



Shin-Etsu Polymer Sustainability Report 2011



Greetings

Strive for urgent reconstruction of new business structure corresponding to the age toward further growth

On March 11, the Great East Japan Earthquake struck with many people losing their lives and causing unprecedented damage. Even now, many disaster-stricken victims are forced to live in refugee centers. I would like to take this opportunity to express my sincere condolences and sympathy to those affected by the earthquake and tsunami.

Our Group fortunately experienced neither human loss nor major damage to buildings and facilities. Following the earthquake, we are now reviewing our emergency measures at the time of a disaster and business continuity plan (BCP) including supply chain. To respond to power shortages this summer, we have also implemented a power saving plan to reduce power consumption by 15% compared with the peak of last year under a joint use limitation scheme in our Group.

Our Group heralds a Basic Environmental Policy of “recognizing that the work for environmental conservation is the one of highest priority issues for our operations” and therefore “working hard to become a part of building a recycling economic society through our responsibilities required,” and has addressed such challenges as resource saving, energy saving, waste reduction and recycling. Under current drastic social changes, we will build a new business structure corresponding to the age and strive to strengthen financial content and corporate value toward further growth.

From management targets

We have the following management targets:

In order to maintain sustainable growth under any business conditions, we powerfully strive to rebuild our business structure required by a new age to build strong corporate content and create new business.

We always keep corporate social responsibility in mind whenever we take action and ensure compliance and risk

management.

We observe the golden rule of top priority to safety and the environment and achieve “zero accidents” as a Group.

We contribute to global environmental conservation and to achieve this, we address power saving, resource saving and reduction of environmental burdens and positively disclose information.

Green Activities promoted as part of the targets have made significant achievements in terms of waste elimination, efficiency promotion, and cost competitiveness improvement, along with Six Sigma and TPS activities. We report the status and results of such activities in this “Shin-Etsu Polymer Sustainability Report.”

The Green Activities

We position Green Activities as “an effort to improve productivity from the viewpoint of the environment,” and ever since its start in fiscal 2000, we have achieved substantial results, driven by global environment conservation and improvements in productivity.

In the current Third Mid-term Plan (fiscal 2009-2011) of the Activities, we have set targets of a “35% reduction of CO₂ emission per basic unit of energy when compared with that of the reference year or fiscal 1994,” “for waste reduction: maintenance and continuance of zero emission” as well as a 3% reduction of emissions per basic unit of waste when compared with that of fiscal 2008,” making fully committed efforts to achieve these targets in the group.

In April 2010, we revised the Basic Environmental Policy and added a new item: “By grasping and assessing the impact of business activities upon the eco-system and reducing its influence, we make efforts for the conservation and sustainable use of biodiversity.” As the Activities have



信越ポリマー株式会社
信越ファインテック株式会社



reached the 10 year mark and environmental issues have increased relationships with corporate activities, we position the Activities from now on as the second step and are committed to challenge new targets from a higher and wider perspective.

Supply chain/green procurement management

Our Group has established a system for the management of chemicals contained in products at each production site in response to customer's green procurement requirements and surveys of chemical substance control, based on the "Standard for the Control of Chemical Substances in Products" and created the "Global Environmental Communication System" to centrally control the entire Group, including overseas sites.

In April 2009, we also joined the Joint Article Management Promotion-consortium (JAMP) and have established a structure to communicate the information on contained chemicals among suppliers and customers with MSDSplus and AIS.

Product development in consideration of the environment

Recognizing that new products and new business domain development is an absolute requirement for corporate growth, the Group has a cross-functional development structure throughout the company in addition to R&D activities at business units, divisions and the R&D Center.

A wide range of business types and industries we are involved in is now showing signs of drastic change. We will

firmly understand trends, respond to them in a speedy and appropriate manner, and develop/propose new products.

Sustainability Report 2011

This Report conforms to the "Environmental Reporting Guidelines: Towards a Sustainable Society (Fiscal Year 2007 Version)" of the Ministry of the Environment and reports on environmental, economic and social initiatives. Also, we aim to create an easy-to-understand report featuring employees independently addressing their jobs, emphasizing environment-friendly products, case studies of environmental conservation activities, and an introduction of overseas sites. In the 2009 edition, we focused on our supply chain CSR management and in the 2010 issue, supply chain/green procurement management. This year, we focus on information security management.

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.

By contributing to the development of society through providing high quality products, technologies and services and by carrying out this growth with a balance of economic, environmental, and social aspects, we positively participate in the formation of a society toward sustainable development.

President

Hiroshi Akazawa

September 2011

Management Philosophy/ Environmental Policy

We display at all locations both at home and abroad in Japanese, English and Chinese



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.

Basic Environmental Principles

Basic Policy

Shin-Etsu Polymer group recognizes that the work for environmental conservation is the one of 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 it's 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.

Corporate Action Policy

- 1 We have a 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.

Information Security Management

Trust in corporations strengthened by well-established information management systems

Year by year, the levels of internal/external security management in relation to corporate information has been improved, and customers also demand strict security management. For this reason, we invited Fujitsu, which has established a strong corporate-wide information security management system and exchanged opinions about how to manage information and challenges for the future. ※Titles omitted

Ideal information security management for suppliers

Moderator Ishii This is the fourth dialog, and for the first time, we have guests. Thank you very much for joining us.

Hirose Our procurement division mainly focuses on the security improvement of software developers in the solution business, and suppliers from which we buy parts and materials similarly assist us in security management. It is our pleasure to listen to your ideas.

Hara We established the information security management standard about ten years ago, and we established various organizations and turned the PDCA cycle since then. Working with Fujitsu, we received a lot of advice about information security management.

Kawamura We started to work with Fujitsu in 2003, when the Fujitsu Research Institute diagnosed our company, pointing out our weak points.

Terashima As one of the weak points, I felt insecure about the access control of the host computer room in terms of information security at that time.

Hara As a room at a plant was the host computer room, which was controlled in house, we didn't properly control access. After this was pointed out, we decided to introduce the service

from Fujitsu in 2005. Back then, our awareness about security was not so high, but as customer requirements for information management increased, we reviewed our security and decided to strengthen control. Now, our core system (SMaRT) is managed by the Fujitsu Tatebayashi System Center as part of measures for BCM (business continuity management).

Terashima Our Tatebayashi System Center achieved the best rating of "AAAs" by the IS Rating, for the first time in Japan, including its access management using vein authentication. In our company, the Security Committee is exclusively responsible for information security, and, especially regarding management, operates the system in compliance with the security management framework based on the ISO27001 international standards. SMaRT was established with ID-based access control and a monitoring system, so you can rest assured about control.

Hirose Customers have given us requests for strengthening our information management structure even prior to that time. With the issue of file sharing software, Winny, around 2005 and information leakage at our supplier as turning points, we started to give full consideration as to how to control information, including suppliers. We are still proceeding with it, facing some difficulties.

Agawa Last year, we received information security check sheets and surveys from about 20 companies. We responded to them and when there is any problem, we improve them one

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by one. The subjects of the surveys are not only our Group companies but also suppliers, so a challenge is promoting management systems at suppliers.

Koyama Previously, information only meant paper media, but now we have not only electronic information on USB memory and PCs but also samples, jigs and other material produced using customer confidential information. We share such information with suppliers, but as the products of our division use many parts for assembly, we must manage multiple suppliers. As overseas suppliers are increasing, I think we must give consideration to control by divisions and also a corporate-wide management system.

Agawa That's true. Information management, including suppliers leaves things out of our reach.

Koyama In commercializing technologies, we must think about suppliers flexibly. Even if suppliers understand the significance of information management, it is difficult to require them to build an expensive mechanism.

Kawamura How about agreements?

Koyama Regardless of nationalities and employment styles, we must prepare agreements on information security, but it cannot be said it is thoroughly implemented. However, if any information leakage occurs, a similar product may be marketed overseas quicker than ours.

Hirose It is associated with intellectual properties.

Kawamura There are so many challenges to handle. How do you address this at Fujitsu?

Hirose The Fujitsu Group audits about 170 suppliers through multiple procurement departments.

Hara How do you choose which suppliers to audit?

Hirose As we cannot visit every supplier, we mainly visit major companies in the software field.

Minabe Do you conduct on site audits?

Hirose We actually visit companies and audit their plants. At present, awareness of information security management is high in society, and the standard of individual company activities has been getting higher and higher.

Hara How do you instruct your suppliers?

Hirose Of course, they must strictly observe confidential obligations in terms of the contract, but the premise is that they appoint the person in charge and build a security management mechanism such as reporting and monitoring. They then operate the mechanism and review to address so-called PDCA

management. This audit can be done by a third-party audit institute, and some companies employ ISMS (Information Security Management System) conformity assessment system and other standards. However, as we cannot check every



process of individual suppliers, we also have them respond to survey sheets. In addition, for Fujitsu, customer information is the most important information, so the handling of it is a critical checkpoint.

Hara I see, another challenge of ours is that we haven't been able to give the widest possible publicity to which is priority confidential information and which is not, and narrow down the information to be protected. If we restrict everything, it may become too difficult to work smoothly.

Terashima As Mr. Koyama mentioned, samples and private information are both information. We must identify the information to be controlled before it becomes accessible in the market, and we must give different handling to information which is important and which is not.

Kawamura Listening to you, is the most important thing for Fujitsu private information? For us, information we get from customers is the most important.

Minabe Yes, when we take pictures of products, people in charge tell us, "Don't take a shot of this." Their level of awareness seems to be comparatively high.

Hirose In the case of a specific product or project, only limited departments and members deal with it. If that is the case, we must set up detailed rules of information operation in consideration of business discussions and practice by project, mustn't we? I think it is effective to establish a set of corporate-wide rules as a template and customize it to individual operations within its framework.

Handling of information by individuals and the importance of the widest possible publicity

Minabe So, the methods of information management by those who handle it is questioned. We use USB memories with encryption function and make a list. What rules do you have about private information handling at Fujitsu?

Hirose In operations, no use of personally owned PCs and USB memories is permitted, and for USB memories, the company provides employees with USB memories with encryption. It is essentially prohibited to take them out of the office, and if they need to, they must make an application for permission to do so.

Minabe The widest possible publicity is important, isn't it?

Terashima Basically, we at sales don't bring PCs with us. Awareness among employees about information management is high and thorough. If we break a rule, we get a due penalty. We are also introducing PCs whose data can be remotely deleted in the case they are stolen.

Hara We haven't experienced any critical leakage incidents

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Moderator
General Affairs G
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Sachiko Ishii



so far, but such accidents as forgetting PCs and loss of USB memories have occurred. The biggest concern is for PCs that have much more information than paper documents. Still, awareness of people who handle them is not high.

Hirose Awareness-raising is essential. Even if the company has rules, it will be a risk when some of its members don't follow the rules. For this reason, each employee of our company submits a written pledge to the company. If you are ever involved in a situation where the operation of your department or section is interrupted when an incident occurred, you will be afraid of taking information with you.

Agawa It is true that once you experience an incident, awareness will be raised. To share such cases, we publish them in Kawaraban (internal information communication tool).

Moderator In terms of education, what kind of initiatives do you take?

Agawa Following the establishment of rules, we started information security education in 2005, and in 2006, 2008 and 2009, Information Security Secretariat members visited individual plants and conducted group training using DVDs and other materials. However, to cover all employees including those overseas, we introduced e-learning last year.

