

ENVIRONMENTAL & SOCIAL REPORT 2013

Paint a Bright Future for the next 100 years

Emphasizing environmentally and socially responsible management, Sumitomo Bakelite offers products that are safe and reliable for diverse applications in wide-ranging fields extending from telecommunications, automotive and medical to food and construction.

Plastics were first manufactured in Japan over a century ago.

And plastics rapidly proved their value in virtually every sphere of human endeavor, enriching our lives in countless ways.

What will be the role of plastics over the next 100 years?

Expect innovation triggered by technical progress together with the rapid evolution of sophisticated new needs in the market.

Sumitomo Bakelite is pursuing the unlimited possibilities of plastics.

By tackling the challenges posed by issues centering on energy and the environment, we are eager to hasten the emergence of a sustainable society through unceasing innovation.

Determined to flourish as a source of life-enhancing products for people throughout the world in the next 100 years, we are wholeheartedly committed to high-performance manufacturing.

Editorial Policy

This report presents the Sumitomo Bakelite Group's CSR activities in fiscal 2012 clearly and succinctly to facilitate communication with all stakeholders. In March 2013 the Responsible Care Committee determined the content and the editorial policy of the report based on a consideration of the principal issues concerning the Company and its stakeholders, in light of the views expressed by our stakeholders and the trends influencing society.

Disclosure of matters related to society and the environment was increased compared with the previous year's report. Page layout was revised to make the report easier on the eyes. Like the 2011 edition, **1** the report was prepared in accordance with the Sustainability Reporting Guidelines 2006 (Version 3) of the Global Reporting Initiative (GRI); **2** Using the Universal Design Font, we have endeavored to prepare a readily understandable and accessible Environmental & Social Report 2013; and **3** an independent assurance was obtained and included in the report to attest to its credibility. The indicators that are assured by third parties are marked with the  mark.

As of April 1, 2013, the Corporate Communications Department was established within the Corporate General Affairs Division. Through enhancing two-way communication both within the company and in society at large concerning PR and IR activities as well as in matters relating to the environment and safety, we seek to cultivate fruitful relationships with all our stakeholders. The Corporate Communications Department is also responsible for this report.

● **Period** In principle, the report covers fiscal 2012 (April 2012 through March 2013). Cases in which the coverage is different from this period are indicated. The report also refers to certain activities that are being undertaken in fiscal 2013.

● **Published** September 2013 (The Fiscal 2012 Report was published in October 2012 and the Fiscal 2014 Report will be published in September 2014.)

● **Boundary** (The names of the companies are generally stated in simplified forms by omitting "Co., Ltd.", "Inc.", etc.) In principle, this report covers Sumitomo Bakelite Co., Ltd. and its consolidated subsidiaries. Regarding environmental and occupational health and safety, the boundary is limited to the following business sites, which are mostly production sites.

[Japan]

Sumitomo Bakelite Head Office and marketing offices, Amagasaki Plant, Kanuma Plant, Utsunomiya Plant, Shizuoka Plant, Advanced Technologies R&D Laboratory, Totsuka Office*1

Akita Sumitomo Bakelite, S.B. Techno Plastics, Hokkai Taiyo Plastic, Yamaroku Kasei Industry, Kyushu Sumitomo Bakelite, S.B. Sheet Waterproof Systems, Tsutsunaka Kosan*2, S.B. Research Osaka Center*2, Softec*2, Thanxs Trading*2, Seibu Resin*2

[Overseas]

Sumitomo Bakelite Singapore, Sumicarrier Singapore*3, SumiDurez Singapore, SNC Industrial Laminates, Indopherin Jaya, SBP Indonesia, Sumitomo Bakelite Vietnam*4, Sumitomo Bakelite (Suzhou), Basec Hong Kong, Sumitomo Bakelite (Shanghai), Sumitomo Bakelite Macau, Sumitomo Bakelite (Nantong), Sumitomo Bakelite (Taiwan), Durez, Durez Canada, Sumitomo Bakelite North America, Promerus, Sumitomo Bakelite Europe, Sumitomo Bakelite Europe (Barcelona), Vyncolit

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*1 The Totsuka Office was closed in June 2012.

*2 These business sites are included in the compilation of energy consumption and CO₂ emissions data.

*3 Sumicarrier Singapore was closed in June 2013.

*4 The Company transferred all of the shares of Sumitomo Bakelite Vietnam to Sumitomo Electric Industries at the end of September 2012.

Note:

In this report, the names of Sumitomo Bakelite Co., Ltd. and its Group companies may be stated in simplified forms by omitting "Co., Ltd.", "Inc.", etc. Quantitative data presented in this report are rounded, in principle. Therefore, in certain cases, the sum of breakdowns may not equal the total.

Pioneering the next 100 years of plastics

Serving society and delighting people

through manufacturing

| Recent Performance

During the fiscal year ended March 31, 2013, the Sumitomo Bakelite Group recorded lower sales than for the previous year. This unsatisfactory result reflected a Japanese economy weakened by protracted deflation and a world economy losing momentum owing to the unresolved sovereign debt crisis in Europe and the slowing economic growth of China and other emerging economies. On a positive note, the Group achieved higher profit thanks to the success of our efforts to reduce fixed costs and the progress made in reforming the business structure through a strategy of concentrating resources in strategic growth fields.

In these circumstances, while maintaining a lean corporate structure and pursuing management based on a sure grasp of the realities affecting our business, the Group is striving to return to a growth track by harnessing the power of all employees. With this objective at the forefront of our minds, we recognize that, in addition to offering products and services attuned to current customer needs, we must cultivate latent needs and fuel demand so that we can partner our customers in the creation of new value. Thus, our priority is customer satisfaction. We endeavor to swiftly and precisely identify the needs of our customers from their perspectives, resolve issues in cooperation with customers, and contribute to their development and success. This guiding principle, embedded in the Sumitomo Bakelite Group's DNA, inspires everything that we do.

| Environmentally and Socially Responsible Management

Sumitomo Bakelite's business philosophy is "Our company places prime importance on trust and sureness, and shall commit itself to contributing to the progress of

society and enhancement of people's welfare and livelihood through its business activities." Adhering to this philosophy, we are promoting environmentally and socially responsible management. Indeed, this is synonymous with Sumitomo's Business Philosophy, which has been bequeathed from one generation to another over the past four centuries. I am convinced that managing our business in accordance with this timeless philosophy enables us to offer assurance, safety, and reliability to society at large.

We have spared no effort in implementing the Sumitomo Bakelite Production System (SBPS)—which is based on the Toyota Production System—to achieve quality improvement, production innovation, shorter lead times, and other objectives. Augmenting our core manufacturing strengths through the implementation of SBPS is vital not only for translating the creation of demand from customers' perspectives into growth of the Group's revenues, but also for improving quality to enhance customer satisfaction as well as for saving energy and other resources. Moreover, we are implementing thorough management of chemical substances. We take the environment, safety, and health into consideration throughout all phases of the product life cycle from development through to disposal.

