology, we have developed new heat dissipation sheet products, such as adhesive sheets fitted with heat dissipating material and sheets that can be bonded onto surfaces after being melted and subsequently hardened. We are aiming to roll out these products in the power semiconductor and automotive fields, which require high levels of reliability.

Gallium Nitride (GaN)

Semiconductors that utilize gallium nitride are expected to experience high demand due to their sophisticated properties and energy efficiency. These characteristics are required for the development of mobility technologies, such as electric cars, and 56. Moving forward,



the Shin-Etsu Group will aim to supply high-caliber GaN products.

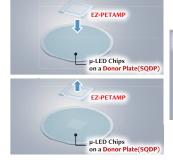
Micro LED Display Manufacturing Materials

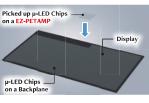
As spontaneous light-emitting displays with microscopic LED elements allocated to each screen pixel, micro LED displays are referred to as the "ultimate display." These displays provide high contrast, brightness and reliability, while conserving energy. To enable mass production of micro LED displays, the Company has developed the following process materials:

- A MicroLED transfer stamp that has formed a dry adhesion layer free of an adhesive agent on the ultra-flat substrate, and
- 2. A temporary support substrate that will make possible various processes such as cleaning processes and transfer processes while holding the substrate.

In addition, we are providing encapsulants, underfill and other process materials.

■Micro LED Mass Transfer Processes





Quality Management

As a materials manufacturer, we believe that stably supplying the quality products that we have promised to our customers is our most important thing. We have assembled an extensive lineup of products that we deliver to customers throughout the world, including raw materials used in industrial goods and materials utilized in state-of-the-art products. To respond to the unique demands related to each of these products, we have adopted the latest analytical equipment and evaluation equipment and are developing our own original quality control technology. At the same time, we are revising our manufacturing processes and employing a statistical methodology to reduce fluctuation in quality. Moving forward, we will remain an ideal partner to our customers as we swiftly respond to their diverse needs and endeavor to provide them with a consistent and stable supply of quality products.

Environmental, Social and Governance (ESG) Enhancement

In pursuit of sustainable growth, the Shin-Etsu Group is striving to provide society with essential materials and contribute to the resolution of pertinent challenges facing the earth by executing its Business Principle.* In addition, the Group is aiming to strengthen its governance structure, which steadily drives sustainable growth.

* Refer to the Business Principle page in the introduction.

ESG Promotion

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 corporate social responsibilities. The Group realizes that its ESG initiatives are essential to achieving sustainable growth and fulfilling these social responsibilities. Accordingly, we formulated a Basic ESG Policy and various internal regulations and have conducted our corporate activities in accordance with these guidelines.

To ensure proper implementation of ESG throughout the Group, we have formed the ESG Promotion Committee, an organization that is chaired by the president of Shin-Etsu Chemical. The Committee has about 50 members, including directors and division managers from the Company, as well as ESG managers from Group companies, and examines all corporate activities from an ESG perspective while establishing guidelines and other specifications for related initiatives.

▶ Basic ESG Policy

The Group:

- 1. Will do our best to increase the Group's corporate value through sustained growth and make multifaceted contributions to society.
- 2. Will carry out all of our company activities by making safety always our utmost priority.
- 3. Will constantly pursue energy-saving, resource-saving and the reduction of the environmental impact, and seek to help create a sustainable future world in which we all live in harmony with the earth.
- 4. Will endeavor to contribute to the prevention of global warming and the conservation of biodiversity by means of our cutting-edge technologies and products.
- 5. Will strive to respect human dignity, assure equality in employment opportunities and support the self-fulfillment of our employees.
- 6. Will appropriately disclose information in a timely manner.
- 7. Will carry out trustworthy corporate activities that are based on the integrity of the Group's ethical values.

► History of ESG Activity Enhancement

Support for Global Charter and Principles

2006

Signed and put into practice the Responsible Care Global Charter

2010

Joined the United Nations Global Compact (UNGC)

WE SUPPORT



2014

Signed the Revised Responsible Care Global Charter



2018

Approved Global Compact Network Japan's Tokyo Principles for Strengthening Anti-Corruption Practices



2019

Declared support for recommendations from the Task Force on Climate-related Financial Disclosures (TCFD)

2002

Established the voluntary Officers' Remuneration Committee

2005

Established the
CSR Promotion
Committee
(renamed as the ESG
Promotion Committee)

2010

Formulated medium-term reduction targets in response to climate change

2016

Identified the Key CSR Issues (renamed as the Key ESG Issues)

2018

Established the CSR Procurement Guidelines and the Supplier Hotline

2019

Formulated the Shin-Etsu Group Human Rights Policy One of the first companies in the chemical industry to raise the age of retirement

Group Initiatives

► FY2019 Initiatives

To strengthen ESG activities, the ESG Promotion Committee identified the following three issues as challenges the Group should undertake in FY2019:

Three Issues

- 1. Integration of Management with Sustainable Development Goals (SDGs)
- 2. Human Rights Due Diligence
- 3. Response to the Task Force on Climate-related Financial Disclosures* (TCFD)

1. Integration of Management with Sustainable Development Goals (SDGs)

The Group offers a diverse lineup of products that conform to its Business Principle and contribute to the achievement of the United Nations' SDGs. In FY2019, we revised a prior management objective from "contribute to the global environment" to "contribute to the SDGs." In making this change, we have further clarified benchmarks for SDGs compatibility and compliance when investing in existing businesses, developing new products and considering new businesses.

In FY2019, 94% of Shin-Etsu Chemical's capital investment projects involved SDGs-related contributions. The Company also invested \(\frac{\text{\frac{4}}}{1.5}\) billion in energy conservation and CO₂ reduction, lowering its greenhouse gas emissions by 7,649 tons a year.

2. Human Rights Due Diligence

Respect for human rights has always been a foundation of the Group's business operations. In May 2019, we established the Shin-Etsu Group Human Rights Policy with the goal of mapping out initiatives related to respect for human rights, promoting Group-wide activities and further enhancing our external messaging regarding respect for human rights.

In addition, we observe international standards of conduct, including the Universal Declaration of Human Rights, the ILO* International Labor Standards and the United Nations' Guiding Principles on Business and Human Rights. Furthermore, we are thoroughly dedicated to activities that aim to uphold respect for human rights, including the abolition of discrimination, the elimination of behavior that damages human dignity, the prohibition of child and forced labor, the protection of privacy and respect for basic labor rights. In December 2019, the Group began conducting risk assessments aimed at achieving comprehension of human rights risks within its value chain as a component of its human rights due diligence. Responding to the risks uncovered by these assessments, the Group will identify and deal with salient human rights issues.

3. Response to the Task Force on Climate-related Financial Disclosures (TCFD)

In February 2017, the TCFD released recommendations that indicated companies should analyze internal risks and opportunities based on several climate change predictions and future scenarios and subsequently disclose the degree of influence these have on financial affairs. The Group declared its support for these recommendations in May 2019 and participated in the TCFD Consortium of Japan co-founded by the Ministry of Economy, Trade and Industry, the Financial Services Agency, the Ministry of the Environment and various other organizations. In accordance with the TCFD's recommendations, the Group will strive to enhance its disclosure of climate change-related information.

^{*}A special team established in December 2015 by the Financial Stability Board (FSB) in response to requests made by the G20. It facilitates the disclosure of financial information related to climate change.

^{*}International Labour Organization

Key ESG Issues

In December 2018, the Shin-Etsu Group reviewed the list of Key ESG Issues, which were formulated in 2015, and were facing the Shin-Etsu Group.

As a result, the committee retained all the key issues, including "legal compliance, fair corporate activities". The Group is placing equal priority on each of the following key issues and regards them as equivalent in terms of importance.

Identifying Key Issues (Materiality)

The Group established the CSR Promotion Committee in 2005. The committee deeply investigated the central themes of ISO 26000 and minutely examined stakeholder demand in order to identify the Key CSR Issues. In 2015, the Committee compiled and proposed key issues that were later approved and designated as official key issues (see the figure below) by the Managing Directors' Meeting, which is a decision-making body for business execution attended by all of the Company's directors.

The CSR Promotion Committee was later developed into the ESG Promotion Committee, which reexamined these key issues. In December 2018, the Committee decided to retain all these issues as Key ESG Issues.

The Group has made legal compliance and equity the foundation of all of its corporate activities, starting with a focus on these nine key issues.