Hara What is pointed out at customers' audit is to grasp who haven't been educated, not who have been educated. For this reason, as we cannot fully grasp such data at group education, we switched to e-learning.

Terashima We also use e-learning. Determining whether all employees have taken the course or not is managed by the manager of each department.

Agawa With e-learning, we can check those absentees as data, and choose languages. This year, we held e-learning in three languages. As we can also analyze results, it is now easier to improve on. We will continue to host this and improve it going forward.

Minabe Have you conducted the course for temporary workers, too?

Agawa Though some of them were trained in group sessions, temporary employees, and subcontractors are subject to the training as long as they are in Japan. At overseas sites, PCs to cover all employees may not be available, so we asked managers to choose who took the course.

Moderator What lesson have you learned from hosting education so far?

Agawa Subsidiaries (individual manufacturing companies) have a stronger level of security than us.

Koyama Awareness is especially high in manufacturing departments. Headquarters have a wide variety of information to handle, while suppliers don't belong to the Group, so we need to have a different response for them.

Hirose I think it is good to do lifecycle management to determine the status where information can be disposed of, not to mention education and management structure.

Koyama We also need to review the definition of confidential

information and the time frame. For example, some information may become non-confidential when a certain period of time has elapsed. In order to truly penetrate awareness among employees, such judgment is important.

Make more detailed mechanisms on site after building the general organization and rules

Hirose Shin-Etsu Polymer has established a mechanism and addressed such important items as awareness-raising for individuals and how to change it through e-learning, Kawaraban and other means. However, operation methods differ at individual departments, so I want managers and leaders to customize individual methods to meet the reality of sites. I think it is important to decide how to actually put them into practice.

Hara I agree. I think we must give emphasis to and prioritize information and flexibly put it into practice by project.

Kawamura First, we need analysis. Each department has strengths and weak points, so regarding information security; each department must make its own rules. Awareness raising of leaders is also important. In order to raise individual awareness of general risk management, leaders will be the key persons.

Terashima In our company, when an incident becomes a concern, internal media covers it, and we also have a monthly security check day. The person responsible for the department makes it known to everyone, and managers check the security setup of laptop PCs of individual employees.

Kawamura The point is to check it on site.

Moderator To conclude the meeting, please tell us about the future outlook.

Hara As a tool to communicate information to suppliers, e-mail is too risky, so we want to introduce online storage using cloud computing. In relation to USB memories, which are a concern, we want to employ ones with functions to enable administrators to browse its use log when it is connected to a network.

Kawamura Information security is part of the foundation of management, and information leakage will damage customer trust. By not only making good products but also protecting information, we hope to strengthen this trust. To achieve this, we should not rely on sales departments, but all departments must collaborate with each other. In the future, I think it is necessary to conduct education by department. In particular, those responsible for procurement at individual divisions and plants must focus on information management with suppliers and study the possibilities of on-site audits and other countermeasures.

It was a pleasure to listen to these precious ideas of Fujitsu, and we want to promote our information security management by taking advantage of them. Thank you very much.

Hirose We want to proceed with information security management as a partner to mutually reduce risks with your company. We would appreciate your continued patronage and support.

Fumigating Yashima Yosaku Sheet

First in the industry folding fumigating Unique product from opinions in the field

The fumigating sheet protects forests against damage caused by pine weevils. Responding to opinions in the field, our group developed the first folding fumigating sheet in the industry. We interviewed Mr. Kohama who was involved in its planning and development.

Protection by fumigating sheet against damage by pine weevils

Parasites (*B. mucronatus* Mamiya et Enda) that uses pine weevils as media have killed many pines. When looking at the transition of damage in the past ten years, the number peaked to 1.12 million square meters in 1994, and decreased year by year, but the damaged areas expanded from the south to the north, still reaching 630,000 square meters of forest as of 2008.

Forestry business operators, including forest owners' cooperatives prevent damage by spraying chemicals or injecting the trunks, and damaged pines are incinerated, crushed, or cut down for fumigation. Fumigation is a treatment to cover damaged trees with sheets and diffuses a gas of highly volatile fumigating solutions to kill the pest. Polyethylene-based fumigating sheets were mainstream until around 2004, but due to needs for eco-friendly products by customers, biodegradable sheets are mainly used now.

Competition is tough in the fumigating sheet market, and even after switching to biodegradable sheets it was critical to differentiate our products from those of competitors. As a market survey to



Fumigating Yashima
Yosaku Sheet

grasp needs in the field, we went to observe actual fumigating work with Yashima Industry, which has the number-one share in chemicals (currently SumikaGreen Co., Ltd.) and found out such dissatisfaction about the existing fumigating sheets as "length," "weight" and the "want to use both hands."

Conventionally, mainstream fumigating sheets were rolls on which a four-meter-width sheet folded in half was wound. For this reason, entering the forest, workers were forced to bear two-meter-long rolls on their shoulders, which was a great physical burden and led to poor operational efficiency.

Responding to opinions from the field with original ideas

To solve these challenges, regarding "length," we thought about folding the sheet, instead of using rolls. We employed a gazette folding to gatefold the ends, reducing the width from four to one meter, and then by further folding the one-meter in half, we were able to fold the sheet into a 50-centimeter square. By changing the specification, we eliminated paper pipes and thus made pallet loading easy.

As for the "weight," the conventional 0.1mm sheet weighed 15kg. We therefore addressed the challenge to develop a product of 12kg by reducing the thickness to 0.08mm. The key issue was performance (quality), i.e. gas barrier property to contain the chemical gas. If the product easily cracks or its performance was deteriorated because of the thinner design, it would have been meaningless. Furthermore, putting too much emphasis on performance to make the sheet multilayered, both cost and weight would increase. We therefore cooperated with the Sheet Dept. and the R&D Center of Shin-Etsu Polymer and started with the composition of the sheet. In March 2008, we conducted tests at forestry experiment stations across Japan, realizing a mortality rate of 100% and successfully maintained the performance with lighter weight.

As for the requirement of "portability," we proposed to



Shin-Etsu Finetech Co., Ltd.
2nd Division
Packaging Materials Group
Manager

Yoshiro
Kohama

sheet protects forests

How to use the Fumigating Yashima Yosaku Sheet

Set the sheet in the carry bag and draw it out like tissue paper. The sheet can be cut to a desired size and open the gatefold to easily cover the damaged tree.



carry sheets on the back to keep both hands free. At first, we considered carrying packaged sheets on the back, but this didn't satisfy performance, durability, and pricing. We then developed an exclusive nylon-made carrying bag that could be used repeatedly. We consulted the bag maker about its functions and shape, let them use our prototypes, and continued to improve it. The first exclusive carrying bag in the industry thus became very compact-sized and easy-to-use, a highly functional bag responding to the requirements from the field.

Toward more space-saving, resource-saving and forest-friendly products

The fumigating sheet protects pines, the king of forests, and contributes to the preservation of the Japanese landscape and spiritual culture. The newly developed biodegradable sheet has a nature to be degraded by microorganisms in the ground over time, generating no waste. Also, the change of specifications resulted in a more environmental-conscious product.

The development of the folding sheet means the elimination of 1kg/roll of paper pipe, and if we assume one lot is 2,000 rolls, we can reduce 2 tons of used paper. It also makes pallet loading possible; reducing the space in the warehouse to 1/3, while increasing the loading weight on one pallet 1.5 times as much as that of conventional sheets. As we can increase the loading weight, we can reduce the frequency of transportation by half, saving transportation fuel and costs.

Forests prevent landslides and floods and also absorb carbon dioxide. Protection of forests leads to support our lives. Through products, we are contributing to not only the environment but also society.

Our current market share is 5%, and we target increasing it by ten times to 50%. Since the spring of 2011, we started to establish sales organizations at sales offices across the country, and are making all-out efforts toward this target.



Safety-focused style from Hanamaki

Hanamaki Forest Owners' Cooperative
Operations Section, Operation Team Supervisor

Koetsu Sawada

The first damage by pine weevils in Iwate Prefecture was identified in 1979. The amount of damage has increased ever since, and spread over all areas of Hanamaki City. To fumigate damaged trees, we cut them down, applied chemicals, and covered them with sheets. As conventional sheets were nearly two-meter bars, workers had to bear heavy loads when shouldering them up and down steep areas. For this reason, we requested a design that would enable hands free movement, and the current knapsack style was proposed, and based on practice in the field, was completed. Mountains have many dangers, and we hope to establish an environment with safer pest control.



Explaining how to use "Fumigating Yashima Yosaku Sheet" to members of the Hanamaki Forest Owners' Cooperative in the forest in Hanamaki



With members of the Hanamaki Forest Owners' Cooperative



Pursuing eco-friendliness and ease of use with dedication

SumikaGreen Co., Ltd.
2nd Sales Department, General Manager

Kotaro Tsuda

Fumigating sheets for pine weevils we handle were always made from polyethylene since the initial release almost 20 years ago. We started to study the possibility of biodegradability for replacements when environmental awareness was rising in society. For many years, we had been engaged in the development of various types of sheets. We had knowledge of the standards of biodegradable sheets and proposed one that nearly satisfied the functions we needed. Following that, we improved the quality several times and changed the specifications to a folding type so the sheets could be stored in a knapsack to complete an unprecedented type of fumigating sheet for pine weevils. We expect much of the Shin-Etsu Polymer Group that has a strong sense of dedication and attentive responses, and hope they continue to develop new good products.

Green products actively used in the market

Shin-Etsu Polymer develops environment-conscious products. Here are representative commercialized products.

Waterproofing product for high performance terminals

Integrated product of silicone rubber and molded plastic



Background of product development

Driven by the implementation of multiple functions in mobile phones, a credit card function has been newly added as a “wallet mobile phone,” along with one-segment TV reception and digital camera functions. To protect personal and credit information in the mobile phones, a “reliable waterproof

function” was necessary. We thus started to study the challenge to determine if our technology could offer a solution.

What was developed and its effect

Conventional waterproofing methods were based on rubber gaskets and couldn't provide sufficient waterproof performance. To solve this problem, we proposed integrated molding of silicone rubber used in automobiles and polycarbonate plastic, thus realizing improved waterproof performance, better durability against cracks and scratches when dropped and



high designability, thanks to print and paint technologies.

Future development

We expect to apply the product to smartphones, digital cameras, game consoles, and other mobile equipment. Through this technology, we hope to continue to propose eco-friendly products that can be used for many years to come.

Silicone rubber gasket, Hisui Barrier®

Supporting long and rich life in consideration of building environment

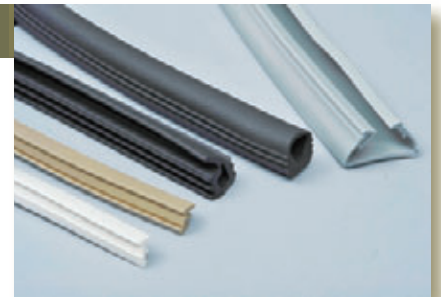


Hisui Barrier is a sealing material with water proof and flame retardant properties, made from silicone rubber. It is used for gasket with waterproof and flame retardant, and for window frames, doors of elevators, and open/close sections of fire prevention doors. Recently window frame products with fire prevention properties occupy 10% of all window frame markets.