Ensuring occupational health and safety is a prerequisite for ethical business activities. Kyushu Sumitomo Bakelite recorded one million hours free from occupational accidents in August 2012 and the Utsunomiya Plant recorded three million hours free from occupational accidents in April 2013. The Group continually endeavors to make its workplaces safer.

The Corporate Communications Department established in April 2013 is Sumitomo Bakelite's contact point for environmental and safety matters as well as for conventional PR and IR activities. The new department is spearheading our efforts to enhance two-way communication

with internal and external parties as we seek to cultivate fruitful relationships with all our stakeholders and enhance corporate value.

| Human Resources Development

In order to conduct business in ways that maximize the benefits for society and customers while achieving consistently good results in a challenging business environment, it is essential to develop human resources that combine the right ethos with outstanding capabilities. Since its establishment in 2007, the SB School has offered 133 programs taken by a cumulative total of 120,000 employees. Going forward, we will redouble our efforts to cultivate the robustly individualistic professionals essential for the thriving global enterprise that Sumitomo Bakelite aspires to be.

| Our Commitment

As a pioneer in plastics, Sumitomo Bakelite endeavors to develop and offer high-performance plastics whose novel properties help customers create new value. Putting customer satisfaction first, we aim to grow and prosper by serving society and delighting our stakeholders throughout the world. Aiming to fulfill our responsibilities to society in an exemplary manner as a leading member of the chemical industry, Sumitomo Bakelite will continue to wholeheartedly endorse the principles embodied in the Responsible Care Global Charter.

August 2013
President



In manufacturing, we accord top priority to environmental protection and safety

Sumitomo Bakelite is wholeheartedly committed to environmental protection and safety. In conducting business, we emphasize customer satisfaction and serving society. Sumitomo's Business Philosophy bequeathed from generation to generation for 400 years is at the heart of everything we do.

Sumitomo's Business Philosophy

We have inherited Sumitomo's Business Philosophy that has supported the Sumitomo Group for four centuries.

The origins of this philosophy are found in the Monjuin Shiigaki (the Founder's Precepts), a document written by Sumitomo family founder Masatomo Sumitomo (who acquired the title Monjuin after becoming a Buddhist priest) to instruct his family about the business wisdom he had distilled from his experience.

At the beginning, it urges "Strive with all your heart, not only in business, but in all situations." This is the fundamental spirit of the Monjuin Shiigaki.

The rigorous efforts and honesty demanded by the Monjuin Shiigaki as well as other personal character-building precepts continue to be the foundation of the Sumitomo Group's Business Philosophy. Sumitomo Bakelite's Business Philosophy—"Our company places prime importance on trust and sureness, and shall commit itself to contributing to the progress of society and enhancement of people's welfare and livelihood through its business activities."—stems from the Sumitomo Business Philosophy that has been inherited, nurtured and applied for 400 years.

Business Philosophy, Management Policies, Corporate Policies for Safety and the Environment

Business Philosophy

Our company places prime importance on trust and sureness, and shall commit itself to contributing to the progress of society and enhancement of people's welfare and livelihood through its business activities.

Management Policies

1. Strengthen and expand the three core businesses—semiconductor materials and electronic circuit products, high-performance plastics, and quality of life products
2. Upgrade competitive power rooted in manufacturing skills
3. Anticipate customers' needs and provide next-generation solutions
4. Promote Customer Satisfaction (CS) enhancement activities and marketing that emphasize B to B

Corporate Policies for Safety and the Environment Philosophy

In all its operations, Sumitomo Bakelite will endeavor to carry out its social responsibilities by meeting the highest standards of the Responsible Care concept and giving due consideration to human health and safety as well as to the protection of the environment.

Policies

In accordance with this philosophy, we will:

1. Evaluate the safety, health, and environmental aspects of all corporate activities, from product design through product disposal, strive to minimize the environmental impact of our corporate activities, and undertake to develop safer products and technologies;
2. Make sustained, Groupwide efforts to promote resource and energy conservation, recycling, and waste reduction;
3. Perform environmental audits and safety audits as well as work to maintain and improve systems for managing environmental protection, safety promotion and disaster prevention, and occupational safety and health;
4. Comply with all relevant laws, regulations, and agreements associated with safety, health, and the environment while autonomously establishing administrative rules designed to promote safety, health, and environmental protection;
5. Work to improve the safety of raw materials, products, and transportation operations and provide product safety information to employees, customers, and others;
6. Implement operational safety management programs to ensure the safety and health of employees and residents of local communities; and
7. Endeavor to disclose information to and promote dialog with such stakeholders as employees and local residents.

Topics

Code of Conduct for Employees Standards of Conduct

A booklet distributed to all employees offers guidance on conduct, including the dos and don'ts to be observed in particular situations.

We play an important, beneficial role in our society, offering customers products and services that put customer satisfaction first. **1**

We strive to improve the performance of the Sumitomo Bakelite Group, always taking a global perspective. **2**

