



Shin-Etsu Polymer Sustainability Report 2013



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 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.

Profile

Shin-Etsu Polymer Co., Ltd. was established as a group company of Shin-Etsu Chemical Co., Ltd. in 1960 and for more than 50 years, has been engaged in the development and application of basic technologies for silicon and various plastics such as material mixtures, compounding and precision mold processing.

We currently support various customer needs in a comprehensive range of fields from electric/electronic equipment, to semiconductors and construction.

By providing diverse products and through production and sales activities under a global network, we continue to respond to different customer needs not only in Japan but all over the world.

Corporate Overview

Trade 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

Production plants:

Tokyo Plant (Saitama Prefecture),
Nanyo Plant (Yamaguchi Prefecture),
Kodama Plant (Saitama Prefecture)

Paid-in Capital: 11,635,950,000 yen

Employees:

Total for all group companies 3,547
Independently 594 (as of March 31, 2013)

Consolidated subsidiaries: 16

Shinano Polymer Co., Ltd.
Urawa Polymer Co., Ltd.
Niigata Polymer Co., Ltd.
SAN-ACE Co., Ltd.
Shin-Etsu Finetech Co., Ltd.
Shin-Etsu Polymer America, Inc.
Shin-Etsu Polymer (Malaysia) Sdn. Bhd.
Shin-Etsu Polymer Europe B.V.
Suzhou Shin-Etsu Polymer Co., Ltd.
P.T. Shin-Etsu Polymer Indonesia
Shin-Etsu Polymer Shanghai Co. Ltd.
Shin-Etsu Polymer Hungary Kft.
Shin-Etsu Polymer Singapore Pte. Ltd.
Shin-Etsu Polymer Hong Kong Co., Ltd.
Shin-Etsu Polymer India Pvt. Ltd.
Dongguan Shin-Etsu Polymer Co., Ltd.

To use this Report

Editorial policy

The Shin-Etsu Polymer Group started issuing the "Sustainability Report" from 2001. Since the 2009 Version, the report has been divided into episodes and information data, and with the 2013 Version, it is divided into parts of information data, CSR reports and environmental data to report to stakeholders.

The editorial principles of the 2013 Version is as follows:

- 1 This Report conforms to the "Environmental Reporting Guidelines (Fiscal Year 2012 Version)" of the Ministry of the Environment and reports on environmental, economic, and social initiatives.
- 2 The CSR Report sums up the group's organization and activities with regard to engagement with "management," "employees" "environment," "customers" and "communities." We targeted disclosing environmental data on a global basis.
- 3 The information in this Report and details of the environmental data are all disclosed on our website. We also provide new information on our website.
- 4 We received third-party comments from Mr. Kozuma, Professor of Sophia University, as was the case with previous editions, and we shall take advantage of them for our future efforts and initiatives.

Period subject to report

April 2012 - March 2013

Issued

September 2013 (next issue: September 2014 (scheduled))

Organizations subject to report

- Domestic production bases
- Domestic offices (non-production bases)
- Overseas production bases
- Overseas offices (non-production bases)

Field of reporting

This Report covers fields of environmental conservation and social activities. For our business overview, please refer to our Corporate Profile.

Contact

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Sotetsu Kandasudacho Building 1-9 Kanda-Sudacho,
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URL <http://www.shinpoly.co.jp/>

“Green Activities”

We contribute to the realization of a sustainable recycling-oriented society, targeting the certain achievement of the 4th Mid-term Environmental Targets

One of the Basic Environmental Principles of our group is “We recognize global environmental preservation as one of our first-priority challenges and, by fulfilling our required social responsibilities, actively participate in the establishment of a recycling-oriented economic society aiming for sustainable development.” Based on this, our target is to “contribute to protecting the global environment.”

In relation to the construction of a recycling-oriented economic society, the legal structure such as the Basic Law for Establishing the Recycling-Based Society based on the Basic Environment Law has been established, and the 3rd Basic Plan for Establishing the Recycling-Based Society targets the promotion of more sophisticated recycling including 2Rs (reduce and reuse) and the collection of useful metals in addition to quality improvement such as appropriate control of hazardous materials. The 4th Basic Environment Plan (April 2012) stipulates the outline of measures for environmental protection and defines nine focus areas to address with priority, including countermeasures against global warming and the effective use of resources.

We recognize countermeasures against global warming, energy saving, resource-saving measures, waste reduction and recycling and so forth as important challenges for our group and target protecting the environment by addressing and assessing them in group-wide Green Activities to reduce environmental loads. Since last year, as part of “Green Activities,” we also launched “Eco-Pro Promotion Activities” to drive the development of environment-friendly products (“eco-products”). In addition, we also address the reduction of environmental loads including the control of environmental chemical contaminants, proper management of volatile organic chemicals (VOCs) and protection of water resources.

About the 4th Mid-term Targets of “Green Activities”

We recognize Green Activities as those of “productivity improvement from the viewpoint of the environment,” and with global environment protection and productivity improvement as the two wheels, we have set mid-term targets and executed activities since their start in 2000.

Currently, we are in the middle of the 4th period (FY2012 to FY2014), and the production sector targets energy saving (improvement of CO₂ emission units and basic units of energy) and the reduction of waste (maintenance of zero emissions and improvement of the basic units of waste emission), while the office sector targets energy saving (improvement of basic units of energy). **(Please refer to page 18)**

In the results of the first year, FY2012, we were not able to achieve the target of basic units of energy against produced weight, as the business environment around us continued to be harsh. However, as we took various measures, we could fulfill targeted CO₂ emission units and waste reduction. **(Please refer to page 19)**

Our group promptly responds to changes in market conditions and will continue to address further improvement and promotion activities, targeting the certain achievement of the 4th Mid-term Targets in FY2014.

About the development of environment-friendly products (eco-products)

Green Activities are those of “productivity improvement from the viewpoint of the environment,” and we position Eco-Pro Promotion Activities that are part of Green

Activities as “those to promote the development of (eco-friendly) products demanded and expected from the market from the viewpoint of environment.”

Based on our Action Policy, we summarized the concept of eco-products on seven items including energy and resource saving. We have also set up our exclusive eco-product evaluation standard, starting internal certification of eco-products from April 2013. **(Please refer to page 6)**

By developing eco-products, we contribute to the establishment of a recycling-oriented economic society and target becoming a company evaluated in society where environmental management is considered important.

Other environmental load reductions

We control environmental chemical contaminants by the “Control Standards of Chemical Substances Contained in Products” that clearly defines the thresholds for chemicals contained in products, while also establishing the “Green Procurement Standard” to build a control system including suppliers, working hard to reduce environmental chemical contaminants. To meet customer green procurement requirements and chemical substance control surveys, each division has a “Control System of Chemical Substances in Products” and utilizes the “Global Environmental Communication System” to centrally control our group including overseas business bases. **(Please refer to page 21)**

We also promote the reduction of substances subject to the PRTR Act and reduced use of volatile organic chemicals (VOCs) to reduce environmental loads associated with chemical substances. **(Please refer to page 20)**

As water is a finite resource, we promote the reduction of industrial water usage and the utilization of recycled water. **(Please refer to page 20 & 27)**

Sustainability Report 2013

This Report conforms to the “Environmental Reporting Guidelines (Fiscal Year 2012 Version)” of the Ministry of the Environment and reports on targets and results of the Key Performance Indicators (KPIs) in addition to the status of Green Activities. The CSR Report deals with management including corporate governance and compliance, occupational health and safety, employment, local community and engagement with customers. Various environmental data and activities

based on business operations are shown by item. This information is also available on our corporate website.

We received third-party comments from Mr. Kozuma, Professor of Sophia University, as was the case with previous editions, and we shall take advantage of them for our future efforts and initiatives.

While proceeding with environmental protection activities, we always act in view of corporate social responsibility and positively promote initiatives to realize a safe and secure sustainable low-carbon, recycling-oriented society that coexists with nature.

President



September 2013

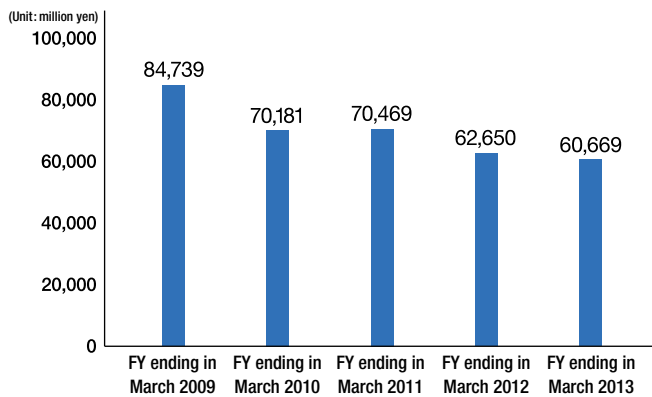




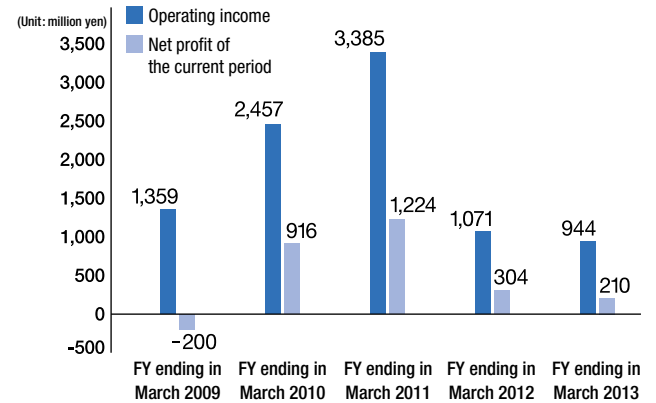
Summary of Key Performance Metrics

Though the automobile industry has recovered somewhat, the market conditions facing the Shin-Etsu Polymer Group have continued to remain adverse, due to the slowdown in the digital home appliance market and suppressed capital investments in the semiconductor industry. Under such conditions, our group focused on new product proposals and new customer development and in terms of production, made efforts to reduce fixed costs and improve production efficiency, but business was generally sluggish.

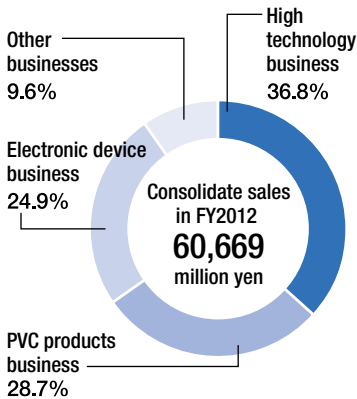
Changes in sales



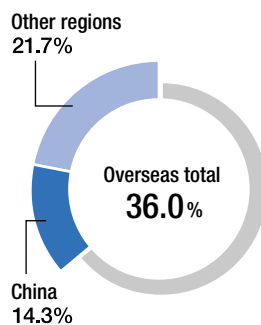
Changes in operating income and net profit



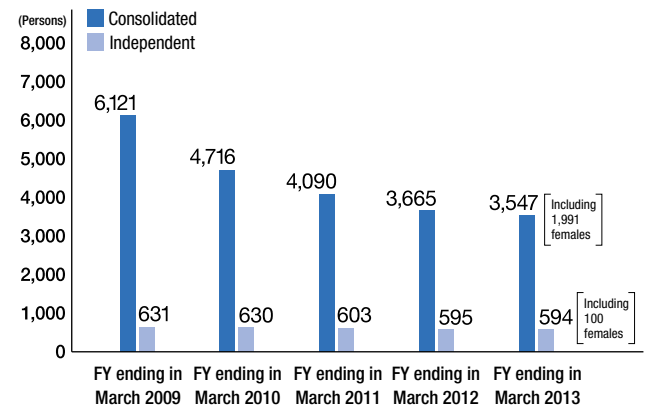
Distribution of consolidated sales by business segment



Distribution of consolidated overseas sales



Changes in the number of employees



Changes in key indicators

Period (fiscal year end)	49th Period (ending in March 2009)	50th Period (ending in March 2010)	51st Period (ending in March 2011)	52nd Period (ending in March 2012)	53rd Period (ending in March 2013)
Sales (million yen)	84,739	70,181	70,469	62,650	60,669
Ordinary income (million yen)	1,263	2,816	3,054	1,248	1,291
Net assets (million yen)	85,914	85,628	81,326	81,017	81,342
Return on equity (%)	-0.3	1.5	2.0	0.5	0.3
CO ₂ emissions (t)	67,453	62,483	65,812	49,957	54,678
mission rate (%)	0.39	0.36	0.36	0.52	0.24
Accident frequency ratio	2.76	2.81	2.43	4.72	4.08

- Sales do not include consumption tax.
- For other key management indicators, etc. please refer to our financial report.
- CO₂ emissions are domestic and overseas production sites of the group.
- Accident frequency ratios are domestic production sites of our group in a calendar year.

Development of eco-products

Based on the Basic Environmental Principles (Please refer to page 18), the Shin-Etsu Polymer Group tackles product development to reduce environmental burdens, positions existing products as eco-products and started internal certification.