Silicone rubber has higher weather proof property and durability compared with other materials such as PVC, chloroprene rubber, and so on. Its high performance lasts long. Moreover, its easiness of dying enables customers to design & make molding window frame products more flexible.

We pursue unique & special composition of materials, such as adjusting rubber elasticity for required shape & durability, in order to meet each customer's different request for composite structure of resin, aluminum, and multilayered glass.

Hisui barrier complies with Japanese standard of frame retardant. It will be



an inevitable material for environment-conscious houses including solar panels, and for long life houses, as well.

There are advanced laws & regulations for fire prevention, and we have high-end technologies and products of fire prevention, based on a high consciousness of it. Laws & regulations for fire prevention are gradually being established in neighboring countries, and we also have to pay attention to global trends for this. We will contribute to the protection of the environment related to housing, and to protect buildings, through the promotion of "Hisui barrier".

External wall material for construction Polymer Panel®



Strong against every environment and resource saving.
Earth and people-friendly external wall material

PVC Products
Business unit
Construction material
Division
Siding Group
Manager

Kohei
Miyamoto



Polymer Panel is an external wall material with a wide variety of features. As all colors of pigment can be mixed into the material, there are a wide variety of colors available, requiring no repainting. Almost zero maintenance is required after construction, as it is resistant against ultraviolet rays, etc., elasticity against shocks and dents, and also humidity/water resistance. These characteristics as well as low running cost after installation attracted the attention of the Ministry of Environment. The product also has heat insulation to keep heat inside in the winter and exclude outdoor summer heat and is considered effective for salt damage protection. Demonstration tests

are being conducted in Akita and Okinawa Prefectures.

Polymer Panel is a resource-saving product that employs PVC whose total energy is as small as 64% of low-density polyethylene, having the smallest environmental load and CO₂ emissions compared with other general-purpose resins. Compared with ceramic materials that account for about 80% of external wall materials, the product is much lighter in weight, making it possible to load a large volume of the product on a single truck. For this reason, its energy consumption for transportation is 1/3 and can be considered an excellent product in terms of lifecycle assessment (LCA*). It is also excellent in terms of workability, generating little waste. Polymer Panel is strong against every construction environment, and is a global environment-friendly external wall material.

The product has recently been

employed in refurbishing city-provided housing, elementary schools, community centers and other public buildings and also enjoys a high word search ratio on major search engines, with inquiries from end users (owners) in addition to constructors.

Our challenge from now on is to improve designability and fireproof performance. The product already satisfies the standards for fireproof/semi-fireproof buildings by conventional construction methods as well as semi-fireproof buildings in a 2 x 4 construction method, but fireproof performance of new buildings demand a higher performance. We target offering improved products meeting such requirements with environmental considerations like energy saving and durability.

*LCA: Quantification of impact of a product on the environment by totaling resource consumption and environmental load of the "life of the product" from raw material collection to manufacture, transportation, sales, use, disposal and recycling.

High-frequency conductive noise suppression SPINPEDA®



From loud noise to quiet environments.
Groundbreaking new product that suppresses the source

R&D Center
R&D Center
Intellectual Property
Group
Manager

Toshiyuki
Kawaguchi



SPINPEDA is a high-frequency conductive noise suppressor made of conductive ceramics and is as thick as 25nm. It is mainly used in flexible boards of optical modules to communicate optical and electric signals, and can suppress high frequency noise (in GHz band) generated inside and running in the circuit near the source of the noise. The optical module is used for optical

transmission stations, corporate servers, etc.

Every electronic circuit generates unwanted electric signals apart from the main electric signals. Such unwanted electric signals impede the smooth operation of electronic circuits and, in the case of communication, interrupt the transmission of precision digital information. SPINPEDA can eliminate such signals. If it is positioned on the transmission line on the 50-ohm MSL (micro strip line) and a 10GHz noise signal is applied, it can eliminate a noise of about 40dB. SPINPEDA is characterized by its ability to be easily installed near the noise source, thanks to its 25nm thinness and flexible designability, achieving a

substantial suppression effect. However, noises generated from signal lines also move onto, for example, nearby power cables (crosstalk), so the product can be installed on the power line to eliminate noise. If noise can be suppressed, frequency to check data and resend it can be reduced, while increasing signal transmission speed, reducing the use of extra energy.

It is expected that signals will have more speed and higher frequencies, and that their use will expand to industrial equipment and household electronic devices. Expectations for SPINPEDA to be used to eliminate noise from the source are very much increasing.

P.T. Shin-Etsu Polymer Indonesia

“Very slow but steady” business and environmental activities in Indonesia

Republic of Indonesia

- Population: 237.6 million (as of July 2010)
 - Area: 1,992,570km² (5.1 times the size of Japan)
 - Capital: Jakarta
 - Language: Indonesian
 - Religion: Islam (90%), Hindu, Christianity, etc.
 - Per capita GDP: 3,015 dollars (2010)
- (Source) JETRO website

P.T. Shin-Etsu Polymer Indonesia



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West Java, Indonesia
- TEL : +62-21-890-5417
- FAX : +62-21-890-5416

President Director

Hiroto
Nanayama



Karawang International Industrial City (KIIC)

About 56km from the capital with highway access, KIIC is the third industrial park near Jakarta. Currently, the park has about 100 companies including many Japanese companies in the fields of automobiles, electric products/semiconductors, food and daily commodities.



Main production center of 200mm wafer case for the world

P.T. Shin-Etsu Polymer Indonesia (“SI”) was established in November 1997, capitalized by Shin-Etsu Polymer Co., Ltd. (99.4%) and Niigata Polymer Co., Ltd. (“NP”) and started operating in September 1998.

As a member of the Shin-Etsu Polymer Group, SI started as the first overseas base to produce wafer cases. NP manufactures 300mm wafer cases in Japan, while SI mainly produces 150mm and 200mm wafer cases. In about ten years, the company grew to produce about 1/3 of 200mm wafer cases around the world.

The total site area of SI is 50,749 square meters, and the floor area is 5,620 square meters. All the employees are Indonesian, except for two Japanese staff, i.e. the president and technical support posted from Japan.

Realizing high quality and stable supply through localization

SI was founded in Indonesia as the second production base of wafer cases, and owns a clean room comparable to that of any other company in Indonesia. Now, the company manufactures products under an environment enabling it to maintain a level of quality equivalent to NP. As the company has a system to produce 80,000 cases for 200mm monthly, SI has become the “main factory of the world” producing about 1/3 of total production.

As the main factory, we strive to improve quality as the basics of our job, with 5S activities. Under the belief that “5S improves 3Q (quality of products, employees and the company),” SI earnestly tackles this challenge. At present, we conduct mutual 5S audits with other overseas production bases like SI, Shin-Etsu Polymer (Malaysia) Sdn. Bhd. as well as cross-industry 5S exchanges within KIIC.

As the scale of the company has reached a globally important role, it must become a site that can stably supply products to customers even at the time of an emergency. NP introduced BCM since 2006, and toward the first implementation of BCM as a Group overseas site, we have been in the process of preparing local employees since October 2010.

Though SI is a Japanese-affiliated company, local employees are appointed managers of divisions, regardless of line and staff other than preparation for BCM. To localize a company, it is essential to understand the local race and culture and based on this, communicate with them. For this reason, SI heralded “mutual help” (GOTONG ROYONG) and discussion (WUSYAWARAH) as the first key phrases. We have as many opportunities to exchange with local employees as possible, believe in each other and make slow but steady progress like Indonesian state policies.



The progress of 5S activities on display in a corridor



Meeting starts at 8AM every morning. Mr. Nanayama, President, attends the meeting not only to grasp the day's progress, but also to explain focus points and production status but also to make contact with employees

Contributing to five neighboring villages through community associations, etc.

Indonesian Company Law requires companies to conduct CSR activities. There are about 100 companies in KIIC, especially Japanese-affiliated companies, and as a member of the community association established by some of the companies based in KIIC, we have been contributing and supporting activities to five villages in the neighborhood of the industrial park. What we have continued since 2001 includes the supply of nutritional/baby foods to infants

Voice — Opinions of local officials —

Penetrate BCM into every corner of the company to prepare for emergencies

Dian Anggraini Rahayu
(responsible for BCM)



BCM is very important for manufacturers. In Indonesia, there are already companies that

have introduced BCM, and SI is preparing for this to stand on the same ground with other companies. We didn't know anything about it when it was introduced, but setting NP, that also manufacture wafer cases and has already introduced BCM, as our example, we plan to collect data based on content assuming earthquakes and fires.

BCM is not complete when it is

established, and it is meaningless unless all employees share similar awareness. We have conducted emergency training in the past, so we can take action subconsciously, and we plan to conduct training until BCM penetrates the company. Preparation of documents is painstaking, but we will continue to update them so we can use them properly in the time of emergencies.

Increase the level of skill and always address quality improvement

SI started operating as a Copy Exactly of NP, using a factory of the same design and the same manufacturing equipment. NP that produces the cutting edge 300mm wafer case has improved its quality control system, along with the increasingly stricter quality requirements by customers, but SI has continued to manufacture products on the same quality level from the beginning. What we learned from a growing number of customers

along with an increasing market share was the improvement of quality standards required for matured wafer cases.

For this reason, in order to improve the standard of quality control to the level of NP, we are targeting becoming a Copy Exactly of the current NP by installing analyzers, conducting mutual checkup, and exchange of information on points to be improved in processes, etc.

Michael Rudy Santoso
(responsible for quality)



Going forward, with the pride as the main factory of 200mm wafer cases, we want to improve our skills with inspectors.

Build an on-time delivery system to eliminate waste

Ir Polaris Simarmata
(responsible for operations)



I have been working for SI since it started manufacturing, and during that time, I have been engaged in various operations including raw material procurement, purchasing and import/export management, while playing the role of leader to achieve ISO9001 and ISO14001 certifications. What I keep in mind most is an on-time delivery system. While the amount of

production has been increasing, I pay attention to lead-time and stock reduction as much as possible.

Following the restoration after the Great East Japan Earthquake, I really feel the key is the supply chain with suppliers, customers, and SI.

We plan to further strengthen our united efforts.

up to five years, contribute three cows and 30 goats for a Sacrifice Festival and provide scholarships to 100 junior and senior high school students in poverty.

Between 2008 and 2009 when SI assumed the role of leader of the association, we conducted factory tours within the industrial complex and a review of the scholarship system. This was because when we heard from children who had received scholarships, that they wanted to get typical jobs such as firefighter or policeman, not knowing much about the companies in the industrial park. As we wanted to increase future career options, we planned and started an annual factory tour. In relation to the scholarship system, different students received money in junior and senior high school, making consistent education difficult. We thus established a new scholarship system, and though the number is limited, we have created an environment where children can devote themselves to elementary and junior high school education without worrying about tuition fees.

Other than the community association, we also support KIIC's CSR program. In 2008 "Telaga Desa" was founded, an agricultural park where a vegetable farm, catfish aquaculture, nursery for cultivated trees, etc., are operated under the assistance and guidance of a university. To maintain the facility, we make a donation every year.

We really feel that though social contribution may be difficult for a single company to do, if we can gather supporting companies, we can then coexist and flourish together with people in neighboring communities.