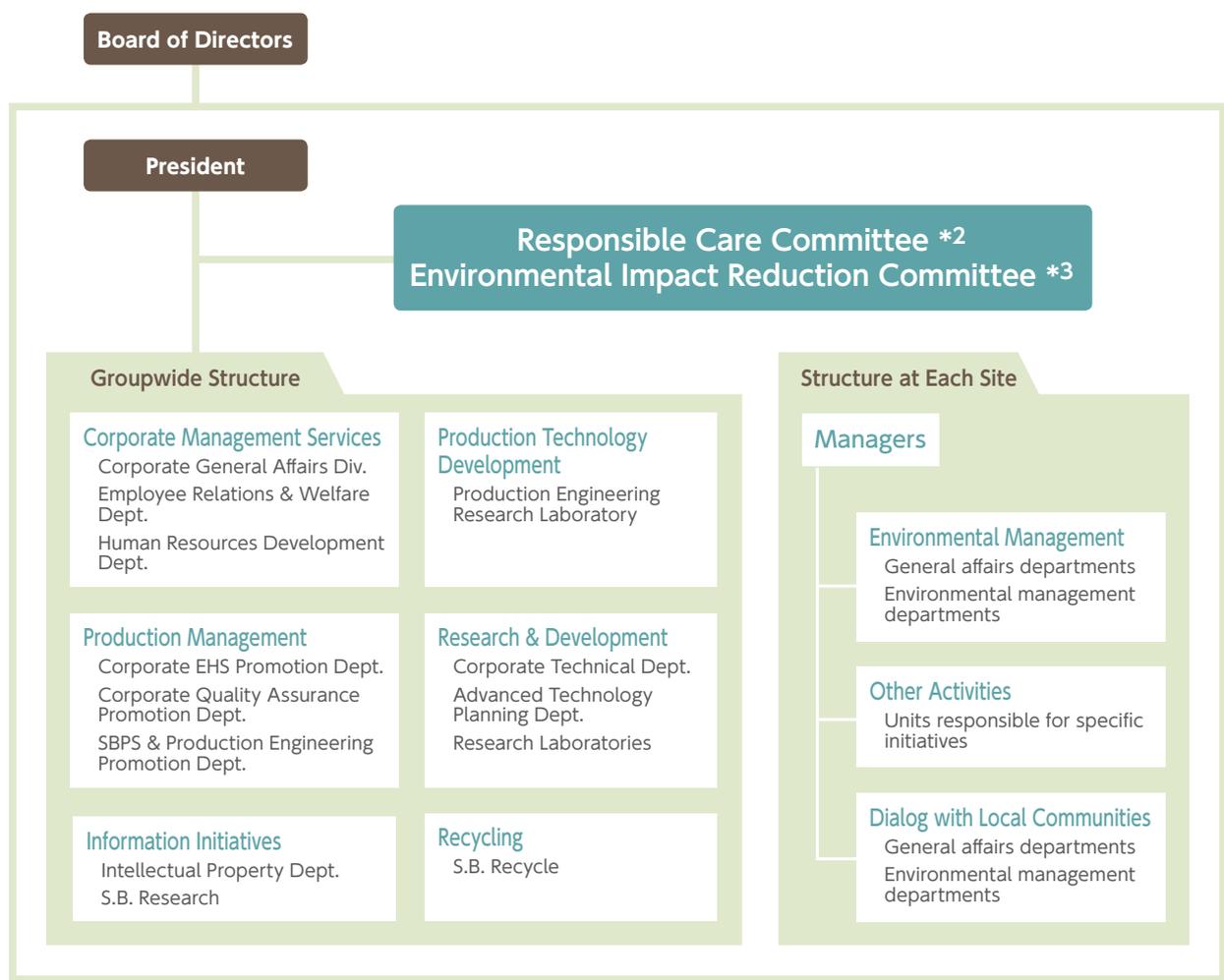
We adhere to our corporate ethics, complying with legal requirements and our bylaws both in Japan and abroad, while engaging in fair and transparent business activities. **3**

We emphasize safety while independently engaging in environmental protection activities. **4**

We strive to create a pleasant work environment through respect for individual personalities and human rights. **5**

CSR Promotion System

Sumitomo Bakelite's system for promoting CSR activities centers on the Responsible Care*1 concept.



*1 "Responsible care" means that companies should work to secure the environmental, safety, and health aspects of their corporate activities from the development of chemical substances through production, distribution, usage, final consumption, disposal, and recycling. They should also make information publicly available on the results of their activities and implement measures to promote dialog and communication with the community. (Japan Chemical Industry Association)

*2 Chaired by the executive officer in charge, this committee meets twice each year. It has the objective of promoting Responsible Care activities related to the Company's business operations.

*3 Chaired by the executive officer in charge of corporate technical departments, this committee has two subcommittees—the Life Cycle Committee and Energy Conservation Committee. It meets once or twice each year, while each of the subcommittees meets twice each year. It has the objective of promoting environmental impact reduction with respect to the Company's products' life cycles and promoting the conservation of energy and resources with respect to the Company's production business sites.

Corporate Data

- **Name** Sumitomo Bakelite Co., Ltd.
- **Head Office** 2-5-8 Higashi-Shinagawa,
Shinagawa-ku, Tokyo 140-0002, Japan
- **President** Shigeru Hayashi
- **Established** January 25, 1932
- **Capital** (as of March 31, 2013)
¥37.1 billion
- **Number of Shareholders** (as of March 31, 2013)
19,215
- **Stock Listing** (as of March 31, 2013)
Tokyo Stock Exchange, First Section
- **Number of Employee** (as of March 31, 2013)
2,151 (non-consolidated)
5,215 (consolidated)
- **Net Sales** (as of March 31, 2013)
¥92.4 billion (non-consolidated)
¥183.4 billion (consolidated)

Major Products by Division

Semiconductor materials

Epoxy resin molding compounds for encapsulation of semiconductor devices
Photosensitive wafer coating resins
Liquid resins for semiconductors
Substrate materials for semiconductor packages

Circuit products

Epoxy resin copper-clad laminates
Phenolic resin copper-clad laminates

High-performance plastics

Phenolic resin molding compounds
Phenolic resins for industrial use
Precision molded products

Quality of life products

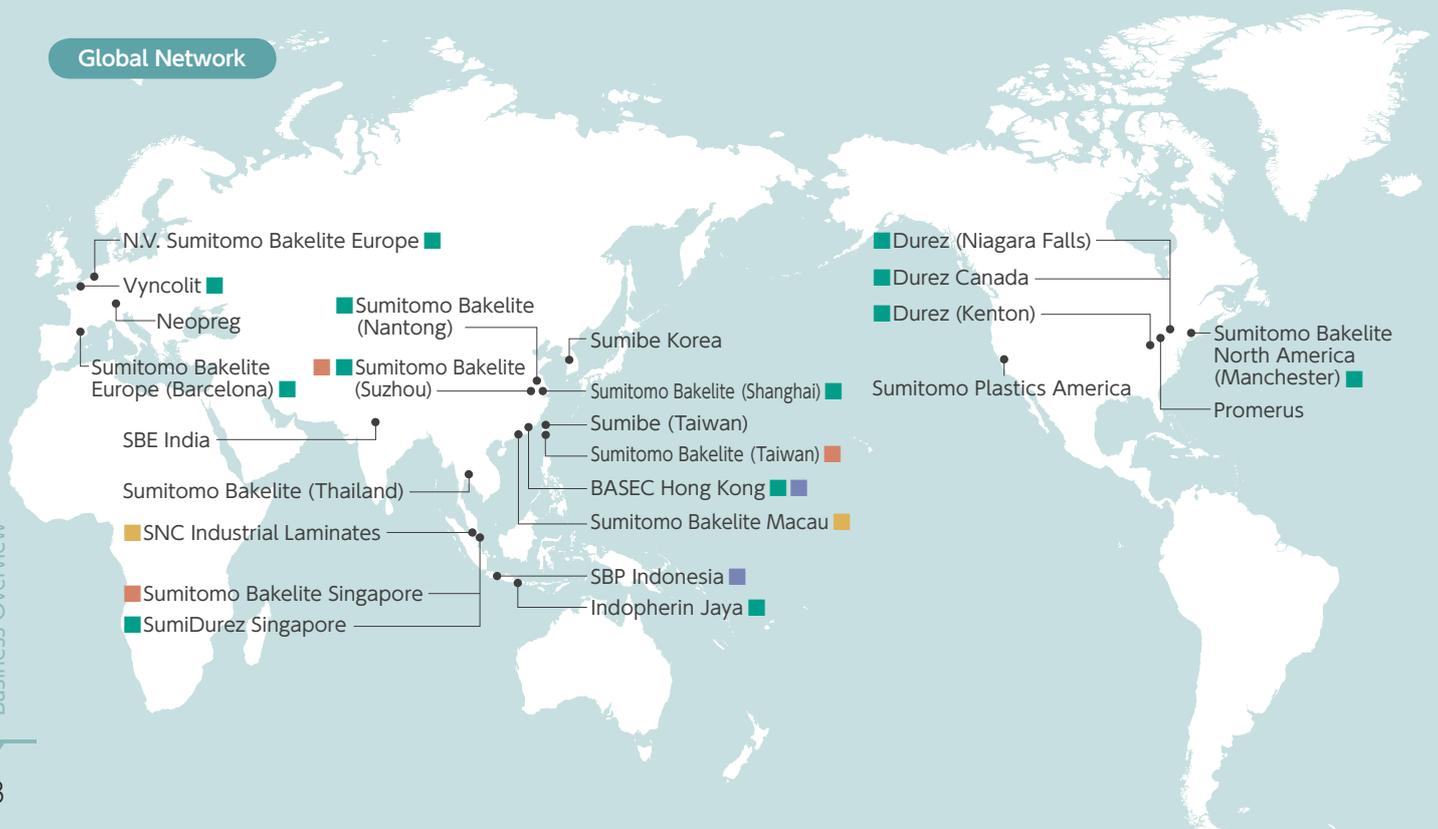
Medical devices
Vinyl resin sheets and multilayer sheets
Carrier tape base materials for semiconductor packaging
Melamine resin decorative laminates and fireproof decorative laminates
Polycarbonate resin plates
Vinyl resin plates
Waterproofing construction and design contractor