Key Issues

Through initiatives targeting key issues, the Shin-Etsu Group is strengthening existing businesses, creating new businesses and contributing to the achievement of the SDGs.







Employees and contractor health and safety



Energy-saving, resource-saving and the reduction of the environmental impact



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

▶ Risks and Opportunities Related to the Key Issues

	Key Issue	Risks and Opportunities (typical examples)	Corresponding Initiatives
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. Opportunities Formation of the foundation of corporate value, risk elimination, customer confidence creation, business opportunity expansion, hiring and retaining excellent human resources, etc.	·Raising of compliance awareness through methods including training ·Thorough bribery and corruption prevention measures, etc.
Ε	Energy-saving, resource-saving and the reduction of the environmental impact	Risks Strengthening of greenhouse gas regulations, raw material price rises, procurement difficulties, etc. Opportunities Enhancement of competitiveness through environmental burden reduction and productivity improvement, expansion in demand for products that contribute to environmental protection, etc.	·Acceleration of environmental burden reduction, response to climate change ·Water resource conservation ·Waste reduction, etc.
	Employees and contractor health and safety	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. Opportunities Stable production and higher productivity achieved through accident prevention measures and new process development, etc.	·Safety training implementation ·Execution of environmental safety audits ·Improvement of workplace environments, etc.
	Product quality improvements and product safety control	Risks Loss of customer trust due to issues concerning product quality or safety, etc. Opportunities Fostering of customer trust through continuous timely delivery of products at pledged levels of quality, etc.	·Quality management ·Quality audits and technical support ·Product safety management, etc.
	Promoting CSR procurement and the diversification of supply sources	Risks Production suspensions and shipment delays caused by difficulties in procuring raw materials, etc. Opportunities Stable procurement at fair prices through diversified suppliers, gaining trust from customers and society through thorough adherence to CSR procurement, 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.
S	Respect for human rights, the development of human resources and the promotion of diversity Respect for and protection of intellectual property	Risks Human rights violations committed through the Company's business activities or within its supply chain, etc. Opportunities Hiring and retaining excellent human resources through business activities grounded in respect for human rights, etc.	-Fostering employee awareness regarding human rights -Promotion of diversity -Enhancing work-life balance systems -Conducting human rights due diligence, etc.
		Risks Delay in business progress caused by intellectual property infringement, etc. Opportunities Acceleration of in-house business development through safeguarding and utilizing intellectual property, etc.	·Appropriate management of intellectual property and information assets ·Cybersecurity enhancement, etc.
	Contribution to industry and social initiatives	Risks Loss of trust when business activities do not align with society's needs, etc. Opportunities Employment promotion and tax payment through stable business operations, fostering of trust-based relationships with local communities, etc.	·Fund-raising activities ·Local contribution activities, etc.
	Accurate and timely information disclosure and communication with stakeholders	nformation disclosure nd communication Opportunities Stablishment of appropriate market valuation	

Please visit the sustainability section of our website for detailed information on each initiative.

WEB https://www.shinetsu.co.jp/en/csr/

The Foundation of All Activities: Legal Compliance, Fair Corporate Activities



The Shin-Etsu Group clearly specified the central importance of legal compliance and fair corporate activities when identifying the Key ESG Issues associated with its diverse business operations.

The Group raises legal compliance awareness among all its directors and employees by including legal compliance within its Business Principle and yearly management objectives. When laws and regulations related to corporate activities are enacted or revised, the Company's Legal Department plays a central role in efforts aimed at thoroughly circulating and disseminating this information internally. To promote understanding of key laws and regulations, the Company is working to raise awareness by posting commentary articles in our company newsletter.

All directors and employees submit written oaths of compliance to the Company. Legal violations and other instances of improper conduct are rectified through appropriate penalties, in accordance with internal regulations. With the establishment of the Compliance Consultation Office, we have established a mechanism through which directors and employees can seek counseling or make reports when they have discovered violations of regulations, such as laws and regulations, social norms and the Group's internal regulations including bribery and corruption prevention rules, or have encountered harassment.

E Environment











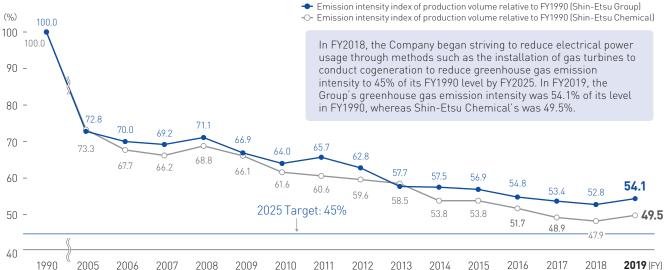
Key Issue: Energy-saving, resource-saving and the reduction of the environmental impact

The Group recognizes the importance of reducing global environmental burdens when manufacturing, using and disposing of our products. Accordingly, the Group does not limit itself to reducing the global environmental impact in production processes alone. It also strives to develop products that help reduce environmental burdens when they are used.

As a chemical manufacturer, the Group views the resolution of issues involving ocean plastic waste, a challenge on a global scale, as one of its duties.

Accordingly, we are striving to resolve this issue through methods such as participation in the Council for Addressing the Ocean Plastic Issue, which was established by an industry association.

Changes in Greenhouse Gas Emissions*



^{*}Greenhouse gas emission intensity index (FY1990 = 100)

Water Usage* ■ Volume of water used (left) (Million m³) - Recycled ratio (right) 4,000 -- 100 91.8 917 91.6 91.2 91.2 - 90 3,000 -**2,333** _{- 80} 2,258 2,264 2,222 2.154 2,000 -- 70 1,000 -- 60 Ω 2015 2019 (FY)

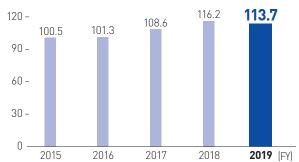
*Total quantity of water withdrawal and recycled water *The volume of water used includes all consolidated subsidiaries and some non-consolidated Group companies' amounts



*Due to standards that differ by country, waste amounts include only waste from Group companies in Japan.

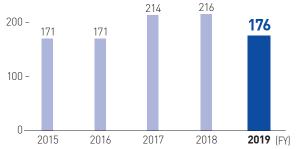
Amount of Waste Generated*

(Thousand tons) 150 -



*Due to standards that differ by country, waste amounts include only waste from Group companies in Japan.

(tons) 300 -



*Figures are totals for Group companies in Japan based on the PRTR system in the Law for Promotion of Chemical Management.

Rare Earth Magnet Recycling Aimed at Resource Conservation

The Group possesses separation and refinement technologies that enable it to extract a variety of rare earth metals. While developing these technologies, the Company is endeavoring to recycle magnet powder generated when processing these metals and, since 2013, to recover rare earth magnets used in energy-saving air conditioners and hybrid cars. These efforts ensure a stable source of valuable rare earth metals and contribute to protecting the environment through the reduction of waste and the reuse of resources.

Rare-Earth Magnet Resource Recycling Process Rare-earth magnet Rare-earth processing plant magnet material processing plant Magnet powder recover Rare-earth Rare-earth magnets Rare-earth magnet Rare-earth raw Rare-earth separation material and refinement plant

▶ Climate Change Response

Through its business activities, the Group strives to reduce greenhouse gas emissions as a component of its climate change response.

Strategies

The Group targets development in both society and livelihoods while reducing its environmental impact. In accordance with this aim, the Group contributes to the maximization of efficiency through its products and technology. Listed below are concrete strategies that are relevant to these targets:

- 1) Reduce greenhouse gas emissions per production unit through thorough production streamlining
- 2) Develop, manufacture and supply products that contribute positively to the environment; Support streamlining efforts for both customers and society
- 3) Promote the adoption of renewable energy
- 4) Accelerate logistical streamlining

Climate Change-Related Risk Management and Ascertainment of Business Opportunities

The Shin-Etsu Group's Risk Management Committee identifies comprehensive risks that the Group should consider when conducting business activities and has included stipulations concerning the identification of specific risks, the maintenance of a risk management system and risk response in its risk management regulations.

The Risk Management Committee reports to the Board of Directors, Managing Directors' Meeting and Audit & Supervisory Board regarding climate change and other important risk management matters.