Agricultural Park

1. Sayur Bayam	100 kg
2. Sayur Kangkung	100 kg
3. Sayur Paku	100 kg
4. Sayur Buncis	100 kg
5. Sayur Brokoli	100 kg
6. Sayur Pakcoy	100 kg
7. Sayur Lodeh	100 kg
8. Sayur Tauge	100 kg
9. Sayur Kacang Panjang	100 kg
10. Sayur Buncis	100 kg
11. Sayur Pakcoy	100 kg
12. Sayur Lodeh	100 kg
13. Sayur Tauge	100 kg
14. Sayur Kacang Panjang	100 kg
15. Sayur Buncis	100 kg
16. Sayur Pakcoy	100 kg
17. Sayur Lodeh	100 kg
18. Sayur Tauge	100 kg
19. Sayur Kacang Panjang	100 kg
20. Sayur Buncis	100 kg
21. Sayur Pakcoy	100 kg
22. Sayur Lodeh	100 kg
23. Sayur Tauge	100 kg
24. Sayur Kacang Panjang	100 kg
25. Sayur Buncis	100 kg
26. Sayur Pakcoy	100 kg
27. Sayur Lodeh	100 kg
28. Sayur Tauge	100 kg
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31. Sayur Pakcoy	100 kg
32. Sayur Lodeh	100 kg
33. Sayur Tauge	100 kg
34. Sayur Kacang Panjang	100 kg
35. Sayur Buncis	100 kg
36. Sayur Pakcoy	100 kg
37. Sayur Lodeh	100 kg
38. Sayur Tauge	100 kg
39. Sayur Kacang Panjang	100 kg
40. Sayur Buncis	100 kg
41. Sayur Pakcoy	100 kg
42. Sayur Lodeh	100 kg
43. Sayur Tauge	100 kg
44. Sayur Kacang Panjang	100 kg
45. Sayur Buncis	100 kg
46. Sayur Pakcoy	100 kg
47. Sayur Lodeh	100 kg
48. Sayur Tauge	100 kg
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50. Sayur Buncis	100 kg
51. Sayur Pakcoy	100 kg
52. Sayur Lodeh	100 kg
53. Sayur Tauge	100 kg
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55. Sayur Buncis	100 kg
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57. Sayur Lodeh	100 kg
58. Sayur Tauge	100 kg
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60. Sayur Buncis	100 kg
61. Sayur Pakcoy	100 kg
62. Sayur Lodeh	100 kg
63. Sayur Tauge	100 kg
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66. Sayur Pakcoy	100 kg
67. Sayur Lodeh	100 kg
68. Sayur Tauge	100 kg
69. Sayur Kacang Panjang	100 kg
70. Sayur Buncis	100 kg
71. Sayur Pakcoy	100 kg
72. Sayur Lodeh	100 kg
73. Sayur Tauge	100 kg
74. Sayur Kacang Panjang	100 kg
75. Sayur Buncis	100 kg
76. Sayur Pakcoy	100 kg
77. Sayur Lodeh	100 kg
78. Sayur Tauge	100 kg
79. Sayur Kacang Panjang	100 kg
80. Sayur Buncis	100 kg
81. Sayur Pakcoy	100 kg
82. Sayur Lodeh	100 kg
83. Sayur Tauge	100 kg
84. Sayur Kacang Panjang	100 kg
85. Sayur Buncis	100 kg
86. Sayur Pakcoy	100 kg
87. Sayur Lodeh	100 kg
88. Sayur Tauge	100 kg
89. Sayur Kacang Panjang	100 kg
90. Sayur Buncis	100 kg
91. Sayur Pakcoy	100 kg
92. Sayur Lodeh	100 kg
93. Sayur Tauge	100 kg
94. Sayur Kacang Panjang	100 kg
95. Sayur Buncis	100 kg
96. Sayur Pakcoy	100 kg
97. Sayur Lodeh	100 kg
98. Sayur Tauge	100 kg
99. Sayur Kacang Panjang	100 kg
100. Sayur Buncis	100 kg



Award-giving ceremony of the scholarship system



SI trees planted in May 2008 have grown taller than us. Mr. Nanayama (center) visiting the agricultural park with KIIC administrators.

Employee benefits and welfare

Soccer field built on site for the soccer-loving employees. Practice matches with other teams in the industrial park are held, and after work, employees continue with their practice until sunset.



Sport events planned by employees are a marathon, soccer, volleyball, etc. For about two months, games and matches will continue and on Independence Day the finals will take place.

Green Activities Overview

Our company has been promoting Green Activities on a Group-wide basis since fiscal 2000.

Since fiscal 2003, we have set up and addressed three-year mid-term targets and we shall do our best to achieve the 3rd Mid-term Targets in place from fiscal 2009.

Basic Policy

We recognize the Green Activities as those of productivity improvement from the viewpoint of the environment and have been promoting them as deeply rooted corporate activities.

The 3rd Mid-term Targets of the Green Activities (fiscal 2009 to fiscal 2011)

Based on the results and a review of the 2nd Mid-term Targets (fiscal 2006 to fiscal 2008) we set up the 3rd Mid-term Targets toward fiscal 2011 to promote environmental conservation activities.

1. Mid-term Targets for Energy-saving

- ① We will achieve a 35% reduction of produced CO₂ emission units (against that of the reference year 1994) by fiscal 2011.
- ② Each plant will reduce its energy consumption when compared with actual units of fiscal 2008 by 3%.

2. Mid-term Targets for Waste Reduction and Recycling

- ① We will maintain a zero emission rate (less than 1% emission rate).
- ② We will reduce basic waste disposal units against that of results in fiscal 2008 by 3%.
※Emission rate = (amount of land fill + simple incineration)/total amount of waste x 100 (%)

3. Mid-term Targets for Office Sections

We will reduce energy consumption and CO₂ emissions when compared with actual results of fiscal 2008 by 10%.

Summary of FY2010 Activities and Results

● Energy-saving Activities

Item	Target	FY2009	FY2010
Specific energy consumption in production (CO ₂ /million yen)	35% reduction compared with reference year of FY1994	6.3% reduction not achieved	13.8% reduction not achieved(※)
Specific energy consumption in production (6 plants)	3% reduction compared with actual units of reference year of FY2008 (1% reduction/year)	1% reduction achieved at 5 plants	2% reduction achieved at 4 plants

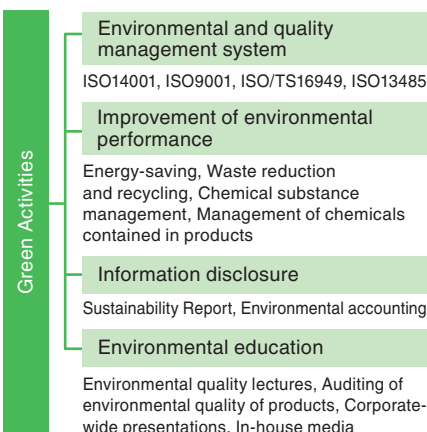
● Waste Reduction/Recycling Activities

Item	Target	FY2009	FY2010
Emission rate	Maintenance and continuance of zero emission (less than 1%)	0.58% achieved	0.36% achieved
Specific waste discharge consumption in production (kg/million yen)	3% reduction against results of FY2008 (1% reduction/year)	1% reduction achieved at 3 plants	2% reduction achieved at 3 plants

● Office Sections Activities

Item	Target	FY2009	FY2010
Energy consumption (kℓ)	10% reduction compared with actual units of FY2008	9.1% reduction not achieved	19.1% reduction not achieved
CO ₂ emissions (t-CO ₂)	10% reduction against results of FY2008	25.6% reduction achieved	37.6% reduction achieved

※Since the Lehman Shock in 2008, though we saw a recovery trend, we did not reach standards of production prior to this, resulting in an increase in specific energy consumption. Afterwards, thanks to a slight recovery in the quantity of production, we have seen improvements but not been able to reach targets



Green Activities Promotion Committee

- Chairman: President
- Vice Chairman: Director, Technology Group
Director, Administration & Public Relations Group

Secretariat

Technology Group, Environmental Control & Safety Group
Administration & Public Relations Group

Energy-saving Subcommittee

Recycling Subcommittee

Office Subcommittee

Plant and Business Sites Green Activities Subcommittee

Plants

Tokyo Plant, Nanyo Plant, Kodama Plant

Production Subsidiaries

Shinano Polymer Co., Ltd., Niigata Polymer Co., Ltd., Urawa Polymer Co., Ltd., SAN-ACE co., Ltd.

Head Office, Branch and Sales Offices

Head Office, Osaka Branch, Nagoya Branch, Fukuoka Branch, Sendai Sales Office, Nagano Sales Office

Sales Subsidiaries

Shin-Etsu Finetech Co., Ltd.
Shin-Etsu Unit Co., Ltd.

Overseas Subsidiaries

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

Activities associated with biodiversity

To alleviate the impact of business activities upon biological diversity, the Shin-Etsu Polymer Group is actively engaged in initiatives against contamination from the effects of business activities upon biodiversity such as (1) proper treatment of industrial waste water, (2) non-use of hazardous substances contained in products and (3) reduction of VOC (volatile organic compounds) exhausts. We also re-evaluate the impact and make efforts to maintain biological diversity and sustainable use.

Revision of the Shin-Etsu Group's Basic CSR Policy

“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.”

We added the above action policy to the group's Action Policy in April 2010 to strengthen our initiatives to protect biological diversity.

Site use status of production plants

We summed up the site use status of domestic and overseas production plants.

(Unit: m²)

Domestic Plants & Subsidiaries		Tokyo Plant	Nanyo Plant	Kodama Plant	Shinano Polymer Co., Ltd.			Urawa Polymer Co., Ltd. Kurihashi Plant	Niigata Polymer Co., Ltd. East + West Plant	Total	Shin-Etsu Unit Co., Ltd. Urawa Plant
					Shiojiri Plant	Nagano Plant	Miyabuchi Plant				
Sites, etc.	Site area	76,059	34,500	21,171	16,200	4,511	1,432	4,512	59,128	217,513	2,653
	Building area	36,702	8,227	8,287	5,230	918	521	2,676	15,144	77,705	2,185
	Floor area	48,632	10,602	18,401	10,050	1,504	969	3,740	25,087	118,985	2,185
Pavement, etc.	Paved area	35,461	22,636	7,574	3,610	1,160	911	1,771	7,666	80,789	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%	25%	13%	1%

Note: Though Shin-Etsu Unit Co., Ltd. is not a production plant; the company conducts cleaning activities at the Urawa Plant, and is thus given as a reference

(Unit: m²)

Overseas Plants & Subsidiaries		Suzhou Shin-Etsu Polymer Co., Ltd.	Shin-Etsu Polymer (Malaysia) Sdn. Bhd.	P.T.Shin-Etsu Polymer Indonesia	Shin-Etsu Polymer Hungary Kft.	Shin-Etsu Polymer India Pvt.Ltd.	Total
Sites, etc.	Building area	19,037	28,545	5,218	3,181	6,507	62,488
	Floor area	19,909	39,839	5,267	3,366	6,507	74,888
	Paved area	11,200	24,226	4,448	5,325	4,047	49,246
Pavement, etc.	Water surface area	0	0	302	0	400	702
	Green area	17,914	6,522	40,731	5,603	4,000	74,770
Green space	Green area percent	36%	11%	80%	40%	10%	35%

Water use status of production plants

We summed up the water use status of domestic and overseas production plants.