Group Companies

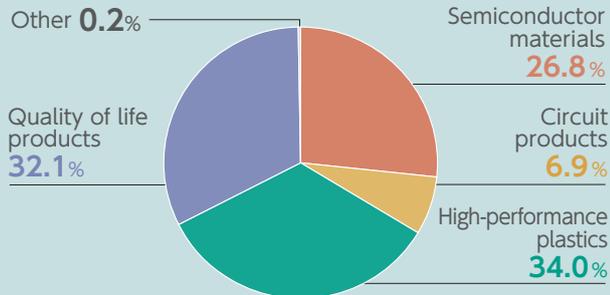
Our Company Group operates in 15 countries and regions including Japan.

■ Semiconductor materials ■ Circuit products ■ High-performance plastics ■ Quality of life products

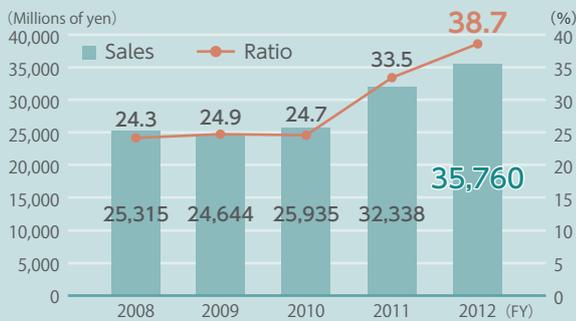
Global Network



Fiscal 2012 Sales Composition by Division (Consolidated)

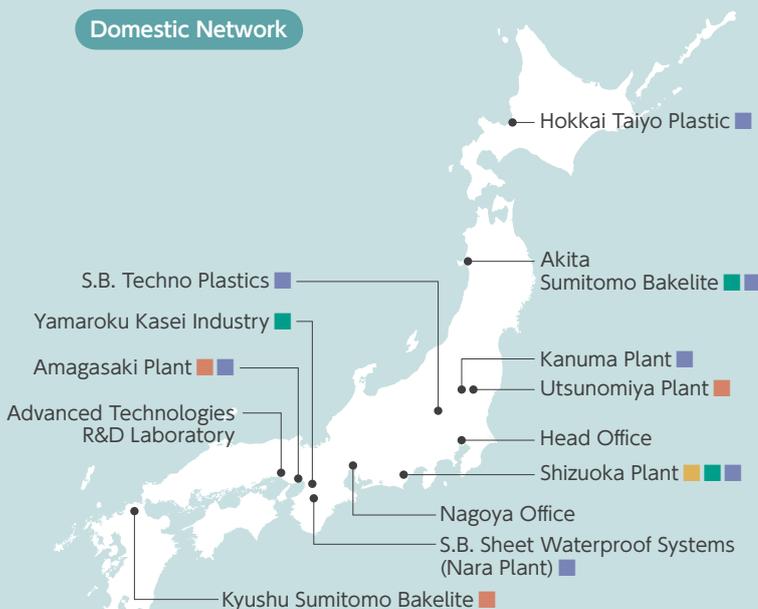


Sales of Environmentally Friendly Products



Note: Data on Sumitomo Bakelite (non-consolidated)

Domestic Network



Our Company Group's Stakeholders

Customers

The Group works in good faith to live up to its responsibilities related to such issues as product quality, delivery dates, and prices as well as to quickly respond to customer needs. To achieve this, we have established a CS Committee that continuously endeavors to enhance customer satisfaction.

Shareholders

The Group is committed to distributing appropriate dividends and discloses all relevant information. To attain these goals, we are striving to augment the efficiency of the Group's management systems, increase the rigor of corporate governance, and ensure the timely disclosure of relevant information.

Local Residents

Operating as a member of local communities, the Group seeks to contribute to the regions in which it operates while giving careful consideration to environmental protection issues. We disclose information to local residents by organizing plant tours and proactively participating in local events.

Government Entities

Besides maintaining rigorous compliance with relevant laws and regulations, the Group endeavors to make information publicly available and engage in two-way communication with local government entities. For this purpose, we are establishing internal mechanisms for monitoring the revision and enactment of laws.

Business Partners

The Group engages in impartial and fair business transactions and cooperates with its business partners to realize CSR procurement objectives. Accordingly, we maintain day-to-day dialog with business partners to confirm the propriety of transactions and clarify the terms of contracts.

Employees

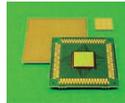
The Group strives to create safe and pleasant working environments and provide employees with meaningful and satisfying careers. We are endeavoring to reduce workplace risks by implementing diverse risk assessments, and we are providing all employees with educational opportunities through the SB School.

Our products are used in items of every shape and description that fulfill vital roles in everyone's life.

