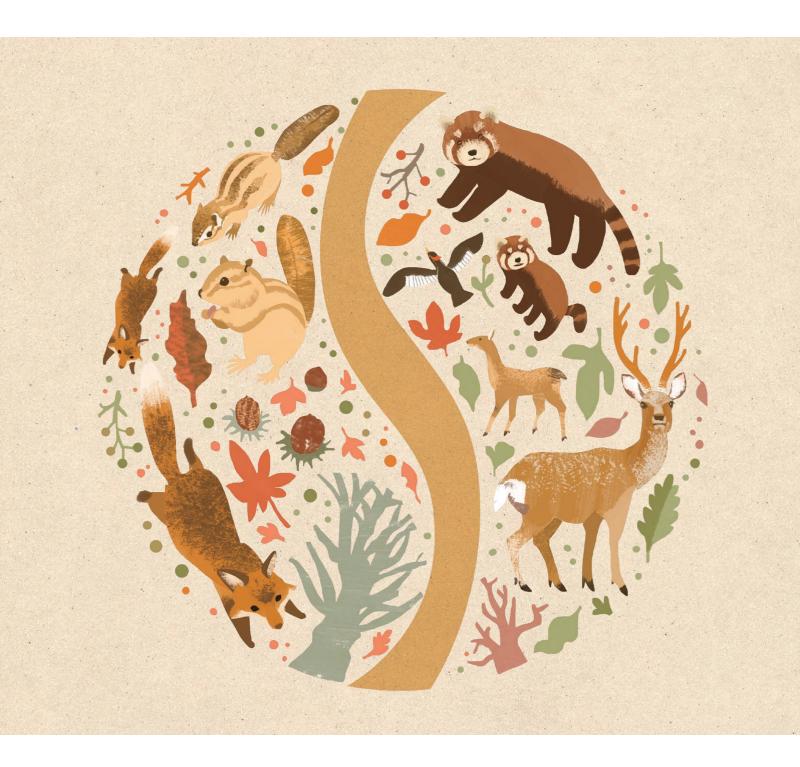
Shin-Etsu Polymer

Sustainability Report 2019





Corporate Mission Statement

The Group strictly complies with all laws and regulations, conducts fair business practices and contributes to people's daily lives as well as to the advance of industry and society by creating value through providing key materials and technologies.

The Shin-Etsu Group places safety and fairness first in its business and targets becoming a group of companies that develops together with society.

Basic CSR* Policy

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

*Corporate Social Responsibility

Corporate Action Policy

1 We have pride and awareness as employees of Shin-Etsu Polymer Co., Ltd. and its Group companies and do our best to become a company trusted by society by always maintaining a law-abiding spirit, complying with laws, regulations, internal codes and rules and conducting fair and highly transparent corporate activities.

Shin Etsu

- 2 We disclose a comprehensive range of corporate information where necessary and appropriate and promote communication with society as well as stockholders, investors, customers, and communities as an "open company."
- 3 We respect the histories, cultures, customs, etc. of individual countries and regions, work at developing business based on mutual trust, and make efforts to coexist with communities.
- 4 We recognize global environmental preservation as one of our first priority challenges and, by fulfilling our social responsibilities, actively participate in the establishment of a recycling-oriented economic society aiming for sustainable development.
- 5 Through business activities, we try to develop and manufacture environmentally friendly products with high performance, contribute to an affluent society and preserve the environment. Furthermore, we implement green procurement, properly control chemical substances, and comply with regulations on substances contained in products.
- 6 We commit ourselves to meet the requirements of customers and consumers and make efforts to provide attractive, safe, and quality products and services that are highly satisfactory. Furthermore, we carefully handle personal information associated with customer's privacy and strictly control such information so that no information leakage or illegal use should occur.
- 7 We respect the principle of free competition and always promote fair trade. We also build transparent, fair, and healthy relations with customers and consumers.
- 8 We respect human rights, personality, and diversity of employees, realize fair treatment, and establish a working environment where they can exert their abilities, skills, and vitality. We comply with occupational laws and regulations and conduct no inhumane labor practice such as child or forced labor.
- **9** We maintain healthy and normal relations with governments and their administrations.
- 10 We confront antisocial groups and organizations that threaten social order and security with a resolute attitude.
- **11** We, as "good corporate citizens" carry out social action programs in a positive manner.

Editorial Policy

The Shin-Etsu Polymer Group began publishing Environmental/Social Reports in 2001. Renamed "Sustainability Reports" from 2017, these reports show our group's CSR activities for the purpose of achieving a sustainable society. The editorial policies for the 2019 version are as follows:

- 1 The content in this report conforms to the "Environmental Reporting Guidelines (Fiscal Year 2018 Version)" of the Ministry of the Environment.
- 2 In the Special Feature article, we introduce product groups related to our fundamental "conductive technology."
- **3** The CSR Report sums up the group's organization and activities in relation to engagement with "governance," "customers," "employees," "communities" and the "environment" in a configuration that is easy to read and understand for all stakeholders.
- **4** The information in this Report (including the English Version) and details of environmental data are all disclosed on our website. We also provide additional information on our website.
- **5** For this 2019 version, we received third-party comments from Mr. Kozuma, Professor of Sophia University, as was the case with previous editions. We will take advantage of them for our future efforts and initiatives.

Website URL: https://www.shinpoly.co.jp/environment/index.html

• Period covered by this report

April 2018 - March 2019

Issued

September 2019 (Next issue: September 2020 (Scheduled))

- Organizations covered by this report Shin-Etsu Polymer Group
- Fields covered by this report

This report covers the fields of environmental conservation and social activities. For an overview of the business, please refer to our corporate profile.

Contact

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Editors' Note

The Shin-Etsu Polymer Group renamed its annual "Environmental/Social Report" to "Sustainability Report" in 2017. In order to realize a sustainable society, we have stepped up our activities under the guidance of the CSR Committee. Although we haven't yet done enough in the areas of corporate governance, environmental load reduction and CSR procurement, we tried to cover what we did in an easy-to-understand manner in this report. We are looking forward to receiving many opinions and comments from readers.



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Conductive Technology in Support of a Digital Society

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Business Overview of the Shin-Etsu Polymer Group

Company profile

Trading name: Shin-Etsu Polymer Co., Ltd. Founded: September 15,1960 Headquarters address: Sotetsu Kandasudacho Building 1-9 Kanda-Sudacho, Chiyoda-ku, Tokyo 101-0041 Japan Capital: 11,635,950,000 yen

Employees: Total for all group companies: 4,614 (1,892 male employees, 2,722 female employees) Independent: 1,034 (821 male employees, 213 female employees) (as of March 31, 2019) Domestic production bases: Tokyo Plant, Nanyo Plant, Kodama Plant, Shiojiri Plant,

Itoigawa Plant

Subsidiaries: 15 (including non-consolidated subsidiary)

Domestic Non-Production Base

Shin-Etsu Finetech Co., Ltd.

Overseas Production Bases

Suzhou Shin-Etsu Polymer Co., Ltd. Dongguan Shin-Etsu Polymer Co., Ltd. Shin-Etsu Polymer (Malaysia) Sdn. Bhd. PT. Shin-Etsu Polymer Indonesia Shin-Etsu Polymer India Pvt. Ltd. Shin-Etsu Polymer Hungary Kft. Hymix Co., Ltd.*

Overseas Non-Production Bases

Shin-Etsu Polymer Shanghai Co. Ltd. Shin-Etsu Polymer Hong Kong Co., Ltd. Shin-Etsu Polymer (Thailand) Ltd. Shin-Etsu Polymer Singapore Pte. Ltd. Shin-Etsu Polymer America, Inc. Shin-Etsu Polymer Europe B.V. Shin-Etsu Polymer Vietnam Co., Ltd.

*As Hymix Co., Ltd. is a non-consolidated subsidiary, it is not covered in this report.

Main Business Activities

We were established as a polyvinyl chloride (PVC) processing manufacturer in 1960 and have continued to work on the development and application of basic technologies such as materials and composition, design, manufacturing processes and evaluation and analysis of various resins including silicone rubber. We support various customer needs in a comprehensive range of fields from automobiles and information equipment to semiconductors and construction.

Electronic Devices Business

Input devices

Automobile key switches, laptop PC touch pads, remote control input devices, electronic home appliance switches

- Display-related devices Electronic device connectors, privacy filter prevention films for ATMs/PCs
- Component-related products Waterproof products for smartphones, parts inspection connectors

Precision Molding Products Business

- Semiconductor-related containers
 Wafer cases, semiconductor-related containers
- Carrier tape-related products Embossed carrier tapes, top cover tapes
- •OA equipment parts Various rollers for printers, faxes and PPCs
- Silicone rubber molded products Medical catheters, silicone plugs, adhesive plates, fire-proof gaskets

Living Environment and Life-Related Materials Business

- Wrapping films and other packaging material related products
 Wrapping films for fresh food, self-adhesive films
- Functional Compounds Items for various electrical cables (communication cables, robot cables etc.), interior and exterior equipment for automobiles
- PVC pipe-related products Water supply and sewerage piping, general drain piping, agricultural piping, piping joints
- Exterior material-related products PVC/Polycarbonate corrugated sheets

Others

- Construction Shop and store design and construction, interior and exterior design and construction of commercial facilities, bathrooms, etc.
- Packaging Materials Industrial trays, packaging for fruit, agricultural materials, shopping bags, container washing

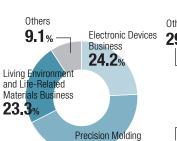
Summary of Key Performance Indicators

Regarding the business environment facing our group in recent years, the semiconductor market has continued to grow, while demand in automobile-related fields generally remains at a high level.



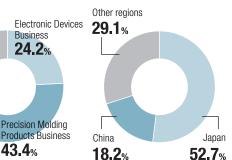
Changes in Sales/Operating Income (Consolidated)

Distribution of Consolidated Sales by Business Segment

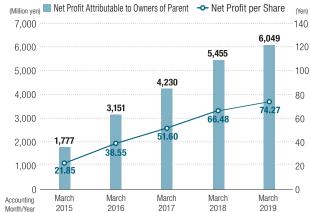


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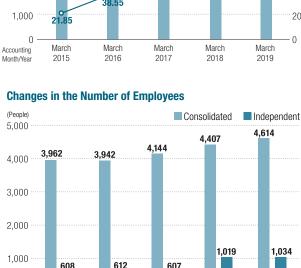
Composition Ratio of Consolidated Overseas Sales and Shipping Destinations



Under these circumstances, we conducted domestic and international sales activities to expand sales volumes of growth products, while enhancing and improving production and supply systems.



Changes in Net Profit Attributable to Owners of Parent/ Net Profit per Share



608

March

2015

March

2016

0

Month/Year

*For the actual split between male and female employees, refer to page 26 *Figures in March 2018 are post-merger.

March

2018

March

2019

607

March

2017

Period (Fiscal Year End)	55th Period (Ending in March 2015)	56th Period (Ending in March 2016)	57th Period (Ending in March 2017)	58th Period (Ending in March 2018)	59th Period (Ending in March 2019)
Net Sales (Million Yen)	71,707	75,039	73,979	79,343	85,460
Operating Income (Million Yen)	2,231	4,101	5,511	7,206	8,153
Total Assets (Million Yen)	93,889	92,845	96,061	103,667	107,032
ROE (%)	2.6	4.4	5.9	7.3	7.7
Domestic Basic Units of CO ₂ Emissions against Produced Weight (t-CO2/t)	0.71	0.69	0.68	0.68	0.71
Overseas Basic Units of CO_2 Emissions against Produced Weight (t- CO_2/t)	7.00	6.72	6.98	6.49	5.86
Domestic Basic Units of Waste Disposal against Produced Weight (kg/t)	59.55	56.72	57.30	55.50	55.97
Overseas Basic Units of Waste Disposal against Produced Weight (kg/t)	393.1	432.8	419.9	418.1	355.2
Domestic accident frequency ratio	3.92	1.16	3.99	2.81	4.48
Overseas accident frequency ratio	0.50	0.50	1.20	0.45	1.27

1. Sales do not include consumption tax.

2. For other key management indicators etc., please refer to our financial report.

3. CO_2 emissions are calculated by using our emission coefficient (0.555kg-CO₂/ kWh)

4. To improve the precision of data, the above overseas basic units of $\ensuremath{\text{CO}_2}$ emissions are revised by retroactively revising those of previous years.

5. The accident frequency ratios refer to the number of accidents at our production sites in a calendar year.

Top Commitment

Contributing to the Realization of a Sustainable Society Based on CSR Management

President *Yoshiahi* Ono

Shin-Etsu Polymer was established in 1960 as a processing company of Shin-Etsu Chemical Co., Ltd. It develops raw materials together with the Shin-Etsu Chemical Group and provides high value-added products for silicone rubber and various other plastics.

CSR-Based Management

At present, society has a myriad of challenges to be addressed, including environmental issues such as global warming and conversation of biodiversity, human rights issues and a decreasing working population. As a means to solve these challenges, the United Nations adopted Sustainable Development Goals or SDGs, thereby placing greater responsibility on the shoulders of businesses. During our business activities, we must constantly keep these issues in mind and aim to contribute to the realization of a sustainable society. Our business activities are based on CSR, and under our Basic CSR Policy (refer to page 2), the CSR Committee identified key issues (refer to pages 8 and 9) and prioritized eight of these issues. In FY2018, we prioritized "Promoting CSR procurement" and "Respect for human rights and development of human resources." This year, once again, we will continue to bolster such initiatives.

Promoting CSR procurement and the diversification of supply sources

- Sharing of Basic CSR Policies and CSR Procurement Guidelines with partner companies
- Investigating CSR activities by partner companies

CSR has become more significant not only for our company but also for the entire value chain. Cooperation with partner companies in particular is a critical factor. We will implement proper CSR procurement, while also addressing a number of key issues pertaining to our company.

(Refer to page 25: Together with Our Business Partners)

Respect for human rights, development of human resources and promotion of diversity

- Thoroughly promoting our human rights policy across the entire Shin-Etsu Group
- · Conducting surveys on human rights and labor issues

To enable group companies to perpetually continue respecting human rights, we comply with all international codes of conduct and promote only activities that respect human rights. (Refer to pages 26 to 29: Together with Employees)

Employees and contractor health and safety

We aim to achieve zero labor accidents, occupational diseases and environmental accidents.