(Unit: m³)

Domestic Plants & Subsidiaries		Tokyo Plant	Nanyo Plant	Kodama Plant	Shinano Polymer Co., Ltd.	Urawa Polymer Co., Ltd. Kurihashi Plant	Niigata Polymer Co., Ltd. East + West Plant	Total	Shin-Etsu Unit Co., Ltd. Urawa Plant
Usage	Industrial water	141,837	155,717	0	0	0	112,217	409,771	0
	Total	149,723	156,518	16,412	24,492	2,130	129,000	478,275	6,060
	Wastewater	Total	46,238	156,518	16,412	24,492	2,130	105,211	351,001

Note 1: Industrial water includes groundwater

Note 2: Though Shin-Etsu Unit Co., Ltd. is not a production plant; the company conducts cleaning activities at the Urawa Plant, and is thus given as a reference

(Unit: m³)

Overseas Plants & Subsidiaries		Suzhou Shin-Etsu Polymer Co., Ltd.	Shin-Etsu Polymer (Malaysia) Sdn. Bhd.	P.T.Shin-Etsu Polymer Indonesia	Shin-Etsu Polymer Hungary Kft.	Shin-Etsu Polymer India Pvt.Ltd.	Total
Usage	Industrial water	—	—	12,364	—	—	12,364
	Total	77,045	133,629	12,364	288	4,842	228,168
	Wastewater	Total	42,583	805	12,364	288	4,842

Note: Water supply includes groundwater

(Unit: ton per year)

Actual VOC emissions into the atmosphere in FY2010

Our group reports the handling amount of 20 substances subject to emission reduction (t/year)(※1) and the volume of emissions into the atmosphere (t/year) to four electric and electronic industry organizations.

In FY2010, VOC emissions into the atmosphere were reduced by 15.2% compared to the previous year.

Facility type	Plants subject to investigation (※2)	Tokyo Plant	Nanyo Plant	Kodama Plant	Shinano Polymer Co., Ltd.	Urawa Polymer Co., Ltd.	Niigata Polymer Co., Ltd.	Total
Facility type	2.Glueing	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	3.Printing	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4.Chemical product manufacturing	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	5.Industrial cleaning	0.0	0.0	0.0	6.5	0.0	0.0	6.5
	6.VOC storage	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	6 other than facility types	0.0	0.0	12.7	0.0	0.0	1.9	14.6
Total	4.5	0.0	12.7	6.5	0.0	1.9	25.6	

※1: Toluene, Xylene, MEK, IPA, ethanol, butyl acetate, ethyl benzene, MIBK, etc

※2: Plant with an annual handling amount of each substance in the 20 substances subject to investigation ≥ 1t/year

Environmental and Quality Management System

All domestic and overseas production sites of the Shin-Etsu Polymer Group have been awarded with the ISO9001 and the ISO14001 certification, apart from the recently established Shin-Etsu Polymer India Pvt. Ltd. In order to further enhance customer satisfaction, two divisions (Electronic Device Business Unit and FI Division) were certified on a divisional basis.

Environment Management System

To promote ISO14001 across the organization, each general manager appoints an environmental management representative based on corporate-wide environmental policies, and heads of departments serve as departmental environmental conservation representatives to promote environmental management.

Environmental management implementation plans of individual departments are prepared on the basis of the environmental objectives and targets of all the sites set forth at the beginning of each fiscal year and approved after a review by the plant manager. The general manager reviews the progress and extent of accomplishment of the implementation plan through submissions of interim and final reports. Furthermore, an annual inspection by the Environmental Conservation Committee is held for an improvement and enhancement of environmental conservation.

Quality Management System

To promote ISO9001 across the organization, each general manager in the role of an executive manager sets forth quality policies and appoints a quality representative to establish and maintain the total quality management system. Each department builds and operates an operational system and by implementing PDCA cycles, improves the effectiveness of the system, quality

of products and efficiency of operations. Each general manager reviews the progress of improvement through monthly reports, achievement review sessions and management reviews and provides the necessary instructions.

ISO/TS16949 Automobile Sector Quality System Standards

ISO/TS16949 is a standard comprising ISO9001 requirements and additional technical specifications (TS) unique to the automobile industry, and it is imperative for manufacturers of automobile parts and components to obtain this certification.

ISO13485 Medical Device Quality Management System

ISO13485 omits some ISO9001 requirements, and adds requirements unique to medical devices for the remaining ISO9001 requirements.

ISO/IEC17025

The standard is based on ISO9001 and added with requirements specific to laboratories and calibration organizations. We can attach certification marks to the certificates issued by such laboratories and organizations and increase reliability as globally recognized certificates.

List of ISO14001 Certification

	Plants & Subsidiaries	Approval Date	Registration Number	Expiry Date	Authority	Applied Specification
Domestic Plants & Subsidiaries	Tokyo Plant	2001.07.23 2010.07.23	JCQA-E-0270	2013.07.22	Japan Chemical Quality Assurance Ltd.	ISO14001:2004
	Nanyo Plant	2001.02.26 2010.02.26	JCQA-E-0232	2013.02.25	Japan Chemical Quality Assurance Ltd.	ISO14001:2004
	Kodama Plant	1999.01.11 2011.01.11	JCQA-E-0040	2014.01.10	Japan Chemical Quality Assurance Ltd.	ISO14001:2004
	Shinano Polymer Co., Ltd.	1999.04.05 2011.04.05	JCQA-E-0056	2014.04.04	Japan Chemical Quality Assurance Ltd.	ISO14001:2004
	Urawa Polymer Co., Ltd.	2001.04.23 2010.04.23	JCQA-E-0252	2013.04.22	Japan Chemical Quality Assurance Ltd.	ISO14001:2004
	Niigata Polymer Co., Ltd.	2001.11.26 2010.06.18	EMS 562957	2013.11.25	BSI Group Japan K.K.	ISO14001:2004
	Shin-Etsu Finetech Co., Ltd.	2005.08.01 2011.08.01	JCQA-E-0679	2014.07.31	Japan Chemical Quality Assurance Ltd.	ISO14001:2004
Overseas Plants & Subsidiaries	Suzhou Shin-Etsu Polymer Co., Ltd.	2001.11.16 2009.09.18	E3020	2012.09.18	Shanghai NQA Certification Co.,Ltd.	ISO14001:2004
	Shin-Etsu Polymer (Malaysia) Sdn.Bhd.	2000.09.27 2010.04.12	E209041	2013.01.29	Bureau Veritas Certification Malaysia	ISO14001:2004
	P.T.Shin-Etsu Polymer Indonesia	2002.01.12 2011.01.12	GB02/54090	2014.01.12	SGS United Kingdom Ltd. Systems & Services Certification	ISO14001:2004
	Shin-Etsu Polymer Hungary Kft.	2006.11.29 2009.10.29	HU13865QE	2012.11.28	Bureau Veritas Certification Hungary	ISO14001:2004

List of ISO9001 Certification

Plants & Subsidiaries	Approval Date	Registration Number	Expiry Date	Authority	Range of Products and Services	Applied Specification
Tokyo Plant	1998.01.12 2010.01.12	JCQA-0295	2013.01.11	Japan Chemical Quality Assurance Ltd.	Development and manufacture of laminated sheet products, calendar sheet products and wrapping film; manufacture of synthetic resin corrugated plates; manufacture and outsourcing management of synthetic resin compounds	ISO 9001:2008
Nanyo Plant	2000.03.13 2009.03.13	JCQA-0662	2012.03.12	Japan Chemical Quality Assurance Ltd.	Development, manufacture and order receipt of hard vinyl chloride and related products; manufacture of hard vinyl chloride corrugated plates	ISO 9001:2008
Kodama Plant	1997.03.03 2011.02.01	2115663	2012.03.02	Bureau Veritas Japan Co., Ltd.	Development and manufacture of silicone rubber roll products, blade products for OA equipment and silicone rubber products for medical, science and chemical industries	ISO 9001:2008
Electronic Device Business Unit (Technology/Manufacturing Unit 3rd Development Department)	2003.06.23 2009.06.23	JCQA-1277	2012.06.22	Japan Chemical Quality Assurance Ltd.	Development and design of electronic devices and related products (rubber contacts and related products) and manufacture management of subsidiary companies	ISO 9001:2008
Shinano Polymer Co., Ltd. Shiojiri Plant Electronic Device Business Unit (Quality Assurance Department, Sales Unit) Electronic Device Business Unit (Osaka Branch, Nagoya Branch) Shin-Etsu Polymer Europe B.V. Shin-Etsu Polymer Shanghai Co.,Ltd.	1996.12.25 2010.12.20	2073082	2013.12.19	Bureau Veritas Japan Co., Ltd.	Development, design and manufacture of inter connectors and rubber contacts	ISO 9001:2008
Shinano Polymer Co., Ltd. Nagano Plant, Miyabuchi Plant	1998.07.06 2010.06.01	1614493	2013.07.05	Bureau Veritas Japan Co., Ltd.	Manufacture of silicone rubber products for medical, scientific and chemical industries	ISO 9001:2008
Urawa Polymer Co., Ltd. Kurihashi Plant, Omiya Plant	1997.03.03 2009.03.03	JCQA-0196	2012.03.02	Japan Chemical Quality Assurance Ltd.	1. Development and manufacturing of carrier tapes 2. Development and outsourcing management of cover tapes	ISO 9001:2008
High Technology Products Business Unit FI Division Niigata Polymer Co., Ltd.	1997.03.03 2010.06.18	FM 562956	2012.03.02	BSI Group Japan K.K.	Development, manufacture, marketing and sales of injection molded wafer cases as well as parts and components for electronic equipment	ISO 9001:2008
Shin-Etsu Finetech Co., Ltd.	2002.07.29 2011.07.29	JCQA-1131	2014.07.28	Japan Chemical Quality Assurance Ltd.	Design, development, management of contract manufacturing, supply and sales of manufactured goods of various synthetic resins and rubber (polystyrene, vinyl chloride, silicone rubber, etc.)	ISO 9001:2008
Suzhou Shin-Etsu Polymer Co., Ltd.	1997.12.31 2009.09.18	33102	2012.09.18	Shanghai NQA Certification Co.,Ltd.	Production and service of silicone rubber products (including keyboard series, connector series, drum cleaning blade and doctor series)	ISO 9001:2008
Shin-Etsu Polymer (Malaysia) Sdn. Bhd.	1996.10.16 2009.05.07	208295	2012.05.07	Bureau Veritas Certification Malaysia	1.Manufacture of silicone rubber contact (silicone elastomer switches), plastic buttons and related products including silicone elastomer connectors for electrical and electronic instruments and appliances. (Plant 1) 2.Manufacture of silicone rubber products for medical equipment, electrical and electronic industries and seal packing materials. (Plant 2) 3.Design and manufacture of embossed carrier tape for electronics and electrical parts. (Plant 2) 4.Manufacture of silicone elastomer roller for office automation devices (Plant 2)	ISO 9001:2008
P.T. Shin-Etsu Polymer Indonesia	2001.01.03 2010.01.03	ID04/0381	2013.01.03	SGS United Kingdom Ltd. Systems & Services Certification	Manufacture of wafer cases produced by injection molding	ISO 9001:2008
Shin-Etsu Polymer Hungary Kft.	2005.11.16 2009.10.29	HU13865 QE	2012.11.28	Bureau Veritas Certification Hungary	Production and related logistical activities of keypads for electronic appliances	ISO 9001:2008
Shin-Etsu Polymer India Pvt. Ltd.	2009.07.04 2010.07.13	IND97257/R1	2012.07.03	Bureau Veritas Certification (India) Pvt. Ltd.	Manufacture and despatch of plastic and rubber components	ISO 9001:2008