■ Climate change-related risks that affect the Group's business activities and corresponding mitigation measures

Contributing factors	Risks	Mitigation measures
Implementation of a 1. carbon tax and emissions trading system	 Introduction of systems enforced in the European Union, where the Group has production bases, in Japan and all U.S. states. 	 Energy conservation and greenhouse gas emission reduction achieved through improved production efficiency and the implementation of new production technologies
2. Changes in regional precipitation volumes	Restoration expenses for production equipment breakdowns caused by unexpectedly severe flooding and storms and lost opportunity cost associated with manufacturing stoppages Difficulty in procuring natural raw materials and raw materials from particular regions	Increase production bases and procure from multiple raw material suppliers Install important equipment at locations with low flooding risk and strengthen waterproofing measures such as floodwall construction Purchase property insurance Reduce water withdrawal by consistently using recycled water
3. Decline in reputation	Concerns regarding increases in absolute greenhouse gas emissions associated with business expansion The fact that the Group's products contribute to greenhouse gas emission reduction is not well known	Multifaceted and active disclosure of the Group's initiatives Proactive dialogue with investors regarding climate change

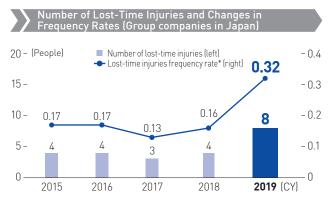
Business opportunities presented by climate change

Contributing factors	Opportunities	Corresponding products		
Opportunities associated with strengthened regulations	 Increased demand for the Group's products that contribute to energy conservation and greenhouse gas emission reduction 	Semiconductor silicon, rare earth magnets, silicones,		
2. Opportunities created by changes in atmospheric temperature	Rise in demand for the Group's products used in energy conserving goods	PVC, etc.		
3. Improvement in reputation	 Increase in sales of existing Group's products used in energy-conserving goods and expansion in sales opportunities for new products thanks to the growing reputation for energy-saving products Possible rise in corporate value due to higher appreciation of the Group's products that contribute to energy conservation 			

Social

▶ Key Issue: Employees and contractor health and safety

The Group targets the prevention of all serious accidents and lost time accidents. We are thoroughly identifying risks that carry dangers of injury or illness through risk assessment while striving to build safe and comfortable workplaces.



^{*}Rate of recordable injuries per million hours worked

Participants of Safety Education Programs

Coverage	FY2015	FY2016	FY2017	FY2018	FY2019
Shin-Etsu Chemical	7,531	7,970	9,751	11,774	19,411
Consolidated companies*	_	22,166	24,829	28,013	39,328

^{*}Consolidated data compiled from FY2016.

Accident Prevention Initiatives

The Group conducts biannual Environmental Control and Safety Audits at all of its manufacturing plants in spring and autumn. In FY2019, the Group audited activities related to several priority issues connected to serious accident prevention, including "safety measures targeting infrequent operations", "predictions regarding serious accidents and disasters, and measures aimed at minimizing associated damages".

In addition, the Group has been accepting suggestions related to close-call incidents *1 or other concerns as a bottom-up activity at each site for many years. In FY2019, Shin-Etsu Chemical received approximately 7,000 suggestions*2 related to close-call incidents that occurred at four of its plants. These activities have contributed to a large number of safety-related improvements.

- *1 Frightening or startling events experienced by workers at their workplaces or personal environments
- *2 Examples of some of these suggestions have been posted on our corporate website, which is updated periodically.

▶ Key Issue: Product quality improvements and product safety control

In addition to high-value-added products, general-purpose products of excellent quality generate cost competitiveness and lead to strategic advantages. At the same time, the Sales, Research, Manufacturing, Quality Assurance and Shipment Departments must fulfill their respective roles for the Group to stably supply its products. Furthermore, the Group acknowledges that quality, distinguishing characteristics and safety in terms of both environment and health are all important product elements and is striving to eliminate product-related issues.



Quality Management Enhancement

Since 2000, the Group has been conducting annual Quality Audits with the goal of improving product quality and upgrading customer services. In FY2019, the Company identified quality management issues, implemented recurrence prevention measures and improved its quality management system under the themes of "properly handling data obtained through process monitoring and product inspections" and "variability in measurement." In addition, we are conducting Six Sigma activities* aimed at raising quality levels on a Company-wide basis.

*A quality improvement method developed by Motorola, Inc. (of the United States) in the 1980s. These quality-improvement activities involve curtailing fluctuations in manufacturing process to prevent uneven quality and inhibiting the occurrence of material defects.



▶ Key Issue: Promoting CSR procurement and the diversification of supply sources

Appropriate raw material procurement throughout the global supply chain has become a worldwide issue. In response, the Group has formulated its Basic Procurement Policy and, in accordance with this policy, is promoting fair procurement activities that take issues involving human rights, environment and other important topics into account. To ensure that our suppliers thoroughly understand this Basic Procurement Policy, we have established the CSR Procurement Guidelines and made them public through our corporate website. We also hold briefing sessions as appropriate.

Furthermore, the Group set up the Supplier Hotline in January 2018 and is endeavoring to ensure transparency and fairness in its transactions.

Initiatives Aimed at Eliminating Conflict Minerals*

Through its Basic Procurement Policy, the Group has proclaimed that it will avoid procuring any items that contain conflict minerals. We ask that all our suppliers comply with this policy and regularly conduct conflict mineral investigations that extend to refineries.

*Minerals that are a source of funds for armed insurgents operating in regions of conflict, such as the Democratic Republic of the Congo and surrounding countries. The term refers to tantalum, tin, gold, tungsten and their by-products and derivatives.

► Key Issue: Respect for human rights, the development of human resources and the promotion of diversity



In May 2019, the Group formulated the Shin-Etsu Group Human Rights Policy through an institutional decision passed by Shin-Etsu Chemical. Starting from December of the same year, the Group began investigating human rights risks in accordance with the United Nations' Guiding Principles on Business and Human Rights. Moving forward, we will use data obtained through these investigations to identify and respond to human rights issues.

The Group is building comfortable working environments and conducting personnel training to enable each of its employees to remain healthy, achieve self-fulfillment and perform career development. With the goal of responding to external environmental changes and global business expansion, the Group is implementing local recruitment overseas while striving to hire foreign nationals within Japan. In addition, we are promoting diversity. For example, in FY2016 we set targets to facilitate active participation from female employees.

Shin-Etsu Chemical raised its retirement age from 60 to 65 in April 2019, which was relatively early when compared to the rest of the chemical industry. The Company also introduced a system that enables employees aged 60 or older to receive pay raises and promotions.

Goals to Promote Women's Participation and Advancement

In the next five years from FY2016, the Company has targeted that:

- **1.** The rate of hiring women will be 40% for administrative positions and 10% for engineering positions.
- **2.** The number of women in managerial positions including junior manager level will be doubled compared to the number in FY2014.

Number of Female Managers (People) Number of female managers (left) (Times) 60 -O- Relative to FY2014 (right) - 5.0 50 1,6 -4.0 37 40 -- 3.0 2.2 2.0 2.0 1.4 20 --1.02021 target: Twice the level in 2014 2015 2019 (FY) 2016 2017 2018

^{*}Applies to employees and loaned employees from Shin-Etsu Chemical.

^{*}Applies to employees and loaned employees from Shin-Etsu Chemical.

▶ Key Issue: Respect for and protection of intellectual property

We maintain the confidentiality, integrity and availability of information assets possessed by the Group and engage in the acquisition and use of intellectual property and appropriately manage and protect information assets to strategically execute corporate management focused on intellectual property. In addition, we have established a system that recognizes employees who contribute to our profits through operationally beneficial inventions, improvements, solutions or plans.

Number of Patents Acquired and Held (major group companies)

(Number of patents)

Target region	Patents acquired			Patents held		
i ai yet i eyibii	FY2017	FY2018	FY2019	FY2017	FY2018	FY2019
Japan	591	577	544	7,562	7,702	7,847
Overseas total	1,591	1,202	1,348	12,007	12,671	13,414
Asia/Oceania	724	543	594	5,314	5,707	6,137
North America	265	220	205	3,077	3,162	3,190
Europe	595	435	539	3,578	3,755	4,029
Other	7	4	10	38	47	58
Total	2,182	1,779	1,892	19,569	20,373	21,261

▶ Key Issue: Contribution to industry and social initiatives



Along with its employees, the Group is actively conducting social contribution activities rooted in local communities.