(Refer to pages 26 to 29: Together with Employees)

Energy-saving, resource-saving and environmental load reduction

To achieve the 6th mid-term goal of the Green Activities, we implement measures to prevent global warming and effectively utilize resources.

(Refer to pages 32 to 44: Together with the Environment)

Product quality improvements and product safety

We will continue to improve customer satisfaction based on our quality policy.

(Refer to page 24: Responding to Customers)

Accurate and timely information disclosure and communication with stakeholders

We will continue to improve corporate governance and disclose all necessary information in an appropriate manner to stakeholders. (Refer to pages 18 to 23: Governance)

Solving management issues for sustainable growth

In order to achieve sustainable growth, we focus on the following two objectives.

Expanding and increasing competitiveness of existing businesses

Our core and growth businesses respond to all customer needs, while continually striving for further enhancement and expansion. In addition, we promote a thorough rationalization of production systems as a means to reduce overall costs.

• Developing high value-added products and creating new businesses through unique technologies

This report introduces our competitive strengths in relation to conductive technology.

(Refer to pages 12 to 16: Special Feature)

To meet all of our customers' needs and to also solve social issues, we will continue to provide products that contribute to society by using our basic technologies, in addition to developing new technologies. We will also increase corporate value by contributing to the realization of a sustainable society.

Some important issues have been mentioned above. The details of these are explained in this report along with targets and results of Key Performance Indicators (KPI). We would very much appreciate any feedback, opinions or comments from stakeholders. As with the previous edition, we have also received a third-party comment from Mr. Yoshinao Kozuma, Professor Emeritus at Sophia University. We will take advantage of this feedback for future efforts and initiatives. Thank you in advance for your continued guidance and support.

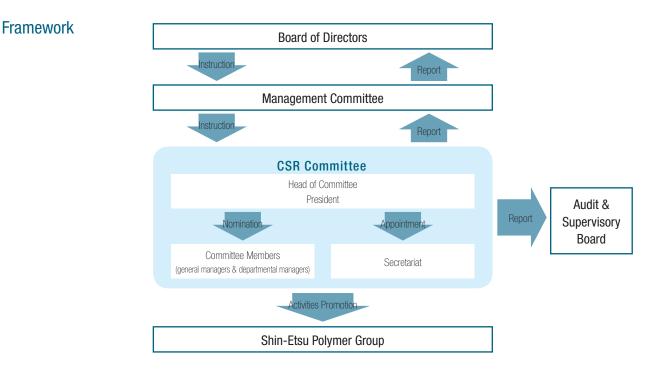
CSR Activities: Objective and Framework

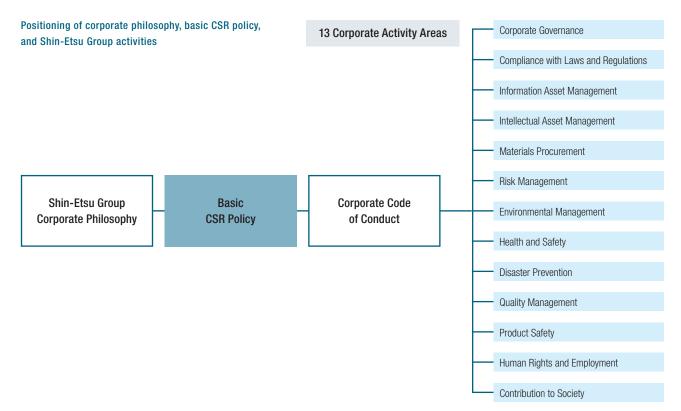
A CSR Committee was established in November 2017 to further improve our CSR activities.

Objective

Fulfilling our social responsibility by enhancing our CSR activities through the establishment of

a clear CSR activity policy and company-wide framework.





Key CSR Issues

The CSR Committee established key CSR issues that our group needs to address through the following procedure:

1. Identifying key CSR issues

- 1 Reconfirming and prioritizing stakeholders
- 2 Identifying key issues using ISO26000's core subjects
- 3 Assigning scores based on importance to the group and importance to stakeholders

2. Prioritizing key issues

Shin-Etsu Chemical Co., Ltd. created a scatter diagram of key issues based on issues and scores. As a result, the majority of the issues were categorized as "extremely important." These issues were then further prioritized and a draft plan for key CSR issues was created.

3.Determination of key issues

The CSR Secretariat reviewed and concluded that each of the proposed key issues was important and that prioritizing them was rather difficult. The Secretariat concluded that fair corporate activities and compliance with laws and regulations are the foundation of CSR, and key issues should be resolved based on these principles.

The CSR Committee decided on this plan and reported to the Management Committee. The following items were selected as key issues.

4.Key CSR Issues

At present, we are addressing each key issue and promoting the following activities.

In particular, we established respective subcommittees for "4. Promoting CSR procurement and the diversification of supply sources" and "5. Respect for human rights, the development of human resources and the promotion of diversity" to prioritize these tasks.

The foundation of all activities: We are addressing the following key issues based on legal compliance and fair corporate activities.

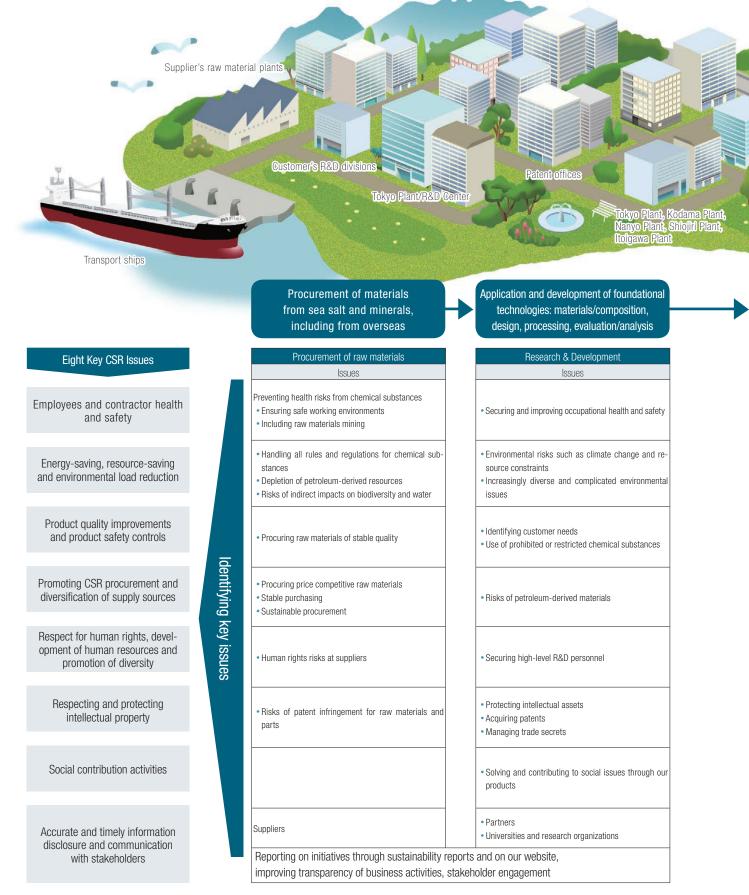
	Item	Activities in FY2018	
1	Employees and contractor health and safety	 Environmental Security Committee Environmental security on-site auditing 	P29
2	Energy-saving, resource-saving and environmental load reduction	Green activitiesChemical substance controls	P32~40 P41~42
3	Product quality improvements and safety controls	Global Quality Assurance Meeting	P24
4	Promoting CSR procurement and the diversification of supply sources	Company Procurement Meeting CSR Procurement Subcommittee	P25
5	Respect for human rights, development of human resources and pro- motion of diversity	 Respect for human rights and human resources system CSR Human Affairs Sub-committee 	P26~28
6	Respecting and protecting intellectual property	Patent Committee	
7	Social contribution activities	 Eco-products promotional activities Coexistence with local communities 	P17 P30~31
8	Accurate and timely information disclosure and communication with stakeholders	 IR and public relations activities Information Disclosure Committee 	P18~23

• CSR Committee

The FY2018 CSR Committee meeting was held to report on activities during the year, future planning and careful discussions on the establishment of CSR promotion rules.

Shin-Etsu Polymer Value Chain

Shin-Etsu Polymer has formulated a value chain map for business activities. We identify key issues from environmental issues at each stage of the value chain. We will contribute to the realization of a sustainable society by addressing eight key CSR issues.



Production in domestic and overseas plants Ocean transport to ther counters, domestic model shift Scutting inventory for CAL Recycling of plastics, resin, and metals Eight Key CSR Issues Induction Issues Using and improving occupational meals and safety Issues Using, disposing and recycling issues Eight Key CSR Issues Induction Issues Issues Using, disposing and recycling issues Eight Key CSR Issues Induction Issues Issues Issues Eight Key CSR Issues Induction and improving occupational meals and safety Issues Issues Issues Insult and safety Inducting and improving occupational meals and safety Issues Issues Issues Issues Product quality improvements and product safety control supply sources Inducing and improving quality Issue insuing and moroving quality Issue insuing and improving	Suzhou Shin-Etsu Polymer Dongguan Shin-Etsu Polymer Shin-Etsu Polymer (Malaysis PT. Shin-Etsu Polymer India Put Shin-Etsu Polymer Hungary Hymir Co., Ltd.	er Co., Ltd. a) Sdn. Bhd. nesia t. Ltd.	NFPS NEPS Superman	kets Kets Kets
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improvements and product safety control Enhancing quality assurance systems Ensuring and improving quality Securing good logistics Securing good logistics Contamination by harmful chemical substances Occupational accident risks at partner companies Human rights, risks in workplaces Accumulating and passing on skills Promoting of intellectual property Outflow of production technology and knowhow Outflow of production technology and knowhow Contribution to industry and social initiatives Contribution to industry information disclosure Employees and partner companies Areas surrounding bases and local governments Shipping companies Shipping companies Shipping companies Customers and society Customers and society Customers and society Shipping companies Shipping companies Shipping companies Substances Shipping companies Shipping companies Shipping companies Shipping companies Shipping companies Shipping companies Shipping companies Shipping companies 	resource-saving, and reduction of	impacts • Handling climate change, resource constraints, water risk	• Reducing CO ₂ and energy consumption	contribute to • Identifying and reducing environmental
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Accurate and timely information disclosure governments • Areas surrounding bases and local governments • Shipping companies • Customers and society				
and communication with stakeholders improving transparency of business activities, stakeholder engagement	information disclosure and communication	Areas surrounding bases and local governments Reporting on initiatives through sus	stainability reports and on our website,	Customers and society

Part 1

Conductive Polymers Used in a Diverse Range of Environments

Toshiya Sawai Group Manager, Group 🎞 Development Department IV Development Unit

Kana Koitabashi CP Group Office of Advanced Materials Project Sales Unit

Hiroshi Kojima Plastic Compound Division Production Unit

Hiromi Takezawa

Group III Development Department IV **Development Unit**

Atsushi Taniguchi Manager, CP Group Office of Advanced Materials Project Sales Unit

Shin-Etsu Polymer's SEPLEGYDA® is a conductive polymer that maintains a high level of conductivity even under harsh operating conditions, and its applications are diverse enough to support a modern digital society. In this Special Feature, employees engaged in the sales, development and production of SEPLEGYDA® discuss the product's main features and future potential.

Research on conductive plastics is underway

What type of product is the conductive polymer, SEPLEGYDA®?

Takezawa: Conductive polymers are often referred to as "conductive plastics." Plastics are generally recognized as insulators that don't conduct electricity, but the few of them that are conductive are referred to as conductive polymers. Dr. Hideki Shirakawa, who discovered and developed them in the 1970s, won the Nobel Prize in Chemistry in 2000, bringing conductive polymers into the global spotlight. In addition to high conductivity, they are excellent in terms of heat resistance, stability and transparency. Research on new applications is currently underway in a wide range of fields.

Sawai: Around 1998, we started to sell SEPLEGYDA®, a con-

ductive paint that uses conductive polymers. It is characterized by high conductivity and excellent transparency. In response to customer needs, we have been working hard on developing a wide range of applications.

Applications ranging from transportation containers to displays

-What type of applications do you receive the most inquiries for?

Taniguchi: There are three key applications. The first is capacitors for automobiles. Polymer used inside capacitors is applied to automotive electronic circuits. Along with technological progress, all parts of an automobile have become electronically controlled, resulting in increased demand for high quality capacitors. In particular, the malfunctioning of an automotive component could lead to a life-threatening situation, meaning

Special Feature Conductive Technology in Support of a Digital Society

that stable performance is critical even under adverse conditions such as high temperature, humidity, and vibrations. SEPLEGYDA[®] is able to endure harsh environments, and our customers appreciate this high level of safety.

Kojima: Most of the SEPLEGYDA[®] inquiries that we get are about capacitors. A new production line was added in November 2018 to increase production to match market expansion.

Taniguchi: The second one is antistatic applications. The polymer is used in the optical films and trays used to transport electronic parts. When stored in a place with static, these parts may be repelled or damaged by static. Therefore, a conductive material is applied to the surface of trays used for transportation within a factory or between plants to prevent static. Carbon and surface-active agents can serve the same function, but SEPLEGYDA® is preferred due to the fact that it is colorless and transparent and doesn't easily come off.

Koitabashi: In recent years, electronic parts have become smaller and more intricate, so it has become even more important to transport them safely to improve quality and productivity. For this reason, our product is attracting a great deal of attention both in Japan and overseas.

Taniguchi: The third one is transparent electrodes that connect boards with touch panels and displays. Indium tin oxide (ITO) is currently widely used as a transparent electrode material, but it is prone breaking when bending. In addition to being transparent and colorless, SEPLEGYDA[®] can bend without breaking, making it a material that's both conductive and flexible.

Sawai: Also, the indium used in ITO is a rare metal that is globally scarce. If mining increases to meet growing demand, this resource is going to run out sooner rather than later. By replacing ITO with SEPLEGYDA[®], we can very much contribute to global resource conservation.

Increasing applications by taking advantage of diverse properties

-----Please explain the future outlook

Kojima: In terms of production, our immediate target is to keep the newly added line running smoothly. We have never received any complaints about SEPLEGYDA[®] in terms of quality and never had any production delays. Moving forward, we will continue taking great care to prevent mistakes, maintaining quality as we expand the business.

Takezawa: Our development staff will work on further expanding applications. SEPLEGYDA[®] has a wide range of properties, so we will need to continue studying it to identify new applications that can take advantage of these properties.