List of ISO/TS16949 Certification

Plants & Subsidiaries	Approval Date	Registration Number	Expiry Date	Authority	Range of Products and Services	Applied Specification
Shinano Polymer Co., Ltd. Shiojiri Plant Electronic Device Business Unit (Quality Assurance Department, Sales Unit) Electronic Device Business Unit (Osaka Branch, Nagoya Branch) Shin-Etsu Polymer Europe B.V. Shin-Etsu Polymer Shanghai Co.,Ltd.	2008.04.15 2010.12.20	(IATF)114472 (BVC)JPN-12044/TS	2013.12.19	Bureau Veritas Certification	Development, design and manufacture of inter connectors and rubber contacts	ISO/TS 16949-Third edition
Suzhou Shin-Etsu Polymer Co., Ltd.	2005.09.10 2009.09.26	(IATF)0089143 (NQA)T2358	2012.09.25	Shanghai NQA Certification Co., Ltd.	Manufacture of silicone rubber keys and gum connectors for automobiles	ISO/TS 16949:2009
Shin-Etsu Polymer (Malaysia) Sdn.Bhd.	2008.08.16	(IATF)71109 (BVC)MYS-233097	2011.08.15	Bureau Veritas Certification	Manufacture of rubber contact	ISO/TS 16949-Second edition
Shin-Etsu Polymer Hungary Kft.	2008.10.27	(IATF)73668 (BVC)HUN-233257	2011.10.26	Bureau Veritas Certification	Manufacture of silicone rubber components	ISO/TS 16949-Second edition

List of ISO13485 Certification

Plants & Subsidiaries	Approval Date	Registration Number	Expiry Date	Authority	Range of Products and Services	Applied Specification
Kodama Plant	2011.02.21	DNKFR93689A	2012.03.02	Bureau Veritas Certification	Development and manufacture of silicone rubber products for medical devices	DS/EN ISO13485:2003
Shinano Polymer Co., Ltd. (Nagano Plant and Miyabuchi Plant)	2007.08.22 2010.06.10	DNKFR92693A	2013.06.09	Bureau Veritas Certification	Manufacture of silicone rubber products for medical uses	DS/EN ISO13485:2003
Shin-Etsu Polymer (Malaysia) Sdn.Bhd.	2007.04.17 2010.04.23	BVC201001	2013.04.17	Bureau Veritas Certification Malaysia	Manufacture of silicone rubber products for medical equipment	ISO13485:2003

List of ISO/IEC17025 Certification

Plants & Subsidiaries	Approval Date	Registration Number	Expiry Date	Authority	Range of Products and Services	Applied Specification
Shin-Etsu Polymer Co., Ltd. (Chemical Analysis Center)	2001.04.11 2009.04.11	RTL00870	2013.04.10	The Japan Accreditation Board for Conformity Assessment	Chemical testing (JIS K 0117, JIS K 5551:2002 Appendix 1)	JIS Q17025:2005 (ISO/IEC 17025:2005)

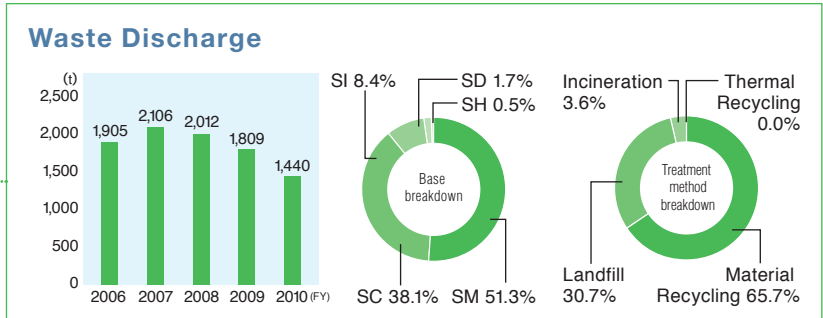
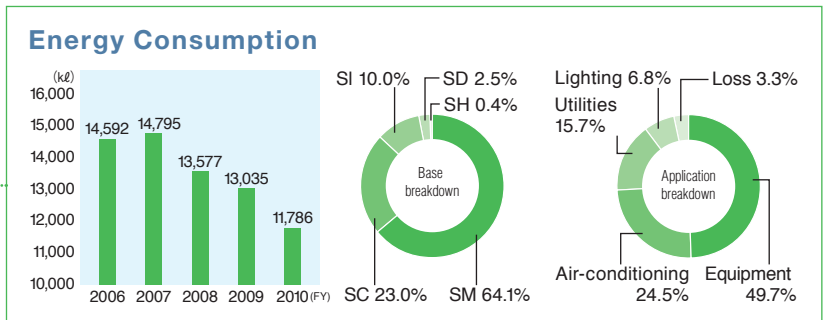
Environmental Efforts of Overseas Production Plants & Domestic Offices

Energy consumption at our five overseas production plants was equivalent to 83.5% of 14,121kl of that of domestic production plants, while waste discharge was 47.4% of 3,035 tons compared to domestic production plants. In addition, domestic office energy consumption was 0.9%.

Environmental Data of Overseas Production Plants (fiscal 2010)

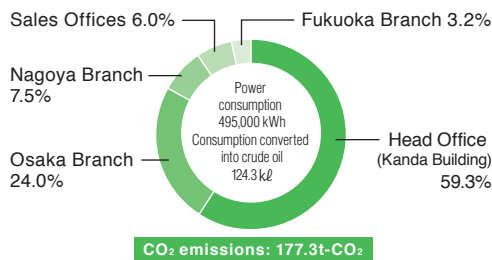
SH: Shin-Etsu Polymer Hungary Kft.
 SM: Shin-Etsu Polymer (Malaysia) Sdn.Bhd.
 SC: Suzhou Shin-Etsu Polymer Co., Ltd.
 SI : P.T.Shin-Etsu Polymer Indonesia
 SD: Shin-Etsu Polymer India Pvt. Ltd.

Energy Consumption	11,786 kl
Specific energy consumption in production	76.1 liters / thousand dollars
CO ₂ emissions	26,342 tons of CO ₂
Specific CO ₂ emissions in production	170.2 kg / thousand dollars
Waste Discharge	1,440 tons
Specific waste discharge in production	9.3 kg / thousand dollars

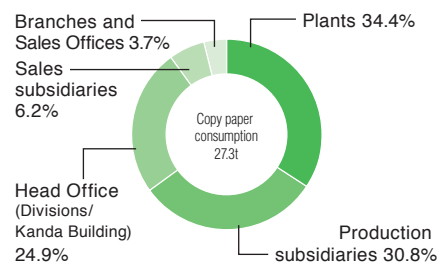


Environmental Data of Domestic Offices (fiscal 2010)

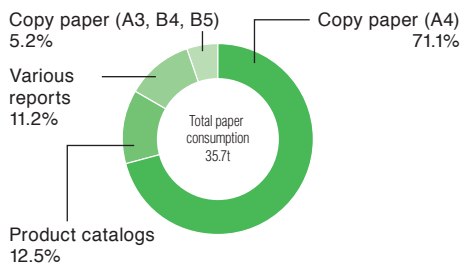
Energy (power) consumption



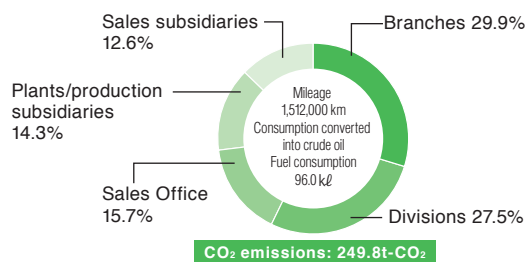
Copy paper consumption (plants + offices)



Total paper consumption (plants + offices)



Official vehicle mileage in fiscal 2010



1) Data of offices located in plants are included in data of plants. 2) Data of domestic sales subsidiaries are included in data of domestic offices

Countermeasures for the Great East Japan Earthquake

—Power consumption reduction measures in summer—

Affected by the Great East Japan Earthquake on March 11, power shortage became a critical issue. In the service areas of Tokyo Electric Power Company (TEPCO) and Tohoku Electric Power Company (Tohoku-EPCO), electricity users whose contracts are for 500kW or more were obliged to reduce maximum power consumption by 15% against that of the peak time of the previous year between July and September, and penalties were established. The Shin-Etsu Polymer Group addressed power saving measures to respond to this situation.

Initiatives at plants

Among our plants, the Tokyo Plant, Kodama Plant, Kurihashi Plant of Urawa Polymer (in the service area of TEPCO) and Niigata Polymer (in the service area of Tohoku-EPCO) were subject to the Restriction of Electricity Use under Article 27 of the Electricity Business Act. The subject periods were from July 1 to September 22 in TEPCO service area and from July 1 to September 9 in Tohoku-EPCO service area, and hours are between 9 AM and 8 PM (excluding Saturdays, Sundays and holidays).

Measures for reduction

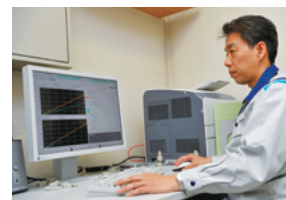
1. We applied for a joint use restriction scheme to respond to the requirement.

- ① Three plants: Tokyo Plant, Kodama Plant, and Kurihashi Plant (Urawa Polymer)
- ② Two plants: East and West Plants of Niigata Polymer

2. Initiatives

We established a production system not causing any inconvenience to customers by measures including:

- ① Implementation of rotation holidays (holidays shifted from Saturday/Sunday to Monday/Tuesday, etc.)
- ② Change of operation hours from day to night shifts
- ③ Facility operation coordination/energy saving
- ④ Employment of summertime (some plants)
- ⑤ Demand value (momentary maximum power) management.



Monitoring an instrument (PC screen) at the Tokyo Plant

Initiatives at Head Office, branches, sales offices, and sales outlets

- Turning lights off during lunch break
- Turning lights off at workplaces with no employee present after working hours
- Turning lights off at places where no light is needed during working hours
- Number of operating fluorescent lamps should be reduced to targeted 500 lux in offices and 300 lux in meeting rooms as long as such reduction cause no inconvenience to operations
- Unplug equipment and devices before leaving
- Thorough standby settings of PCs
- Turning off displays when leaving a seat
- Unplug equipment and devices to eliminate standby power consumption when not in use
- Summer vacation setting by changing annual holiday plans
- Increase of no overtime days
- Thorough air conditioner setting at 28°C by taking advantage of Coolbiz, etc.