Each year, the Group conducts fund-raising activities in connection with the UN-established World Refugee Day on June 20 and donates the proceeds to the Office of the United Nations High Commissioner for Refugees.

During March of each year from 2012 to 2019, we supported recovery efforts in areas affected by the Great East Japan Earthquake by conducting cooperative sales of specialty goods from these regions.

In addition, we continue to support activities at overseas locations by engaging proactively with local communities. These efforts include conducting safety education at local kindergartens and elementary schools and donating to hospitals.

In response to the novel coronavirus pandemic, the Company donated sodium hypochlorite manufactured by the Company, as well as dustproof workwear, protective clothing and other protective items from consumables stock at the plant, to medical associations and several municipalities in which it has established places of business with the goal of benefitting educational facilities and medical and welfare institutions.





We donated sodium hypochlorite, protective clothing, and other protective items to local communities and medical associations.

▶ Key Issue: Accurate and timely information disclosure and communication with stakeholders

The Group believes the appropriate and timely disclosure of Company information promotes stakeholder understanding and leads to appropriate market valuation. We engage in fair and transparent disclosure through information posted on our corporate website, announcements in the media and at stock exchanges and publications including the annual report and other reports for shareholders.

Primary Dialogue Methods and Opportunities

All shareholders and investors	 General Meeting of Shareholders Teleconferences regarding financial results for institutional investors and securities analysts (four per year) Annual guided plant tour for institutional investors and securities analysts One-on-one meetings (about 280 per year) Small meetings for investors sponsored by securities companies (five per year) Information sessions for individual investors (four per year) Communication of information through our corporate website, Annual Report, etc. 		
Customers	 Response from sales departments Communication of information through our corporate website, exhibitions, etc. 		
Suppliers	 Response from procurement departments Supplier hotline 		
Local communities	Dialogue with local government, etc.Participation in regional events		
Employees	 Dialogue and conferences with labor unions Communication of information through a Company newsletter, intranet, etc. 		

Enhancement of Governance

G Governance

▶ Corporate Governance

For more detailed information, please see the Governance section on the Group's website.

WEB https://www.shinetsu.co.jp/en/csr/csr_governance.html

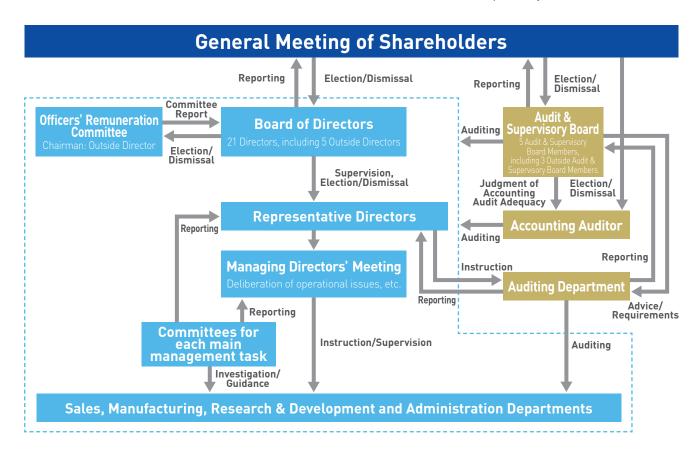
[Basic Approach]

Shin-Etsu Chemical develops various systems and has an efficient organizational structure able to quickly respond to changes in the business environment to realize its basic management policies of meeting shareholder expectations and continuously enhancing corporate value. From the standpoint of improving management transparency and enhancing monitoring capabilities, we have made the timely and accurate disclosure of information to shareholders fundamental to our corporate governance and view disclosure of this nature as one of our highest priority management issues.

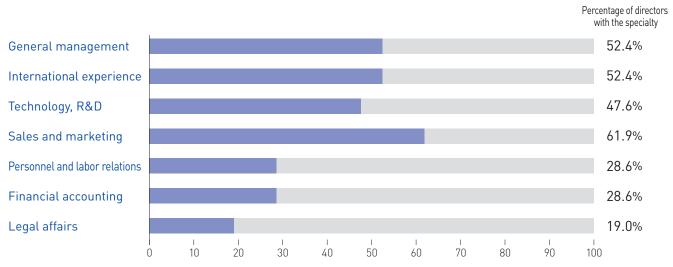
[Corporate Governance Structure (as of June 26, 2020)]

Shin-Etsu Chemical's Audit & Supervisory Board consists of five members, including three highly independent outside members. The Company strives to enhance human resources and systems that support audits conducted by Audit & Supervisory Board members and, by ensuring close cooperation between these members and internal audit departments, conducts effective management that enables these members to adequately perform their auditing functions. By conducting thorough oversight of management based on collaboration between its five highly independent Outside Directors, its Audit & Supervisory Board members and its internal Auditing Department, the Company has established mechanisms that strengthen its management oversight capacity while ensuring effective application of functions performed by its Audit and Supervisory Board members.

In this way, we have adopted the Company with Auditors system with the aim of establishing a desirable corporate governance system and ensuring confidence and trust from all our shareholders and investors. 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. 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.



[Director Specialties]



Note: Percentages rounded to the nearest tenth

[Officers' Remuneration]

Shin-Etsu Chemical established the Officers' Remuneration Committee as an advisory body to the Board of Directors in 2002. With Outside Director Frank Peter Popoff serving as chairman, this Committee comprehensively examines and evaluates every director's contributions to performance and general management each fiscal year and reports results to the Board of Directors.

About Decision Making Related to the Remuneration Amount and Calculation Method

The Company's director remuneration is within the scope of the compensation framework approved by the General Meeting of Shareholders and determined by the Board of Directors based on assessments and evaluations made by the Officers' Remuneration Committee. Director remuneration consists of fixed remuneration reflecting position and duties, performance-based remuneration and stock options issued to increase motivation and morale related to duties and improve performance.

Audit & Supervisory Board member remuneration is within the scope of the compensation framework approved by the General Meeting of Shareholders and is fixed remuneration determined through consultation with Audit & Supervisory Board members reflecting their duties.

Outside Directors and outside Audit & Supervisory Board members do not receive performance-based remuneration, stock options or bonuses.

Remuneration Amount by Director Type and Its Detail, Number of Applicable Directors (for the year ended March 31, 2020)

Designation	Amount of Remuneration by Type (¥ million)			Number of Recipients (People)	Type of Remuneration (¥ million)	Number of Recipients	
5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	Fixed	Performance- Based	Total	(People)	Stock Option	(People)	
Directors (excluding Outside Directors)	1,106	590	1,696	18	310	17	
Audit & Supervisory Board Members (excluding outside Audit & Supervisory Board Members)	36	_	36	3	_	_	
Outside Directors and Outside Audit & Supervisory Board Members	149	_	149	7	_	-	

Notes:

- 1. Includes one director and one Audit & Supervisory Board member who retired from their positions effective upon the conclusion of the 142nd General
- Shareholders' Meeting held on June 27, 2019.
 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 for 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 and the amount the company guarantees to pay in cash, either. In addition, the salary amounts for Directors' concurrently held positions are not included.
- 4. Payments to Directors do not include employee salary amounts (including bonuses) equivalent to concurrently held positions. Salary amounts for concurrently held positions are immaterial.
- 5. The total amount of remuneration to Directors (excluding Outside Directors), which consists of fixed and performance-based remuneration and stock options was 42,006 million.

▶ Compliance

[Internal Control System]

Status of Internal Control System Development

Shin-Etsu Chemical has formulated a Basic Policy on Internal Controls to comply with Japanese law, Article 362, Paragraph 4, Item 6, of the Companies Act. In line with this basic policy, we have established and operate an internal control system that undergoes constant review in an effort to enhance its appropriateness and efficiency.

■ Status of Audit and Supervisory Board Auditing and Internal Auditing

Shin-Etsu Chemical's Audit & Supervisory Board members attend important internal meetings and conduct audits on the execution of operations through the review of important documents and physical observation of plants worldwide. As necessary, regarding audits conducted by the Accounting Auditor, the Audit & Supervisory Board members request reports and explanations, sitting down with them for research, and exchange information and opinions several times throughout the year. The staff from the Auditing Department and the Legal Department also assist the Audit & Supervisory Board members with their duties.

In terms of the internal auditing organizational structure, the Auditing Department conducts business audits of each department from the perspectives of legal compliance and the rationality of business activities. The results of these audits are reported to management, the Outside Directors and the Audit & Supervisory Board members.