Information and Communications Materials (Semiconductor Materials and Circuit Products)

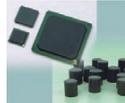
1 Semiconductor Package Substrate Materials (SUMILITE LαZ®)

LαZ semiconductor package substrate materials whose superior properties represent new value for customers



2 Molding Compounds for Encapsulation of Semiconductor Devices (SUMIKON® EME)

Widely used as a molding compound for encapsulation of semiconductor devices to provide protection from moisture and physical impacts and to act as an electrical insulator



3 Wafer Coating Resin (SUMIRESIN EXCEL® CRC)

Protects semiconductors from the external environment, including stress and impurities, and contributes to device reliability



4 Pastes for Die Bonding (SUMIRESIN EXCEL® CRM)

Adhesives used for attaching semiconductor dies and LED chips to various types of substrates (lead frames, organic and ceramic substrates)



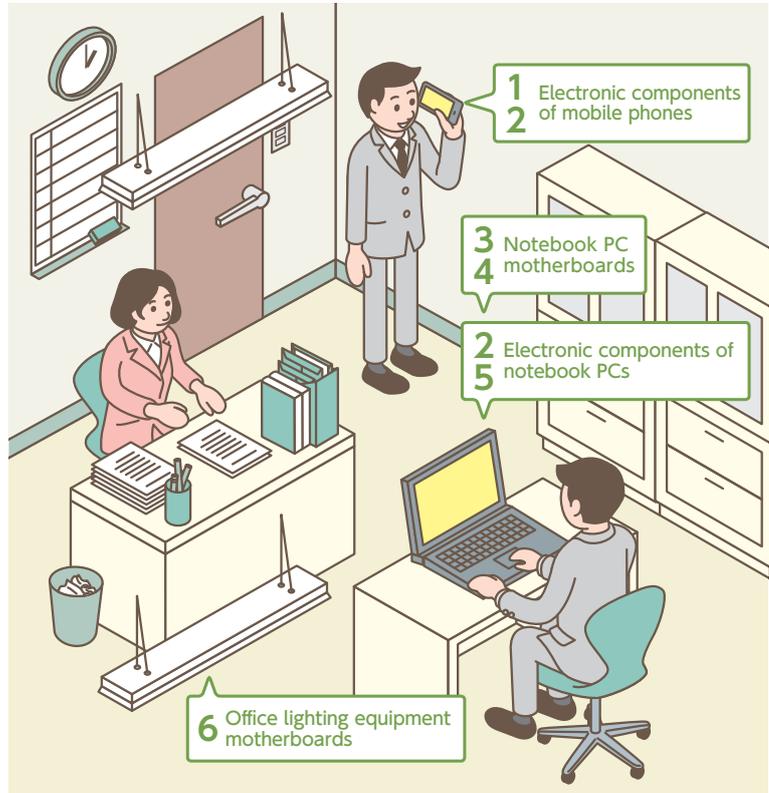
5 Cover (Carrier) Tapes (SUMILITE® CSL)

Used for transporting semiconductors and other electronic components, contribute to surface-mounting reliability, and protect components from static electricity



6 Copper-Clad Laminates (SUMILITE® ELC/ALC)

Composite materials and aluminum base CCL with excellent heat-releasing performance contribute to energy saving in LED lighting applications.



High-Performance Plastics

7 Copper-Clad Laminates (SUMILITE® ELC)

Highly heat-resistant glass-epoxy substrate materials used in electronic control circuit boards to improve fuel economy and riding comfort



8 Tire-Reinforcement Material (SUMILITERESIN® PR)

Phenolic resins that are added to rubber materials for greater stiffness to make tires more fuel efficient by decreasing rolling resistance



9 Materials for Electronic Components (SUMILITERESIN® ECP)

Environmentally friendly, halogen-free materials used in components of electronic control systems for automobile motors, coils, and condensers



10 Materials for Pulleys and Disc Brake Pistons (SUMIKON® PM)

Phenolic resin molding materials used in auxiliary engine parts and brake components requiring high heat resistance and strength. Contributes to automobile weight reduction and fuel economy



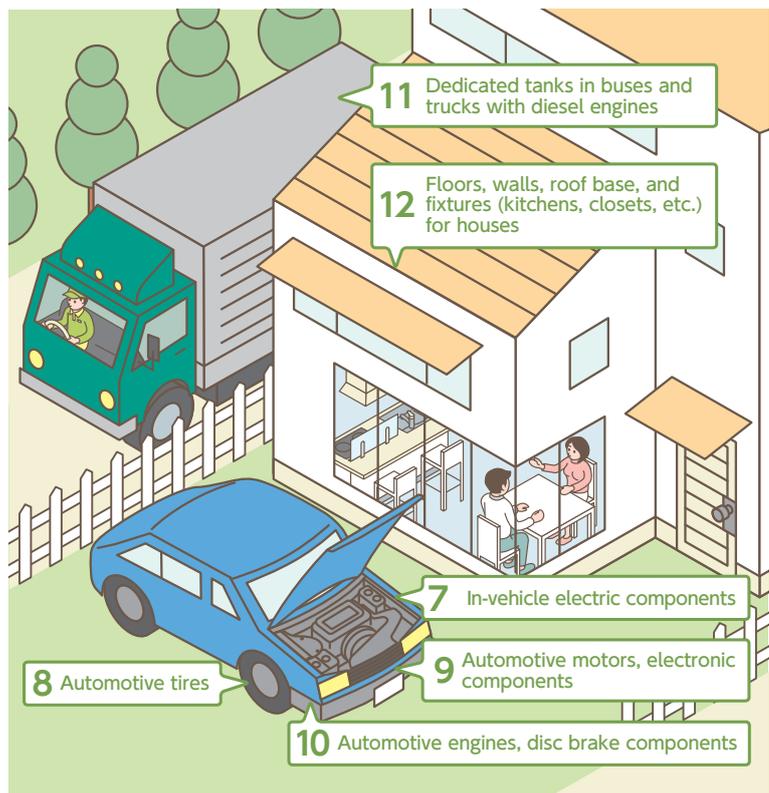
11 Diesel Exhaust Fluid (AdBlue)