—Review of emergency measures—

With the Great Hanshin-Awaji Earthquake of 1995 as a turning point, we started to prepare and improve the crisis management system by, for example, creating an "Emergency Manual," and began initiatives to create BCM. However, with the Great East Japan Earthquake where situations beyond assumptions continued to occur, we identified defects such as prior disaster prevention like measures for preventing bookshelves from falling down, securing communication means between sites and emergency responses. For this reason, we reviewed the Emergency Manual and renewed it as "Disaster Manual." In order to minimize damage and early restoration of operations, the manual stipulates the basic concept of disaster measures and emergency organization of our Group. Based on this manual, each site takes its individual locality and specialty into consideration, organizes an emergency organization and makes disaster prevention plans, repeats disaster drills and raises awareness of disaster prevention to enable proper and timely responses possible at the time of an emergency.



The summer issue of the in-house magazine, "NEXT", carried special features and discussed challenges and feedback from the disaster as well as future disaster prevention and targets

Future countermeasures

- Establishment of disaster response headquarters by site, preparation/review of disaster prevention planning and practice of emergency drills by site
- Securing communication means including improvement of dedicated lines
- Establishment of BCM and BCP on Group level
- Promotion of cloud computing

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. This year, we also set up the Control Standards of Chemical Substances Contained in Products. To respond to customers’ CSR surveys, etc., we apply the Global Environmental Communication System.

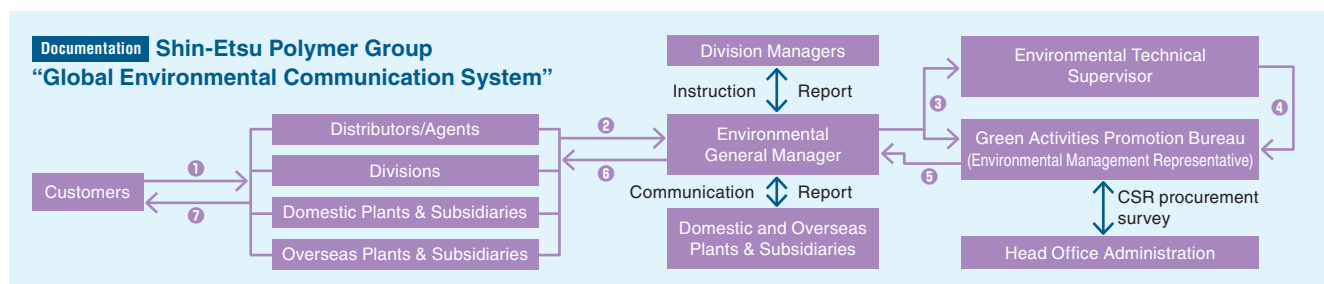
Global Environmental Communication System

- (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) Material 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	2011.09.01~2013.08.31
		Kodama Plant	FC002586	2003.08.01	
		Shinano Polymer Co., Ltd. (Shiojiri Plant)	FC002584	2003.08.01	
		Urawa Polymer Co., Ltd. (Kurihashi Plant)	FC002585	2003.08.01	
		Niigata Polymer Co., Ltd.	FC007726	2005.11.17	
Shin-Etsu Finetech Co., Ltd.	—		6553	2007.09.21	2010.06.01~2012.05.31

List of the recommended suppliers by the Sony Green Partner Environmental Quality Approval Program

(recommended suppliers)

Partner Name	Corporate ID	Subject material
Shin-Etsu Chemical Co., Ltd.	0185	Molding resin
Shin-Etsu Polymer Co., Ltd.	0186	Molding resin

List of Certified Judges of the Ricoh Chemical Substance Management System (CMS)

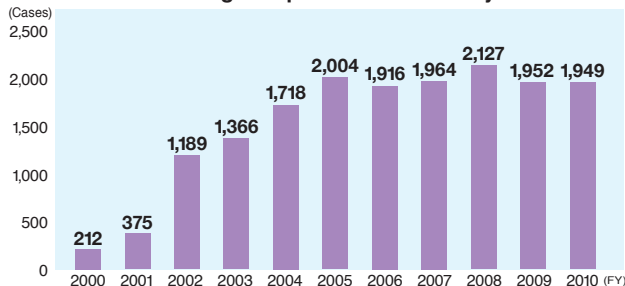
Division/Plant	Name	Registration Number	Date of Certification
Kodama Plant	Yukio Arai	S00132	2006.10.01
	Hiroshi Sunaga	S01420	2010.12.15
Technology Group Electronic Device Business Unit	Hideki Tabei	S01420	2010.03.29
	Hiroyasu Imahashi	S01446	2011.01.20

List of on-site audits of information security system by customers (FY2010)

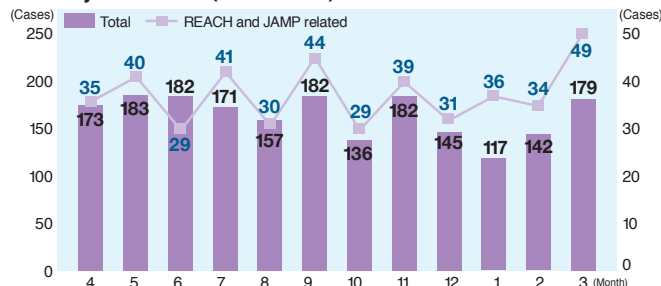
Date	Customer Name	Subject Division, etc.
2010.05.31	Panasonic Mobile Communications Co., Ltd.	Information Systems Group Electronic Device Business Unit
2010.11.25	Panasonic Electronic Device Japan Co., Ltd.	Information Systems Group Electronic Device Business Unit

Remarks: Excluding information security audits in CSR surveys

Annual transition of green procurement surveys



Monthly Transition (fiscal 2010)



- We set the permissible density (threshold level) of Cd, Pb, Hg, Hexavalent Cr, PBB and PBDE as shown in Table 1. Our control value is based on the strictest values set forth by domestic customers in the electric/electronic industry.
- We guarantee that there is no intentional use of any substance shown in Table 2 in products and purchased materials (raw materials, parts/components, packaging materials, etc.) supplied to customers and that the content ratio is less than the threshold level shown in the same table. Products for construction materials and similar products and products based on the specifications mutually agreed upon with customers are not subject to this guarantee. Please note that Table 2

complies with Table A of JIG-101 Version 4.0 (published on March 10, 2011.)

Table 1 Control values of RoHS hazardous materials

Substance	Permissible density		Analysis method at our Chemical Analysis Center (quantitative lower limit)
	Thresholds of RoHS Directive	Our control values	
Cd	100ppm	5ppm	ICP-OES (5ppm)
Pb	1,000ppm	100ppm	ICP-OES (10ppm)
Hg	1,000ppm	100ppm	ICP-OES (5ppm)
Beryllium oxide	1,000ppm	100ppm	Colorimeter method (10ppm) or ICP-OES (5ppm at all Cr)
PBB	1,000ppm	100ppm	XRF (30ppm) or GC-MS (30ppm)
PBDE	1,000ppm	100ppm	

ICP-OES : Inductively Coupled Plasma Optical Emission Spectrometry

X-RF : X-ray Fluorescence

GC-MS : Gas Chromatography-Mass Spectrometry

Table 2 Shin-Etsu Polymer Group’s “Standard for the Control of Chemical Substances in Products”

Chemical substance/category	Standard※	Threshold level
Asbestos	R	Intentionally added
Azocolourants and azodyes which form certain aromatic amines	R	30ppm of the product
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkylesters, C7-rich (DIHP)	A	1,000ppm of the product
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUF)	A	1,000ppm of the product
Beryllium oxide (BeO)	I	1,000ppm of the product
4-[4,4'-bis (dimethylamino) benzhydrylidene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C. I. Basic Violet 3)	A	1,000ppm of the product
Boric acid	R	1,000ppm of the product
Brominated flame retardants (other than PBBs, PBDEs, or HBCDD)	I	1,000ppm of the plastic materials
Cadmium/cadmium compounds	R	5ppm of cadmium in homogeneous medium
Chromium VI compounds	R	100ppm of chromium VI in homogeneous medium
Cobalt dichloride (CoCl ₂)	R	1,000ppm of the product
Diarsenic pentoxide	R	1,000ppm of the product
Diarsenic trioxide	R	1,000ppm of the product
Dibutyltin (DBT) compounds	R	1,000ppm in material as tin element
Diocetyl tin (DOT) compounds	R	1,000ppm in material as tin element
Dimethyl fumarate	R	0.1ppm in material
Disodium tetraborate, anhydrous	R	1,000ppm of the product
Fluorinated greenhouse gases (PFC, SF ₆ , HFC)	R	Intentionally added
Formaldehyde	R	Intentionally added
Hexabromocyclododecane (HBCDD) and all major diastereoisomers	R	1,000ppm of the product
Lead/lead compounds	R	100ppm of lead in homogeneous material
Lead chromate	R	1,000ppm of the product
Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	R	1,000ppm of the product
Lead sulfochromate yellow (C.I. Pigment Yellow 34)	R	1,000ppm of the product
Mercury/mercury compounds	R	Intentionally added or 100ppm of mercury in homogeneous material
Nickel	R	If contacts skin for a long period of time Intentionally added

Chemical substance/category	Standard※	Threshold level
Ozone depleting substances	R	Intentionally added
Perchlorates	R	0.006ppm of the product
Perfluorooctane sulfonate (PFOS)	R	Intentionally added or 1,000ppm in material
Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis (1,1-dimethylethyl)	R	Intentionally added
Bis (2-ethylhexyl) phthalate (DEHP)	R	1,000ppm of the product
Dibutyl phthalate (DBP)	R	1,000ppm of the product
Benzyl butyl phthalate (BBP)	R	1,000ppm of the product
Diisobutyl phthalate (DIBP)	R	1,000ppm of the product
Selected Phthalates Group 1 (BBP, DBP, DEHP)	R	100ppm of homogeneous material
Selected Phthalates Group 2 (DIDP, DINP, DNOP)	R	1,000ppm of plasticized material
Polybrominated biphenyls (PBBs)	R	100ppm of homogeneous material
Polybrominated diphenylethers (PBDEs)	R	Intentionally added or 100ppm of homogeneous material
Polychlorinated biphenyls (PCBs) and specific substitutes	R	Intentionally added
Polychlorinated terphenyls (PCTs)	R	50ppm of the material
Polychlorinated naphthalenes (more than 3 chlorine atoms)	R	Intentionally added
Polyvinyl chloride (PVC)	I	1,000ppm of the product
Radioactive substances	R	Intentionally added
Refractory Ceramic Fibres, Aluminosilicate	R	1,000ppm of the product
Refractory Ceramic Fibres, Zirconia Aluminosilicate	R	1,000ppm of the product
Shortchain chlorinated paraffins (C10-C13)	R	1,000ppm of the product
Tetraboron disodium heptaoxide, hydrate	R	1,000ppm of the product
Tri-substituted organostannic compounds	R	Intentionally added or 1,000ppm in material as tin element
Tributyl tin oxide (TBTO)	R	Intentionally added or 1,000ppm of the product
Tris (2-chloroethyl) phosphate (TCEP)	R	1,000ppm of the product

※Basic standard of disclosure : 1-R (laws and regulations);

2-A (assessment); 3-I (information)

※For detailed chemical substance list by category, please refer to the Appendix B of JIG-101 (Ed. 4.0)

Engagement with Employees

The Shin-Etsu Polymer 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.

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. In FY2010, we started 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 in January 2007. This is 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 of 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 Stabilization of Employment of Older Persons (revised in 2004), we introduced a reemployment system after mandatory retirement in April 2006. Whether reemployment is applied is determined by the selection standard provided in the contract between employer and union, and each agreement is concluded on a one-year basis, emphasizing health conditions and willingness to work. The limit of contract extension is the legally stipulated age.