Members of the Audit & Supervisory Board regularly receive reports and explanations regarding the status of internal auditing from the Auditing Department and work cooperatively with it, exchanging views and ideas. Full-time Audit & Supervisory Board members also receive reports regarding matters such as activity statuses and internal audit results from the Auditing Department as necessary and offer their own advice or requests on an as-needed basis. The Auditing Department also attends meetings where Audit & Supervisory Board members receive reports and explanations from the Accounting Auditor in an effort to strengthen auditing functions based on more effective tripartite cooperation.

▶ Tax Compliance

In accordance with the philosophy of legal compliance and fair corporate activities outlined in its Business Principle, the Group properly reports and pays taxes on the profits it earns through its corporate activities in accordance with corresponding laws and ordinances in each of the countries in which it conducts business. In FY2019, our consolidated companies paid an approximate total of ¥107.8 billion in taxes.

Compliance with the Corporate Governance Code

The Group is in compliance with the Tokyo Stock Exchange Corporate Governance Code and implements all 11 principles therein. Please see the Corporate Governance Report for detail. WEB https://www.shinetsu.co.jp/en/csr/csr_governance.html#governance

Activity Status of Outside Directors and Outside Audit & Supervisory Board Members (For the fiscal year ended March 31, 2020)





From the left: Toshihiko Fukui, Hiroshi Komiyama, Frank Peter Popoff, Tsuyoshi Miyazaki

From the left: Yoshihito Kosaka, Kiyoshi Nagano, Taku Fukui

	Important concurrent positions (As of March 31, 2020)	Status of activities	Attendance at Board meetings (Year ended March 31, 2020)
Outside Director Frank Peter Popoff		His practical opinions and advice, based on his management experience as CEO of the former The Dow Chemical Company, a U.S. company that has a long history as a global company, have been of significant importance for the Company to expand its business overseas and enhance its corporate value.	Board of Directors Meetings 100%
Outside Director Tsuyoshi Miyazaki	Adviser, Mitsubishi Logistics Corporation	He shared his recommendations from a broad, high-level perspective capitalizing on his management experience at Mitsubishi Logistics Corporation. He also provided thorough supervision from an independent standpoint.	Board of Directors Meetings 92%
Outside Director Toshihiko Fukui	President, Canon Institute for Global Studies Outside Director, Kikkoman Corporation	He shared his recommendations capitalizing on his outstanding knowledge and wealth of experience related to global finance and economy as an ex-Governor of the Bank of Japan. He also provided thorough supervision from an independent standpoint.	Board of Directors Meetings 85%
Outside Director Hiroshi Komiyama	Chairman, Mitsubishi Research Institute, Inc.	He has served as President of the University of Tokyo, as well as in a variety of distinguished positions, and shared his recommendations 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%
Outside Audit & Supervisory Board Member Taku Fukui	Lawyer Managing Partner, Kashiwagi Sogo Law Offices Professor, Keio University Law School Outside Director, Yamaha Corporation	At the Audit & Supervisory Board meetings, he shared his comments from a legal specialist's point of view. In addition, he received reports from Directors and employees on the execution of duties and conducted onsite audits of offices/factories and subsidiaries of the Company, thereby exercising his audit function thoroughly.	Board of Directors Meetings 100% Audit & Supervisory Board Meetings 100%
Outside Audit & Supervisory Board Member Yoshihito Kosaka	C.P.A. Certified Public Tax Accountant Outside Director, Star Mica Holdings Co., Ltd.	At the Audit & Supervisory Board meetings, he shared his comments from a finance and accounting specialist's point of view. In addition, he received reports from Directors and employees on the execution of duties and conducted onsite audits of offices/factories and subsidiaries of the Company, thereby exercising his audit function thoroughly.	Board of Directors Meetings 100% Audit & Supervisory Board Meetings 100%
Outside Audit & Supervisory Board Member Kiyoshi Nagano	Outside Director, LEC, INC.	At the Audit & Supervisory Board meetings, he shared his comments from a finance and accounting specialist's point of view. In addition, he received reports from Directors and employees on the execution of duties and conducted onsite audits of offices/factories and subsidiaries of the Company, thereby exercising his audit function thoroughly.	Board of Directors Meetings 100% Audit & Supervisory Board Meetings 100%

Board of Directors and Audit & Supervisory Board Members





Founder of SHINTECH Inc.

Representative Director-Chihiro Kanagawa

Director, Chairman and



Representative Director-Vice Chairman 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.

Senior Managing Director	Susumu Ueno	In charge of Special Functional Products; General Manager, Silicone Div.
Senior Managing Director	Masahiko Todoroki	General Manager, Planning & Administration Dept., Semiconductor Materials Div., Senior Managing Director of Shin-Etsu Handotai Co., Ltd.
Managing Director	Toshiya Akimoto	In charge of Office of the Secretariat, Public Relations, Legal Affairs and Purchasing; General Manager, Office for Digitization and Digitalization
Managing Director	Fumio Arai	General Manager, Organic Chemicals Div., Director & President of Shin-Etsu PVC B.V. and SE Tylose GmbH & Co. KG
Managing Director	Yukihiro Matsui	In charge of Patents; General Manager, Electronics Materials Div.
Managing Director	Masaki Miyajima	In charge of Advanced Materials; General Manager, PVC Div.
Managing Director	Kenji Ikegami	In charge of General Affairs, Personnel & Labor Relations and Business Auditing
Director - Advisor	Shunzo Mori	
Director	Frank Peter Popoff ¹	
Director	Tsuyoshi Miyazaki¹	Adviser, Mitsubishi Logistics Corporation
Director	Toshihiko Fukui¹	President, the Canon Institute for Global Studies; Outside Director, Kikkoman Corporation
Director	Hiroshi Komiyama¹	Chairman, Mitsubishi Research Institute, Inc.
Director	Kuniharu Nakamura	Director and Chairman, SUMITOMO CORPORATION; Outside Director, NEC Corporation
Director	Toshiyuki Kasahara	In charge of Office of the President; General Manager, Finance & Accounting Dept.
Director	Kazumasa Maruyama	General Manager, New Functional Materials Div.
Director	Toshio Shiobara	In charge of R&D Deputy General Manager, Electronics Materials Div. (In charge of Organic Electronics Materials)
Director	Yoshimitsu Takahashi	In charge of Environmental Control & Safety; General Manager, Business Development Dept.
Director	Kai Yasuoka	General Manager, International Div.
Full-time Audit & Supervisory Board Member	Hiroaki Okamoto	
Full-time Audit & Supervisory Board Member	Hidenori Onezawa	
Audit & Supervisory Board Member	Taku Fukui²	Managing Partner, Kashiwagi Sogo Law Offices; Professor, Keio University Law School Outside Director, YAMAHA CORPORATION
Audit & Supervisory Board Member	Yoshihito Kosaka²	Outside Director, Star Mica Holdings Co., Ltd.
Audit & Supervisory Board Member	Kiyoshi Nagano ²	Outside Director, LEC, INC.
Notes 1 Indicates on O.	taida Dianatan an dafira dia Itana 15 Antiala (2 - f + h - C

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

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

Ten-Year Summary

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES For the fiscal years ended March 31, 2011 through 2020

For more detailed information, please see the Investor Information on our corporate website. WEB https://www.shinetsu.co.jp/jp/ir/ir_data.html

	2011	2012	2013	2014	
For the year:					
Net sales	¥1,058,257	¥ 1,047,731	¥1,025,409	¥1,165,819	
Cost of sales	803,574	798,592	769,427	873,879	
Selling, general and administrative expenses	105,460	99,505	98,938	118,130	
Operating income	149,221	149,632	157,043	173,809	
Ordinary income	160,338	165,237	170,207	180,605	
Net income attributable to owners of parent	100,119	100,643	105,714	113,617	
Capital expenditures	119,884	87,165	86,841	83,155	
R&D costs	37,321	35,725	37,671	43,546	
Depreciation and amortization	93,732	82,868	80,961	91,445	
At year-end:					
Total assets	¥1,784,166	¥ 1,809,841	¥1,920,903	¥2,198,912	
Working capital (Current assets - Current liabilities)	638,493	694,803	832,878	981,667	
Common stock	119,419	119,419	119,419	119,419	
Net assets	1,469,429	1,494,573	1,623,176	1,822,135	
Interest-bearing debt	14,574	15,732	13,929	15,638	
Per share (Yen and U.S. dollars):					
Net income per share	¥ 235.80	¥ 237.03	¥ 248.94	¥ 267.20	
Diluted net income per share ²	235.80	_	248.92	267.07	
Cash dividends	100.00	100.00	100.00	100.00	
Payout ratio (%)	42.4	42.2	40.2	37.4	
Net assets	3,360.39	3,422.93	3,709.19	4,165.28	
General:					
Operating income to net sales ratio (%)	14.1	14.3	15.3	14.9	
Net income attributable to owners of parent to net sales ratio (%) 9.5	9.6	10.3	9.7	
ROE (%)	7.0	7.0	7.0	6.8	
ROA (%)	9.0	9.2	9.1	8.8	
Equity ratio (%)	80.0	80.3	82.0	80.6	
Number of employees	16,302	16,167	17,712	17,892	
Number of shares issued (Thousands)	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 ¥109 = US\$1, the approximate rate of exchange on March 31, 2020.