Concept of our eco-products

Based on the Corporate Action Policy, we set up the concept of eco-products in our group.

Concept

Eco-products in our group are new or existing products that solve customers' challenges, and upon confirmation that they are required by society and the environment (social needs), are evaluated and certified for seven items (Please refer to the top half of the following page).

Position of Eco-Pro Promotion Activities

These activities are part of Green Activities and are positioned as described below. In these activities, we also establish the concept, evaluation standards, and evaluation methods of our exclusive eco-products and certification of products.

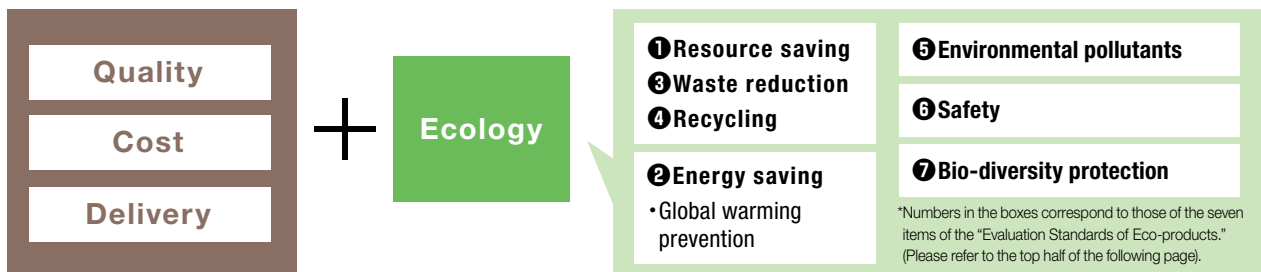
We position Green Activities as “an effort to improve productivity from the viewpoint of the environment,” and Eco-Pro Promotion Activities as “an activity to promote the development of (eco-friendly) products demanded and expected by the market from the viewpoint of the environment.”

Concept of activities

We add the ideas of ecology to QCD and tackle the challenge of environmental burden reduction of products from raw material procurement to manufacture, use, and disposal.

The concept is to **convert** conventional QCD to QCD+E [environmental friendliness]

(Q stands for quality, C for cost, D for delivery and E for ecology (reduction of environmental burden))



By developing eco-friendly products, we target becoming a company that contributes to the realization of a recycling-oriented society and that is appreciated in society where environmental management is emphasized.

Evaluation Standards of Eco-products

Shown below are the evaluation standards of eco-products.

Category	Description
① Resource saving	We have decreased the weight of products, reduced the use of raw materials, and/or improved yields. We have also used recycled materials or resources.
② Energy saving	We reduced energy consumption, the amounts of various basic units and the generation of GHG at the time of energy-saving manufacturing. We have also reduced energy consumption at the time of use of products.
③ Waste reduction	We have suppressed the generation of waste in the waste-reducing manufacturing processes. We have also contributed to the reduction of waste after use.
④ Recycling	In the recycling-oriented manufacturing process, we have diverted waste from incineration and dumping to recycling process, etc. After the use of products, reuse and recovery has become possible.
⑤ Environmental pollutants	Products containing environmental pollutants satisfy laws, regulations, industry standards, etc. and we have reduced the use of environmental burdens in products and manufacturing processes.
⑥ Safety	We have improved safety against explosions and injuries in safe-manufacturing processes. Safety has been improved when products are used.
⑦ Bio-diversity protection	We have reduced the amount of water use and VOC emissions in manufacturing processes to protect bio-diversity. Products have also contributed to the protection of bio-diversity




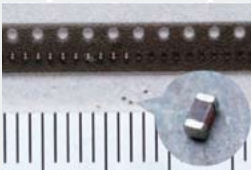


For the above seven categories, we have a total of 97 evaluation standards.

Since April 2013, we have started to internally certify “eco-products”, judging them against these evaluation items.

Certified products (excerpts)

(As of June 2013)

● Shows certified categories.

	① Resource saving	② Energy saving	③ Waste reduction	④ Recycling	⑤ Environmental pollutants	⑥ Safety	⑦ Bio-diversity protection
Pine weevil fumigating sheet	●		●	●		●	●
	 <p>Fumigating Yashima Yosaku Sheet</p>						
W4P1 emboss carrier tape	●	●	●	●			
							
SS200K 8-inch wafer shipping box	●	●	●	●			
							

For detailed information, please visit the following websites.

- Pine weevil fumigating sheet
 - ▶ SumikaGreen Co., Ltd. : http://www.sumika-green.jp/business_product.html “Greening of forests”
- W4P1 emboss carrier tape
 - ▶ <http://www.shinpoly.co.jp/product/semicon/tape/>
- Wafer case website
 - ▶ <http://www.shinpoly.co.jp/business/seimitsu/>

Shin-Etsu AQUAPROOF FOUPTM

Maintaining low humidity and contributing to improved yields in semiconductor device manufacturing process

Next generation product reflecting what customers require

The Front Opening Unified POD (FOUP) is used as a container in semiconductor manufacturing processes to carry wafer while maintaining a clean environment. We developed FOUP in 2000 and started full-scale mass production in 2001. To respond to customer quality requirements for FOUP driven by customers' technological development in recent years, we have successfully developed "Shin-Etsu AQUAPROOF FOUPTM" to maintain low humidity in the container. We interviewed Mr. Kawahara, Manager, and Mr. Mimura, Section Manager, who were involved in development and sales.



FOUP, the driving force of localized cleaning

Semiconductors are used in electronic equipment and other devices in everyday life. A semiconductor is completed by writing circuit patterns on a silicone wafer as substrate, while applying thermal and chemical treatment. In the process, minute particles affect the yield, so it is imperative to manufacture semiconductors in a clean environment that is controlled to the limit. However, as making an entire manufacturing plant into a clean room costs too much, a method known as, "local cleaning" to keep only the production equipment clean is used. In hundreds of production processes, FOUP containers used in semiconductor manufacturing processes play a very important role as a closed container to carry wafers. Due to its advanced air-tightness, FOUP protects wafers during transportation from particles and delivers them to each process, while maintaining a clean condition.

In recent years, semiconductor devices have developed higher performance and integrity, making it absolutely necessary to make the line width of circuit patterns to be written on the wafer. For this reason, a small amount of water in FOUP that had no influence

has started to affect the yield as particles. To meet the requirements for improved yields of semiconductor devices, next-generation FOUP, “Shin-Etsu AQUAPROOF FOUP (SAP FOUP) has been developed to maintain low humidity within the FOUP.

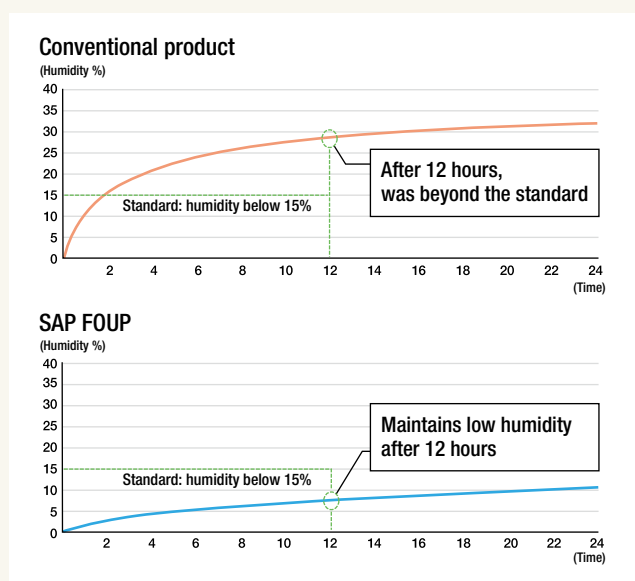
Realizing the maintenance of low humidity with new resin material

In developing SAP FOUP, we paid attention to the hygroscopic property of resin materials. By employing a low hygroscopic resin material, it became possible to suppress the absorption of water in the air. However, we encountered issues such as the strength of resin material, moldability, and control of outgases, metals and other impurities in the resin.

Mimura: “We investigated tens of resin materials, and repeated basic experiments for each one. It took many months, and we faced difficulties, but in the end, we were able to realize a product that has the basic performance of conventional products and can maintain low humidity in FOUP.”

As the material is conductive, we can prevent the attachment of minute particles by static, while securing reliable durability, heat, and chemical resistance equivalent to conventional products. In addition, the newly employed resin material can reduce total weight by about 600g compared to conventional products.

Kawahara: “Reducing the weight of FOUP will alleviate the load on customers’ manufacturing facilities and prolongs their lives as well as accelerates the speed of carrying FOUP between production processes, resulting in shorter production time. This is another appealing point of our SAP FOUP.”



Temperatures when 12 hours elapsed are compared for the conventional product and SAP FOUP. SAP FOUP maintains low humidity better than conventional products and complies with standards required by the customer.

Integrally molded structure contributing to optimized process and reduction in basic units

At the same time, in mass-producing SAP FOUP, there was a challenge of compliance with unified standard of dimensions. In a semiconductor device manufacturing factory, transportation between processes and transfer of wafers are all automatically carried out. If the dimension of FOUP or the position of wafer in the FOUP is shifted, the production line might be stopped. As resin materials have a property that their dimensions change with temperature, sophisticated molding technology is required to manufacture FOUP precisely with the unified standard of dimensions. We successfully implemented the integrally molded structure we set up as our concept from the beginning of the development in SAP FOUP.

Mimura: “Production and Engineering cooperated with each other, repeated trial-and-error processes, and carried out tests again and again. By adjusting the measurements of dyes tailored for the new resin material as well as production methods and molding conditions, we met the strict standard of measurements, while maintaining the integrally molded structure.”

As we stuck to the integrally molded structure, we didn’t need to mount components in FOUP, resulting in better drying characteristics after cleansing, requiring no dimension check after cleansing and eliminating the time loss before inputting into the line. As no friction among components occurs, no particles are generated, making it possible to maintain a high level of yield. With such advantages, we believe that highly efficient operations and improved yield are possible for customers who have employed our SAP FOUP.

Kawahara: “We have already heard that a customer who is using our SAP FOUP has been able to reduce a few percentages in terms of basic units.”

This development was made possible through continuous efforts by Sales, Engineering and Production members and accumulated excellent technological strengths. As we have access to requests from customers around the world, we will continue to develop products that improve customer yields and realize reduction in basic units, taking advantage of this experience.

History of our FOUP



Before 2000



In and after 2000



2012 - (SAP FOUP)

Compound with high sliding property, "EXELAST™" (SX Grade)

Highly functional compound to realize rationalization of customers' processes

Product utilizing silicon, molding of thermosetting resin and mixture technology

Compound with high sliding property*, "EXELAST™" (SX Grade), was developed to realize processes to replace nylon pile filling and painting. We made it eco-friendly by combining silicon with olefin resin. We interviewed Mr. Katada, Manager, Mr. Honda, Senior Manager, and Mr. Ogasawara, Section Manager, engaged in its planning, development, and manufacture.

*High sliding property: Low friction and easy to slide



Increasing needs for new thermosetting materials with high sliding property

A glass run channel has the role to make the door glass go up and down smoothly, and it is basically formed by the rubber-based basic part with a sliding surface to contact the glass made of highly sliding material. Multiple methods of its formation are available, including the application of silicon and other paints to the rubber-made basic part and its sliding surface, filling (attaching) with nylon piles and other materials and molding to form two layers. In two-layer molding, a co-extrusion method to simultaneously extrude two resins (for basic and sliding parts) was developed to become a highly rational process in terms of time and effort, compared to separate molding processes of basic and sliding parts. Actually, there was no material good enough with sliding property sufficient for the co-extrusion method available, so many

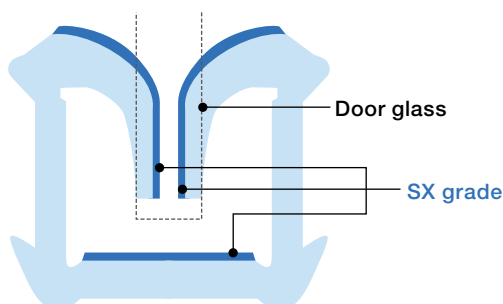
companies tried to develop new thermosetting materials with sliding properties.

Development of resin-based sliding material characterized by silicon, our advantage

A resin-based sliding material must have the basic performance to make the door glass go up and down smoothly and be reliable in its durability. The basic premise is that the compound as its raw material should be processed in customers' manufacturing processes and should satisfy hardness required by customers in addition to mechanical properties including tensile strength and elongation. However, as Shin-Etsu Polymer was a late starter, we thought that doing the same thing as other companies wouldn't suffice and decided to develop a resin-based sliding material characterized by a silicon technology that was our advantage.