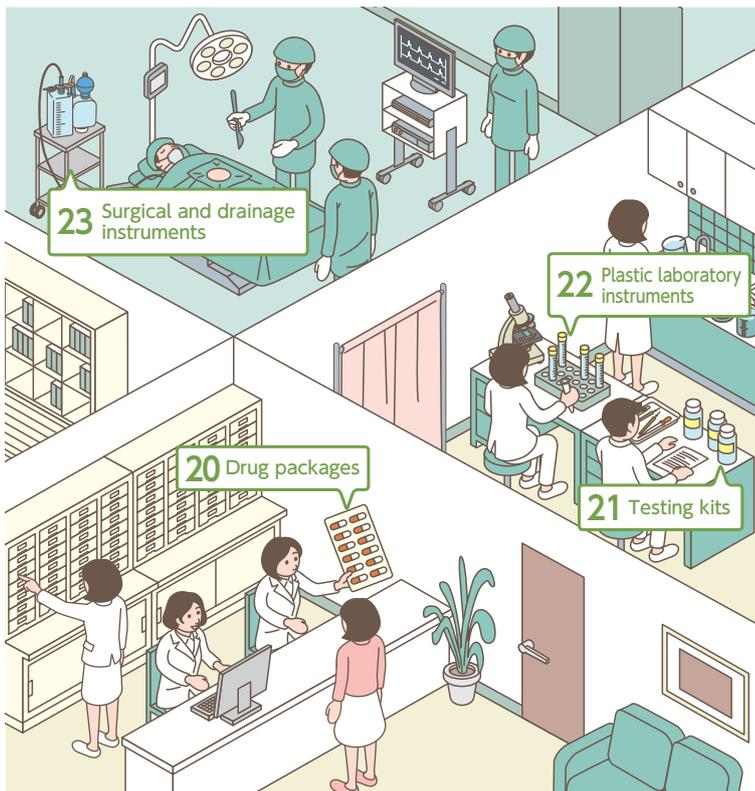
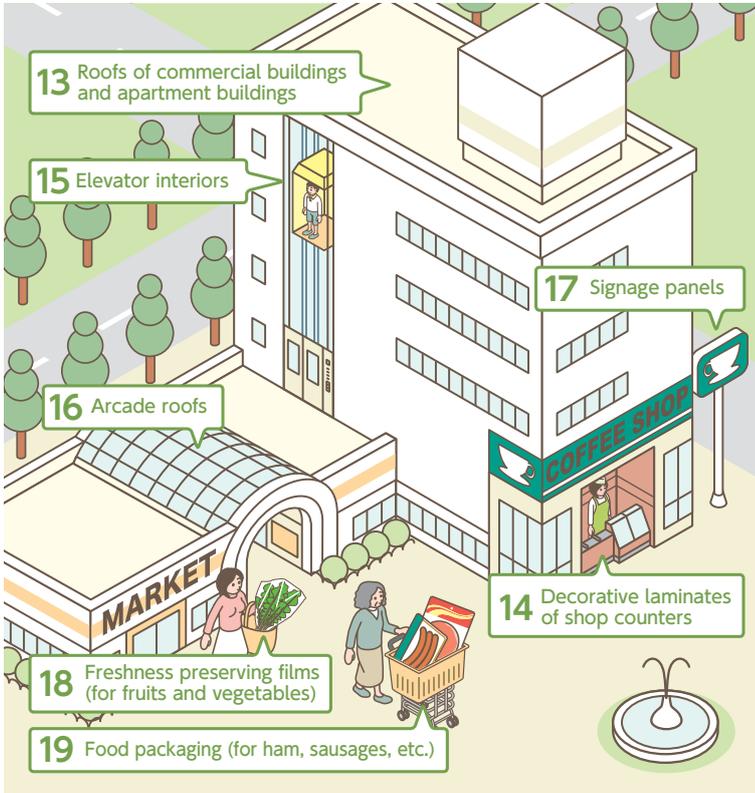
High-purity aqueous urea solution used in Selective Catalytic Reduction (SCR) to lower NOx concentration in the exhaust emissions of diesel engines. Contributes to environmental protection



12 Adhesive for Plywood Production and Boards (Yuroid)

Phenolic resin used in making plywood that features hardening at low temperatures and low formaldehyde emissions. Increases efficiency of plywood production and contributes to environmental protection





Quality-of-Life Products

13 Waterproofing Sheet & System (SUNLOID® DN System)

Employing PVC sheets, this system is used on the roofs of buildings, for the waterproofing of tanks and veranda flooring, and on the roofs of high-quality prefab housing.



14 Melamine-Faced Decorative Laminates (DECOLA®)

Coming in a wide choice of types and colors, used as decorative materials in signage as well as for shops and other interiors, in public, commercial, medical, and other facilities



15 Melamine-Faced Decorative Sheets (DECOLA INNOVAIR®)

Inflammable melamine decorative sheets 0.2 mm in thickness used for internal walls of office buildings, stores, condominiums, and hospitals and for elevator interior materials



16 Polycarbonate Sheets and Films (SUNLOID PC®)

This highly transparent material allows light to enter and is widely used in many applications, including canopies, windows, and roofs.



17 Acrylic Light Guide Sheets (SUNLOID® LUMIKING)

Acrylic-based, light-conducting material used in signage panels, interior decoration for shops, and lighting fixtures



18 Freshness Preserving Films (P-Plus®)

Slows the deterioration in quality of fruit and vegetables in transit and storage, thus helping deliver fresher produce to consumers



19 Multilayer Films for Food Packaging (SUMILITE® CEL)

These flexible multi-layer composite films can be used for vacuum packaging, gas packaging, skin packaging, and various other kinds of packaging.



20 Pharmaceutical Products Packing Materials (Materials for PTP) (SUMILITE® VSS)

Press-through-packs (PTPs) and other blister film packaging enable pharmaceuticals to be delivered to users safely and with confidence. These materials help maintain the quality of a wide range of drugs that require careful attention to sanitation and safety.



21 Biotechnology-Related Products

Bio chip and bead products are helping both to reduce waste and lower running costs by speeding up and downsizing equipment for biological sample testing.



22 Laboratory Plasticware (SUMILON®)

SUMILON® products are plastic laboratory consumables that are indispensable for biological research. With their simple packaging and made of a single uniform material, these products lighten the environmental impact of research.



23 Medical and Therapeutic Devices (sumius®)

Products marketed under the sumius® brand support the provision of safe and reliable medical therapy, thus contributing to the health and welfare of everyone.



Dialogue

Addressing Social Issues through Group-wide CS Enhancement Activities

How does Sumitomo Bakelite raise customer satisfaction and contribute to society through its business activities? President Hayashi discusses this question with Kumi Fujisawa from Think Tank SophiaBank.

Fujisawa Japan's plastics industry celebrated its centenary two years ago. What do you think about that?

Hayashi Well, a century isn't that long but a lot has happened. Compared with metals and rubber, plastics are still a fairly new material. Today, we use plastics in all manner of products from aircraft and automobiles to household appliances. Sankyo Company began trial mass production in Japan of phenolic resin, the oldest type of plastic, back in 1911. Plastics rapidly became commonplace throughout society. We inherited Sankyo's operations and became a pioneer of the plastics industry in Japan.

Fujisawa Sumitomo Bakelite products are widely used in everyday life..?

Hayashi Yes, our product applications span fields as diverse as information technology, automobiles, medicine, food and construction. We target a host of niche markets within these many fields. While none are

especially large in scale, this manufacturing business model allows us to diversify our risk across numerous fields. To expand the company's sales we need to continue creating new products that can dominate such niches.

Investment in R&D makes a social contribution

Fujisawa So what is the secret to making that happen?