Sawai: Yes, it's necessary to explore new applications from both needs and seeds perspectives.

Taniguchi: At sales, we see great potential for SEPLEGYDA[®] to enter the display market and play a pivotal role in that space. Though the technological hurdles are still quite high, we want to take on ITO.

Koitabashi: Through collaborative efforts by sales, development and manufacturing, I believe we can develop a product to support technological innovations around the world.

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Main applications of SEPLEGYDA®

Special Feature Conductive Technology in Support of a Digital Society

Shin-Etsu Polymer has developed many different types of inter-connectors in response to changing times and markets. Employees engaged in development discuss the history of the market and future outlooks.

Connecting LCDs and substrates with soft materials

—What type of product is an inter-connector?

F Frei

信越ポリマー株式会社

Hagiwara: An inter-connector is a product used to transmit electric signals by connecting an electronic substrate with the liquid crystal display (LCD) of an electronic device. Generally, a metal with low resistance is soldered on to make the connection. However, the heat generated during soldering may damage the substrates or components. Additionally, the permanent connection makes disassembly and repair work difficult. In other cases, soldering simply doesn't work. Therefore, we have been developing inter-connectors that are made of soft materials such as silicone rubber. **Aoki:** Unlike metallic materials, elastomeric connections with soft materials do not break when bent. Furthermore, conductivity can be achieved simply by placing them in the correct spot, rather than connecting them with heat. This means assembly is easy and there's no danger of heat damage to components. And apart from making disassembly and repair work easier, they're also easier to recycle.

Yamazaki: From an environmental perspective, the lead used for soldering causes problems in the form of contaminated soil and water. By using a material that replaces soldering, we contribute to reducing the environmental burden.

From the left: Zebra type, GB type and MT type

Part 2

Improving Core Technologies While Responding to Market Changes Inter-connectors



Koichi Yamazaki

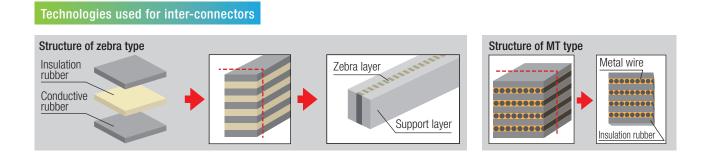
Group Manager, Group I Development Department Development Unit

Kazuhiko Aoki

Group Manager, Group II Sales & Marketing Division I Sales Unit Yukihisa Hagiwara

Group Manager, Group III Development Department I Development Unit

Special Feature Conductive Technology in Support of a Digital Society



A product that has grown along with the development of electronic devices

-----How long has Shin-Etsu Polymer been involved in the development of inter-connectors?

Yamazaki: Our history with inter-connectors dates back more than 30 years. The first one we created was a zebra type made of conductive rubber. First, thin sheets of conductive silicone rubber and non-conductive silicone rubber are piled on top of each other to form blocks. These blocks are then thinly cut and sandwiched with soft rubber. As conductive and insulated parts are aligned at predetermined pitches, the conductive parts make contact with the substrate's electrodes at many points, giving this inter-connector its characteristic stable connection.

Hagiwara: The zebra type was adopted to connect small monochrome LCDs and substrates in pocket calculators in the 1980s. Afterwards, word processors emerged, and when laptops appeared around 1990, displays became larger than simple calculator screens. As such, connectors with lower resistance values were required, and film type connectors from other companies claimed a larger share of the market.

Aoki: For these very reasons, around 1993, we started to work on the development of inter-connectors using metallic wires with a resistance value lower than that of conductive rubber: the GB type. We made this type by molding thin metallic wires arranged at a fine pitch on a thin sheet. This GB type was used in connections for motor power supplies for hard drives as well as connections for COG LCDs for early mobile phones. In terms of mobile phones, this type was widely used for connections and applied to microphones and loudspeakers due to the fact that the parts couldn't withstand high temperatures. Later on, when the heat resistance of individual parts was improved, and with wider applications of MEMS technology, the market for the GB type shrank. However, there still remains some need to connect parts with low heat resistance in narrow spaces. **Hagiwara:** In parallel with the sale of the GB type, the MT type that combines the technologies of the zebra and metallic wire types was developed around 1995. This type is made by aligning metallic wires on a sheet, piling them up, and then finely cutting them. It was adopted for conductivity tests in the semiconductor manufacturing process. In recent years, everything has built-in sensors, increasing the demand for semiconductor products, so the MT type is enjoying the largest market share at the moment.

Making further technological progress towards new markets

------What other applications exist apart from semiconductor inspections?

Yamazaki: Many of the products we developed in the past are still in use today for different applications. They're used in a wide range of fields, including trip meters for automobiles and LCDs on watches and cameras.

Aoki: We have developed numerous types along with the changing times, yet the core technology hasn't changed. It's all based on our sheet manufacturing technology, including our ability to make thin and uniform sheets and to stack and cut them with high precision. However, we have come this far by continuously searching for new markets and modifying these technologies to suit the changing times.

----Please tell us your outlook for the future.

Yamazaki: We'd like to focus on bendable LCDs. The elastomeric connections of silicone rubber do not break when bent, so they should be effective for thin and bendable LCDs like electronic paper and roll displays.

Aoki: Our inter-connectors are also able to easily run highspeed signals, and I believe they can support higher-speed communications such as 5G. As in the past, we aim to continue developing products that play pivotal roles in new markets.

Special Feature

Conductive Technology in Support of a Digital Society

Part 3 Diverse Products That Take Advantage of Conductive Technology

Our company also has products that utilize conductive technology.

Rollers for OA equipment



Using silicone rubber as a raw material, we have developed products such as toner rollers and developing rollers that take advantage of our unique processing technologies such as combining, foaming and conductivity, thereby contributing to performance improvements in OA equipment and environmental conservation.

Shin-Etsu Silico-Sheet



Conductive type silicone rubber sheets excel in terms of environmental, heat, cold and chemical resistance.

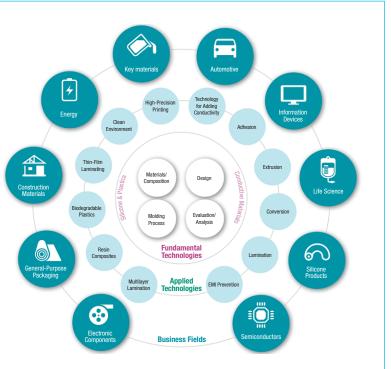
Embossed carrier tapes



Carrier tapes are an essential packing material for the automated mounting of electronic components. In addition to preserving products, it also has anti-static properties and high dimensional accuracy.

Foundational technologies of Shin-Etsu Polymer

The foundational technologies that make up the core of technological development at Shin-Etsu Polymer are materials/composition, design, processing, evaluation/analysis using silicone, various resins and conductive materials as key materials. By applying these technologies in multifaceted ways, we deliver high value-added products tailored to the diverse needs of customers in a wide range of fields. As shown in the diagram on the right, we have 12 applied technologies, from which we selected conductive technology to cover in our special feature.



Towards Establishing a Recycling-Oriented Economic Society



• Supply of Environmentally Friendly/Contributory Products

Per our Basic CSR Policies (page 2) and Basic Environmental Principles (page 32), we promote an eco-friendly product system that develops products to reduce envi-



ronmental burdens and solve social issues, thus contributing to the sustainability of society. We also develop products as a means to achieve SDGs.

• Concept of environmentally friendly/ contributory products

Based on our Corporate Action Policy (page 32), the concept behind our Group's environmentally friendly/ contributory products is as follows:

Concept Environmentally friendly and contributory products in our Group are new or existing products that solve customer challenges and, upon confirmation that they are needed by society and the environment (social needs), they are evaluated and certified according to seven items.

• Evaluation standards for environmentally friendly/contributory products

Our evaluation criteria determine whether a product can contribute to reducing the Group's environmental footprint or reducing environmental or operational burdens for our customers.

We have a total 97 evaluation criteria in place for seven categories: (1) Resource saving, (2) Energy saving, (3) Waste reduction, (4) Recycling, (5) Environmental pollutants, (6) Safety and (7) Protection of biological diversity. From April 2013, we started internal certifications of environmentally friendly and contributory products by assigning grades according to these evaluation items.

• Certification targets for environmentally friendly/contributory products

We are conducting activities with the goal of tripling our number of certified products by 2020 (compared to FY2014). • Shin-Etsu Group Products and Technologies Contributing to the UN Sustainable Development Goals (SDGs)

UN Sustainable Develop- ment Goals (SDGs)	Group products contributing to SDGs Numbers in parenthesis refer to the specific target
Goal #2: Zero Hunger	Biodegradable runner clips Goal #2(2.4) *Also applies to Goal #12 (12.1) and #15 (15.1)
Goal #3: Good Health	Medical catheters (3.8)
and Well-being	Food wrapping films (3.d)
6 GLARMANTER Goal #6: Clean Water and Sanitation	• Vinyl chloride tubes/joints Goal #6(6.4) *Also applies to Goal #9 (9.4)
	• Semiconductor wafer transport containers (7.3)
	Resin tape frames for wafers (7.3)
Goal #7: Affordable and Clean Energy	• Silicone rollers for office automation (7.3) shupua(7.3)
	• Shupua (7.3)
	• Functional compound EXELAST SX Series Goal #7 (7.3) *Also applies to Goal #9 (9.4)
9 MORE ANNALE Industry,	• Touch switches (Input devices) (9.4)
Innovation and Infrastructure	• Silicone adhesive tapes to prevent water leakage (9.4)
Goal #11: Sustainable Cities and Communities	• Toilet booths (11.3)
	• Embossed carrier tapes (12.5)
Goal #12: 12 #UPGARE ACCOUNTING Responsible	• HSP (12.5)
Consumption and Production	Polica Tough Corrugated Sheets (12.5)
	• SEPLEGYDA (Conductive paint) (12.2)
Goal #15:	• Fumigation sheets (15.1)

*Products in blue are certified as environmentally friendly and contributory products. *For further details on individual products, please refer to the following website.

• https://www.shinetsu.co.jp/jp/csr/csr_spcontents4.html

As a global company that is trusted by and carries the expectations of various stakeholders including shareholders, the Shin-Etsu Polymer Group fully recognizes that improving corporate value is the basis of management. With this basic awareness, we are continually working to enhance corporate governance by making decisions properly and carrying them out through prompt decision-making, transparent management and improved internal control functions.

Governance

Corporate Governance

Basic Principles

1 Ensuring shareholders' rights and equality

We strive to maintain an environment where shareholders can properly exercise their rights by respecting such rights and ensuring equality for all, including minority and overseas shareholders.

2 Appropriate cooperation with all stakeholders, in addition to shareholders

We strive to uphold appropriate cooperation with all stakeholders other than just shareholders, while working towards creating sustainable growth and medium to long-term corporate value for the company.

3 Ensuring disclosure and transparency of appropriate information

We strive to ensure that all information is useful and easy for users to understand, while making sure details are properly disclosed based on the relevant laws and regulations. We also independently provide various other information.

4 Responsibilities of the Board of Directors

We strive for the appropriate implementation of the roles and responsibilities of the Board of Directors based on our fiduciary responsibility to shareholders.

5 Dialogue with shareholders

We strive to make constructive dialogue with shareholders, and understandably explain our management policies in order to make sure they are properly understood.

Corporate Governance System

We have adopted an auditor system where all three auditors are outside auditors. Two organizations, the Board of Directors and the Board of Auditors, provide a double layer of supervision and auditing, allowing for functional and effective management supervision alongside objective and neutral auditing.

The Board of Directors makes important management decisions and supervises the job performance of individual directors. The Board of Directors is comprised of 11 members, two of whom are outside directors. Outside directors, who have extensive experience and deep insights from many years as company owners and specialists in accounting/tax affairs, supervise our company's overall management in an objective and proper manner.

For further details on our company report on corporate governance, please visit our website (in Japanese):

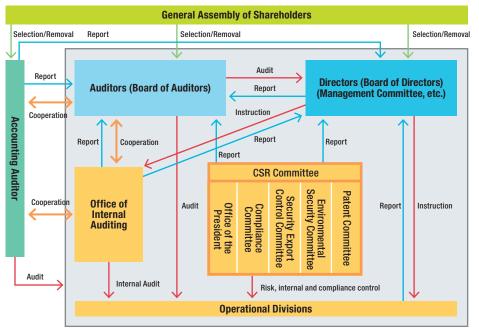
https://www.shinpoly.co.jp/company/corporate.html

Relationship with parent company

Our parent company, Shin-Etsu Chemical Co., Ltd., is a controlling shareholder that holds 52.9% of our issued shares (excluding treasury shares). We maintain independence in all business activities and transaction terms are determined by market prices when we purchase materials, etc. from our parent company.



Shin-Etsu Group Corporate Governance System (As of June 25, 2019)



Office of the President

Manages corporate-wide challenges and risks, establishes management policies, evaluates the company's overall situation and puts appropriate measures in place. Furthermore, cooperates with other divisions and operates as a contact center in the case of an emergency.

Compliance Committee

Deliberates over and resolves matters related to compliance policy, measures and situational awareness.

Security Export Control Committee

Deliberates over and resolves compliance matters related to export control laws and regulations.

Environmental Security Committee

Deliberates over and resolves matters related to environmental security and disaster management, in addition to occupational health and safety.

Patent Committee

Deliberates over and resolves matters related to industrial property rights.

Improved effectiveness of governance organization

In FY2018, we once again conducted a survey on the effectiveness of the Board of Directors, with all directors and auditors making self-evaluations. As a result, we were able to identify certain issues, such as the need for further implementation of functions to study management policies and more in-depth discussions on medium-term business plan formulation. Based on the aforementioned survey, we have assessed that the Board of Directors is capable and functioning effectively. Going forward, we will continue to improve all functions of the Board of Directors.

Audit system

Three outside auditors (one is an independent outside auditor) comprise the Board of Auditors, and they conduct audits completely independent of business execution. In their role of monitoring management, auditors attend various meetings, including the Board of Directors, and hold Board of Auditors' meetings, which are necessary to discuss important audit-related issues based on reports provided by individual auditors.

As for internal audits, the Office of Internal Auditing audits the control/operation system and status of business execution from the viewpoint of legality, rationality and efficiency.