We selected olefin polymer with low friction as the base for the sliding part, but we couldn't obtain sufficient sliding property with this only. We thus took advantage of silicon mixture technology we were good at and combined it with silicon oil, targeting forming a silicon protection layer on the surface to realize good sliding property. To compensate the protection layer that would be lost when the door glass went up and

Section of glass run channel



SX Grade is used as the part to contact the door glass



**PVC Products Business Unit
Life Material Division
Plastic Compound Dept.
Sales Group
Manager
Kosuke Katada**



**Tokyo Plant
Development and
Engineering Department
Group I
Senior Manager
Masayuki Honda**



**Tokyo Plant
Production Department
Plastic Compound Section
Section Manager
Masatoshi Ogasawara**

down, we formed a localized, silicon decentralized structure with different concentrations inside the sliding part (See the figure below). In studying the structure to maintain the sliding property for the long term, we made prototypes over and over using existing equipment in the development stage and decentralized silicon by forming structures different in the order of microns. In this way, we were able to establish the optimal structure that could make the silicon feed channel thick, long and many from the inside the part to its surface.

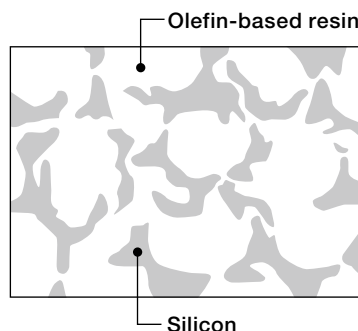
As a result, an evaluation test conducted by a customer proved to have good sliding property and durability to gain their trust.

To mass-produce the product, we developed an unprecedented process exclusive for Shin-Etsu Polymer to precisely make the decentralized structure. This was the optimal method for forming the decentralized structure required, but we faced difficulties mastering operations and procedures for completely new machines and establishing quality evaluation as well as an efficient production method. This “new process” in fact became the conclusive factor for quality.

Developed a new market by realizing an eco-friendly, rational process

The olefin-based sliding material thus completed was named “EXELAST (SX Grade)” meaning “excellent elastomer.” SX Grade is advantageous for automotive manufacturers as end users because as its low specific gravity leads to a lighter weight of the product, which in turn contributes to weight reduction and even improved mileage of automobiles. As it is suitable for the co-extrusion process, it also contributes to the rationalization of manufacturing processes of customers (reduced number of processes, reduced footprint of production lines, and energy-saving/resource-saving such as improvement of energy efficiency and process loss reduction in the production process). This resin can also be recycled, helping waste reduction.

Shin-Etsu Polymer that was a new comer in the field of resin-based sliding materials entered the market, thanks to the high performance of SX Grade endorsed by the silicon decentralizing technology as well as satisfying the trends of the times such as energy and resource saving. It can be said that SX Grade is the most excellent among paints and other resin-based sliding materials in terms of sliding properties and durability, and is expanding its range of applications both domestically and internationally around Japanese automotive manufacturers. Going forward, we will consider more applications and development into, for example, sealing materials for window frames and other construction material fields to develop new markets.



Localized silicon decentralized structure with different concentrations

Touch switch with a high transmittance, contributing to energy saving

Eco-product gentle for our company and other companies

A touch switch contributes to reduce the number of parts and improve automotive mileage. The market demands a higher transmittance, and we successfully developed a touch switch with a transmittance of 80%, improved from the conventional 70%. We interviewed Mr. Sugo, Manager, Ms. Ushikoshi, and Mr. Muraai, engaged in development about the types of contrivances made and the characteristics of the product.

Touch switch increasing adoption rate in the field of domestic and international automotive switches

Our capacitance sensor sheets have three types: touch pad for laptop PCs, touch switch for automotive center consoles and touch panel for tablets and other LCD screens. Among them, the touch switch has been applied and developed for various fields to replace mechanical switches.

A touch switch has a basic structure made by applying highly transparent conductive coating for detection electrodes and metal wiring to conduct

electric signals to the film, and when a finger touches the electrodes for detection, the switch identifies the change in capacitance made and converts it to an input signal. By using our exclusive conductive coating (SEPLEGYDA), we could realize a 70% total light transmittance, enabling backlighting. When compared with an uneven mechanical switch made of multiple parts, a touch switch with everything concentrated upon a thin sheet has advantages such as reduced number of parts and ease of recycling. It is also used at conspicuous locations, which can be made flat with the touch switch, and customers can make designability and functionality compatible.

Our touch switch has been enjoying more and more



Electronic Device Business Unit
Technology Headquarters
Development Department I
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Manager
Toshiyuki Sugo



Electronic Device Business Unit
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Product Development Group
Yoko Ushikoshi



Electronic Device Business Unit
Sales Headquarters
Sales Department I
Group I
Junpei Muraai

recognition, with many new inquiries and adoption, contributing to weight reduction and resource saving. As the touch switch is flat and is easy to clean and maintain clean conditions, we have also received inquiries from medical equipment manufacturers.

Challenge to improve transmittance from 70% to 80%

With an expanding range of applications and other competitors' technological innovations, we needed to develop a product with even higher transmittance to maintain our superiority. Of course, the development of such a product was also a customer requirement, and we thus faced the challenge of developing a touch switch with 80% transmittance.

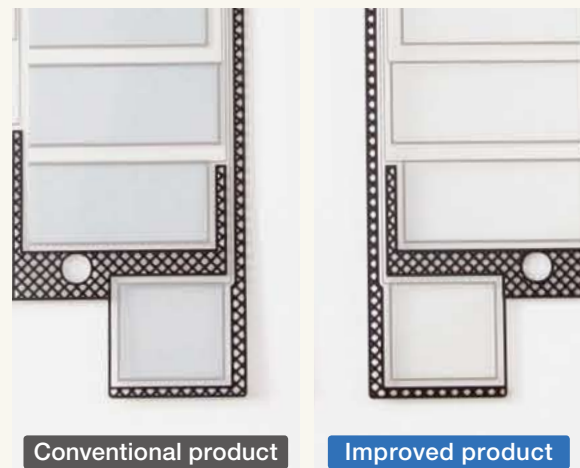
The first thing we set about was the improvement of the method to form the conductive coating. Instead of coating formation by conventional print technology, we took a method to paint conductive paint fully on the film and additionally process electrodes for detection in a required form and arrangement (Patent No. 4818216). By introducing this technology, we could make the paint film of conductive paint thinner. One of the key points for success was in launching a new coating process, we worked together with the Technology Development Headquarters to improve the conductive paint and successfully developed a conductive paint that shows conductivity equivalent to that of the conventional product even when it is made thinner.

In this way, we were able to realize 80% transmittance for our touch switch, and make it possible to promote the energy saving of backlighting better than before, which is also greatly advantageous for our customers.

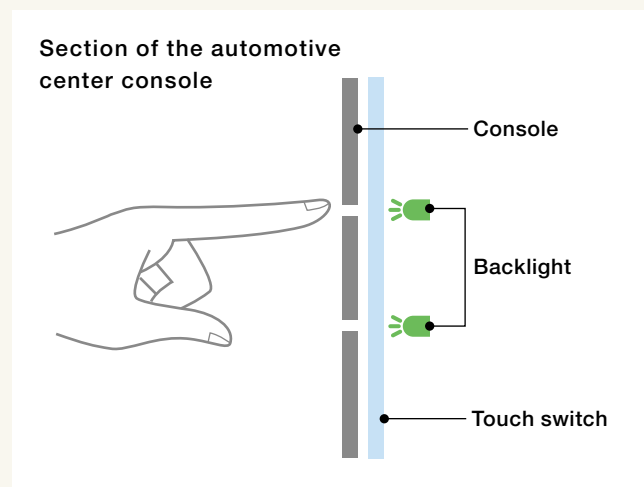
Full lineup realized by applications and development of technologies

The new process technology also contributed to improving in-house yields. A touch switch is a multi-layered structure having a film painted with conductive coating; cover film, adhesive, and film to improve reliability layered. Conventionally, printing of this conductive paint and management of drying processes were very difficult, which was one of the factors preventing in-process yields from increasing. As we changed the production method, we overcame problems that had been difficult to solve with conventional printing technology, resulting in improved yields and reduced losses.

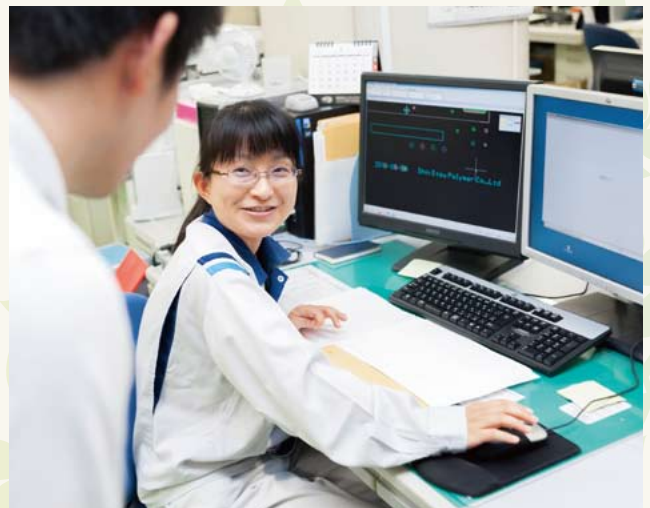
We are engaged in further technological innovations for touch pads and touch panels in addition to touch switches, making daily improvements for better



Conventional product with 70% transmittance (left) and improved one with 80% transmittance



Making the transmittance of the touch switch higher contributes to save energy needed for backlighting



Meeting to communicate market needs

performance and quality.

We will continue to make efforts for further improvement efforts for the supply chain, accumulation of technologies and know-how and higher yields.



About management

To increase corporate value from the viewpoint of shareholders, customers, employees, etc., the Shin-Etsu Polymer Group has been working on quicker management decision-making, secured transparency of management and the strengthening of internal control systems. Considering that the management of risks surrounding the company, compliance with social rules, and accomplishment of corporate social responsibility as the absolute conditions for corporate survival, we maintain and improve risk management and compliance systems that are trusted by all stakeholders.

Our concept of corporate governance

The basic policy of our group is to accelerate the speed of management decision-making, secure the transparency of management, and strengthen internal control functions to increase corporate value from the viewpoint of shareholders, customers, employees, etc.

Corporate governance organization

We properly manage the execution of tasks and duties by directors through the board of directors, including outside directors. We also adopt an auditor system, and the board of auditors has a function to monitor management, and conducts audits for the entire group, including domestic and overseas business bases.

In relation to internal control systems and risk management, we have established a general risk control committee to improve and operate general risk management, internal control, and compliance systems of the entire group.



General risk control committee

The committee centrally controls the risk management of the entire group, and under this committee, seven committees including the internal control committee and risk compliance committee are set up to generally manage risks, plan risk control policies and measures, grasp risk control conditions and take the necessary measures. Each committee is responsible for the following items.

● Internal control committee

We set up the “Basic Principles of Internal Control system,” established an internal control system based on the Companies Act and the Order for Enforcement of the Companies Act. In response to the internal control reporting system based on the Financial Instruments and Exchange Act, we have effectively and efficiently established and evaluated internal control of relevant financial reports to secure the reliability of such financial reports.

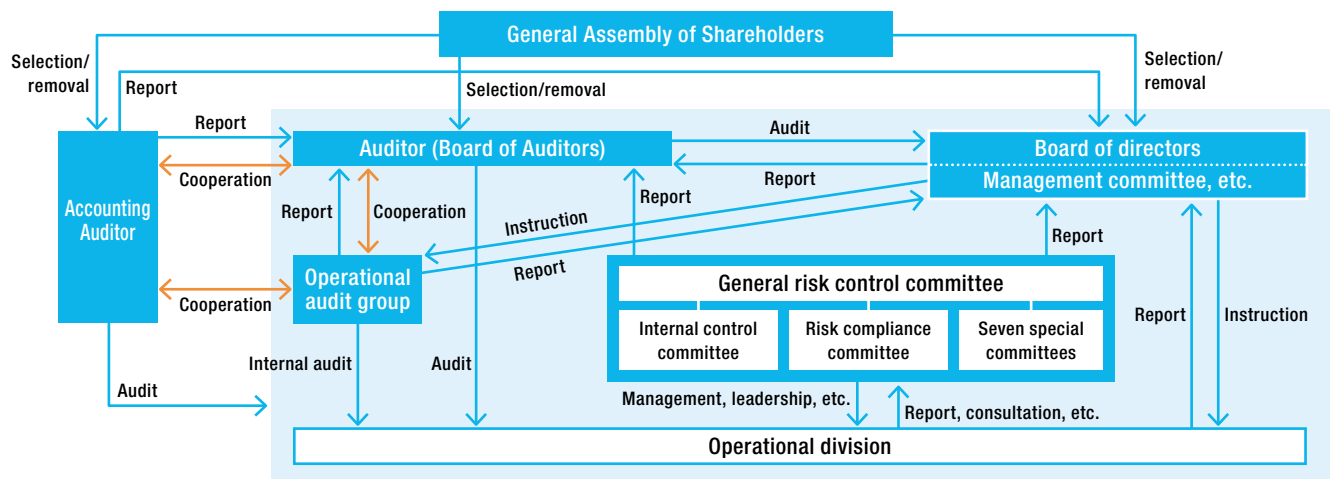
● Risk compliance committee

A risk is defined as a possibility that factors to inhibit the achievement of corporate objectives and or events to prevent the accomplishment of business activities and uncertainty that events possibly affect business sales and profit may occur. Our group has built an organization to prevent risks, etc., attempting to smoothly execute business and operations. Based on the idea that it is essential to “take action, respecting values and ethics required for citizens in addition to complying with laws, regulations, etc.” to win trust as a member of society, we will continue to thoroughly fulfill compliance.