2. Diluted net income per share for the fiscal year ended March 31, 2012 is not presented as there were no securities with dilutive effect.

3. "Partial Amendments to 'Accounting Standard for Tax-Effect Accounting'", etc. [ASBJ Statement No. 28, February 16, 2018] were applied from the beginning of the fiscal year ended March 31, 2019. Accordingly, the main management indicators, etc., for the previous fiscal year are those after retroactive application of said Accounting Standard, etc.

Millions of U.S. dollars (Note 1) Millions of yen

dollars (Note 1)	Millions of yen					
2020	2020	2019	2018	2017	2016	2015
\$ 14,160	¥1,543,525	¥ 1,594,036	¥1,441,432	¥1,237,405	¥1,279,807	¥1,255,543
9,062	987,782	1,039,979	963,008	868,404	930,019	940,399
1,373	149,702	150,352	141,601	130,383	141,262	129,814
3,725	406,041	403,705	336,822	238,617	208,525	185,329
3,837	418,242	415,311	340,308	242,133	220,005	198,025
2,880	314,027	309,125	266,235	175,912	148,840	128,606
2,431	265,018	240,618	176,283	145,647	134,753	109,903
445	48,536	56,436	51,768	49,020	53,165	47,165
1,203	131,172	137,570	112,016	93,087	100,466	96,918
\$ 29,637	¥3,230,485	¥3,038,717	¥2,903,137	¥2,655,636	¥2,510,085	¥ 2,452,306
13,272	1,446,724	1,358,614	1,324,495	1,232,607	1,170,679	1,100,999
1,095	119,419	119,419	119,419	119,419	119,419	119,419
24,982	2,723,141	2,532,556	2,413,025	2,190,082	2,080,465	2,012,711
278	30,383	14,920	15,814	14,642	13,470	14,328
\$ 6.928	¥ 755.17	¥ 725.99	¥ 624.28	¥ 412.86	¥ 349.46	¥ 302.05
6.927	755.01	725.92	624.10	412.83	349.42	301.98
2.018	220.00	200.00	140.00	120.00	110.00	100.00
29.1	29.1	27.5	22.4	29.1	31.5	33.1
58.513	6,377.93	5,915.47	5,511.98	5,002.16	4,761.48	4,602.80
26.3	26.3	25.3	23.4	19.3	16.3	14.8
20.3	20.3	19.4	18.5	14.2	11.6	10.2
12.3	12.3	12.8	11.9	8.5	7.5	6.9
13.3	13.3	14.0	12.2	9.4	8.9	8.5
82.1	82.1	81.1	81.0	80.3	80.8	79.9
22,783	22,783	21,735	20,155	19,206	18,407	18,276
416,662	416,662	427,606	432,106	432,106	432,106	432,106
		<u> </u>	·	·	<u> </u>	

Consolidated Balance Sheet

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES As of March 31, 2019 and 2020

		Millions of yen	U.S. dollars
	2019	2020	2020
ASSETS			
Current Assets:			
Cash and time deposits	¥ 826,680	¥ 836,448	\$ 7,673
Notes and accounts receivable-trade	338,701	325,489	2,986
Securities	215,444	251,377	2,306
Merchandise and finished goods	158,717	173,358	1,590
Work in process	16,711	16,828	154
Raw materials and supplies	154,064	175,479	1,609
Other	47,527	52,723	483
Less: Allowance for doubtful accounts	(7,379)	(7,186)	(65)
Total current assets	1,750,469	1,824,519	16,738
Fixed Assets:			
Property, Plant and Equipment:			
Buildings and structures, net	188,268	202,848	1,860
Machinery and equipment, net	445,974	440,595	4,042
Land	88,806	92,577	849
Construction in progress	255,232	367,309	3,369
Other, net	9,678	16,584	152
Total property, plant and equipment	987,960	1,119,915	10,274
	0.740	40.000	
Intangible Assets	8,740	10,099	92
Investments and Other Assets:			
Investments in securities	141,685	126,060	1,156
Net defined benefit asset	3,841	3,788	34
Deferred tax assets	59,154	63,735	584
Other	89,491	84,657	776
Less: Allowance for doubtful accounts	(2,624)	(2,291)	(21)
Total investments and other assets	291,548	275,950	2,531
Total fixed assets	1,288,248	1,405,965	12,898
Total Assets	¥3,038,717	¥3,230,485	\$ 29,637

Millions of

The accompanying notes are an integral part of the consolidated financial statements.

		Millions of yen	Millions of U.S. dollars
	2019	2020	2020
LIABILITIES			
Current Liabilities:			
Notes and accounts payable—trade	¥ 141,027	¥ 136,442	\$ 1,251
Short-term borrowings	7,008	8,295	76
Accounts payable—other	75,128	75,094	688
Accrued expenses	74,354	73,292	672
Accrued income taxes	45,739	44.377	407
Accrued bonuses for employees	3,551	3,661	33
Accrued bonuses for directors	694	728	6
Other	44,350	35,901	329
Total current liabilities	391,854	377,794	3,466
Long-Term Liabilities:			
Long-term debt	7,624	15,124	138
Deferred tax liabilities	62,669	59,378	544
Net defined benefit liability	30,473	36,243	332
Other	13,540	18,803	172
Total long-term liabilities	114,306	129,549	1,188
Total Liabilities	506,161	507,343	4,654
NET ASSETS			
Stockholders' Equity:			
Common stock	119,419	119,419	1,095
Additional paid-in capital	128,299	128,323	1,177
Retained earnings	2,283,760	2,413,769	22,144
Less: Treasury stock, at cost	(94,702)	(7,123)	(65)
Total stockholders' equity	2,436,777	2,654,388	24,352
Accumulated Other Comprehensive Income:			
Unrealized gains (losses) on available-for-sale securities	22,955	10,296	94
Deferred gains (losses) on hedges	(266)	(2,799)	(25)
Foreign currency translation adjustments	5,143	(8,187)	(75)
Remeasurements of defined benefit plans	987	(1,387)	(12)
Total accumulated other comprehensive income	28,820	(2,078)	(19)
Share Subscription Rights	1,143	1,904	17
Non-Controlling Interests in Consolidated Subsidiaries	65,814	68,927	632
Total Net Assets	2,532,556	2,723,141	24,982
Total Liabilities and Net Assets	¥3,038,717	¥3,230,485	\$29,637

Consolidated Statement of Income

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES For the fiscal years ended March 31, 2019 and 2020

For the fiscal years ended March 31, 2019 and 2020		Millions of yen	Millions of U.S. dollars
	2019	2020	2020
Net Sales	¥1,594,036	¥1,543,525	\$14,160
Cost of Sales	1,039,979	987,782	9,062
Gross profit	554,057	555,743	5,098
Selling, General and Administrative Expenses	150,352	149,702	1,373
Operating income	403,705	406,041	3,725
Other Income (Expenses):	,	•	ŕ
Interest income	9,093	10,777	98
Dividend income	5,896	7,388	67
Equity in earnings (losses) of affiliates	4,669	4,327	39
Interest expenses	(746)	(749)	(6)
Foreign exchange gain (loss)	(217)	(5,650)	(51)
Other, net	(7,088)	(3,892)	(35)
Ordinary income	415,311	418,242	3,837
Extraordinary income:	,	,	,
Gain on sales of investment securities	_	7,774	71
Income before income taxes and non-controlling interests	415,311	426,017	3,908
Income Taxes:	,	,	ŕ
Current	104,186	108,290	993
Deferred	(2,861)	(564)	(5)
Total Income Taxes	101,325	107,726	988
Net Income	313,986	318,290	2,920
Net Income Attributable to Non-Controlling Interests	(4,860)	(4,263)	(39)
Net Income Attributable to Owners of Parent	¥ 309,125	¥ 314,027	\$ 2,880
Earnings per Share:		Yen	U.S. dollars
Net income attributable to owners of parent—basic	¥ 725.99	¥ 755.17	\$ 6.928
Net income attributable to owners of parent—fully diluted	725.92	755.01	6.927
Cash dividends	200.00	220.00	2.018
Weighted-Average Number of Shares Outstanding (Thousands)	425,797	415,838	415,838