Hayashi There are basically three ways in which we develop our business. The first is to improve our existing products in terms of QCDS — that is, Quality, Cost, Delivery and Service — so that we can increase our market share. The second is to talk to our customers about their requirements so that we can develop new products customized to their needs. And the third way is to undertake research with the aim of "sowing seeds"



Kumi Fujisawa
Co-President
Think Tank SophiaBank

Shigeru Hayashi
President &
Representative Director
Sumitomo Bakelite Co., Ltd.

that will germinate and blossom into new businesses years later. Through our research, the aim is to create new markets that seemingly come out of nowhere. This is an approach that takes time and money.

Fujisawa On what areas is this research focused?

Hayashi To give you an example, electrical circuits can no longer be used to develop the supercomputers of the future due to the huge amounts of power and fast transmission speeds required. Instead, we are looking to optical circuits to cut energy consumption while achieving higher transmission speeds. We have been developing “optical waveguides” for more than a decade, and finally we are now starting to see market demand for this type of product. We expect to start shipments next year.

Fujisawa It’s extraordinary to think that plastics can be used to transmit light. What other R&D themes have big implications for the future?

Hayashi A major issue for plastics manufacturers at the moment is the need to step up the production of plastics from precursors other than oil, which is a finite resource implicated in rising CO₂ emissions. To this end we are doing joint research with the Research Institute of Innovative Technology for the Earth (RITE) into “green phenols.” This approach looks at producing phenolic resin from inedible biomass. Our aim is to develop commercial technology within the next five to ten years.

Fujisawa That sounds amazing. Top oil producer Saudi Arabia is developing a national strategy based on the assumed depletion of its oil reserves. If we consider the future implications of that, developing biological sources for phenolic resin is an important goal.

Hayashi It may be a while before this technology translates into a big increase in sales. However, from the perspective of lowering CO₂ emissions and conserving natural resources, we believe that it is our duty as a

plastics manufacturer to make this kind of technology work.

Fujisawa One imagines the high cost of raw materials is negatively affecting your manufacturing and development operations. Do you plan to continue investing a certain amount in R&D as you look to the future?

Hayashi We do. R&D expenses are around 3% of sales on average for chemicals manufacturers, but we aim to invest an amount equivalent to about 6% of sales in

of time and money in research for the long haul. It seems to me that your investment in R&D is making a real social contribution.

Hayashi I would agree.

Fujisawa By helping to address social issues through your core business, I think these activities are about Creating Shared Value (CSV), which is a little more advanced than Corporate Social Responsibility (CSR).

Hayashi We do not use the term 'CSV,' but such thinking is a natural part of our corporate philosophy because we operate within the Sumitomo family. At all of our manufacturing plants we have programs aimed at preventing soil or water pollution and reducing the environmental impact of operations. At our Shizuoka plant, we plan to create a biotope over the next few years based on a study of the local ecosystem. We have inherited the Sumitomo business philosophy that originated some 400 years ago. Based on the Sumitomo philosophy, the Sumitomo Bakelite business philosophy states: 'Our company places prime importance on trust and sureness, and shall commit itself to contributing to the progress of society and enhancement of people's welfare and livelihood through its business activities.'

Building trust through CS enhancement activities

Fujisawa I believe that your company's business philosophy also forms the basis for your ongoing program of activities aimed at enhancing customer satisfaction (CS)?

Hayashi Naturally. In the past we might have considered it enough just to try to make good products, but these days we need to do more than that to flourish amid fierce competition. We need our customers to get to know us and to trust us so that we can continue supplying them with value-added products and services. We established the CS Promotion Committee back in 1999.

Fujisawa As president, do you chair that committee?

Hayashi Yes. I have been doing that since 2006. During this period, we have been undertaking programs aimed at building trust with our customers. In many cases, these companies don't simply purchase products from us. For example, because of our advanced expertise in plastics, we are partnering with customers in the semiconductor industry to look at opportunities for collaboration that can be applied to our products as



Profile

Worked for various Japanese and foreign fund management companies after graduating from university.
 Founded the first investment trust evaluation company in Japan in 1996.
 Participated in the establishment of Think Tank SophiaBank in 2000.
 Appointed Visiting Professor, Hosei Business School of Innovation Management in 2005.
 Nominated as a Young Global Leader by the World Economic Forum in Davos in 2007.
 Appointed Co-President, Think Tank SophiaBank, in 2013.

R&D. That is a high level of R&D investment for the scale of our business, but it is necessary for our future profits. Our development programs must keep up with the rapid pace within other industries, as shown by the fact that a new generation of smartphone models appears every six months. Since we must be constantly developing new products, we think 6% is the right level.

Fujisawa I see. These days we seem to be surrounded by innovation focused on short-term changes, as evidenced by the smartphones that you mention. There seems to be much less focus on significant long-term change. Yet we have Sumitomo Bakelite investing a lot

well as theirs. We are creating frameworks that allow us to develop original solutions for these customers. In other words, by working together we are developing win-win relationships. I am proud to be leading such initiatives.

Fujisawa In terms of specifics, what do CS activities involve?

Hayashi What we want is to draw out the customer's underlying needs. For example, it can often be difficult even for senior engineers to put into words what it is that they are trying to achieve. After we have discussed the issue a number of times, we start to see what their underlying needs are. At that point we like to get everything onto one large sheet of paper on the wall so that we can pinpoint the issue exactly with the customer. Having done that, we start to see where there is scope for collaboration and we work out specific measures to address the issue. In some cases more than a year of work may be involved, but that would then turn into a substantial business for us.

Fujisawa It's impressive that you take the time to talk to the customer, build trust and create a collaborative relationship that probably involves sharing confidential information.

Hayashi In some cases, by the later stages we have advanced to doing joint research with customers, with our researchers working alongside theirs. In these ways, our customers show us that they regard us as true partners.

Fujisawa CS enhancement activities tend to be viewed as something separate from the core business, but you're saying that there is a direct connection.

Hayashi There is. What our customers want is a partner who will spend the time to discover their underlying needs and solve the related issues. We fulfill that role, make proposals and then work together with customers to bring new products to market. I cannot imagine any better way to increase customer satisfaction.

Fujisawa That's right. Not only that, but solving these individual issues also contributes to the development of society.

Hayashi As part of these CS enhancement activities, we always extend a warm welcome to our customers whenever they visit us, showing them care and consideration at all times. Each of our sites has drawn up its own five-point CS declaration. Starting with the basics, such as greeting, answering a call within three rings, and responding to an inquiry within 24 hours, I believe it is important to cultivate customers' confidence

in us so that they will develop loyalty and affection for Sumitomo Bakelite.