● Quality control committee

Items associated with customer satisfaction improvement related to product quality

Shin-Etsu Group corporate governance system



● **Product safety promotion committee**

Risks and issues associated with product liability

● **Security export control committee**

Risks and issues in relation to export control laws and regulations

● **Environmental security committee**

Risk and issues associated with environmental protection, disaster prevention control and occupational health & safety

● **Patent committee**

Risks and issues in relation to industrial property rights

● **Contract screening committee**

Screening of contracts, minutes of meetings, agreements, etc. with suppliers and customers

● **Information system committee**

The committee implements the following security control measures for systems and data:

- ① Restriction of persons authorized for access to the database;
- ② entrance control into the server room; ③ data saving onto integrated file server; ④ encryption of PCs and USB memory;
- ⑤ updating antivirus software and continuous monitoring of unauthorized access to the network, etc. ⑥ identification of employees and visitors at business bases and offices, classification of locations based on applications and entrance control using IC cards, etc.;
- ⑦ back up for maintaining availability of information; ⑧ conducting information security training; and
- ⑨ receiving regular information security audits by customers and relevant improvement activities.

In FY2012, no critical information security incident occurred.

• **Personal information protection**

Our group set up “Personal Information Protection Policy” and “Personal Information Protection Rules” to complete the arrangements for personal data protection to perfection.

Risk control and response to risks

The general risk control committee takes ISO31000 international risk management standards into reference and established a risk control manual. In this manual, each business base of our company is required to quarterly review identification, evaluation, responses, etc. of risks and carry out monitoring.

The secretariat is responsible for establishment and review of risk control frameworks as well as giving advice/ generally control each business base risk control.

Based on the experience of the Great East Japan Earthquake, we reviewed, the disaster contingency planning manual, established the Shin-Etsu Polymer Group disaster contingency organization and conduct training for proper action should a disaster occur.



General emergency drill at the Kodama Plant



Corporate Action Policy

Unlimited challenges and growth!

We work to become a company full of creativity and vitality by realizing hopes and visions toward the future.

- 1 We serve as a strong and reliable partner with companies challenging to grow in their markets through innovative products and services.**
- 2 We always consider and make proposals from the viewpoint of our customers and globally provide products and services that contribute to their value creation and growth.**
- 3 We assume our corporate responsibilities toward shareholders, customers, employees, communities, and the global environment.**

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.**
- 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 social responsibilities required, 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 preservation of 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 our social action programs in a positive manner.**



Engagement with Employees

The Shin-Etsu Polymer Group considers safety and environmental protection as the foundation of corporate activities and by realizing human and eco-friendly workplaces, improves corporate value. The group believes that when individual employees firmly recognize their roles and responsibilities and take independent action in different fields, the power of the whole group will be strengthened, leading to its presence as an organization full of vitality.

Environmental protection and management system

The environmental protection committee organized by all group companies makes decisions on group action principles, targets and management plans and reviews the challenges shared by the group. Based on the integrated policies determined by the committee, each plant develops environmental protection activities.

Environmental protection audit

To confirm that environmental protection activities at individual plants are definitely carried out, we regularly conduct environmental protection audits. In the audit, we check the compliance status of related laws and regulations and the progress of environmental protection and management activities. In the audit in FY2012, we confirmed the targets and identified challenges, especially to achieve zero accidents.

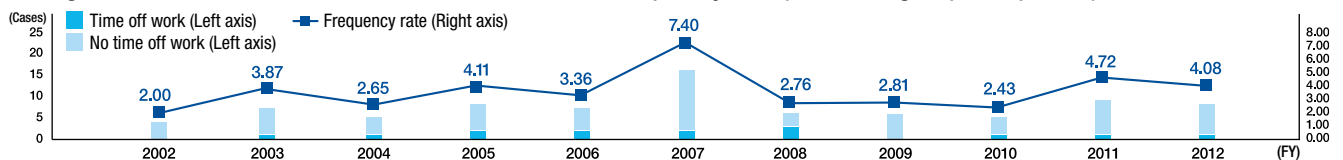
Report on labor-related accidents in FY2012

Looking at the status of labor-related accidents in FY2012, the frequency rate of all accidents improved by 0.64 points compared to the previous year. Unfortunately, one accident that required time off work took place. Most of the causes of accidents are due to a lack of danger prediction and a low level of safety awareness.

Toward zero labor-related incidents

Based on the occupational health and safety management system, we take risk assessment measures of facilities and operations. We also conduct safety proposals with participation by all, hiyarihato (near-miss) activities, and danger prediction training. We target establishing "safety" as part of our corporate culture and forming workplaces with a high level of safety awareness and address the challenge of achieving "zero incidents."

Changes in the number of labor-related accidents and frequency rate (domestic group companies)



Respect for human rights

Based on respect for basic human rights, we eliminate unreasonable discrimination based on race, gender, academic backgrounds, health, birthplaces, philosophies, etc. As part of these efforts, we conduct human right awareness education for all employees and host activities to advocate basic human rights regarding the understanding of social integration and prevention of sexual or power harassment.

Employee Assistance Program (EAP)

We introduced the Employee Assistance Program, a system to support employees so that they and their families can lead a healthy life both physically and mentally. While maintaining privacy using toll-free dials and e-mail, professionals in individual fields offer consultation on such fields as mental health, health, childcare, nursing, the law, and financing. We also have a point of contact for sexual harassment consultation.

To raise awareness about mental health and health management, we regularly transmit information useful for promoting health by taking advantage of in-house LAN.

Current status of employment

Reemployment System

Based on the Law concerning the Stabilization of Employment of Older Persons amended in April 2013, we updated the reemployment system after mandatory retirement to reemploy all persons who want to be reemployed after retirement to the legally stipulated age.

To enable reemployed persons to make use of their knowledge, skills, and experience, promote cost reduction and the transfer of skills to young generations and play a more active role, we will continue to establish systems observing the relevant laws and regulations.

Number of employees, average age, and years of employment

FY	Number of employees (persons)	Average age (years old)	Average years of employment (years)
2008	631	43.3	18.7
2009	630	43.7	19.2
2010	603	44.3	19.6
2011	595	44.8	19.9
2012	594	45.3	20.5

*Numbers of employees are those who are actually working.

*Officers, temporary employees, and contract employees not included.

Loan employees not included; accepted loan employees included.

Status of employment of new graduates
(independent data of Shin-Etsu Polymer Co., Ltd.) (Unit: person)

	University graduates (male)	University graduates (female)	Junior college/vocational school graduates (male/female)	High school graduates, etc. (male/female)
April 2011	5	3	0	0
April 2012	4	0	0	3
April 2013	1	1	0	0

Status of employment of impaired persons

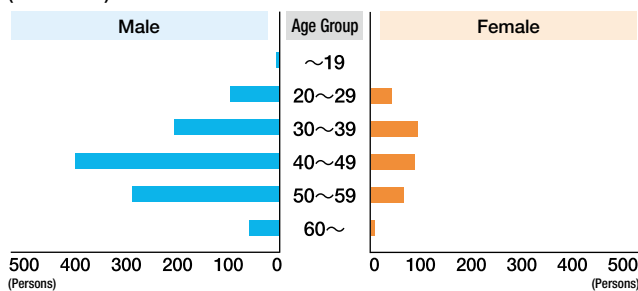
	End of FY2010	End of FY2011	End of FY2012	April 2013
Number of impaired persons (persons)	14	14	14	14
Employment rate of impaired persons (%)	1.93	1.96	1.99	2.00*

*The legally stipulated employment rate in private companies was raised from 1.8% to 2.0% as of April 1, 2013.

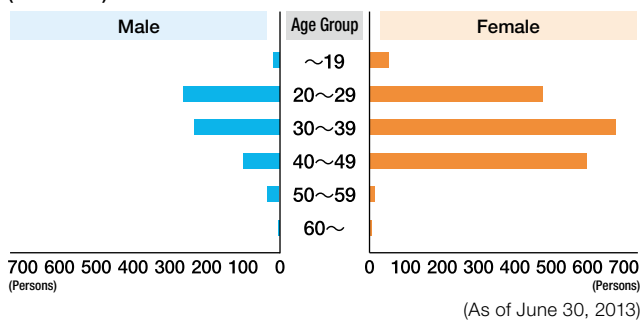
Number of officers and managers
(independent data of Shin-Etsu Polymer Co., Ltd.; as of March 31, 2012) (Unit: person)

	Male	Female
Managers (6th Grade or higher)	248	4
Officers	15	0

Distribution of labor force by gender and age group (domestic)



Distribution of labor force by gender and age group (overseas)



Human resources system

Our human resources system is based on a performance-based wage system. For clerical workers, the development of competencies* that are directly related to results is subject to evaluation, while for managers only the performance based on responsibilities for results is subject to evaluation. The records of performance evaluation details are made into a database, enabling evaluation results to be fed back to individuals, securing fairness, objectivity, and transparency.

*Behavioral characteristics commonly observed among those who consistently make high achievements in performing duties

Respect for work life balance

● **Childcare and maternity leave system**

Based on the Act on Advancement of Measures to Support Raising Next-Generation Children enforced in April 2005, we introduced a system to meet short-hour workdays and other individuals' needs to improve work life balance after returning to work. As for the childcare leave system, a total of 23 persons have made use of it. Especially in the past 12 months, a total of two persons have used the leave.

In October 2010, as part of childcare support, we revised the Office Regulations to extend the period of maternity leave from "until the child becomes 18 months old" in the conventional system to "up to the first April 30 after the child reached 18 months old" in consideration of the fact that children become eligible for entering nursery schools in April so that employees on maternity leave could concentrate on childcare.

By creating an easy-to-work environment that enables all employees to make work and childcare compatible, we will continue to address the challenge of introducing a system where every employee can fully exploit his or her abilities.

Work life balance information

	FY2010	FY2011	FY2012
Average days of holidays given (days)	19.2	19.2	19.4
Average days of holidays taken (days)	8.0	9.3	9.2
Rate of paid holidays being taken (%)	41.9	48.4	48.0

Use of maternity, childcare, and nursing leave

	FY2010	FY2011	FY2012
Number of persons who have taken maternity leave (persons)	4	4	2
Number of persons who have taken childcare leave (persons)	4	4	2
Number of males who have taken childcare leave (persons)	0	0	0
Rate of childcare leave being taken by females (%) (Number of persons who have taken leave/number of persons who gave childbirths x 100)	100	100	100
Number of persons who have taken nursing leave (persons)	0	0	0

Educational training

For all employees or for each individual layer, we offer a comprehensive range of programs for education and training such as overseas study and auditor system.

● **Overseas study and training system**

In 1987, we established an overseas training system to develop international businesspersons responding to our global expansion, starting with a system to study in the US. Afterwards in 1994, the People's Republic of China was added as a destination for overseas study. Through this training system, employees learn English or Chinese as well as different cultures at local universities in the US and China.

● **University auditor system**

To improve the abilities and skills of employees, employees study a specific auditor course for one year at the College of Science and Technology, Nihon University, away from the workplaces. Once a month, an opportunity for exchange among auditors is offered. The program started in 1962, and a total of 21 employees have used the system.