With regard to accounting audits, auditing firms conduct quarterly reviews and provide accounting advice as necessary.

The Board of Auditors, internal auditors and auditing firms closely collaborate and exchange information to improving audits.

Support System for Outside Directors (Outside Corporate Auditors)

The General Affairs Department provides support to outside directors, while the Auditors' Office supports outside auditors.

We inform outside directors and outside auditors of the schedule and agenda of important meetings such as the Board of Directors meeting in advance. Since FY2016, we have been striving to improve the frequency and quality of information supplements by, for example, holding liaison meetings for outside directors and auditors every month.

Dialogs with Shareholders/Investors

Information disclosure system

We operate with a constant awareness of enhancing corporate governance and securing transparency of management. As for information disclosure to shareholders and investors, we strive to provide fair, timely, and proper information disclosure to shareholders/investors in accordance with all applicable laws and regulations in relation to financial instruments trades, etc. and rules of the Tokyo Stock Exchange.

For our information disclosure system, based on the Basic Information Disclosure Policies, we appoint an information disclosure officer, who chairs meetings of the Information Disclosure Committee. The Information Disclosure Committee is made up of personnel from the Office of the President (In charge of IR/PR), the Accounting Department and the Legal Department as well as other related departmental personnel. Meetings are held as necessary to disclose information in a flexible and prompt manner.

For further information on the Basic Information Disclosure Policies,

please visit our website:

• https://www.shinpoly.co.jp/ir/policy.html



Communication with Shareholders/Investors

We hold explanatory meetings for analysts, investors and media when releasing financial statements at the end of each fiscal year and in the 2nd quarter to explain our business status to shareholders/investors. We also use our website to disclose information such as news releases, brief summaries of financial results, explanatory materials, annual reviews, notices for the General Meeting of Shareholders, and notices of resolution in a timely and fair manner.

Efforts to invigorate the General Assembly of Shareholders and facilitate the exercise of voting rights

• Early delivery of convocation notices for the General Assembly of Shareholders

Notices are sent three weeks prior to the day of the General Assembly of Shareholders

• Avoiding overlaps with other companies' General Assembly of Shareholders

59th General Assembly of Shareholders: June 25, 2019

- Exercise of voting rights using an electromagnetic method Exercise of voting rights using an electromagnetic method via the Internet adopted
- Effort to improve voting environment Participation in electronic voting platform

Compliance

Basic stance

Based on the idea that for our group to obtain trust as a member of society, it is essential that we "comply with all laws and regulations, act sincerely, and respect social values and ethics," our group promotes thorough compliance and refuses any relationships with antisocial forces.

Additionally, we strive to operate and maintain an appropriate and efficient internal control system, positioning the establishment, improvement and operation of said internal control system as an important management responsibility.

Compliance promotion system

"Our Group strictly complies with all laws and regulations, conducts fair business practices and contributes to people's daily lives as well as to the advance of industry and society." Based on this mission statement, the Shin-Etsu Chemical Group has established the group's compliance principles and compliance manual, and the Compliance Committee responds to compliance issues in an organic manner.

We also promote groupwide corporate activities based on the compliance manual, including the implementation of compliance education and the establishment of an internal reporting system (Hotline).

Internal reporting system

Our group has established an internal reporting system based on internal reporting rules, prohibiting any disadvantageous treatment due to reporting and stipulating punishment for any person who handles such reporting in a disadvantageous manner.

Improving compliance

• Tokyo Principles for Strengthening Anti-Corruption Practices In February 2018, the Shin-Etsu Chemical Group became the first company to sign the Global Compact Network Japan's Tokyo Principles for Strengthening Anti-Corruption Practices. These principles also contributes to the achievement of the UN's 16th SDG, "Peace, justice and strong institutions." As a member of the Shin-Etsu Chemical Group, our group strive to raise awareness that anti-corruption is an important factor in business activities and observes the principles set up by the GCNJ.

Cutting Ties with Anti-social Forces

As the standard of action, our group confronts antisocial forces with a resolute attitude based on our Corporate Code of Conduct and Code of Ethics. The General Affairs Department is responsible for confronting antisocial forces, centrally collecting and controlling information on antisocial forces, working together with relevant departments in the company, and confronting all unjust demands with a resolute attitude. In addition, we work closely with the relevant authorities, lawyers and other external professional organizations to prepare for any unjust demands from antisocial forces.



Respect for Human Rights

Basic stance

The Shin-Etsu Chemical Group is committed to its corporate philosophy of being a company that "contributes to people's daily lives as well as to society and industry by creating value with our key materials and technologies, adhering to fair business activities in compliance with all laws and regulations." The foundation of this is respect for human rights.

The Shin-Etsu Chemical Group respects the human rights of all people. To ensure that all Group companies always respect human rights, we strongly promote activities for respecting human rights in compliance with international codes of conduct (such as the Universal Declaration of Human Rights, ILO International Labor Standards, UN Guiding Principles on Business and Human Rights and the Ten Principles of the UN Global Compact).

1 Prohibition of discrimination

We do not discriminate on the basis of nationality, race, ethnicity, gender, religion, personal views, beliefs, age, social status, disability, sexual orientation, gender identification, labor union participation, health, marital status, political opinions or any other status.

2 Prohibition of damaging human dignity

We do not conduct sexual harassment, power harassment, maternity harassment or any other acts that damage human dignity.

3 Protection of privacy

We protect the privacy of individuals and handle personal information properly in accordance with the applicable laws and regulations of each country.

4 Respect for basic labor rights

We respect workers' right to organize, the right to collective bargaining, and further rights given to workers to establish, maintain and improve trust and good cooperative relationships through dialogue between labor and management.

5 Prohibition of child and forced labor

We prohibit operations in all countries and regions from using child labor in accordance with the applicable laws and regulations of each country. We also prohibit the use of forced labor.

Activities for Respecting Human Rights

1 Human rights awareness

The people responsible for human resources at each Group business site and company strive to develop a proper understanding of human rights and an awareness of respect for human rights through activities including education for employees on human rights.

2 Human resources development

The Group will create an environment in which diverse individuals can work at their full capacity and give all employees equal opportunities aligned with their aptitudes to develop and utilize their abilities.

3 Working environment

The Group will make efforts to create sound and comfortable working environments and to ensure safety

4 Prevention of human rights infringements

The Group will make efforts to prevent the infringement of human rights in the course of business activities by conducting due diligence* in accordance with the UN Guiding Principles on Business and Human Rights.

5 Measures for handling issues

If there are concerns regarding human rights infringement in our business activities, the Group will take appropriate measures to promptly resolve them.

6 Promotion of respect for human rights

The Group will encourage all people associated with the Group to comply with international standards for human rights.

- * Due diligence" means:
- To constantly identify and evaluate risks to human rights, put preventative or corrective measures in place, monitor the situation, and disclose information in accordance with the Group's human rights policy.

(See Business Principle on page 2)

Initiatives for respect of human rights across the value chain

As part of CSR procurement, we conduct investigations of business partners with human rights as one of the items in our CSR investigation category. For our employees, we have long carried out activities to spread knowledge about human rights and prevent child and forced labor.

(See "Together with Our Business Partners" on page 25 and "Together with Employees" on pages 26 through 29)



Risk Management

Risk Management Regulations

Our group established Risk Management Regulations for the purpose of contributing to the smooth operation of our business by upgrading to a management system that is aimed at total risk prevention and that responds to any risks that may happen to arise.

11) Intellectual property risks

14) Personnel and labor risks15) Publicity and reputational

13) Finance and accounting risks

17) Business infrastructure risks

19) Country specific risks

12) Information risks

risks

16) Social risks

18) Legal risks

20) Others

1 Business risk factors

- 1) Management risks
- 2) Sales and marketing risks
- 3) Customer risks
- 4) Production risks
- 5) Purchasing risks
- 6) Logistics risks
- 7) Quality risks
- 8) Technology risks
- 9) Environment and safety risks
- 10) Research and development
 - risks

2 External risks

- 1) Risks due to economic factors
- 2) Risks due to social factors
- 3) Risks due to political factors
- 4) Risks due to scientific and technical factors
- 5) Risks due to environmental and disaster factors
- 6) Others

Risk management system

Recognizing that risk management is a crucial issue for the sustainable growth of a company, our group has established a system driven by five risk management departments (five committees including the CSR Committee and the Office of the President) to control critical risks across the entire group in an organized manner. The Board of Directors deliberates on critical companywide risks and passes the necessary measures to prevent them.

Furthermore, all departments at headquarters, as well as domestic and overseas production and sales bases, periodically assess individual critical risks and take appropriate measures to reduce such risks.

Business Continuity Management (BCM)

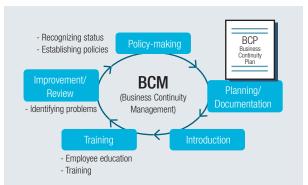
Basic BCP Policy

- 1. Ensuring reliability and safety of employees, their family members and local residents.
 - 1) Ensuring workplace safety.
 - 2) Improving the safety of employees and their family members.
 - 3) Offering support to employees and their family members.
 - 4) Offering support to local residents.
- Aiming for continuation and early recovery of business for customers and employees.
 - 1) Ensuring our customers' trust.

• Disaster Countermeasures and Business Continuity Manual (BCM manual)

Our Disaster Countermeasures and Business Continuity Manual (BCM Manual) includes an outline of a business continuity plan and clearly states our aim for the continuation and early recovery of business for employees, their family members, neighboring residents and customers. The manual is updated every year, based on the Basic BCP Policy. At each site, nine standard documents are also updated and managed by the President's Office.

BCM system

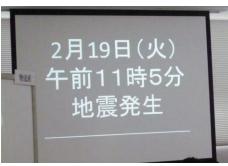


BCP (Business Continuity Plan/Action Plan), which defines pre-emptive and post-disaster measures, is one of the key factors that supports business continuity. To practice this more effectively, we recognize that it is important to continually improve and manage BCM (Business Continuity Management) for all activities.

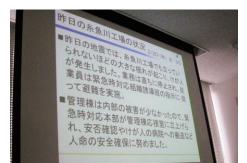


BCM Training

Once a year, we conduct BCM training to confirm the BCM functions of all relevant Group headquarters and production bases. During the third training at the Itoigawa Plant in February 2019, we held a training simulation (scenario-blind) with specific disaster conditions to encourage employees to think about the countermeasures and decisions to be taken, thereby promoting the acquisition of practical wisdom and improved recognition.



Training started



Sharing of damage status



Meeting at headquarters to discuss responses



Simulator waiting for inquiries

Information security

Information security policies and rules

As for our corporate information security policies, we examine the permissible range of risks in information security regarding company information assets, establish goals to maintain and manage information security and position the achievement of such goals as a real challenge for the company. Information security essentially involves maintaining confidentiality, completeness and maintaining available information assets. Our management goals include the following:

- (1) Clarifying responsibilities for protection, utilization, management and operation of information assets.
- (2) Informing every one of their responsibilities so they can act with an awareness of them.
- (3) Properly recognizing risks to ensure that effective countermeasures are taken.
- (4) Maintaining information system security for each employee who carries out operations.
- (5) Thoroughly observing social ethics and all applicable laws and regulations.

• Information security system

Information security can only be realized when each individual employee understands the authority and responsibility granted to them in accordance with his or her functions and roles and properly carries out the responsibilities he or she bears. Information security is handled by the Information Systems Department under the direction of the information systems officer. Matters concerning corporate-wide management of information security are communicated via IT leader meetings. The Information Systems Department also provides guidance on information security for Shin-Etsu Polymer and affiliated companies.





The Shin-Etsu Polymer Group believes it is important to maintain a high quality and stable supply so that our customers can use our products with confidence. To that end, we aim to improve customer satisfaction by establishing and improving a quality assurance system for the entire group.

Initiatives for Quality Control

Shin-Etsu Polymer Group Quality Policy

Through manufacturing, we will contribute to society by providing high-quality products that are trusted by customers.

- 1 We will always incorporate market needs into our products and strive to improve customer satisfaction.
- 2 We will continue efforts to improve quality and hone our technology, as we aim to become the company of choice for our customers.
- 3 We will conduct thorough field management to continuously provide a stable supply of high-quality products.

Second quality month

In order to improve quality awareness, a second quality month was implemented in November 2018 to unify the entire company.

As was the case with the previous year, the President made a speech, while the Head of the Production Division evaluated the plants (three domestic plants). Our internal newsletter carried a special feature on quality. A new English section was established so that overseas plants could also participate in coming up with a new quality slogan.

Third Global Quality Meeting

In March 2019, a total of 64 employees involved with quality assurance from 13 bases in Japan and overseas (including 2 bases in charge of managing OEM production sites) as well as sales and engineering departments, gathered for this event. During the meeting, they examined the previous year's quality results and divided into groups for product-based workshops. The Head of the Office of Products Development Management reviewed the event by saying, "We expect to see great initiatives that better comprehend and reduce failure costs."

• Towards quality improvements

For the purpose of building a common foundation and an improved quality level across the entire group including overseas companies, we introduced a QC examination in March 2019.

Seven employees passed 2nd grade and thirteen employees passed 3rd grade. The QC examination is considered part of our operations, and the company supports it by, for example, covering the cost of the examination fee. The Production Unit anticipates that about 200 employees (including overseas local employees) in total will take the 2nd and 3rd grade examinations over the next three years, and we are planning to further expand these numbers in the future.

• Internal investigations of data falsification and other misconduct

Following a paper audit in FY2017, we conducted on-site audits at all five plants in Japan and five overseas sites excluding SH*. The results revealed no acts of dishonesty such as data falsification or cover-ups. We will continue to monitor this situation going forward. These reports were also covered during the Global Quality Meeting, and we were once again instructed to keep a close lookout for any acts of dishonesty, as such an act can potentially lead to the downfall of the company.

*SH: Shin-Etsu Polymer Hungary Kft.



On-site audit (Kodama Plant)

Initiatives to Secure Product Safety

Product safety activities

When we receive information from our customers that presents a high risk, such as information that threatens product safety, we promptly notify management and ensure that those in charge inform the Office of Quality Assurance so an appropriate response can be taken.

https://www.shinpoly.co.jp/technology/index.html



Together with Our Business Partners

We have cooperated with our business partners to conduct initiatives for environmental problems based on our original green procurement standards. As the stock market and ratings agencies have begun placing an emphasis on CSR when evaluating companies, any environmental problem discovered on our supply chain could potentially lead to risks such as boycotts. Therefore, CSR procurement is a key issue for the CSR Committee.