Consolidated Statement of Comprehensive Income

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES For the fiscal years ended March 31, 2019 and 2020		Millions of yen	Millions of U.S. dollars
	2019	2020	2020
Net Income	¥ 313,986	¥ 318,290	\$ 2,920
Other Comprehensive Income:			
Unrealized gains (losses) on available-for-sale securities	(3,499)	(12,732)	(116)
Deferred gains (losses) on hedges	(1,928)	(2,530)	(23)
Foreign currency translation adjustments	(30,861)	(13,642)	(125)
Remeasurements of defined benefit plans	2,383	(2,371)	(21)
Share of other comprehensive income (loss) of affiliates accounted for using the equity method	(134)	(125)	(1)
Total other comprehensive income (loss)	(34,040)	(31,401)	(288)
Comprehensive Income	¥ 279,945	¥ 286,889	\$ 2,632
(Breakdown)			
Comprehensive income attributable to owners of parent	¥ 276,632	¥ 283,128	\$ 2,597
Comprehensive income attributable to non-controlling interests	3,312	3,760	34

Consolidated Statement of Changes in Net Assets

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES

	Thousands					Millions of yen	
		Stockholders' Equity					
	Number of shares of common stock	Common stock	Additional paid-in capital	Retained earnings	Treasury stock, at cost	Total	
Balance at April 1, 2018	432,106	¥119,419	¥129,937	¥2,070,779	¥(30,207)	¥2,289,929	
Cash dividends				(74,655)		(74,655)	
Net income attributable to owners of parent				309,125		309,125	
Purchase of treasury stock					(89,475)	(89,475)	
Disposal of treasury stock			166		429	596	
Retirement of treasury stock	(4,500)		(24,551)		24,551		
Transfer to additional paid-in capital from retained earnings			22,719	(22,719)			
Others			27	1,230		1,257	
Net changes of items other than stockholders' equity							
Balance at March 31, 2019	427,606	¥119,419	¥128,299	¥2,283,760	¥(94,702)	¥2,436,777	

								Millions of yen
	Accun	nulated Other	Comprehensiv	e Income				
	Unrealized gains (losses) on available- for-sale securities	Deferred gains (losses) on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total	Share subscription rights	Non-controlling interests in consolidated subsidiaries	Total net assets
Balance at April 1, 2018	¥26,446	¥1,671	¥34,611	¥(1,416)	¥61,313	¥524	¥61,258	¥2,413,025
Cash dividends								(74,655)
Net income attributable to owners of parent								309,125
Purchase of treasury stock								(89,475)
Disposal of treasury stock								596
Retirement of treasury stock								
Transfer to additional paid-in capital from retained earnings								
Others								1,257
Net changes of items other than stockholders' equity	(3,491)	(1,938)	(29,467)	2,403	(32,493)	619	4,556	(27,317)
Balance at March 31, 2019	¥22.955	¥[266]	¥5.143	¥987	¥28.820	¥1.143	¥65.814	¥2.532.556

	Thousands					Millions of yen
			S	itockholders' Equity		
	Number of shares of common stock	Common stock	Additional paid-in capital	Retained earnings	Treasury stock, at cost	Total
Balance at April 1, 2019	427,606	¥119,419	¥128,299	¥2,283,760	¥(94,702)	¥2,436,777
Cash dividends				(87,410)		(87,410)
Net income attributable to owners of parent				314,027		314,027
Purchase of treasury stock					(10,566)	(10,566)
Disposal of treasury stock			145		1,391	1,537
Retirement of treasury stock	(10,943)		(96,753)		96,753	
Transfer to additional paid-in capital from retained earnings			96,608	(96,608)		
Others			23			23
Net changes of items other than stockholders' equity						
Balance at March 31, 2020	416,662	¥119,419	¥128,323	¥2,413,769	¥(7,123)	¥2,654,388

								Millions of yen
Accumulated Other Comprehensive Income								
	Unrealized gains (losses) on available- for-sale securities	Deferred gains (losses) on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total	Share subscription rights	Non-controlling interests in consolidated subsidiaries	Total net assets
Balance at April 1, 2019	¥22,955	¥(266)	¥5,143	¥987	¥28,820	¥1,143	¥65,814	¥2,532,556
Cash dividends								(87,410)
Net income attributable to owners of parent								314,027
Purchase of treasury stock								(10,566)
Disposal of treasury stock								1,537
Retirement of treasury stock								
Transfer to additional paid-in capital from retained earnings								
Others								23
Net changes of items other than stockholders' equity	(12,659)	(2,533)	(13,331)	(2,375)	(30,899)	760	3,112	(27,026)
Balance at March 31, 2020	¥10,296	¥(2,799)	¥(8,187)	¥(1,387)	¥(2,078)	¥1,904	¥68,927	¥2,723,141

Consolidated Statement of Changes in Net Assets

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES

	Thousands				Millions	of U.S. dollars
			Sto	ockholders' Equity		
	Number of shares of common stock	Common stock	Additional paid-in capital	Retained earnings	Treasury stock, at cost	Total
Balance at April 1, 2019	427,606	\$1,095	\$1,177	\$20,951	\$(868)	\$22,355
Cash dividends				(801)		(801)
Net income attributable to owners of parent				2,880		2,880
Purchase of treasury stock					(96)	(96)
Disposal of treasury stock			1		12	14
Retirement of treasury stock	(10,943)		(887)		887	
Transfer to additional paid-in capital from retained earnings			886	(886)		
Others			0			0
Net changes of items other than stockholders' equity						
Balance at March 31, 2020	416,662	\$1,095	\$1,177	\$22,144	\$(65)	\$24,352

							Millions	of U.S. dollars
	Accumulated Other Comprehensive Income							
	Unrealized gains (losses) on available- for-sale securities	Deferred gains (losses) on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total	Share subscription rights	Non-controlling interests in consolidated subsidiaries	Total net assets
Balance at April 1, 2019	\$210	\$(2)	\$47	\$9	\$264	\$10	\$603	\$23,234
Cash dividends								(801)
Net income attributable to owners of parent								2,880
Purchase of treasury stock								(96)
Disposal of treasury stock								14
Retirement of treasury stock								
Transfer to additional paid-in capital from retained earnings								
Others								0
Net changes of items other than stockholders' equity	(116)	(23)	[122]	(21)	(283)	6	28	(247)
Balance at March 31, 2020	\$94	\$(25)	\$(75)	\$(12)	\$(19)	\$17	\$632	\$24,982