Engagement with the Environment

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

Basic Environmental Principles

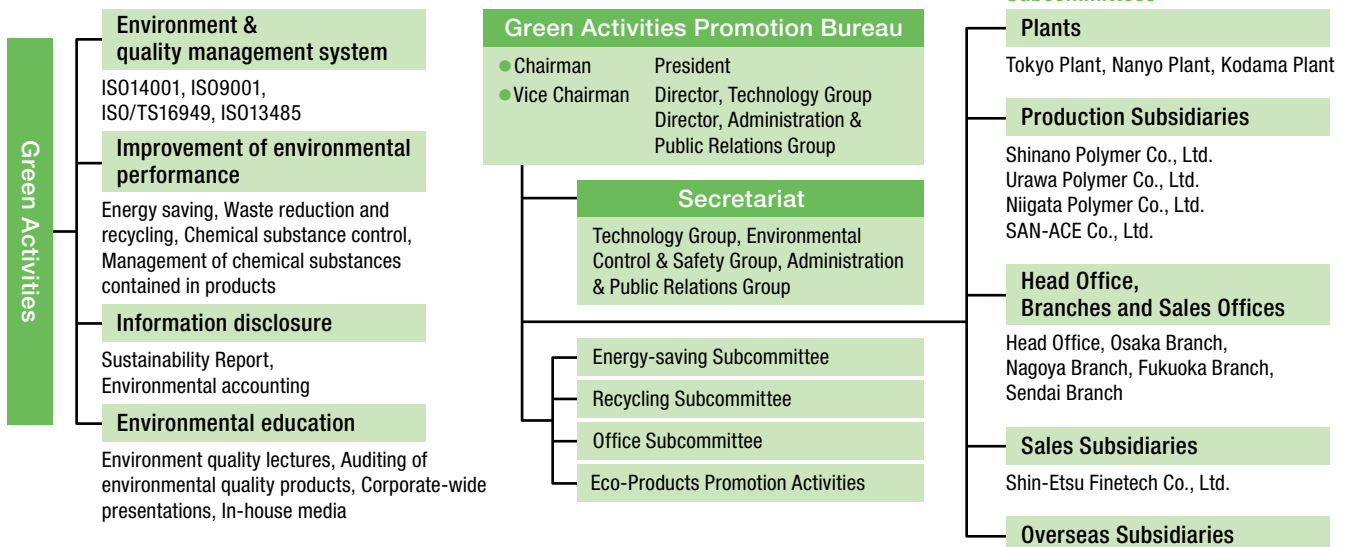
Basic Policy

Shin-Etsu Polymer group recognizes that the work for 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 our responsibilities required.

Action Policy

- 1 We are rebuilding the organization and systems to work for efficient and continuous environmental activities.
- 2 We observe law 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 it within our own manner in technical and economic resources.
- 3 We evaluate the environmental impacts of all phases from purchase and production through usage and disposal during the new product development stage and thus reduce its environmental impact.
- 4 We strive for the conservation and sustainable use of biological diversity by understanding and evaluating the impact on ecosystems from business activities, and by reducing this impact.
- 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 (As of April 1, 2013)



The 4th Mid-term Targets of the Green Activities

(Period: 3 years between April 2012 and March 2015)

	Target	Indicator	Reference	2014 target
1 Countermeasures against global warming	1-1. CO ₂ emission reduction	Basic unit of production weight	FY2008	6% reduction
	1-2. Reduction of energy converted to crude oil	Basic unit of production weight	FY2011	3% reduction
	1-3. Same as above (offices)	Basic unit of used area	FY2011	3% reduction
	1-4. Reduction of energy consumed for logistics	Basic unit of transportation	FY2011	3% reduction
2 Countermeasures for effective use of resources	2-1. Emission rate	Zero emission (less than 1%)	—	Less than 1%
	2-2. Reduction of waste emissions	Basic unit of production weight	FY2011	3% reduction
3 Countermeasures for reducing environmental load substances	3-1. Reduction of the use of PRTR substances			
	3-2. Reduction of emissions of VOC into atmosphere			
	3-3. Reduction of domestic and overseas use/drainage of water			
4 Eco-product promotion activities	4-1. Certification of "Eco-Products**"			
	4-2. Creation of "Eco-Products"			

*Detailed accounts are given on pages 6 and 7.

The 4th Mid-term Targets of the Green Activities

Results for FY2012

Target	Indicator	FY2012			
		Target	Result	Achievement	
1-1. CO ₂ emission reduction Entire group	Basic unit of production weight Reference: FY2008	4% reduction from 0.7241t-CO ₂ /t	0.6878t-CO ₂ /t (5.0% reduction)	Achieved	
		Though the power company CO ₂ emission factor deteriorated, energy converted to crude oil was reduced by 21.8%, resulting in the achievement of the basic unit target.			
		1-2. Reduction of energy converted to crude oil (plants)	1% reduction	Total 6 plants From +0% to +7.9%	Not achieved at all 6 plants
		Though individual plants conducted energy reduction in an organized manner, the production drop was larger than the reduction, resulting in non-achievement. We will make further efforts for energy saving toward FY2014.			
1-3. Reduction of energy converted to crude oil (offices)	Basic unit of used area Reference: FY2011	1% reduction from 0.0306kℓ/m ²	0.0328kℓ/m ² (7.2% increase)	Not achieved	
In 2011, we were affected by the earthquake disaster, and offices made all-out efforts for electricity saving, resulting in a reduction in the basic unit. This year, to efficiently operate offices, we reduced the area of offices, but the amount of the reduction of power consumption was too small to achieve the target.					
1-4. Reduction of energy consumed for logistics	Basic unit of transportation compared to the previous year	1% reduction from 0.0142kℓ/t	0.0137kℓ/t (3.6% reduction)	Achieved	
In FY2012, thanks to the effect of modal shift (railway transportation: 12.6%; ship transportation: 14.3%), average changes over the past five years were also achieved 96.0% (4.0% reduction).					
2-1. Emission rate (*1) (Group)	Less than 1%	Less than 1%	0.24%	Achieved	
In FY2011, the corporate-wide emission rate was 0.5%, but as we worked hard to improve recycled quality, incineration and land filling were reduced, greatly achieving the target.					
2-1. Emission rate (plants)	Less than 1%	Less than 1%		Achieved at all 6 plants	
All 6 plants achieved the target, and one plant achieved 0% emission rate.					
2-2. Reduction of waste emissions (Group)	Basic unit of production weight Reference: FY2011	1% reduction from 65.1kg/t	58.8kg/t (9.7% reduction)	Achieved	
Thanks to process improvements, yields increased to achieve a 15.7% reduction of waste emissions against those of FY2011.					
2-2. Reduction of waste emissions (plants)	Basic unit of production weight Reference: FY2011	1% reduction		Achieved at 5 plants, not achieved at 1 plant	
The one plant that couldn't achieve the target, experienced a drastic decrease in production weight in addition to a special factor of warehouse integration, increasing the weight of waste.					
3-1. Reduction of the use of PRTR substances	Registered amount	Reduction in comparison to the previous year (1,694kg)	240kg reduction to 1,454kg	14% reduction against the previous year	
		Basic unit of production weight	Reduction in comparison to the previous year (0.046kg/t)	To 0.042kg/t	9% reduction against the previous year
		Class I Specified Chemical Substance	Reduction in comparison to the previous year (121kg)	31kg reduction to 91kg	25% reduction against the previous year
	3-2. Reduction of emissions of VOC into the atmosphere	Emissions into atmosphere	Reduction in comparison to the previous year (21.2t)	20.3t emissions 0.9t reduction	4.3% reduction against the previous year
		Basic unit of production weight	Reduction in comparison to the previous year (0.574kg/t)	0.589kg/t	2.6% increase against the previous year
	3-3. Reduction in domestic use of industrial water	Total amount of use by all domestic plants	Reduction in comparison to the previous year (646m ³)	96.5m ³ reduction to 549.5m ³	15% reduction against the previous year
Total basic unit of production weight by all domestic plants		Reduction in comparison to the previous year (17.5m ³ /t)	To 15.9m ³ /t	9% reduction against the previous year	
3-3. Domestic industrial water drainage	Total amount of use by domestic plants	Reduction in comparison to the previous year (571m ³)	91.8m ³ reduction to 479.2m ³	16% reduction against the previous year	
	Basic unit of production weight by domestic plants	Reduction in comparison to the previous year (15.5m ³ /t)	To 13.9m ³ /t	10% against the previous year	
3-3. Overseas industrial water use = drainage	Basic unit of production weight at overseas plants	Reduction in comparison to the previous year (210m ³)	10.4% reduction to 199.6m ³	5% reduction against the previous year	
	Basic unit of production weight at overseas plants	Reduction against the previous year (71.4m ³)	To 76.6m ³ /t	7% increase against the previous year	

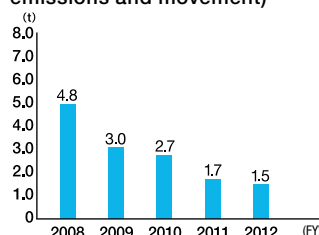
*1. Emission rate = (amount of landfill + simple incineration)/total waste emissions x 100 (%)

Chemical substances control

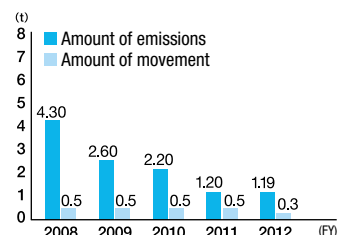
Our group addresses the challenge of reducing PRTR substances to be reported. In FY2012, the amount was 1.5t, representing a 0.2t reduction (-11.8%) compared to the previous year.

Emissions (into atmosphere and water systems) were 1.19t, which was equivalent to that of the previous year. The amount of movement was reduced by 0.2%, but showed no conspicuous change.

Reported amount of PRTR substances (Details of amounts of emissions and movement)



PRTR substances (Details of amounts of emissions and movement)



Actual VOC emissions into atmosphere in FY2012

Our group reports the handled amount of 20 substances* subject to emission reduction against the four electric and electronic organizations (t/year) and their emissions into atmosphere (t/year) every year.

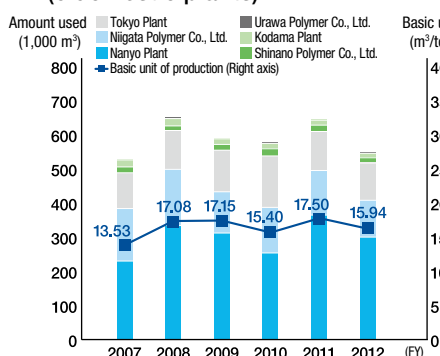
Comparing 20.3t of emissions of VOC into the atmosphere in FY2012 and the previous year, we achieved a 0.95t reduction (-4.3%).

*Ethanol, butyl acetate, methyl ethyl ketone, toluene, isopropyl alcohol, acetone, xylene, etc.

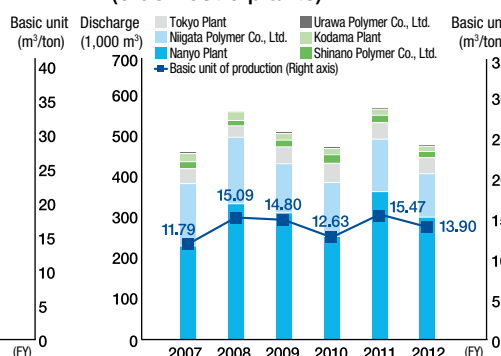
		(Unit: t/year)						
		Tokyo Plant	Nanyo Plant	Kodama Plant	Shinano Polymer Co., Ltd.	Urawa Polymer Co., Ltd.	Niigata Polymer Co., Ltd.	Total
Facility type	1.Paint	2.0	0.0	3.6	0.0	0.0	0.0	5.6
	2.Adhesion	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	3.Print	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4.Chemical product manufacturing	0.1	0.0	0.0	0.0	0.0	0.0	0.1
	5.Industrial cleansing	0.0	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	0.0
Other than the above		0.0	0.0	8.6	4.6	0.0	1.4	14.6
Total		2.1	0.0	12.2	4.6	0.0	1.4	20.3

Protection of bio-diversity: Industrial water control

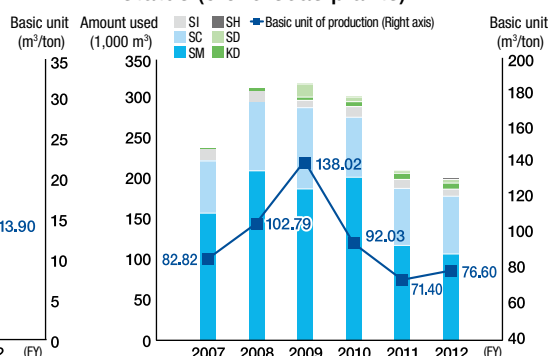
Waste use status (6 domestic plants)



Water discharge status (6 domestic plants)



Industrial waste water (discharge) status (6 overseas plants)



Energy-saving activities associated with freight transportation

As a designated consigner that annually consigns 30 million ton-kilometers or more, our group has reported results since the first year (FY2006) and submitted the 7th regular report in June 2013. As a result, the volume of freight transported in FY2012 reduced by 4.9% compared with the previous year, affected by the decrease in total transportation, while annual CO₂ emissions dropped by 10.3%.

Following last year, our group promoted the increase of the capacity of vehicles for transportation between plants as well as modal shift (increased transportation by railway and ship), and in FY2012, almost completely switched vehicles used for yard-to-yard transportation of construction materials from Yamaguchi Prefecture

to Aichi Prefecture from a 10-ton truck to a 13-ton truck. In addition, for the yard-to-yard transportation of construction materials (including some products), we executed a modal shift from truck transportation to JR container transportation.

In FY2006, railway transportation accounted for 5.0% and ship transportation for 1.7% of the total transportation, but thanks to our efforts, we now see the effects of modal shift with 12.6% for railway transportation and 14.3% for ship transportation in FY2012. The average change in basic units over five years is now reduced to 96% or a 4% reduction, greatly exceeding the average annual reduction target of 1.0%.