CSR Procurement Promotion Activity

Basic Policy and Guidelines to promote CSR procurement

Under the Basic Procurement Policy of the Shin-Etsu Polymer Group, we consider it important to promote CSR activities across the entire supply chain. To achieve this goal, we aim to solicit understanding from business partners and promote CSR activities in tandem on the basis of the Shin-Etsu Polymer Group's CSR Procurement Guideline.

Basic Procurement Policy

- 1 Abiding by the law
- 2 Promotion of corporate social responsibility
- 3 Selection of vendors
- 4 Meeting the needs of suppliers and conducting performance reviews

CSR Procurement Guideline

https://www.shinetsu.co.jp/jp/csr/pdf/csr_guideline.pdf

• CSR procurement promotion system

We established a CSR Procurement Subcommittee and regularly hold meetings.

Main activities in FY2018

- · Establishment of Basic Procurement Policy
- · Establishment of CSR Procurement Guidelines
- Conducted business partner survey using a CSR procurement investigation questionnaire
- · Study of evaluation methods
- · Review of how to provide feedback about an evaluation

Business partner survey

We prepared a questionnaire based on the CSR Procurement Guidelines and conducted a survey in FY2018 to better understand the current status of our business partners' CSR activities.

urvey overview

- Survey categories : Six items (Human rights, compliance with laws and regulations, safety and disaster prevention, environmental conservation, information asset management and management) 104 questions
- Survey format : Self-check where respondents give responses to questionnaire without on-site audit

Results

Almost 90% of companies met the requirements for each item. The categories that were deemed to require additional support were CSR management (setting of CSR policy and goals, etc.) and supply chain management.

Future activities

We will tackle the following items, while also promoting activities.

- Expand the range of business partners surveyed
- Promote better understanding of the Procurement Guidelines among business partners
- Conduct risk assessments based on survey results

Response to Conflict Minerals

The Shin-Etsu Polymer Group has established a policy on how to respond to conflict minerals. Under this policy, the entire supply chain, including business partners, maintain initiatives to ensure zero use of any conflict minerals across the supply chain, thereby promoting responsible procurement.

Shin-Etsu Polymer Group Conflict Material Policy

https://www.shinpoly.co.jp/environment/mineral.html

The Shin-Etsu Polymer Group believes that safety and environmental preservation are the foundation of all corporate activities and one of the most important issues for management. We proactively work on activities to realize human and environmentally-friendly workplaces with a goal of eliminating workplace and environmental accidents. In addition, we strive towards creating work environments where each and every employee can be themselves, develop and grow at the same time.

Together with Employees

AND AND ADDRESS OF MY

Respect for Human Rights

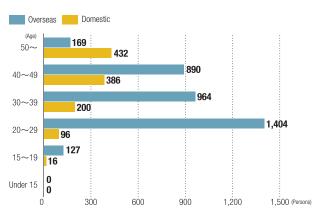
Raising awareness of human rights

Based on respect for human rights, the Shin-Etsu Polymer Group does not discriminate in terms of race, gender, academic background, disabilities, place of birth, ethnicity or religious beliefs. We conduct human rights awareness training for all employees as part of our efforts to promote an understanding of social integration and prevent problems such as sexual or power harassment.

Elimination of child/forced labor

In accordance with global laws and regulations related to labor, our Group prohibits child and forced labor in all countries and regions. We have surveyed all group companies including those located overseas and confirmed that there is no child or forced labor.





Current Employment Situation

Changes in number of employees (Unit: People)										
	Personne	el (Non-Cons	olidated)	Persor	nnel (Consoli	dated)				
End of FY	Male	Female	Total	Male	Female	Total				
2014	501	107	608	1,678	2,284	3,962				
2015	504 108		612	1,694	2,248	3,942				
2016	498	109	607	1,742	2,402	4,144				
2017	805	214	1,019	1,859	2,548	4,407				
2018	821	213	1,034	1,892	2,722	4,614				

*Employees refers to full-time employees.

Managerial positions (Unit: People)								
End of DV	Mana	agers	Offi	cers				
End of FY	Male	Female	Male	Female				
2014	251	4	16	0				
2015	293	4	15	0				
2016	314	5	15	0				
2017	304	7	15	0				
2018	309	8	15	0				

*FY2017 figures are post-merger.

Number of new graduates hired

D/	University	graduates	High school/ot	rer graduates Female 0 0	
FY	Male	Female	Male	Female	
Joined in April 2015	6	2	2	0	
Joined in April 2016	7	2	1	0	
Joined in April 2017	6	1	6	1	
Joined in April 2018	8	2	11	6	
Joined in April 2019	5	3	9	2	

*FY2017 figures are post-merger

(Unit: People)



Work-Life Balance

All domestic group companies strive to create environments where all employees can work comfortably and thrive.

Childcare

Our Group revised the rules for childcare leave in October 2016. The revised rules allow employees to take childcare leave until a child reaches the age of three and/or work shorter hours until the child reaches third grade in school. This particular revision was based on opinions that were collected through interviews conducted with employees who raised or are currently raising children. In FY2018, 12 employees took childcare leave and 15 employees used the reduced working time system to care for their children. Working hours were also reduced from 30 to 120 minutes based on the needs of individuals. In addition, in FY2018, a male employee took childcare leave for the first time. We will continue to cooperate with employees to create environments that are conducive to working while raising children and where employees can easily maintain their employment status.

Nursing care

We revised our standards for nursing care leave in October 2016 prior to an official legal amendment in 2017. For example, in addition to 93 days of nursing care leave, employees can also opt for shorter working hours. As the system dealing with nursing care is expected to become increasingly important, we will strive to create environments where employees involved in nursing care can work in the most comfortable manner possible.

Promoting the use of these systems

Following revisions to rules and systems, we carry out briefing sessions at all sites to explain the changes. In addition to explanations of new systems, we also monitor the usage of existing systems. Should usage begin to stagnate, we once again provide explanations and encourage employees to take advantage of these systems.

Usage of maternity, childcare and nursing care leave

End of FY	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Number of employees who took maternity leave (People)	3	5	7	7	7
Number of employees who took childcare leave (People)	3	4	10	19	12
Number of male employees who took childcare leave (People)	0	0	0	0	1
Number of female employees who took maternity leave (Leave takers/Number of births x 100)	100	100	100	100	100
Number of employees who used reduced working time system to care for children (People)	1	3	4	13	15
Number of employees who took nursing care leave (People)	0	0	1	0	0

*This data is applicable to Shin-Etsu Polymer Co., Ltd. only

Usage of annual paid leave

End of FY	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Average annual paid leave granted (Days)	19.6	19.2	19.2	19.1	19.0
Usage of annual paid leave (Days)	10.8	11.1	10.8	11.8	11.4
Annual paid leave taken (%)	55.1	57.8	56.3	61.8	60.0

*FY2017 figures are post-merger.

Diversity of Working Styles

Act on Promotion of Women's Participation and Advancement in the Workplace

At our company, the average years of service by female employees are 21.8 years for administrative positions and 14.4 years for non-managerial positions⁻¹, and differences from those of male employees are 5.5 years and 1.4 years, respectively. In FY2018, there were 50 female employees in managerial positions. In FY2019, this number increased to 56⁻², indicating that more women with long years of service are rising to leadership positions and thriving in the workplace. We will continue to work on creating systems that further develop human resources.

^{*1} As of the end of March 2019. The figures are applicable to Shin-Etsu Polymer Co., Ltd. only.
*2 This includes 10 female managers who joined our company as a result of the merger in April 2017. Applicable to Shin-Etsu Polymer Co., Ltd. only.



Employment status of people with disabilities and initiatives for their continuous employment

In FY2018, the employment rate of people with disabilities was below the necessary quota, but we are still actively encouraging the employment of people with disabilities. In FY2019, we once again accepted several interns from a special needs school. These interns were able to gain practical experience, learn about our work and experience the workplace atmosphere, which will hopefully ease some of their anxieties about joining the workforce. With the support of the Employment and Living Support Center for Persons with Disabilities, we will actively work on creating comfortable working environments for these employees after they join the company. We will continue listening to outside feedback as we take measures to prevent any decreases in the employment rate of people with disabilities.

End of FY	FY2014	FY2015	FY2016	FY2017	FY2018
Number of employees with disabilities (People)	15	14	17	23	23
Employment rate of peo- ple with disabilities (%)	2.25	2.02	2.34	1.98	1.96

*FY2017 figures are post-merger

*The employment quota for people with disabilities for private companies was 2.2% in FY2018.

Re-employment system

In accordance with the Amendments to the Act for Stabilization of Employment of Older Persons that came into effect in April 2013, our group has updated our re-employment system to allow retired employees to return to work if they wish to do so. These older employees possess knowledge, expertise and experience cultivated over many years of regular employment and can pass on valuable skills to the next generation. We will continue to update our systems in accordance with all laws and regulations to enable employees of all age groups to play active roles.

Career self-assessment system

We have begun implementing a career self-assessment system for employees aged 50 years and older to help them reassess the challenges and knowledge required to continue working after reaching retirement age and to improve their motivation. Additionally, we invite outside instructors to conduct Pension Seminars to improve understanding of financial planning following retirement.

Human Resources System

Our Group is continually working on personnel systems to facilitate any challenges being faced by employees. Following a revision to the personnel system for general staff members in FY2016, thereby establishing a consistent system for all employees. We have also adopted a track-based personnel system consisting of three tracks for managerial staff (based on expected roles) and three tracks for general staff (based on duties and/or work locations). In conjunction with this, we have revised the personnel evaluation system, placing a higher importance on fairness and persuasiveness. This new personnel evaluation system for cuses not only on achievements but also on the underlying abilities and attitudes that drive employees toward greatness. In addition to personal achievements, it also acknowledges contributions made to the organization and teamwork. We will continue to focus on creating systems that facilitate any and all employee challenges.

Training and Development

We believe that helping our employees grow contributes to business continuity. In addition to OJT, we offer a variety of programs that support employees at major career turning points such as promotions.

Tutor System

Each new hire is assigned a one-on-one tutor who focuses on training them for their new position. These tutors serve as role models and confidantes for new employees joining the workforce for the first time. The tutors themselves also grow and develop through working with new employees.

Management Training

Since FY2015, group employees have participated in rank-specific training (managerial and senior staff level) to learn about the concepts and techniques of group-wide management.

We also provide in-group promotion training for employees newly elevated to managerial positions to provide additional support for growth.

Physical and Mental Health Care

Employee Assistance Program (EAP)

The Shin-Etsu Polymer Group has introduced the Employee Assistance Program (EAP) to help employees and their families lead healthy lives, both physically and mentally. Through this program, employees can consult professionals in various fields on a variety of topics including mental and physical health, raising children, nursing care and also legal and financial matters. Toll-free calls and e-mail are used to maintain privacy. We also have a consulting service for sexual harassment. In addition, we regularly deliver useful health-related information via our internal network to raise awareness about mental health and health management.



Environmental Security Management System

Environmental Security Policy

Our Group recognizes that safety, disaster management and global environmental protection are top priority issues. Consequently, as a group, we work on: (1) creating safe, comfortable and eco-friendly workplaces with the aim of eliminating occupational accidents, occupational diseases and environmental accidents, (2) observing all relevant laws and regulations, (3) preventing disasters and environmental accidents by promoting risk management and minimizing risks (promotion of risk assessments) (4) raising awareness of safety, disaster prevention and environmental conservation via education and (5) obtaining trust from society by openly disclosing information about the current status of all our environmental security activities.

Eliminating workplace accidents

In addition to performing regular risk assessments of facilities and operations based on our occupational health and safety management system, we promote safety proposals, near-miss elimination activities and risk prediction training. We aim to completely eliminate workplace accidents by establishing safety as part of our corporate culture and creating workplaces with a high level of safety awareness.

After analyzing the causes of workplace accidents, we determined that the majority (approx. 60%) are a result of human factors such as human errors, lack of awareness and rule violations, followed by managerial factors such as procedural inadequacies and lack of training and physical factors such as equipment and working environment issues. In FY2019, we are working to reduce risk factors and strengthen risk assessment efforts to prevent falling accidents.

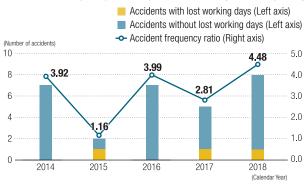
Environmental security audits

We regularly conduct environmental security audits to confirm whether environmental security activities (safety, disaster prevention, environment and compliance) at all business offices are being properly implemented. As part of these audits, we confirm compliance with all applicable laws and regulations and the current status of environmental security management activities. During an audit in FY2018, we focused on reviewing countermeasures for previously identified issues and identifying new issues.

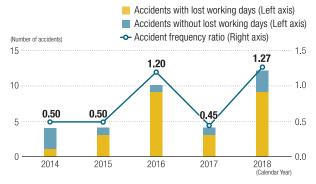
Work time accidents report for 2018

The number of accidents that occurred at 12 domestic and overseas production plants was 20, including eight in Japan (one accident with lost working days) and 12 overseas (nine accidents with lost working days). Most victims were young employees with less than three years of work experience, and most of the accidents were caused by human error. Therefore, we are promoting safety education, near-miss elimination activities and risk prediction training, thereby improving safety measures at individual workplaces. In addition, as the percentage of falling accidents was as high as 25%, we have taken preventive measures including repairing bumpy surfaces, installing handrails on stairwells and clearly marking height differences.

Number and frequency of workplace accidents (Domestic plants)



Number and frequency of workplace accidents (Overseas plants)



Regular environmental security audits at overseas production sites

Every year, Shin-Etsu Polymer (Malaysia) Sdn. Bhd., Suzhou Shin-Etsu Polymer Co., and Ltd., Dongguan Shin-Etsu Polymer Co., Ltd. undergo environmental security audits to confirm that environmental security activities are being properly executed. In addition to these three regular audits, Shin-Etsu Polymer Hungary Kft. was also audited in FY2018.

In addition to the above three mentioned regular audits, Shin-Etsu Polymer India Pvt. Ltd. and PT. Shin-Etsu Polymer Indonesia will undergo audits in FY2019.



Based on the concept of "making efforts to coexist with local communities," we carry out health and safety, communication with communities and humanitarian/disaster relief activities to promote coexistence and mutual prosperity. In relation to the implementation status of such activities, we openly disclose all relevant information.