● Employment information

(independent data of Shin-Etsu Polymer Co., Ltd.)

Number of employees, average age, and years of employment

Year	Number of employees (persons)	Average age (years old)	Average years of employment (years)
2006	635	43.0	18.8
2007	640	43.0	18.8
2008	631	43.3	18.7
2009	630	43.7	19.2
2010	603	44.3	19.6

Remarks : Officers, temporary employees, and contract employees not included. Loan employees not included; accepted loan employees included

Employee composition by generation (End of FY2010) (Unit: person)

Teens-twenties	Thirties	Forties	Fifties	Sixties or more	Total
43	141	247	143	29	603

Status of employment of new graduates (Unit: person)

Year	University graduates (male)	University graduates (female)	Junior college/vocational school graduates (male/female)	High school graduates, etc.
2009	3	2	0	1
2010	0	0	0	0
2011	5	3	0	0

Status of employment of mid-career workers (Unit: person)

Year	University graduates (male)	University graduates (female)	Other than university graduates (male)	Other than university graduates (female)
2009	4	0	3	0
2010	4	2	1	3
2011	1	2	0	0

Number of officers and managers (Unit: person)

	Male	Female
Managers	268	3
Officers	13	0

Status of employment of impaired persons

	Number of impaired persons (persons)	Employment rate of impaired persons (%)
End of FY2007	13	1.71
End of FY2008	13	1.75
End of FY2009	12	1.65
End of FY2010	14	1.93

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, the performance based on responsibilities for results is subject to evaluation. The mechanism of the system differs, depending on individual layers, but 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. In relation to the childcare leave system, a total of 17 persons have made use of it, and especially in the past 12 months, a total of four persons have used the leave. In 2010, our company celebrated the 50th anniversary, and under the "Ukiuki Campaign," solicited ideas and propositions about operational and system reforms from employees. Based on one of such propositions, 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 April when children become eligible for entering nursery schools so that employees on maternity leave could concentrate on childcare.

● **Work life balance information**
(independent data of Shin-Etsu Polymer Co.,Ltd.)

Use of yearly paid holidays

Year	Average days of holidays given (days)	Average days of holidays taken (days)	Rate of paid holidays being taken (%)
2007	18.2	7.9	43.4
2008	18.1	7.3	40.0
2009	19.0	7.3	38.4
2010	19.2	8.0	41.9

Use of maternity, childcare, and nursing leave

Year	Number of persons who have taken maternity leave (persons)	Number of persons who have taken childcare leave (persons)	Number of males who have taken childcare leave (persons)	Rate of childcare leave being taken (%)	Number of persons who have taken nursing leave (persons)
2007	2	2	0	100	0
2008	3	3	0	100	0
2009	6	6	0	100	0
2010	4	4	0	100	0

Educational training

For all employees or individual layers, 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, and 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 expertise as auditors 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.

Comments from Ms. Mayumi Shintani (Shin-Etsu Finetech Co., Ltd.) whose proposition about special leave of maternity and spouse's childbirth leave are adopted at the "Ukiuki Campaign" to celebrate the 50th anniversary of the company



Making propositions based on personal experience

—A company that is able to adapt to the times—

After being reinstated from maternity leave, I made propositions on the childcare support system with hopes of "changes needed" as a working mother. Changing a system is not easy, but I made an application, thinking it important that actual users of the system should present their voices. The company promptly studied my two propositions, and Office Regulations were revised.

The percentage of males who take maternity leave is very small, but the number of working mothers is ever increasing. I feel that our company is a place where we can safely use the child-rearing support system in reality, not just for words. I believe the company will gradually change in response to the changing times with a long-term view from now on.

As for "various systems," things wouldn't easily change unless relevant laws and regulations were revised, so I thought this proposition system was an opportunity to have my voice heard. I think a forum for propositions like this and an open atmosphere where various opinions can be exchanged are very significant for both employees and the company in order to make it better.



At nursery school

Comments from Mr. Tatsuhiro Asakawa (Kodama Plant) who participated in the Chinese language program in FY2010 (September 2010 to July 2011)



Want to apply my experience in China full of vitality to work

There is a trend where many Japanese companies are relocating their overseas production bases to Vietnam, Thailand, and other Southeast Asian countries other than China, but after actually living in China, I felt that the so-called "factory of the world," the country and people in China are full of vitality and will continue to drastically grow in the future.

People from many countries have visited China to learn Chinese, and the number is increasing every year. From this fact, I can safely say that it is a country attracting attention from every corner of the globe.

It was just ten-months training, but I could not only learn the language but also experience many other things. I want to apply this experience to my job going forward.



With some colleagues

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

Third-party comments

Third-party comments on the “Sustainability Report 2011”

In relation 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 2011” (hereinafter referred to as Report) and after interviewing those concerned.

1. Global development of CSR management

To realize a sustainable society, value chain-based CSR management is essential so optimal management is to be conducted throughout the product lifecycle. The same Group's strategy toward this challenge has been realized as its global environment communication system, and it can also be said that this is organized as a system that can be applied to CSR procurement including human rights and labor.

In consolidated sales, overseas sites account for 36.2%, making it extremely difficult to establish a CSR procurement system to cover the entire Group. The fact that this has been accomplished early on is a very positive point for evaluation. It is expected that the effectiveness of the system is regularly reviewed and leads to continuous improvement in the future.

2. Review of BCP

In relation to the impact of the Great East Japan Earthquake, the review of BCP has been reported. The same Group did not experience any notable damage to its procurement and production system, but based on this, the review of BCP has been discussed including emergency measures at the time of a disaster and supply chain, which suggests the healthy function of the PDCA of the same Group. I highly value such improvements that give stakeholders a sense of safety as sincere response of the same Group that includes not only compliance with laws and regulations but also respect of social value and ethics in its concept of compliance.

3. Risk assessment of biodiversity and information disclosure

Following the addition of the conservation and sustainable

Economics Department,
Sophia University

Professor

**Yoshinao
Kozuma**



use of biodiversity to the Basic Environmental Policy, site use conditions, water resource use status and other information about production plants have been disclosed. This marks a drastic step in information disclosure, but the issue of biodiversity includes not only the conservation of biodiversity but also fair distribution of profit coming from the sustainable use of eco-system services and use of generic resources. For this reason, risk assessment of business activities in view of the entire value chain is necessary, making information disclosure a future challenge.

4. Follow-up status

I have seen improvements in falling trends in the employment rate of impaired persons and the rate of paid holidays being taken, which I pointed out last year. It seems, however, that little progress is seen in employment information disclosure on a global basis. This issue features CSR management at the production base in Indonesia, but as detailed economic contributions to the local community is reported here, it seems quite possible to globalize the reports of organizations. Studies toward complete consolidated disclosure are expected, including the integration of domestic and international environmental data separately disclosed.

As far as seen from the data, the mid-term targets of energy saving on the basic unit basis appear to be difficult to achieve, but in order to eliminate the impact of financial results as its cause, I think it should be studied to change the standard of basic unit calculation from production amount to production quantity. I hope that information disclosure will be easier to understand and compare.



In response to third-party comments

Director
Assistant Chairman, Green Activities
Promotion Bureau

Yutaka Kawamura

Professor Kozuma gave a more or less positive evaluation on CSR management, but we want to further promote the improvement of activities on “human rights,” the “environment” and so forth, both domestically and internationally. From lessons learned from the Great East Japan Earthquake, we are promoting the review of BCP, etc., and will establish

an organization to make responses in a timely and appropriate manner including the supply chain at the time of an emergency.

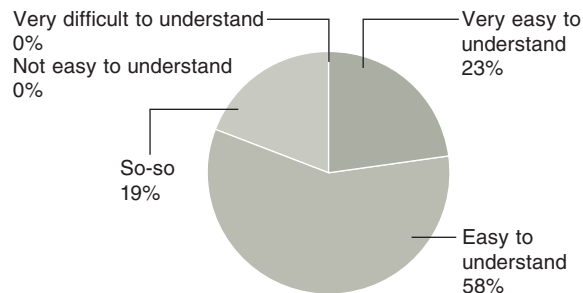
As to the necessity of risk assessment of business activities associated with biodiversity he pointed out, we plan to establish a system to make investigations, keeping raw material traceability and other resource management in mind.

As he also pointed out, the mid-term targets on the basic unit bases will be switched from the current production amount standard to a production quantity standard.

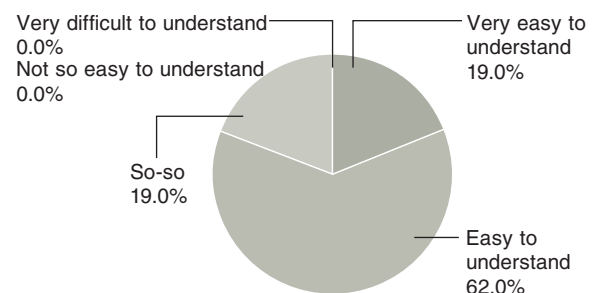
Questionnaire results & Editor's Note

After releasing the "Sustainability Report 2010," we received internal and external readers' responses to our questionnaire. 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.

- In consideration of the current situation, I learned a lot about Niigata Polymer's BCM initiatives being integrated with the community at the time of earthquakes and other disasters. This is an activity report that should be applied to all plants cross-functionally.
- ➔ **In the Sustainability Report 2011, learning from the Great East Japan Earthquake, we published initiatives on reviewing the disaster prevention manual as a first action and response. Facing the future, we want to work on a Group basis to build a BCM system.**
- I want you to carry articles on our products' contribution to environmental conservation. I believe it is a very good tool to let people know about our company.
- By publishing comments with photos by staff in charge, not just difficult expressions, the articles were more familiar. Effective use of graphs, etc. as well as the text was good. A lot of quantitative data is given, and annual results of environmental

activities were expressed as chronological graphs, making things easy to understand. I think you had difficulties in summing things up in detail, but I hope you continue to prepare reports easy to understand and full of contents.

- The contents of the report on biodiversity were poor.
- Your initiatives are easy to understand, but as it appears to be a collection of good points only, I want you to give a definitive concept and report more about manufacturing sites.
- I always pay attention to the report because I can learn about eco-friendly products and get an explanation on the history of development, given in an easy-to-understand way.
- ➔ **We will continue to carry an introduction of many eco-friendly products.**
- Episode 1, Environment-conscious Products, Episode 2, Environmental Conservation Activities and Episode 3, Overseas Affiliates and Episode, are all concrete, easy to understand and useful as reference. The contents are easy for external readers.

Editor's Note

Succeeding the will of the late Mr. Nakamura who played a central role in production up to the 2010 edition, we worked on this edition with a new team and are relieved to safely publish the Sustainability Report 2011.

Exchanging opinions with Professor Kozuma, he pointed out such improvement targets as information disclosure integrating both domestic

and international data, arrangements of messages to reach specific stakeholders, etc. We want to reflect these upon the 4th mid-term targets of Green Activities.

We have often been unable to put into practice his comments and opinions from readers, but as he had a favorable impression of the contents of our activities, saying that we had steadily made progress on environmental issues



even step by step. We will continue to address challenges that we can and continue to report the results.

We are looking for frank and honest opinions on the environmental and social activities of our Group.