Annual transition of energy associated with freight transportation

	Unit	Year subject to report					In comparison to the previous year
		FY2008	FY2009	FY2010	FY2011	FY2012	
Annual volume of freight transportation	Thousand ton-kilometers	32,849	30,074	31,570	27,253	25,911	-4.9%
Volume of energy use	GJ	64,085	55,654	59,635	51,501	46,288	-10.1%
	kℓ	1,653	1,436	1,539	1,329	1,194	
Basic unit of energy consumption	kℓ/t*	0.0161	0.0153	0.0154	0.0142	0.0137	-3.6%
Annual CO ₂ emissions	t-CO ₂	4,350	3,770	4,042	3,498	3,137	-10.3%

Changes in basic unit regarding energy use in the past five years

	FY2008	FY2009	FY2010	FY2011	FY2012	Average change in basic unit over five years
Changes in basic unit regarding energy use (kℓ/t)	0.0161	0.0153	0.0154	0.0142	0.0137	
Basic unit of energy use (%) Compared with the previous year		95.0	100.7	92.1	96.4	96.0

*In FY2011, we changed the basic unit from kℓ/1,000 ton-kilometer to kiloliter/ton. We thus revised past data accordingly.

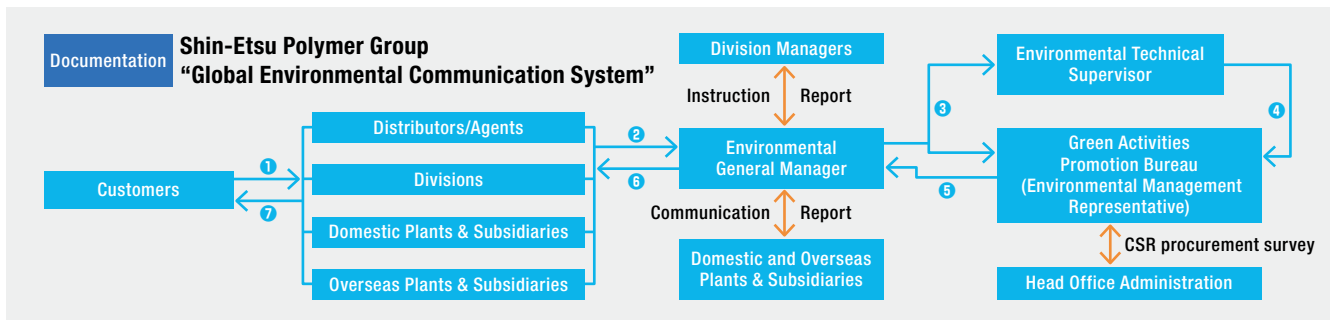


Engagement with Customers

In order to meet the requirements for the management of chemicals contained in products by customers, we created the “Global Environmental Communication System” to centrally manage all Group companies including overseas plants. We also apply the Global Environmental Communication System to respond to customers’ CSR surveys, Dodd-Frank Act (conflict minerals), etc.

Global Environmental Communication System

- (1) The “Environmental Management Representative” of our Group is appointed, and the Representative represents our Group with regard to customer’s requirements in relation to the environmental quality of our products.
- (2) The “Environmental General Manager” and the “Environmental Technical Supervisor” are appointed at each division, and respectively manage issues associated with the environmental quality of products of the division.
- (3) Submissions of such documents as Green Procurement Survey Responses, Certificate of non-use of environment-related substances, Conformation Form of the 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 environment-friendly suppliers in accordance with “Green Procurement Guidelines” and “Control Standards of Chemical Substances Contained in Products.”
- (5) Part of this system is applied to customer’s “CSR Procurement Survey (Supplier CSR Promotion Status Survey)” on human rights/labor, safety and welfare, environment, fair trade and ethics, quality and safety, information security and social contribution.



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

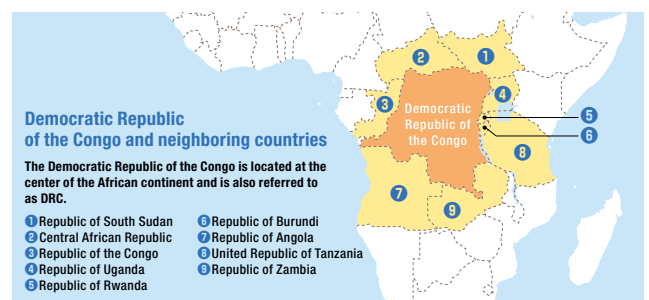
Partner Name	Corporate ID	Plant Name	Factory Code	Original Date of Plant ID Issuance	Current Validity Period
Shin-Etsu Polymer Co., Ltd.	410A	Tokyo Plant	FC007742	2005.06.30	2015.08.31
		Kodama Plant	FC002586	2003.08.01	2015.08.31
		Shinano Polymer Co., Ltd. (Shiojiri Plant)	FC002584	2003.08.01	2015.08.31
		Urawa Polymer Co., Ltd. (Kurihashi Plant)	FC002585	2003.08.01	2015.08.31
		Niigata Polymer Co., Ltd.	FC007726	2005.11.17	2015.08.31
		Ta Yang Group Holdings Ltd.	FC013237	2015.08.31	2015.08.31
Shin-Etsu Finetech Co., Ltd.	—		FC006553	2007.09.21	2016.05.31

Conflict minerals

In recent years, there is concern that minerals essential as raw materials for IT and electronic parts and components extracted in the Democratic Republic of the Congo (DRC) and its nine neighboring countries are possibly financing armed groups that cause the violation of human rights, environmental destruction, etc.

In response to this, the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) defines “tantalum, tin, gold, or tungsten” as conflict minerals”, and companies are required to identify if conflict minerals contained in their products are financing armed groups in these areas and if so, to annually disclose the information.

In order to trace back and survey the supply chain to find if any minerals that serve as a source of funds for armed groups in conflict areas in the Democratic Republic of the Congo or neighboring countries are used in our products, we plan to ask for cooperation from suppliers to identify refiners.



*Refers to “columbite (tantalum), tin, gold and wolframite (tungsten) or their derivatives” and “any other mineral or its derivatives determined by the Secretary of State to be directly or indirectly financing conflict in the Democratic Republic of the Congo (DRC) or an adjoining country.”
(Source: Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act)



Manufacturing direct sales Internet site launched

Our group mainly develops B2B business. As a new initiative, we began Internet sales of items that can be commercialized for general consumers. Taking advantage of manufacturer direct sales and long cultivated technologies, we provide items of which we have confidence in quality to consumers.

Shop name	Polybien *Trademark registration pending
Address	http://www.polybien.com/
Operator	Shin-Etsu Finetech Co., Ltd.
Opening	February 18, 2013
Tagline	Serving Better Life

*What is Polybien?

It is a coined word made of Poly (many) + Bien (good). We introduce products consumers would say, "Polybien!" when they choose them.

Peeping prevention film (Privacy filter film)

This is an exclusively developed film to control viewing angles. As an application of a film used for ATMs, airplane personal TVs and car navigation systems, we have added this items for use with smartphones including iPhone 5 and mobile phones.



Shusuke Komatsu (Shinano Polymer Co., Ltd.)

*Second from right in the front row

Five months have already passed since the Internet shop, "Polybien" opened. It is our first experience, and we launched it full of "excitement" and "thrills." However, the reality is tough, and we haven't been able to achieve the results as expected. It is quite an uphill struggle.

Going forward, we will extend the product lineup, cooperate with other departments and companies and accumulate actual results with dreams, speed, and target.

◀ Members of Shinano Polymer



Shin-Etsu Polymer Group Conflict Material Policy

The Shin-Etsu Polymer Group expresses the following in relation to conflict minerals:

- The Shin-Etsu Polymer Group agrees with and supports the objectives of the Wall Street Reform and Consumer Protection Act on conflict minerals.
- The Shin-Etsu Polymer Group has no intention to participate in human right violations or environmental destruction by procuring raw materials, parts, components, or products using such conflict minerals.
- The Shin-Etsu Polymer Group will continue to work with customers, business partners, and industry organizations to proceed with efforts to avoid such participation.
- If any conflict minerals are found in raw materials, parts, components, or products the Shin-Etsu Polymer Group procures, the group will promptly take the necessary measures.



Environmental Data

In “Engagement with the Environment” (pages 18 to 20), we explained the compliance status of each law and regulation in addition to targets and results associated with Green Activities. From this page we will explain other environmental data, reduction activities, etc.

Business activities and the environment

We believe the essence of environmental conservation activities is to precisely grasp environmental loads associated with our business activities. To effectively and continuously promote environmental conservation activities, we check the related numerical values and are engaged in activities based on the improvement themes to reduce environmental loads.

INPUT

Resources and energy

() Figures within brackets show the percentage against the previous year

	Domestic plants	Domestic non-plant business bases	Overseas plants	Overseas non-plant business bases	Group Total
Energy (converted to crude oil)	11,687kℓ (8% reduction)	317kℓ (11% increase)	13,876kℓ (12% increase)	41kℓ (0%)	25,921kℓ (4% increase)
Water consumption	549,000m ³ (15% reduction)		200,000m ³ (5% reduction)		749,000m ³ (12% reduction)

Raw materials

- **PVC (polyvinyl chloride)** 32,505t
- **Silicone rubber** 3,862t
- **Other synthetic resins** 5,582t
- **Indirect materials** 6,715t

Shin-Etsu Polymer Group

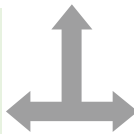
Development

We promote the design and development of products with less environmental loads.



Procurement

We control chemical substances contained in products including raw materials to reduce environmental loads.



Production

We promote energy saving and recycling activities to support environmental conservation.

Domestic Plants & Subsidiaries

- **Shin-Etsu Polymer Co., Ltd.**
Tokyo Plant
Nanyo Plant
Kodama Plant
- **Manufacturing subsidiaries**
Shinano Polymer Co., Ltd.
Urawa Polymer Co., Ltd.
Niigata Polymer Co., Ltd.

Domestic non-plant business bases

- **Shin-Etsu Polymer Co., Ltd.**
Head Office, etc.
- **Shin-Etsu Finetech Co., Ltd.**
Head Office, etc.

Overseas plants

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

Overseas non-plant business bases

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



OUTPUT

To society

- **Electronic devices**
- **High technology products**
- **PVC products**
- **Others**
- Input devices
- Multi-functional OA products
- Wrapping films
- Design and construction of buildings, interior/ exterior, shops, etc.
- Display-related devices
- Medical parts
- Plastic sheets
- PVC pipe-related products
- Semiconductor-related containers
- Exterior material-related products
- Components
- Silicone rubber products
- Carrier tape
- Functional compounds

To the environment

() Figures within brackets show the percentage against the previous year

	Domestic plants	Domestic non-plant business bases	Overseas plants	Overseas non-plant business bases	Group Total
CO₂ emissions	23,705 tons-CO ₂ (13% reduction)	514 tons-CO ₂ (9% increase)	30,973 tons-CO ₂ (14% increase)	90 tons-CO ₂ (2% increase)	55,282 tons-CO ₂ (2% increase)
Waste	Total emissions	2,026 tons (16% reduction)	1,687 tons (8% reduction)*		3,713 tons (12% reduction)
	Recycled amount	2,021 tons (15% reduction)			
	Simple incineration	4.11 tons (50% reduction)			
	Landfill	0.75 tons (82% reduction)			
Waste water	479,000 m ³ (16% reduction)		200,000 m ³ (5% reduction)		679,000 m ³ (13% reduction)
PRTR emissions (Reported amount of subject substances)	1.5 tons (12% reduction)				

*Aggregated value based on Group standard

ISO certifications

All domestic and overseas production sites of the Shin-Etsu Polymer Group have been awarded with the ISO9001 and the ISO14001 certification. Based on the ISO9001 certification, we have established a quality management system for each business unit and plant, delivering products satisfying customers.

With the acquisition of ISO14001, we take advantage of the mechanism when controlling chemical substances contained in our products as well as procure and select materials & components for product development in order to conserve the global environment.