Together with Local Communities

Communication with Communities

Acceptance of workplace experience participants

Each production site provides opportunities for local students to gain on-the-job experience. In FY2018, four sites accepted a total of 17 students.

Tokyo Plant	7 people
Kodama Plant	3 people
Shiojiri Plant	2 people
Itoigawa Plant	5 people





Kodama Plant A second-year student from Kodama Hakuyo High School experiencing the deburring process

Shiojiri Plant A second-year student from Okaya Technical High School experiencing the inspection process



School experiencing the inspection process

Itoigawa Plant A second-year student from Itoigawa Hakurei High School experiencing the inspection process

•Acceptance of plant tour participants

Production sites regularly welcome plant tour participants. In FY2018, five different sites accepted a total of 418 people.

Tokyo Plant	51 people
Kodama Plant	54 people
Itoigawa Plant	7 people
Suzhou Shin-Etsu Polymer Co., Ltd.	151 people
Shin-Etsu Polymer (Malaysia) Sdn. Bhd.	155 people

Beautification activities

All production sites conducted beautification activities in their local areas, with 322 employees from five bases participating.

Tokyo Plant	15 people
Kodama Plant	55 people
Shiojiri Plant	112 people
Itoigawa Plant	70 people
Dongguan Shin-Etsu Polymer Co., Ltd.	70 people



Shiojiri Plant

The Eco Walk Shiojiri. They conducted beautifications covering a stretch of about four kilometers, along with local citizens.



Itoigawa Plant Cleaning around the plant, held as part of Environment Month in June



Health and Safety

Blood donation

Every year, we host blood donation drives at both our domestic and overseas sites. This year, 327 employees from five different sites participated. The breakdown is as follows:

Tokyo Plant	33 people
Kodama Plant	38 people
Shiojiri Plant	24 people
Suzhou Shin-Etsu Polymer Co., Ltd. (SC)	51 people
Shin-Etsu Polymer(Malaysia)Sdn. Bhd.(SM)	181 people



Shiojiri Plant A pre-blood donation test in the canteen



SC (China) Pre-blood donation test



SM (Malaysia) Donating blood at plant

Traffic safety

Shiojiri Plant

The Shiojiri Plant Young Drivers Club participate in traffic safety activities four times a year (spring, summer, fall and winter), to remind drivers about traffic safety. Activities both inside and outside the plant include seat belt checks and requests for suggestions of traffic safety slogans. At the 29th Young Drivers Club Traffic Accident Prevention Contest, which is hosted by the Nagano Prefecture Safe Driving Manager Association, the Shiojiri Plant Young Drivers Club was awarded with the "Excellent Club" prize.



Mr. Tezuka, Vice Chairman (right) being handed the award

Shin-Etsu Polymer India Pvt. Ltd. (India)

A traffic safety drive was held by the Chennai City Japanese Chamber of Commerce and Industry in which a total of eight employees from SD made up of six local staff and two Japanese employees participated. At Elliots Beach and Marina Beach, Chennai and under the guidance of local police officers, we urged drivers and motorcyclists to wear seatbelts and helmets and not to talk on their phones while driving. We distributed cards showing the purpose of the activity along with our company's name, in addition to a DRIVE SAFELY strap.



SD staff members participating in traffic safety drive



Based on its Basic Environmental Principles, the Shin-Etsu Polymer Group addresses challenges such as combating global warming, energy saving, resource saving, waste reduction and recycling, listing them as some of the group-wide Green Activities and promoting the protection of the environment by reducing environmental burdens.

Together with environment

Basic Environmental Principles

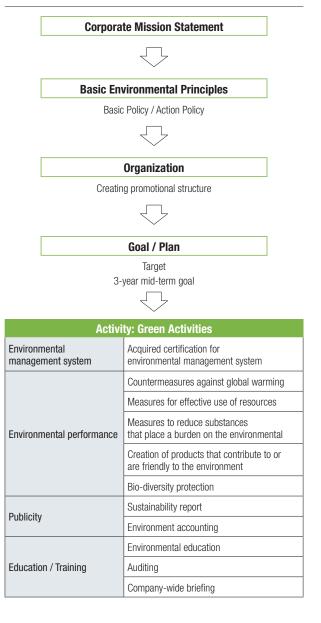
Environmental Management System Diagram

Basic Policy

Shin-Etsu Polymer Group recognizes that work towards environmental conservation is one of the highest priority issues for our operation. Therefore, we are working hard to become a part of building a recycling economic society through responsibilities we are expected to uphold.

Action Policy

- **1** We are rebuilding the organization and systems to work for efficient and continuous environmental activities.
- 2 We observe laws and regulations for resource conservation, energy saving, waste reduction, recycling and the proper handling of environmentally harmful substances. In addition, we set challenging goals and try to achieve them in our own manner with technical and economic resources.
- **3** We evaluate the environmental impacts of all phases from purchase and production through to usage and disposal during the new product development stage and thus reduce any environmental impacts.
- **4** We strive for the conservation and sustainable use of biological diversity by understanding and evaluating and reducing the impact on ecosystems caused by business activities.
- **5** We provide internal education programs to achieve understanding and awareness of basic environmental policies for all employees.
- **6** We disclose the information of our environmental activities and make efforts to coexist with the community.





Green Activities Organization

Green Activities refer to activities including the acquisition of an environmental management system certificate, understanding and support of "Environmental Performance" such as countermeasures against global warming and measures for the effective use of resources, public relations as represented by environmental and social reports, as well as education and training in the form of company-wide briefings. We also draw up mid-term plans every three years, with FY2018 being the first year of our 6th Mid-Term Plan.

Green Activities Organization (As of March 31, 2019)

Environment Management System

Acquired ISO14001

Improvement of Environmental Performance

Energy saving, waste reduction and recycling, eco-products promotion activities, chemical substance controls, management of chemical substances contained in products

Information Disclosure

Green Activities

Sustainability Report, environmental accounting

Environmental Education

Environmental lectures, auditing of environmental quality products, corporate-wide presentations, internal media, environmental lectures, auditing of environmental quality products, corporate-wide presentations, internal media

Green Activities Promotion Bureau

• Vice Chairman: Director in Charge of Environmental Control & Safety

Chairman: President

Certifications of Environmental Management System

* Hymix Co., Ltd. is a non-consolidated subsidiary and therefore is not covered in this report.

We have been awarded with ISO14001 certifications at all Japanese and overseas production sites. Based on a concept of reducing environmental burdens and complete compliance with all environment laws and regulations, we engage in the reduction of environmental burdens and continual environment improvement activities by efficiently utilizing the management systems we have in place. * Please visit our website for further information on registration card numbers, certification bodies and various other data.

List of Plants & Subsidiaries approved by the Sony Green Partner Environmental Quality Approval Program

Shin-Etsu Polymer Co., Ltd. ID: 410A

Factory Code	MC Name	FC Name	Expiry Date
FC014187	Dongguan Midas Electronic Co., Ltd.	Dongguan Midas Electronic Co., Ltd.	20210831
FC007726	Shin-Etsu Polymer Co.,Ltd.	Itoigawa Plant	20210831
FC002586	Shin-Etsu Polymer Co.,Ltd.	Kodama Plant	20210831
FC002584	Shin-Etsu Polymer Co.,Ltd.	Shiojiri Plant	20210831
FC007742	Shin-Etsu Polymer Co.,Ltd.	Tokyo Plant Production Department I	20210831
FC014180	Shin-Etsu Polymer Co.,Ltd.	Tokyo Plant Production Department II	20210831
FC013450	Suzhou Shin-Etsu Polymer Co.,Ltd.	(No Factory Name)	20210831

*Confirmed: July 17, 2019

*Each name is as stated on the Notification of Green Partner Certification.



Together with environment

6th Mid-Term Targets of Green Activities of the Shin-Etsu Polymer Group Results for FY2018

(As of April 1, 2019)

Countermeasures against Global Warming

Indicator	FY2018			0010 Torrest	
	indicator	Target	Results	Achievement Level	2019 Target
Reduction of CO ₂ emissions	Basic unit of production weight (t-CO ₂ /t)	1% reduction	4.5% increase	Not achieved	2% reduction compared to FY2017
(Domestic plants)	Reference: FY2017	0.6751	0.7127		0.6683
Reduction of energy converted to crude oil (Domestic plants)	Basic unit of production weight (kℓ/t) Reference: FY2017	1% reduction	Max. increase: 18.2% Max. reduction: 9.6%	Achieved at 3 plants Not achieved at 2 plants	2% reduction compared to FY2017

Y2019 Challenges

•We improved yields, introduced energy-saving equipment including LED replacements to lights, and streamlined equipment surplus to requirements. •We will continue with our FY2018 activities and further promote the sharing of information concerning energy-saving activities among all plants.

	FY2018			00107	
	Indicator	Target	Results	Achievement Level	2019 Target
Reduction of CO ₂ emis- sions (Overseas plants)	Basic unit of production weight (t-CO ₂ /t)	_	9.8% year-on-year decrease		_
,	· · ·		5.855		
Reduction of energy converted to crude oil (Overseas plants)	Basic unit of production weight (kℓ/t) Reference: FY2017	1% reduction	Max. increase: None Max. reduction: 11.2%	Achieved at 4 plants Not achieved at 2 plants	2% reduction compared to FY2017

FY2018 Activities •LED replacements of lights, upgrades to air-conditioners, turning off unnecessary power supplies and lighting, etc.

•We need to continue with FY2018 activities and ascertain how best to share information on energy-saving activities among all plants.

	Indiaator		FY2018		2010 Torgot
	Indicator -	Target	Results	Achievement Level	2019 Target
Reduction of energy converted to crude oil	Basic unit of used area (kl/m²) Reference: FY2017	1% reduction	4.4% increase	Not achieved	2% reduction compared to FY2017
(Domestic non-plant business bases)		0.0498	0.0521		0.0493

FY2018 Activities •We implemented summer and winter energy-saving countermeasures and upgraded the air-conditioning facilities of the building management company.

FY2019 Challenges •We will implement a wide range of minor energy-saving countermeasures.

	Indiantar		FY2018		2010 Terret
	Indicator	Target	Results	Achievement Level	2019 Target
Reduction of energy	Basic unit of transportation compared to the previous year	1% reduction	1.1% increase	Not achieved	1% reduction compared to FY2018
consumed for logistics	(kl/1,000tkm)	0.0459	0.0469		0.0464

FY2018 Activities •To reduce the volume of transfer between warehouses, we switched to direct shipments of corrugated products from the Tokyo Plant.

FY2019 Challenges •We will carry out a modal shift of film products that require long-distance transfers between warehouses (truck to rail containers).

Effective Use of Resources

	Indicator	FY2018			2019 Target
		Target	Results	Achievement Level	2019 laiget
Emission rate (Group domestic plants) *	Less than 1%	Less than 1%	0.39%	Achieved	Less than 1%
Emission rate (Domestic plants)	Less than 1%	Less than 1%	Min. 0.00% Max. 0.86%	Achieved at 5 plants	Less than 1%

*Emission rate = (Amount of landfill + simple incineration) / total waste emissions x 100 (%)

FY2018 Activities •Further promotion of sorting for recycling.

FY2019 Challenges •We need to conduct a study on disposal contractors for small-amount reagents and chemicals used in development.



Together with environment

		FY2018			0040 To a st
	Indicator	Target	Results	Achievement Level	2019 Target
Reduction of waste emissions	Basic unit of production weight (kg/t)	1% reduction	0.8% increase	Not achieved	2% reduction compared to FY2017
(Group domestic plants)	Reference: FY2017	54.9	56.0		54.4
Reduction of waste emissions (Domestic plants)	Basic unit of production weight (kg/t) Reference: FY2017	1% reduction	Between 58.7% increase and 10.4% reduction	Achieved at 3 plants Not achieved at 2 plants	2% reduction compared to FY2017

FY2018 Activities •Not achieved due to the discontinuation of the recycling contractor's business and disposal of unused equipment.

FY2019 Challenges •Further improvement of process yields. Study into elimination of sudden problems and faults.

	Indiaator		0010 Terret		
	Indicator	Target	Results	Achievement Level	2019 Target
Reduction of waste emissions (Group overseas plants)	Basic unit of production weight (kg/t)	_	15% reduction compared to the previous year 355.2	_	_
Reduction of waste emissions (Overseas plants)	Basic unit of production weight (kg/t) Reference: FY2017	1% reduction	2.5% to 15.4% reduction	Achieved at 6 plants	2% reduction compared to FY2017

FY2018 Activities •Activities mainly involving efficient production through increased production amounts and improvements to process yields.

FY2019 Challenges •Further improvement of process yields. Study into elimination of sudden problems and faults.

	Indicator		2010 Target			
	Target		Results	Achievement Level	- 2019 Target	
Creation of products that are friendly to and contribute to the environment	Compared to number of certified products in FY2014	To be tripled by FY2020	Doubled	_	To be tripled by FY2020	

FY2018 Activities •We identified a group of products appropriate for certification, but were unable to obtain it.

FY2019 Challenges •Promote proposals of products for applications, working with relevant departments.

Control of Chemical Substances The control values in the table represent results in FY2017. We targeted a reduction compared to the previous year for FY2018.

Control item	Indicator	FY2018			
Control terri	Indicator	Control value	Results	Achievement Level	
	Registered amount	192kg	1,152kg	600% increase compared to previous year (960 kg increase)	
PRTR registration	Basic unit of production weight	0.005kg/t	0.030kg/t	500% increase compared to previous year	
	Class I Specified Chemical Substance	136kg	127kg	7% reduction compared to previous year (9 kg reduction)	
VOC 20 substances (Target substances of 4 organizations in electronics industry)	Emissions into atmosphere	13.8t	14.8t	7.2% increase compared to previous year (1-ton increase)	
	Basic unit of production weight	0.357kg/t	0.386kg/t	8% increase compared to previous year	

FY2018 Activities •Though we reduced the usage and disposal of various solvents, results increased overall as the amount of toluene used exceeded one ton. (See page 40)

FY2019 Challenges •Reduction by changing usage methods and study of alternative materials.

Water resources

The control values in the table represent results in FY2017. We targeted a reduction compared to the previous year for FY2018.