Consolidated Statement of Cash Flows

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES For the fiscal years ended March 31, 2019 and 2020

or the fiscal years ended March 31, 2019 and 2020	Millions of yen		Millions of U.S. dollars
	2019	2020	2020
Cash Flows from Operating Activities:			
Income before income taxes and non-controlling interests	¥ 415,311	¥ 426,017	\$ 3,908
Depreciation and amortization	137,570	131,172	1,203
Loss on impairment of fixed assets	2,232	912	8
Increase (decrease) in net defined benefit liability	(126)	2,723	24
(Gain) loss on sales of investments in securities	(3)	(7,774)	(71)
(Gain) loss on revaluation of investments in securities	1,565	_	-
Increase (decrease) in allowance for doubtful accounts	(4,281)	(493)	(4)
Interest and dividend income	(14,989)	(18,166)	(166)
Interest expenses	746	749	6
Exchange (gain) loss	(2,060)	3,464	31
Equity in (earnings) losses of affiliates	(4,669)	(4,327)	(39)
(Increase) decrease in notes and accounts receivable	(8,697)	11,215	102
(Increase) decrease in inventories	(49,109)	(36,910)	(338)
(Increase) decrease in long-term advance payment	3,838	3,579	32
Increase (decrease) in notes and accounts payable	3,270	(3,892)	(35)
Other, net	25,803	(7,404)	(67)
Subtotal	506,400	500,865	4,595
Proceeds from interest and dividends	16,627	19,852	182
Payments of interest	(751)	(508)	(4)
Payments of income taxes	(121,589)	(107,824)	(989)
Net cash provided by operating activities	400,687	412,384	3,783
Cash Flows from Investing Activities:	.00,007	,	2,7.00
(Increase) decrease in time deposits	55,116	(127,525)	(1,169)
Purchases of securities	(83,830)	(117,000)	(1,073)
Proceeds from redemption of securities	82,660	115,936	1,063
Purchases of property, plant and equipment	(226,768)	(268,365)	(2,462)
Proceeds from sales of property, plant and equipment	238	65	0
Purchases of intangible fixed assets	(1,334)	(1,063)	(9)
Purchases of investments in securities	(2,563)	(6,520)	(59)
Proceeds from sales of investments in securities	434	12,606	115
Payments of loans	(4)	(74)	(0)
Purchases of investments in subsidiaries resulting in change in scope of consolidation	(4) —	(1,966)	(18)
Proceeds from collection of loans	542	615	5
Other, net Net cash provided by (used for) investing activities	(6,045) (181,553)	(1,256) (394,547)	(11)
Cash Flows from Financing Activities:	(101,000)	(374,347)	(3,017)
Net increase (decrease) in short-term borrowings	(200)	1 2/5	11
	(298)	1,265	
Proceeds from long-term debt	51	8,384	76
Repayments of long-term debt	(227)	(743)	(6)
Purchases of treasury stock	(89,475)	(10,566)	(96)
Proceeds from sales of treasury stock	573	1,398	12
Cash dividends paid	(74,655)	(87,410)	(801)
Cash dividends paid to non-controlling interests	(896)	(1,077)	(9)
Other, net	389	(5,306)	(48)
Net cash used for financing activities	(164,538)	(94,055)	(862)
Effect of Exchange Rate Changes on Cash and Cash Equivalents	(7,917)	(7,001)	(64)
Net Increase (Decrease) in Cash and Cash Equivalents	46,678	(83,220)	(763)
Cash and Cash Equivalents at Beginning of Year Increase (Decrease) in Cash and Cash Equivalents Resulting from	780,449	828,345	7,599
Changes in Scope of Consolidation	1,217	¥7/E 40E	£ / 00/
Cash and Cash Equivalents at End of Year	¥ 828,345	¥ 745,125	\$ 6,836

Millions of

Shin-Etsu Group Companies

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

	NORTH AMERICA			
	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
United States (1)	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 95131-1841, U.S.A.	Tel. 408-383-9240

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

		EUROPI	E	
	Shin-Etsu Silicones Europe B.V.	Production and sales of silicone products	Bolderweg 32,1332 AV, Almere, The Netherlands	Tel. 36-549-3170
The Netherlands (31)	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	SE Tylose GmbH & Co. KG	Production and sales of cellulose derivatives	Rheingaustr.190-196, 65203 Wiesbaden, Germany	Tel. 611-962-6462
(49)	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				
	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	
Malaysia (60)	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, 11900, Bayan Lepas, 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. 897-806744	
Vietnam	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	
(84)	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 4034 The Philippines	Tel. 49-5413191	
Singapore	Shin-Etsu Singapore Pte. Ltd.	Sales of silicone products	4 Shenton Way #10-03/06 SGX Centre II, Singapore 068807	Tel. 6743-7277	
(65)	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. 2935160	

	Shin-Etsu Silicones (Thailand), Ltd.	Production and sales of silicone products	7th Floor, Harindhorn Tower, 54 North Sathorn Road, Bangkok 10500, Thailand	Tel. 2-632-2941
hailand (66)	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
	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	Sotetsu Kandasudacho bldg., 9, Kanda-Sudacho 1-chome, Chiyoda-ku, Tokyo 101-0041, Japan	Tel. 03-5289-3712
	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
Japan	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
(81)	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	Shinjuku San-ei Bldg., 22-2, Nishi-Shinjuku 1-chome, Shinjuku-ku, Tokyo 160-0023, Japan	Tel. 03-3348-1912
	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. 6F, Narihira 1-21-9, Sumida-ku, Tokyo 130-0002, Japan	Tel. 03-5637-2022
Korea	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
(82)	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
	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 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 510610, China	Tel. 20-3831-0212
China (86)	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 (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 optical fiber preforms 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
	Shin-Etsu Silicone Taiwan Co., Ltd.	Production and sales of silicone products	11F-D, No.167, Tun Hua N. Road, Taipei, 10549 Taiwan, R.O.C.	Tel. 2-2715-0055
aiwan	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
(886)	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. 5-5511122

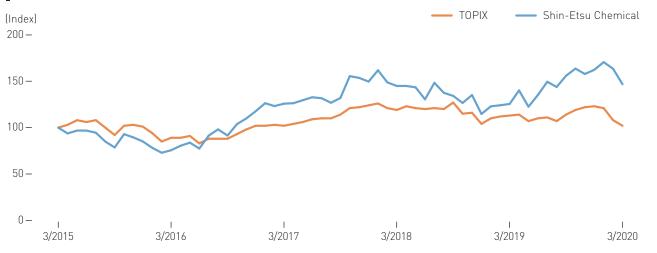
Note: The Shin-Etsu Group had a total of 146 member companies as of March 31, 2020.

Investor Information

Stock Price Movement



Total Shareholder Return over the Past Five Years



Stock index of Shin-Etsu Chemical and TOPIX (March 31, 2015 = 100)

	Shin-Etsu Chemical	TOPIX
2015	100	100
2016	76	89
2017	126	102
2018	145	119
2019	126	113
2020	147	102

Note: The above chart and the table show the rate of return taking into consideration the dividend as of March 31, 2020, and the stock price when an investment was conducted on March 31, 2015. Investment performance including dividends has been added to the Shin-Etsu Chemical stock price and indexed at 100 as of March 31, 2015. The TSE Stock Price Index (TOPIX), which is a comparative index, also uses indexed data and is

Share Data (As of March 31, 2020)

Company Name	Shin-Etsu Chemical Co., Ltd.		
Head Office	6-1, Ohtemachi 2-chome, Chiyoda-ku, Tokyo 100-0004, Japan		
Date of Establishment	September 16, 1926		
Capital	¥119,419 million		
Number of Employees	22,783 (Consolidated)		
Common Stock	Number of Shares Authorized 1,720,000,000 Number of Shares Issued* 416,662,793 *Includes 805,396 treasury shares. Share Unit of Exchange 100 stocks		
	Number of Stockholders 45,408		
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 Phone: +81-3-3246-5091 Department F a x: +81-3-3246-5096 e-mail: sec-pr@shinetsu.jp		

Note: The total number of issued shares fell by 10,943,900 compared to the end of the previous fiscal year due to a cancellation of treasury shares conducted on October 7, 2019.

Major Shareholders (*Round	ded down to the nearest 1,000.
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Name of Shareholder	Number of Shares Held (Thousand shares*)	Holding Ratio (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	52,814	12.7
Japan Trustee Services Bank, Ltd. (Trust Account)	25,960	6.2
Nippon Life Insurance Company	21,933	5.3
JP MORGAN CHASE BANK 385632	19,140	4.6
The Hachijuni Bank, Ltd.	11,790	2.8
Japan Trustee Services Bank, Ltd. (Trust Account 4)	11,772	2.8
Meiji Yasuda Life Insurance Company	10,687	2.6
SSBTC CLIENT OMNIBUS ACCOUNT	10,304	2.5
GOVERNMENT OF NORWAY	9,457	2.3
Japan Trustee Services Bank, Ltd. (Trust Account 7)	7,418	1.8

Note: The holding ratios are computed net of the treasury shares (805,396).

Please visit our Web site:

Corporate Information



https://www.shinetsu.co.jp/en/(English) https://www.shinetsu.co.jp/cn/(Chinese) https://www.shinetsu.co.jp/(Japanese)

Investor Information



https://www.shinetsu.co.jp/en/ir/(English) https://www.shinetsu.co.jp/jp/ir/(Japanese)

Sustainability Information



https://www.shinetsu.co.jp/en/csr/(English) https://www.shinetsu.co.jp/jp/csr/(Japanese)



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