Management system name	Standard	Management system requirement
Environmental management system	ISO14001	A system to grasp environmental risks caused by business activities and make continuous improvements of reducing or eliminating them, targeting reducing environmental loads and contributing to the environment
Quality management system	ISO9001	A system to run the PDCA cycle so that corporations can decide their attitudes to handle products and services and achieve continuous customer satisfaction
Quality management system for the automotive industry	ISO/TS16949	An advanced quality control system established by adding requirements unique to the automotive industry to the ISO9001 standard requirements
Quality management system for medical equipment	ISO13485	A quality control system omitting some requirements of ISO9001, while adding requirements unique to medical equipment to the system
General requirements for the competence of testing and calibration laboratories	ISO/IEC17025	A standard added with requirements unique to testing and calibration laboratories, used by a certifying body to certify the capabilities of testing and calibration laboratories
Occupational health and safety management system	OHSAS18001	A system to grasp risks in occupational health and safety, conduct countermeasures and target reductions in labor-related accidents and disaster risks

List of certifications

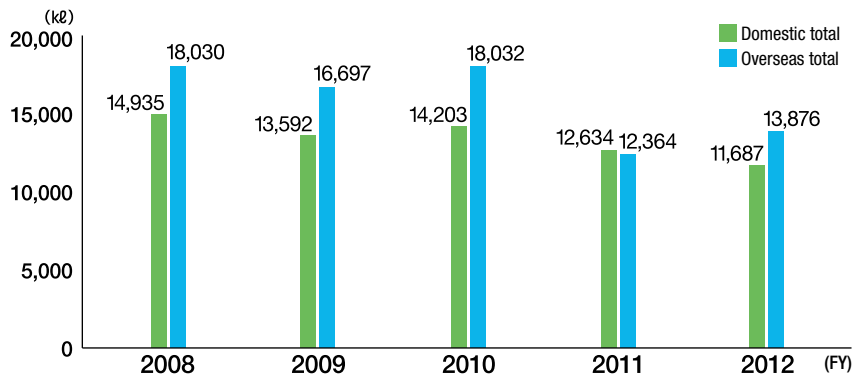
	Plants & Subsidiaries	ISO 14001: 2004	ISO 9001: 2008	ISO/TS 16949	ISO 13485: 2003	ISO/IEC 17025: 2005	OHSAS 18001: 2007	Product category
Domestic plants & subsidiaries	Tokyo Plant	●	●				●	Corrugated boards, wrap films, high performance sheets, etc.
	Nanyo Plant	●	●					Hard polyvinyl chloride pipe, etc.
	Kodama Plant	●	●		●		●	OA equipment, silicone rubber molded products, etc.
	Electronic Device Business Unit (Technology/Manufacturing Unit, 3rd Development Department)		●					Display-related parts, input devices, etc.
	Shinano Polymer Co., Ltd. (Head Office, etc.)	●	●					Display-related parts, input devices, etc.
	Shinano Polymer Co., Ltd. (Shiojiri Plant)							
	Electronic Device Business Unit (Quality Assurance Department, Sales Unit)		○	●				
	Electronic Device Business Unit (Nagoya Branch)	○	○	●				Display-related parts, input devices, etc.
	Shin-Etsu Polymer Europe B.V.							
	Shin-Etsu Polymer Shanghai Co., Ltd.							
	Shinano Polymer Co., Ltd. (Nagano Plant, Miyabuchi Plant)	○	●		●			Medical parts, physical and chemical appliances, etc.
	High Technology Products Business Unit (FI Division) Niigata Polymer Co., Ltd.	●	●					Silicone wafer cases, etc.
Shin-Etsu Polymer Co., Ltd. (Chemical Analysis Center)	○				●	○	Property analysis operations	
Urawa Polymer Co., Ltd. (Kurihashi Plant)	●	●					Embossed carrier tapes, etc.	
Shin-Etsu Finetech Co., Ltd.	●	●					Sales Division and original products	
Overseas Plants & Subsidiaries	Shin-Etsu Polymer (Malaysia) Sdn. Bhd.	●	●	●	●			OA equipment, silicone rubber molded products, display-related parts, input devices, embossed carrier tapes, etc.
	Suzhou Shin-Etsu Polymer Co., Ltd.	●	●	●			●	Display-related parts, input devices, etc.
	Shin-Etsu Polymer Hungary Kft.	●	●	●				Display-related parts, input devices, etc.
	P.T. Shin-Etsu Polymer Indonesia	●	●					Silicone wafer cases, etc.
	Shin-Etsu Polymer India Pvt. Ltd.	●	●	●				Display-related parts, input devices, etc.
	Dongguan Shin-Etsu Polymer Co., Ltd.	●	●					OA equipment, silicone rubber molded products, etc.

*○ is included in the scope of the main plant.

*For data such as registered certificate numbers and certifying bodies, please visit our website.

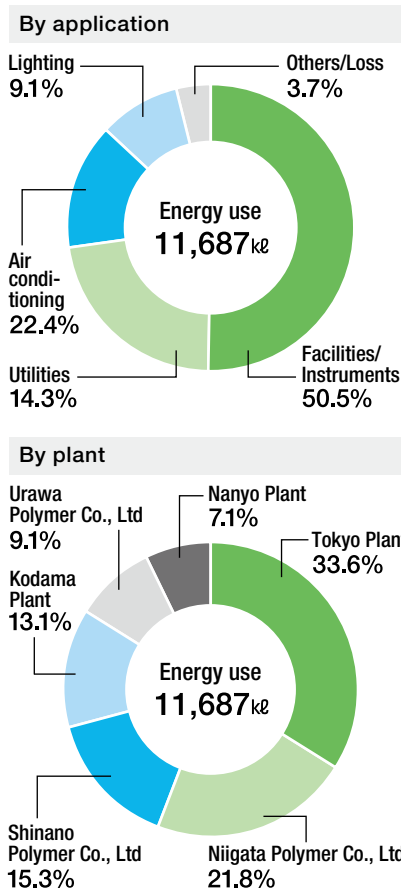
Status of energy converted to crude oil (domestic and overseas production sites)

The amount of energy consumed at domestic plants was 11,687kℓ or a 947kℓ reduction (-7.5%) compared to the previous year, showing a trend similar to the reduction in produced weight. The energy used at overseas plants was 13,876kℓ or an increase of 1,512kℓ (12.2%).



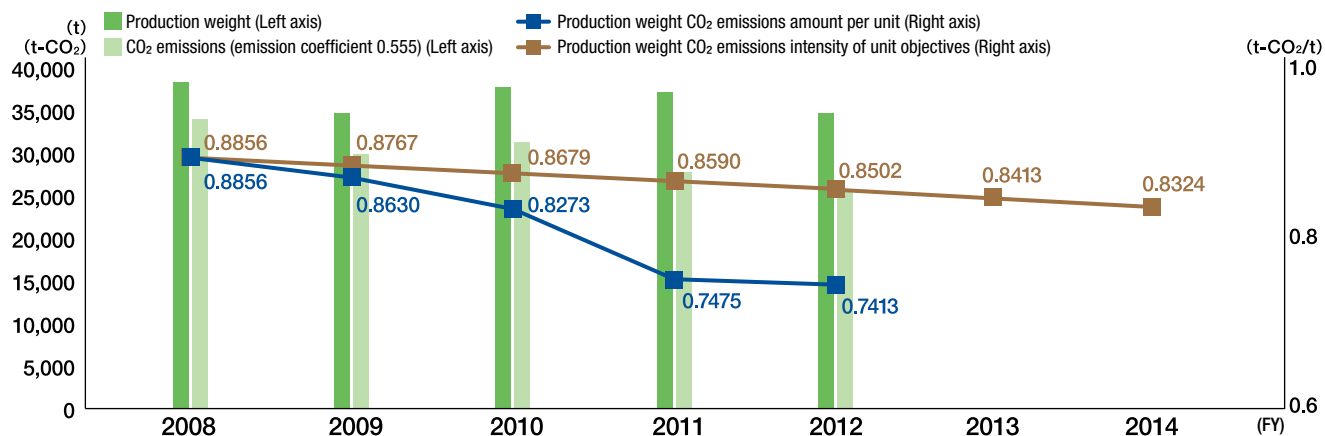
*Energy consumed at overseas plants is obtained by converting the original values to the domestic factor.

Reality of energy use (FY2012, domestic)



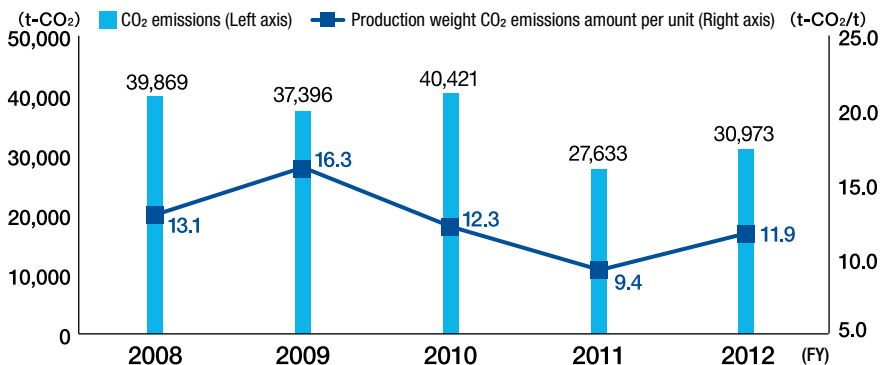
Status of CO₂ emissions by production weight in basic units at domestic plants (according to our reference CO₂ emissions factor)

To make the effect of energy saving activities clear, we used our reference emissions factor (0.555 tons-CO₂/1,000kWh) that is not affected by annual changes of power companies' actual emission factors. It was 0.7413t-CO₂/tons, representing a reduction of 0.006t-CO₂/tons (-0.8%) from last year.



Status of CO₂ emissions by production weight in basic units at overseas plants

In FY2012, CO₂ emissions increased, and results in terms of basic units got worse. We will proceed with energy saving and other improvement efforts.

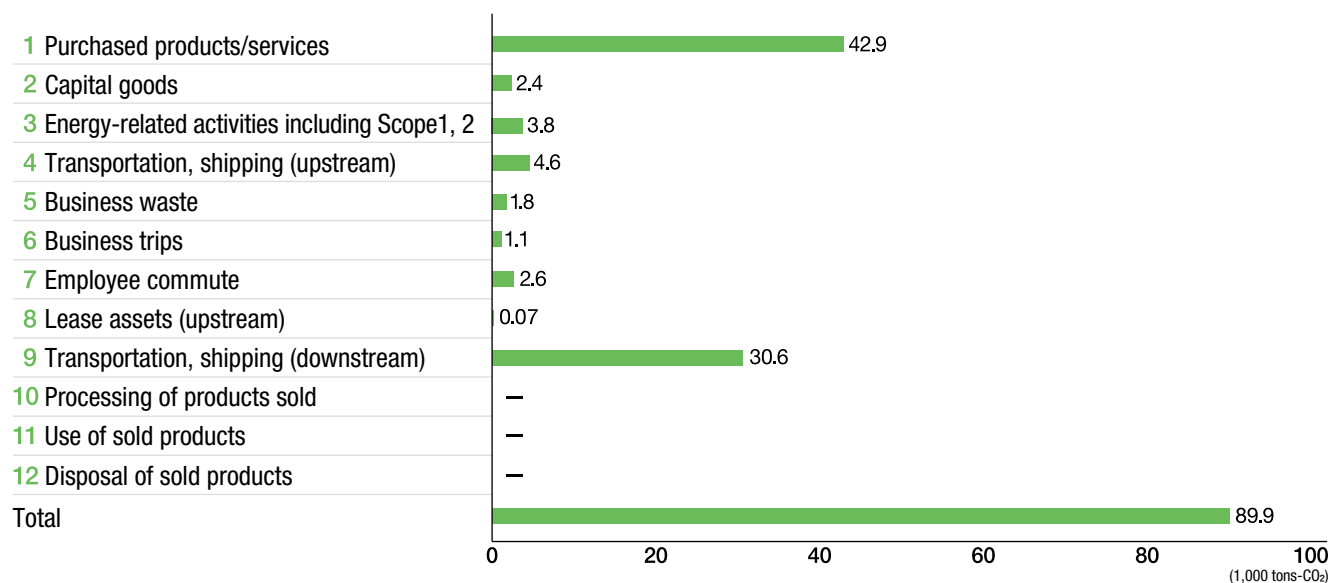


*Calculated by our Group emissions factor

Scope 3 emissions of GHG

Since FY2012, we started to calculate Scope 3 emissions* as a shared activity in the Shin-Etsu Chemical Group, based on the “Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain.” Our group Scope 3 emissions resulted in 89,9000 tons-CO₂. By grasping changes over a number of years, we will use the data to confirm the progress of our reduction measures.

*Scope 3 emissions: Emissions from upstream and downstream of the value chain



Received an on-site survey based on Energy Saving Act

● Niigata Polymer Co., Ltd.

Niigata Polymer Co., Ltd. underwent an on-site survey for an energy control designated factory in accordance with the “Act on the Rational Use of Energy” (Energy Saving Act) by the Agency for Natural Resources and Energy, METI. During the investigation, we explained the status of energy use at the plant, the transition of basic units in energy use, etc., and they checked the status of facilities using energy.

In relation to the compliance status of the “Standards of Judgment for Business Operators” under the Energy Saving Act, an investigation on 142 items was conducted, and we acquired a high score of 99.9 points.

Going forward, we will continue to attempt to strengthen the control system, further promoting energy saving.