Control item	Control item Indicator		FY2018			
Control Item	Indicator	Control value	Results	Achievement Level		
Domestic use of industrial water	Total amount of use by all domestic plants (in thousand m ³)	503	467	7% reduction compared to previous year (reduction of 35,000 m ³)		
	Total basic unit of production weight by all domestic plants (m ³ /t)	13	12	6% reduction compared to previous year		
Overseas use of industrial water	Total amount of use at overseas plants (in thousand m ³)	199	189	5% reduction compared to pre- vious year (Reduction of 10,000 m ³)		
	Basic unit of production weight at overseas plants (m ³ /t)	32	28	15% reduction compared to previous year		

FY2018 Activities • Promoted switching to circulating water both in Japan and overseas.

FY2019 Challenges •Investigate water risks at each plant, and study countermeasures.

*For the above total numbers, domestic data is taken from the fiscal year from April 2018 to March 2019, while overseas data is taken from the calendar year January 2018 to December 2018.

*There were mistakes in relation to the units used in the previous year's report. (m³ was corrected to thousand m³, and m³/thousand tons was corrected to m³/t).



Real examples of Environmental Protection Activities

Promoting LED lighting for outdoor lightings



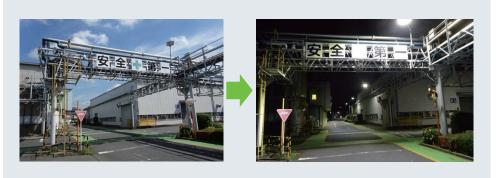
Masanori Tomita Engineering Section, Tokyo Plant

The Tokyo Plant manufactures many products, with quite a few sites operating 24 hours a day. As some products are transported by forklift at night, we need to keep a minimum number of outdoor lights on for safety and security reasons.

By replacing existing outdoor lights with LED type

bulbs, we can improve illuminance, while reducing power consumption by 50%, thereby contributing to a reduction of CO_2 emissions.

With Green Activities, we are determined to work together to identify and further promote energy-saving themes.



·Waste plastic material recycling (Disposal of valuable items by sales)

The Itoigawa Plant has seen an increase in plastic waste emissions, proportional to our higher operation rates. With a thorough promotion of activities concerning disposal sorting activities in the material recycling process and an improvement of yields, we were able to drastically reduce the costs for waste disposal in FY2018.

As it is essential to take measures against increasing costs for waste disposal, we thoroughly promote and raise awareness of further plastic waste sorting and aim for improved yields through cooperation by all, thereby promoting an overall reduction of waste.



Sorted waste in the storage area



Shigeko Nakakura Environment & Safety Section, Administration Department, Itoigawa Plant



Environmental Burdens Related to Our Business Activities

We believe that accurately understanding all environmental burdens associated with our business activities is the real basis for environmental conservation activities. We use relevant figures to formulate plans that effectively and continually promote environmental conservation activities. *This fiscal year, in order to improve the precision of data, we retroactively revised data from previous years.

INPUT

Resources and Energy Domestic figures represent fiscal year, while overseas figures are for the calendar year.						
		Dom	nestic	Ove	erseas	
Year	Usage amount	Production locations	Non-production locations	Production locations	Non-production locations	Group total
2018	Energy(Converted to	12,349	292	18,541	35	31,216
2017	crude oil) (kℓ)	11,908	282	18,490	37	30,718
Ratio compar	ed to previous year (%)	103.7	103.4	100.3	93.1	101.6
2018	Water consumption	467		189		657
2017	(1,000 m ³)	503	_	199	—	702
Ratio compar	ed to previous year (%)	93.0	_	94.9	_	93.5
2018	Chemical substances	94.3				
2017	subject to PRTR (t)	98.5				
Ratio compar	ed to previous year (%)	95.7				

Raw materials

- PVC (Polyvinyl chloride)
- Silicone rubber
- Other synthetic resins
- Other materials
- Other material

Shin-Etsu Polymer Group

Business activities (Resin molding and processing)

High-definition printing

Adhesion



Injection molding

Thin film molding

OUTPUT

To the environment

D THE ENVIRONMENT Domestic figures represent fiscal year, while overseas figures are for the ca					ures are for the calendar y	
		Domestic		Over	seas	
Year	Emissions	Production locations	Non-production locations	Production locations	Non-production locations	Group total
2018	CO ₂ (t-CO ₂)*	27,337	616	40,002	73	68,029
2017	UU ₂ (I=UU ₂)	26,367	596	39,891	79	66,934
Ratio con	npared to previous year (%)	103.7	103.3	100.3	92.9	101.6
2018	Tatal wasta amiasiana (t)	2,147		2,427		4,574
2017	Total waste emissions (t)	2,146		2,569	—	4,715
Ratio con	npared to previous year (%)	100.1	—	94.5	_	97.0
2018	Amount of mounted of mode (4)	2,138				
2017	Amount of recycled of waste (t)	2,143				
Ratio con	npared to previous year (%)	99.8				
2018	Amount of unrecycled of	8				
2017	waste (t)	3				
Ratio con	npared to previous year (%)	268.8				
2018		0.39				
2017	Emission rate (%)	0.15				
Ratio con	npared to previous year (%)	260.0				
2018	Waste water (1,000 m ³)	419		154		573
2017	waste water (1,000 m ²)	455		160	—	615
Ratio con	npared to previous year (%)	92.2	_	96.0	_	93.2
2018	PRTR emissions	1.152				
2017	(Reported amount of target substances)	0.192				
Ratio com	pared to previoas year(%)	600.0				

*Aggregated values based on Group emission factors (0.555kg-CO₂/kWh).



Countermeasures Against Global Warming

In order to contribute to the prevention of global warming, we actively promote energy conservation on all business sites.

We conducted Green Activities as part of our energy-saving promotion activities, and this year, the first year of the 6th Mid-Term Plan, we promoted activities at both domestic and overseas business locations. In terms of logistics, we implemented energy-saving initiatives through modal shifts and efficient site operations.

Domestic plants

Five Domestic Plants

At these plants, both the basic unit of produced weight energy and the basic units of CO2 emissions against produced weight in FY2018 increased by 4.5% compared to figures in FY2017. This was partly as a result of transfer of production overseas, as well as a decrease in domestic produced weight and an increase in power consumption due to trial runs of equipment and product certification work that was necessitated by increased development projects and an expansion of plants, which could not be compensated by energy-saving measures taken by the individual plants. We will continue to engage in a wide range of energy-saving countermeasures including yield improvements, as we continue to contribute to the prevention of global warming.

Individual Plants

The target for basic units of produced weight energy for FY2018 was a 1% reduction compared to the reference year (FY2017). Three plants managed to achieve this target, while two plants unfortunately did not.

Overseas Plants

Six Overseas Plants

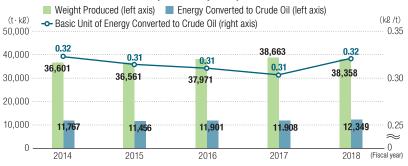
Both the basic units of produced weight energy and the basic unit of CO_2 emissions against produced weight in FY2018 were 9.8% lower than that of FY2017 at six overseas plants.

*This fiscal year, in order to improve the precision of data, we retroactively revised data from previous years.

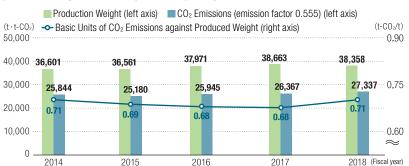
Individual Plants

The target for basic units of produced weight energy in FY2018 was a 1% reduction compared to the reference year (FY2017). Four plants managed to achieve this, but unfortunately two did not.

Energy converted to crude oil and basic units of energy converted to crude oil over time (Domestic plants)

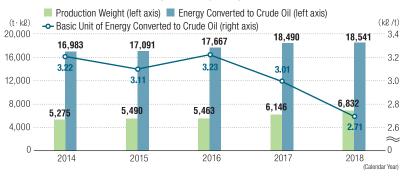


CO₂ emissions and basic units of CO₂ emissions against produced weight over time (Domestic plants)

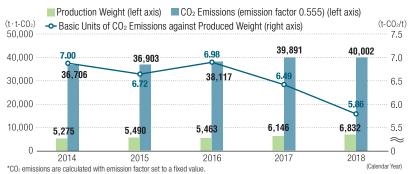


*CO₂ emissions are calculated with emission factor set to a fixed value.

Energy converted to crude oil and basic units of energy converted to crude oil over time (Overseas plants)



CO_2 emissions and basic units of CO_2 emissions against produced weight over time (Overseas plants)





GHG Scope 3 emissions

Our group calculates Scope 3 emissions based on guidelines from the Ministry of Environment and compares values to the previous year. Scope 3 emissions in FY2018 saw an 11% increase from the previous fiscal year at 199,000 t-CO₂, which accounted for 74% of the total supply chain.

	Category	FY2017	FY2018	Compared to previous FY
Our	(Scope 1) Direct emissions	1.4	1.3	-7%
group	(Scope 2) Indirect emissions from energy sources	66.9	68.0	2%
1	Purchased products / services	65.3	68.4	5%
2	Capital goods	5.4	7.6	41%
3	Energy-related activities outside of Scope 1 and 2	4.4	4.5	2%
4	Transportation and shipping (upstream)	54.3	59.4	9%
5	Business waste	1.1	1.1	0%
6	Business trips	1.8	1.7	-6%
7	Employee commuting	2.0	2.2	10%
8	Leased assets (upstream)		—	
9	Transportation and shipping (downstream)	5.3	14.6	175%
10	Processing of products sold	_	_	—
11	Use of products sold	_	_	_
12	Disposal of products sold	39.1	39.5	1%
	Subtotal of Scope 3	178.7	199.0	11%
	Total	247.0	268.3	9%
	Percentage (Scope 3)	72%	74%	

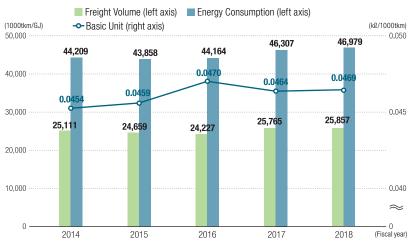
*1 Category 1-8 belong to upstream in the supply chain, and Category 9-12 belong to downstream

*2 If not indicated, the unit for figures is 1,000t-CO2

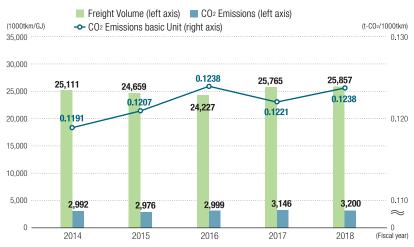
Energy-saving activities related to transportation

Basic units of energy consumption for freight volumes in FY2018 saw a 1.1% increase compared to that of FY2017. The reason for this increase was due to heavy rain in July 2018 and the impact of typhoons #21 to 24, causing suspensions along train routes between Okayama and Yamaguchi Prefectures, forcing us to switch from rail containers to truck transportation for long-distance hauling between warehouses, all of which resulted in poor figures. We will continue to implement modal shifts, while also reducing basic units.

Basic unit of heat and energy consumption for freight volumes over time



Basic unit of CO₂ emissions rate and CO₂ emissions for freight volumes over time





Waste Reductions and Recycling

Under the 6th Mid-Term Plan (FY2018 to FY2020), we are promoting activities with a goal of "maintenance and continuation of zero emissions" and a "3% reduction in the basic units of waste emissions against produced weight compared to FY2017."

Approaches to waste reduction and recycling

With the keywords "zero landfills and simple incineration by promoting waste recycling," we are engaged in activities to achieve and maintain zero emissions (less than 1% emission rate) with the control indicators of 1) basic units of waste emissions and 2) emission rate.

Key initiatives

In terms of waste reduction activities, we tackle the improvement of pass rates and the reduction of start-stop losses, while also working on waste disposal in the form of deterioration preventive measures of inventory, and the recovery and reuse of liquid silicon material residue. In addition, we are regularly conducting on-site inspection of waste disposal contractors to make sure that the wastes are disposed properly.

Results for FY2018

Domestic Plants

The total volume of waste in FY2018 was 2,147 tons, which was almost equivalent to that of the previous fiscal year. The basic unit of waste emissions against produced weight was 55.97 kg/t, which did not achieve the targeted amount with a 0.8% increase from the previous fiscal year. The emissions rate was 0.39%, thereby achieving the target rate of less than 1.0%.

Specially controlled industrial waste mainly consists of waste acid, waste alkali and waste oil. We properly treat them with neutralization, incineration and other methods, while recycling as much as possible. We also disposed of PCB waste in compliance with the law concerning Special Measures Against PCB Waste.

Overseas plants

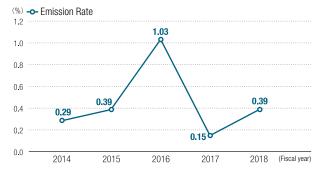
The total volume of waste in 2018 was 2,427 tons or a 142-ton decrease from the previous year. The basic unit of waste emissions against produced weight was 355.2 kg/t, which was a 15% decrease from the previous year.

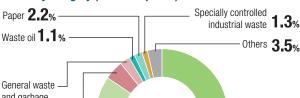
*This fiscal year, in order to improve the precision of data, we retroactively revised data from previous years



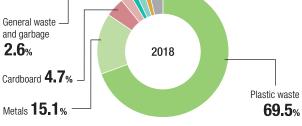


Annual emissions rate over time (Domestic plants)





Sorted by category (Domestic plants)



Annual waste emissions over time (Overseas plants)



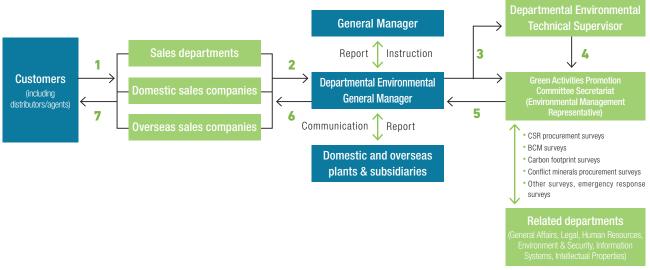
1.3%



Control of Chemical Substances

Global Environment Communication System (G-Environment System)

- 1 An "Environmental Management Representative" for our Group is appointed who represents the Group regarding customer's requirements in relation to the environmental quality of our products.
- 2 An "Environmental General Manager" and the "Environmental Technical Supervisor" are appointed in each division and manage issues associated with the environmental quality of products from their respective divisions.
- 3 Submissions of documents such as Green Procurement Survey Responses, certificates of non-use of environment-related substances, confirmation forms of changes in management or analysis data are conducted in accordance with the rules set forth in the Global Environmental Communication System.
- 4 Materials with low environmental burdens (raw material, parts/components, packing material, etc.) are purchased from suppliers that promote environmental considerations in accordance with "Green Procurement Guidelines" and "Control Standards of Chemical Substances Contained in Products."
- 5 This system is applied to CSR and Risk Management Surveys from customers on human rights/labor, safety and welfare, environment, fair trade and ethics, quality and safety, information security and social contributions.



. Control standards for chemical substances contained in products

Based on the Control Rules of Chemical Substances Contained in Products, our Group stipulates Control Standards for Chemical Substances Contained in Products. According to these standards, we target the reduction of chemical substances in all finished products and purchased materials. In Version 4.0 of the Shin-Etsu Polymer Group's Control Rules of Chemical Substances Contained in Products, we established new regulations to reportable substances in addition to any prohibited and controlled substances.

 Prohibited substances (1) Chemical Substances Control Law: Class I Specified Chemical Substances (2) Industrial Safety and Health Law: Hazardous substances prohibited in production, etc. (3) Poisonous and Deleterious Substances Control Law: Specific poisons (4) TSCA: Substances based on Section 6 (5) POPs regulation: Annex I (6) REACH regulation: Annex X VII 	Controlled substances Reportable substances	 (1) ELV Directive: Designated substances (2) RoHS Directive: Designated substances (3) REACH Regulations: SVHC (4) IEC62474 (1) GADSL: Reference List (Classification: D)
(7) GADSL: Reference List (Classifications: P and D/P)		

Standards of prohibited and controlled substances

∴Acceptable if below threshold ×:Unacceptable

	Prohibited substances	Controlled substances	Reportable substances
Intentional use	×	×	(Report only)
Contained in the form of impurities	×	\bigtriangleup	(Report only)

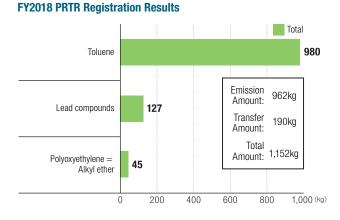
*Please visit our website for further details. (http://www.shinpoly.co.jp/environment/pdf/standard.pdf)



•FY2018 PRTR registration

Tokyo, Nanyo and Shiojiri Plants made PRTR registrations. In FY2018, we made registrations for 1,152 kg of three substances (962 kg for emissions and 190 kg for transfers). As part of this, we registered 127 kg (38 kg for emissions and 89 kg for transfers) of lead compounds (lead-based stabilizer for PVC products), a Class I Specified Chemical Substance.

Due to an increase in production in FY2018, the toluene usage weights that we had been able to exclude from our registrations in FY2017 exceeded 1,000 kg, once again becoming a registerable material, and thereby drastically increasing our registered amounts for FY2018. Out of a total of 1,001 kg, we registered 980 kg as our toluene usage weight (890 kg for emissions and 90 kg for transfers), and 21 kg for consumption.



Total results of PRTR registrations over time



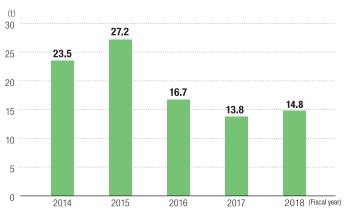
•FY2018 VOC emissions into the atmosphere

The amount of domestic VOC emission into the atmosphere (t/year) was 14.8 tons, a 7.2% increase from the previous year (13.8 tons) in FY2018. Substances making up a large volume of emissions included ethanol, isopropyl alcohol, butyl acetate and toluene.

							(Unit: People)
		Tokyo Plant	Nanyo Plant	Kodama Plant	Shiojiri Plant	Itoigawa Plant	Total
Total amount of	of emissions into atmosphere	0.6	0.0	7.2	4.6	2.4	14.8
	1.Painting	0.0	0.0	2.4	0.0	0.0	2.4
	2.Adhesion	0.0	0.0	0.0	0.0	0.0	0.0
Facilities	3.Printing	0.0	0.0	0.0	0.0	0.0	0.0
Facilities	4. Chemical products production	0.0	0.0	0.0	0.0	0.0	0.0
	5.Industrial cleaning	0.0	0.0	0.0	0.0	0.0	0.0
	6.VOC storage	0.0	0.0	0.0	0.0	0.0	0.0
	Total	0.0	0.0	2.4	0.0	0.0	2.4
Facilitie	es other than these six	0.6	0.0	4.9	4.6	2.4	12.4

*Subject VOCs are the 20 substances of four electrical and electronic organizations exceeding 1,000 kg.

Annual VOC20 emission volumes over time





Activities for Bio-diversity Protection

Our group address activities such as global warming countermeasures, effective utilization of resources, thorough management of chemical substances, effective use of water resources and pollution prevention that affect bio-diversity protection, as we strive to reduce environmental burdens.

·Efficient use of water resources

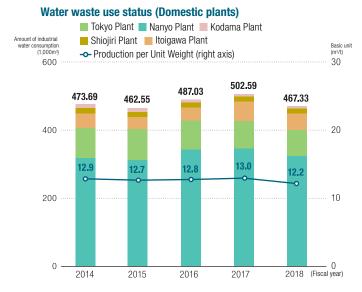
At domestic plants, while the production amount remained at the same level, industrial water consumption was 93% compared to the previous year, thanks to more efficient production, improving the basic unit by 1%. Despite the production increase at overseas sites, the basic unit decreased by 4%, which was due to the efficient use of water.

We will continue to ensure we have a proper understanding of the number of basic units at each site and promote the most efficient use of water resources.

Basic unit (m3/t)

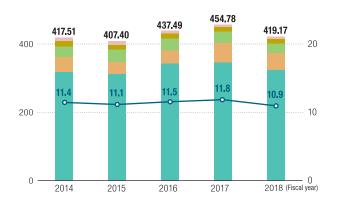
30

*This fiscal year, in order to improve the precision of data, we retroactively revised data from previous years.

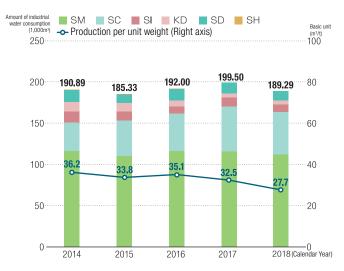


Water discharge status (Domestic plants)

Amount of industrial water consumption (1,000m) 600 Tokyo Plant Nanyo Plant Kodama Plant Shiojiri Plant Itoigawa Plant -- Production per Unit Weight (Right axis)

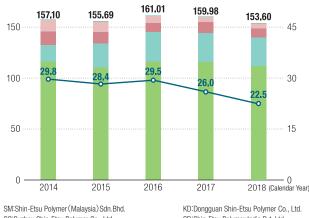


Waste water use status (Overseas plants)



Water Discharge Status (five overseas plants) *no water discharge in SD





SC:Suzhou Shin-Etsu Polymer Co., Ltd. SI:PT. Shin-Etsu Polymer Indonesia KD:Dongguan Shin-Etsu Polymer Co., Ltd SD:Shin-Etsu Polymer India Pvt. Ltd. SH:Shin-Etsu Polymer Hungary Kft.



Air pollution prevention

We have no equipment that is subject to regulations, yet we do stipulate self-control standards when deemed necessary and work on reducing emission amounts. We periodically measure the emission concentration of VOCs in order to confirm that the value is below the limit.

•Water pollution prevention

We check that the quality of discharged water satisfies the standard specified in the Water Pollution Prevention Act both voluntarily and in accordance with laws and regulations. We are also working on reducing the basic units of water use and aiming for conversion to circulated water.

Soil contamination prevention

We perform monitoring based on the Soil Contamination Countermeasures Act. We also conduct surveys on soil and underground water where necessary to confirm that there is no contamination.

Environmental Accounting

Costs borne for environmental conservation

				(Unit: Million yen)
Cat	egory	Main initiatives	Investment amount	Cost ^{*1}
	1-1. Pollution prevention costs	Regular inspections of equipment, noise measurements, etc.	79.8	12.5
1.Costs within busi- ness	1-2. Global environmental conservation costs	Introduction of high-efficiency air conditioners, LED lighting, etc.	1,051.2	88.0
	1-3. Recycling costs	Collection and recycling of resources, conversion into raw materials or fuel, etc.	5.6	0.0
Sub	o-total		1,136.6	100.5
2. Upstream and downs	tream costs ⁻²	Costs related to control of chemical substances contained in products, etc.	0.0	1.8
3. Control activity costs		EMS maintenance, education, greening with plants, etc.	4.6	31.9
4. R&D costs [∗] ³		Development of products that are friendly to and contribute to the environment such as input components for automobiles, etc.	0.0	16.7
5. Social activity costs		Donations, etc.	—	3.7
6. Environmental damage prevention costs		N/A	0	0
To	otal		1,141.2	154.6

*1. Costs = Actual costs – costs in the case of not conducting an activity. When the total difference $\leq 0, 0$ is the assumed value.

*2. Registration costs for recycling outsourcing agreements are not included.

*3. R&D costs are calculated based on our own standards.

Effects of Environmental Prevention

Items for environmental burden reductions	Unit	Annual amount of reduction
A. Energy consumption	t-CO2	595
B. Waste discharge amount	t	1,573
C. Chemical substances consumption	t	0
D. Amount of purchased paper	1,000 sheets	35
E. Others	_	0

Economic effects in accordance with environmental conservation measures

Items for environmental burden reductions	Unit	Cost
A. Energy costs	Million yen	14.7
B. Waste disposal costs	Million yen	5.9
C. Material purchase costs (Raw materials + subsidiary materials)	Million yen	15.5
D. Profit from the sales of valuables	Million yen	22.0
E.Others	Million yen	0.0
Total	Million yen	58.1

Thoughts from Outside the Company

For this report, we asked for opinions and comments from third parties to help further enhance our group's environmental and social activities.



Comments from a third party on the "Sustainability Report 2019"

Yoshinao Kozuma Professor Emeritus, Sophia University

After reading the Group's "Sustainability Report 2019" and interviewing certain people involved, I would like to say the following in relation to the environmental, social efforts and initiatives by the Shin-Etsu Polymer Group.

1. Starting CSR procurement operations

For this year's Top Commitment, it is clearly stated that promoting CSR procurement has been established as the most important CSR challenge, and that initiatives in relation to it would be strengthened. Since last year, the Shin-Etsu Polymer Group has been steadily improving its CSR procurement promotion system by setting up a CSR procurement subcommittee within the CSR Committee, and also by establishing a Basic Procurement Policy for the entire group. This has now finally entered the operational stage, and questionnaires conducted based on the Shin-Etsu Chemical Group's CSR Procurement Guideline have resulted in a better understanding of the current status concerning primary suppliers' ESG risks. There is still room for improvement as the questionnaire was voluntary, but I would like to express my respect for this attitude to face important challenges head on and proceed with initiatives wherever possible every year.

2. Clarification of policy on respecting human rights

Respect for human rights is one of the key CSR issues. Supply chains involving chemical companies are often exposed to human rights problems such as conflict minerals. Properly controlling this is therefore an essential factor in establishing a business model that conforms to a sustainable society. The first step is the recognition of the presence of human rights problems in the supply chain. This year, the group started collecting information through CSR procurement questionnaires, and the development of a due diligence process in the near future is highly anticipated. Furthermore, it is necessary to clearly share the policy on respecting human rights within the organization. As a result, respect for human rights is positioned as both a high-level organizational topic and part of governance. I can appreciate there is real determination to avoid human rights issues by the Shin-Etsu Polymer Group.

3. Childcare leave for male employees

FY2018 was the first year in which a male employee took childcare leave. In Japan's industrial society, it is common for only women to take childcare leave, with men continuing to work throughout the whole period. While there is a system in place for men to take leave, they usually do not take advantage of it, and it seems highly likely that reasons for this include a fixed corporate culture as well as historical and social traditions. This is the only case of a male employee taking childcare leave among all domestic consolidated companies in the Shin-Etsu Chemical Group over the past three years, and it believe it carries great significance. Going forward, I expect that the group will further improve the environment to promote a better work-life balance.

4.Future challenges

This issue concerning the employment rate of people with disabilities being below the employment quota for people with disabilities has not yet been resolved. The explanation of measures regarding the employment of people with disabilities is the same as that of the previous year, but if these measures do not lead to actual results, a review may be necessary. In addition, the frequency of accidents resulting in lost working days increased. Compared to the industry average (Japanese Chemical Industry Association) and the average of domestic group companies of the Shin-Etsu Chemical Group, the figure is rather high. I believe the Shin-Etsu Polymer Group should apply countermeasures to improve this particular situation.



Toru Takayama Senior Director; Assistant Chairman, Green Activities Promotion Bureau

In Response

With guidance from Professor Kozuma, we are now working on CSR procurement and the clarification of our policy on respecting human rights as top priorities. We intend to work on the challenges he identified in the following ways:

1. Failing to reach the employment quota for people with disabilities

The improvement measures we have been working on since last year have not yet yielded results. I will provide guidance to ensure that we engage in corporate-wide reviews and that new improvement measures are put in place at each plant, with the goal of achieving real results.

2.Increase in accidents resulting in lost working days

Compared to baselines such as the industry average, this figure remains at a high level with accidents involving falls especially on the rise, partly due to the aging of employees. However, we will put in place appropriate measures at individual plants to realize "zero accidents." We will further improve initiatives to solve environmental and social issues and promote CSR management so that our company continuously satisfies all of our corporate social responsibilities.



Inquiries

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About the symbol mark

The symbol mark expresses our feelings of creating our brilliant value in a "green environment" with the green leaf and bright morning dew.

The combination of indigo water, green trees and blue sky symbolizes our commitment to "continuously develop vitality," while the Shin-Etsu colors provides an image of the development of Shin-Etsu Polymer.



About the design

The Shin-Etsu Polymer Group is striving to make a sustainable society with the community a reality. Since the 2017 Sustainability Report, the cover designs have depicted endangered species within a circle representing the earth, with an "S" for Shin-Etsu wrapped around it. The FY2017 report featured grassland animals based on a spring theme and in the FY2018 report, we used sea creatures based on a summer theme. This fiscal year's report features autumnal harvest celebrations and animals.