Saitama Prefecture Target-setting Emissions Trading Scheme

Following the 2007 G8 L'Aquila Summit that set a target of 50% reduction of GHG emissions worldwide by 2050, Saitama Prefecture set up a mid-term target of reducing GHG emissions by 25% in 2020 compared to 2005. To achieve the target, the Tokyo and Kodama Plants are responsible for keeping the target of an annual average reduction of 6% over four years in the first planned period between 2011 and 2014, based on the past reduction of the operator and reduction forecast in the future and in consideration of the consistency with the leading Tokyo system in terms of wide area system. To meet this target, each operator conducts emissions trading, but the reference emissions and actual emissions during the planned period should undergo the examination by a third-party institution.

The Tokyo and Kodama Plants underwent the examination of the reference year and emissions in FY2011 by the Japan Management Association, a general incorporated association, and the Global Warming Countermeasure Section, Environment Department, Saitama Prefecture received the report. The reduction rates in FY2011 were 21.5% for the Tokyo Plant and 31.5% for the Kodama Plant, drastically exceeding the reduction rate target of 6% set by the prefecture.

Site use status of production plants

Domestic Plants & Subsidiaries

(Unit: m²)

Item	Tokyo Plant	Nanyo Plant	Kodama Plant	Shinano Polymer Co., Ltd.			Urawa Polymer Co., Ltd. Kurihashi Plant	Niigata Polymer Co., Ltd. East + West Plants	Total	Shin-Etsu Finetech Co., Ltd. Unit Division Cleaning Department	
				Shiojiri Plant	Nagano Plant	Miyabuchi Plant					
Sites, etc.	Site area	76,059	34,500	21,171	16,200	4,511	1,432	4,512	61,602	219,987	2,653
	Building area	36,702	8,227	8,287	5,230	918	521	2,676	15,144	77,705	2,185
	Floor area	45,070	10,602	18,401	10,050	1,504	969	3,740	25,087	115,423	2,185
Pavement, etc.	Paved area	35,461	22,636	7,574	3,610	1,160	911	1,763	7,666	80,781	448
	Water surface area	74	139	0	0	0	0	0	0	213	0
Green space	Green area	2,490	3,498	5,303	2,360	100	0	51	14,912	28,714	20
	Green area percent	3%	10%	25%	15%	2%	0%	1%	24%	13%	1%

Overseas Plants & Subsidiaries

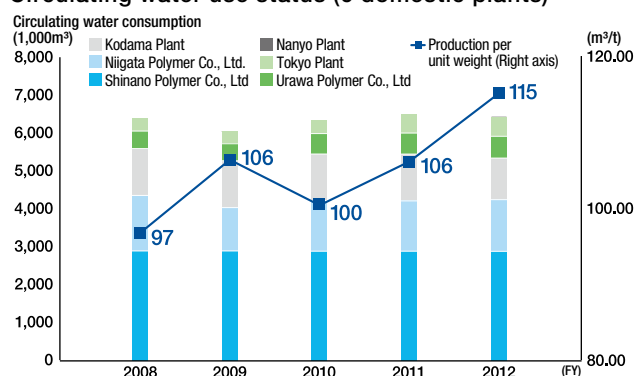
(Unit: m²)

Item	Shin-Etsu Polymer (Malaysia) Sdn. Bhd.	Suzhou Shin-Etsu Polymer Co., Ltd.	P.T. Shin-Etsu Polymer Indonesia	Shin-Etsu Polymer Hungary Kft.	Shin-Etsu Polymer India Pvt. Ltd.	Dongguan Shin-Etsu Polymer Co., Ltd.	Total	
								Site area
Sites, etc.	Building area	2,733	19,037	5,218	3,181	6,507	4,849	41,525
	Floor area	38,722	19,909	5,267	3,366	6,507	4,849	78,620
Pavement, etc.	Paved area	16,803	11,200	4,448	5,325	4,047	2,685	44,508
	Water surface area	0	0	302	0	400	0	702
Green space	Green area	15,195	17,914	40,731	5,603	4,000	12,065	95,508
	Green area percent	26%	36%	80%	40%	10%	62%	41%

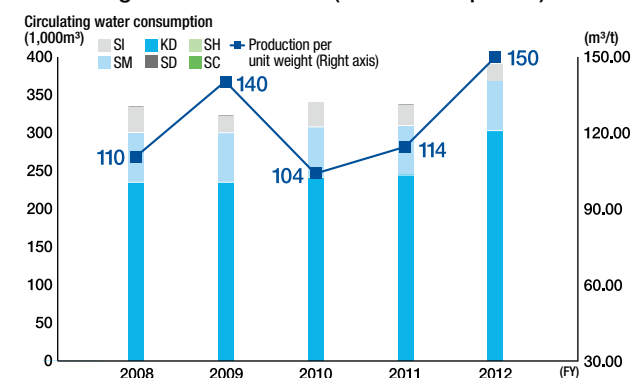
Status of circulating water use

To effectively use water resources, we make efforts to switch to circulating water both domestically and overseas.

Circulating water use status (6 domestic plants)



Circulating water use status (6 overseas plants)



Efforts for pollution prevention

● Air pollution prevention

Regarding air pollution, we comply with standards stipulated in the Air Pollution Control Law enacted to protect people's health and conserve living environments and set voluntary control standards as necessary to reduce environmental loads.

● Water pollution prevention

We comply with standards stipulated in the Water Pollution Control Law enacted to protect people's health and conserve living environments and set voluntary control standards as necessary to reduce environmental loads.

● Soil contamination prevention

To prevent health damage by soil contamination, we conduct monitoring based on the Soil Contamination Countermeasures Act. We also conduct surveys on soil, where necessary.

Opinion of Third Person

We received third-party comments to further improve the environmental and social activities of our Group.



Third-party comments on the “Sustainability Report 2013”

Economics Department,
Sophia University, Professor
Yoshinao Kozuma

With regard to the environmental and social efforts and initiatives of the Shin-Etsu Polymer Group, I am providing my comments after reading the same Group’s “Sustainability Report 2013” (hereinafter referred to as Report) and after interviewing those concerned.

1. Summary of Key Performance Metrics

This year, many ambitious initiatives have been taken, and the report was compiled with conspicuous progress over a single year. Especially impressive was the “Summary of Key Performance Metrics.” Economic reporting up to the last year has been drastically renewed, changing into a data highlight format like an integrated report. In the transition of the number of employees on a consolidated basis it now contains the number of female employees, while changes in key financial and non-financial indices were added to the outline of financial data. As illustrated by these examples, the report now has a structure of information to communicate the reality of management of the Shin-Etsu Polymer Group in more diverse viewpoints, and these are improvements I very much appreciate.

2. Internal certification standards of Eco-Products

One of the innovations in terms of initiatives was the establishment of internal certification standards of Eco-Products. The concept of eco-friendly products that had not been established is now clearly defined, and evaluation standards are now set up for seven eco-friendly items including energy saving, resource saving, and recycling. With this, the development of products that can meet market needs in a sustainable society will make progress, and the creation of value shared with society will be promoted more efficiently. I expect that such greening of business strategies will lead to the long-term growth of the Shin-Etsu Polymer Group.

3. Expansion of the scope

I have also seen progress in the expansion of the reporting scope. This year marks the effort to calculate and disclose Scope 3 emissions of GHG. Even more, it is conducted in all 12 categories corresponding to the business model of the Shin-Etsu Polymer Group, and together with the development of CSR management with the range of consolidation as the boundary, it contributes greatly to the improved transparency of the group.

Another point to appreciate is the development of the policy for conflict minerals. This shows the establishment of internal policy required for building a consistent information route throughout the value chain, and it is considered to contribute to improving a system to enable prompt response to customer requirements for CSR procurement.

4. Future challenges

While I appreciate the many improvements, I also have to point out some challenges. One of them is the increase of CO₂ emissions at overseas plants. With the increase of production weight, energy use at overseas plants has been increasing. If this is a cause of the increase of CO₂ emissions, it is a matter of great concern. CO₂ emissions of production weight in basic units have worsened by 2.5 points. The deterioration was observed, while consolidated sales and operating income have shown a decreasing trend, and an analytic explanation is required for its cause.

With the improvement of the contents of efforts and information disclosure, easiness to read the report is now the next challenge. As information has been expanded qualitatively and quantitatively, the report’s usability has been enhanced, but visually, it still has room for improvement. I hope that organization and integration of information is promoted with contrivances to the total configuration and layout so the general quality of the report is further improved.

In response to third-party comments

We have drastically redesigned the pages of this year’s report based on the remarks pointed out by Professor Kozuma, and we are quite encouraged with so much praise. In terms of activities, this year materially falls on the kick-off year associated with Eco-Products, and we are determined to maintain what Professor Kozuma has appreciated such as building systems and preparing evaluation standards for Eco-Products as well as new initiatives such as Scope 3 emissions of GHG.

On the other hand, for the Summary of Key Performance Metrics, we have added to CO₂ emissions,

emission rate and frequency rate of accidents to conventional economic reports this year, and described females in the number of employees, so that single page should summarize the results of our activities.

In relation to CO₂ emissions at overseas plants that were pointed out as a challenge, we plan to determine the cause and take countermeasures very quickly. We will also continue to study how to make pages that are easy to read while keeping the amount of information as our challenge for future reports in the next year and beyond.

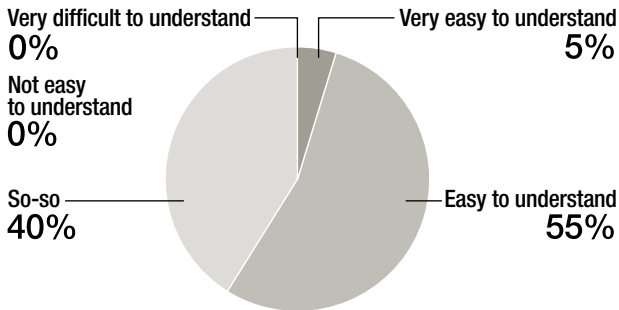


Assistant Chairman,
Green Activities
Promotion Bureau,
Director
**Yutaka
Kawamura**

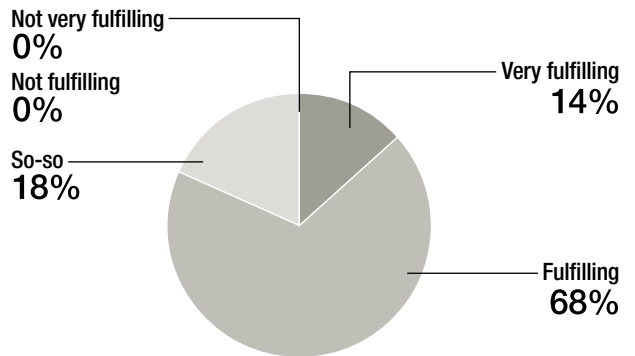
Questionnaire Results & Editor's Note

After releasing the "Sustainability Report 2012," we received internal and external readers' responses to our questionnaire, and results are given below. We would like to take your opinions and comments into consideration for future issues. Thank you very much.

Q Was the report easy to understand?



Q What about the contents?



Q Please give your comments, opinions, and requests.

General impression

- Graphs, tables, and figures have been upgraded, and the report is very easy to read and understand. Data are diverse, and reported by item in an efficient manner.
- When I flipped through the pages of the Sustainability Report, it was hard to read everything, and I wondered who were the target readers. It has a lot of content (which merit higher points) but the number of words was too many (which demerits the report), and I think it would be a document employees would carefully read if you could reduce the number of words somewhat.
⇒We edited the 2013 edition, focusing on readability. Please give us your comment again.
- One-year activities of the Shin-Etsu Polymer Group were summarized, and I could learn about it very well.

Individual topics

- I can understand the efforts at Shin-Etsu Polymer well, and some of them can be applied to our company, so I would like to use it as a reference and feed it back to our own activities.
- "Engagement with Employees" was good because I could learn about the education and training system and other information not available in the Corporate Profile.
⇒We will continue to transmit ample information, going forward.
- The report has important information that we don't usually see, as it covers in an easy to understand manner the status of efforts for society on themes of security export control, "Environmental & Quality Management System" at domestic plants, "Green Activities," "Energy Saving" and "Waste Reduction & Recycling."

- I always read about Green Products with interest.
- It was easy to understand what role Shin-Etsu Polymer products played (in what way they were good for the environment).
- The special article on eco-friendly products was good. The promotion of Eco-Products was emphasized, and it is important to not only observe the law but also address the challenge of creating eco-friendly products and show our attitude toward it.
⇒In the 2013 version, we covered "Eco-Products Promotion Activities." We will continue to promote these activities.

Editor's Note

This is the year to issue a renewed version of the report once in four years. The cover succeeds the "S" of Shin-Etsu but is designed, highlighting "prefectural birds" and we radically changed both contents and configuration. We positively incorporated advice from Professor Kozuma that can internally be reflected and covered its contents.

One of them is the internal certification system of Eco-Products started in April

2013. We understood his advice that "manufactures should solve challenges of customers and develop what society needs." This is a new initiative for us, so started with raising the level of recognition within the company; we hope to introduce its results in next year's report and beyond.

We will address what we can improve based on comments from Professor Kozuma and readers and report on its



results. We are looking forward to hearing honest and frank opinions on our Group's environmental and social activities.