Fujisawa So such day-to-day CS enhancement activities are the foundation for cultivating customer confidence that extends to their strategic business areas. By collaborating with customers as a partner, Sumitomo Bakelite is unleashing innovation that is socially beneficial and holds great promise for the future. Looking ahead, I think it will become ever more critical for companies to increase customer satisfaction while in



Profile

President & Representative Director,
Sumitomo Bakelite Co., Ltd.
Joined Sumitomo Bakelite in 1970.
Appointed Director in 2000 after working mainly in sales.
Became Vice President in 2008, and President in 2010.
Chair of CS Promotion Committee since 2006.

some way contributing to society through their business activities. I hope that Sumitomo Bakelite continues to focus on doing this.

Hayashi We are doing our utmost to encourage all our employees to share this approach. Rather than sitting at a desk, I urge everyone to swing into action—get out in the field, see what is happening, listen to people and share ideas, and have meaningful encounters with customers. It is what we refer to as “Genchi, Genbutsu, Gennin (in Japanese).” By pursuing this facts-based approach, we can generate new ideas that will lead to future growth.

Encouraging youngsters' interest in science through support for education involving collaboration between local government and enterprises

Fujieda Science Education Support Project

The growing tendency among children to avoid or lose interest in science has emerged as a social issue. With the aim of encouraging more youngsters to enjoy science and offering valuable assistance to science teachers at junior high schools, Sumitomo Bakelite launched the Fujieda Science Education Support Project in 2009 in cooperation with the Japan Association for Chemical Innovation (JACI). Sumitomo Bakelite chose Fujieda as a model city for this project as the Company's Shizuoka Plant is located there.

Below are some of the activities we undertook in fiscal 2012.

[Knowledge-related cooperation]

Classroom-applicable knowledge and experience for teachers

[1] BATHCLIN Corporation, a local company based in Fujieda, helped organize a factory tour and presentation for science teachers on their products, bath salts—their effects, color, feel, quality and so on. Teachers were also able to prepare bath salts by hand. Representatives from the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Ministry of Economy, Trade and Industry (METI) attended the event, commenting favorably on it.



Teachers making bath salts



Demonstration by a company presenter (January 2013)

[2] Sumitomo Bakelite was invited to participate in a roundtable discussion between elementary and secondary school chemistry teachers and representatives of companies that was organized jointly by MEXT and METI in August 2012. The event produced a lively and productive exchange of views between educators and people from industry, providing a useful reference for future activities.

[Material-related cooperation]

Provision of practical educational materials

[1] We invited Dr. Kazuko Ogino, Professor Emerita at Tohoku University, to give a classroom science seminar to teachers at Takasu Junior High School in Fujieda. Dr. Ogino introduced microscale experimental kits provided by Sumitomo Bakelite and demonstrated an experiment.



Testing with microscale experimental kits (June 2012)

[Initiatives involving local government and enterprises]

Sumitomo Bakelite has taken the lead in planning and managing this project from its inception. We emphasize cultivating fruitful relationships rooted in trust with teachers working in Fujieda public schools.

In the next phase, we aim to deepen collaboration with companies that have major production facilities in Fujieda in order to give added impetus to these activities.

We are actively developing this program in cooperation with the Board of Education and city government officials who are responsible for promoting industry. In view of the keen interest expressed by central and local government, we continue to develop activities that offer practical support to science teachers and help enrich the life of the local community.

Comments on the Project from Government and Industry Officials



Mr. Yoshihide Chijiwa
Deputy Section Chief and Senior Specialist for School Education
School Curriculum Division
Elementary and Secondary Education Bureau
Ministry of Education, Culture, Sports, Science and Technology

According to the results of a national education survey conducted by the ministry in 2012, the proportion of students responding that they enjoyed studying science was high, 82%, in the sixth grade of elementary school, but this fell to 62% for students in the third year of junior high. That is a drop of about 20% over a three-year period. Moreover, only 53% of students in the third year of junior high agreed that what they learned in science classes would be useful when they left school. This means we are also seeing a drop in the proportion of students who appreciate the significance of science.

To address this situation, we believe it is important to offer youngsters opportunities to experience the role and utility of science and technology in society at large. In this way, we can stimulate their passion for science. Given this background, the Fujieda Science Education Support Project for providing practical assistance to junior high school science educators is a valuable initiative. We hope to see this project growing from strength to strength, continuing to help cultivate a love of science among our students.



Mr. Bin Ida
Executive Director
Japan Association for Chemical Innovation (JACI)

We began supporting this project four years ago as the Japan Chemical Innovation Institute.

What is so special about this project is the way in which the schools, the Board of Education and companies in Fujieda are all working together for the good of the community. Companies in other parts of Japan invite children from local schools to tour their factories, but the close organizational cooperation we have seen in Fujieda is inspiring.

The success of this project is attributable to the enthusiasm of the teachers, the support of the Board of Education and the cooperation of local enterprises. Sumitomo Bakelite has demonstrated strong leadership ever since the project's inception. Indeed, the company's support has been invaluable.

Comments from People Involved in the Project

These activities are the fruit of a collaborative endeavor involving many different people. By highlighting the linkage between science in the classroom and cutting-edge corporate technology, we hope to inspire teachers to share the wonder of science with as many youngsters as possible.



Mitsumoto Murayama
Kinu Kobayashi
Corporate Technical Dept.
Sumitomo Bakelite

Placing prime importance on trust and sureness, committed to contributing to the progress of society through business

By continually increasing management transparency and promoting socially beneficial corporate management, we strive to fulfill our accountability to all Sumitomo Bakelite stakeholders.

Strengthening Corporate Governance

At Sumitomo Bakelite, we recognize that increasing management transparency and promoting socially beneficial corporate management are essential for sound corporate governance. Moreover, this recognition is rooted in our business philosophy, "Our company places prime importance on trust and sureness, and shall commit itself to contributing to the progress of society and enhancement of people's welfare and livelihood through its business activities." Inspired by this philosophy, we are taking steps to strengthen corporate governance.

Management System

The Board of Directors, in accordance with laws and regulations, including the Regulations of the Board of Directors, makes decisions on the execution of important operational matters and monitors the progress of each director's execution of operations based on reports on important issues concerning the performance of duties by each director. In the case of situations corresponding to potential conflicts of interest involving directors, potential conflicts of interest are required to be reported in advance to the Board of Directors so that the director in question will be excluded from participation in the decision-making process concerning the matter in question. The Board of Directors selects candidates for the position of director from among persons whose qualifications and skills are appropriate for the execution of the Group's management and fulfillment of the Group's social responsibility. Directors are appointed by resolution of the general meeting of shareholders.

In addition, the remuneration of the directors (excluding outside directors) includes basic remuneration (monthly remuneration) and a bonus, and the total value of basic remuneration and bonuses is determined by the Board of Directors within the total amount of remuneration

approved by the general meeting of shareholders.

In addition, the Board appoints executive officers, and the executive officers are responsible for executing their assigned tasks under the direction of the president. Currently, the management system includes nine directors and 18 executive officers (including seven who serve concurrently as directors). Of the directors, one is an outside director.

There are four corporate auditors, two of whom are outside corporate auditors.

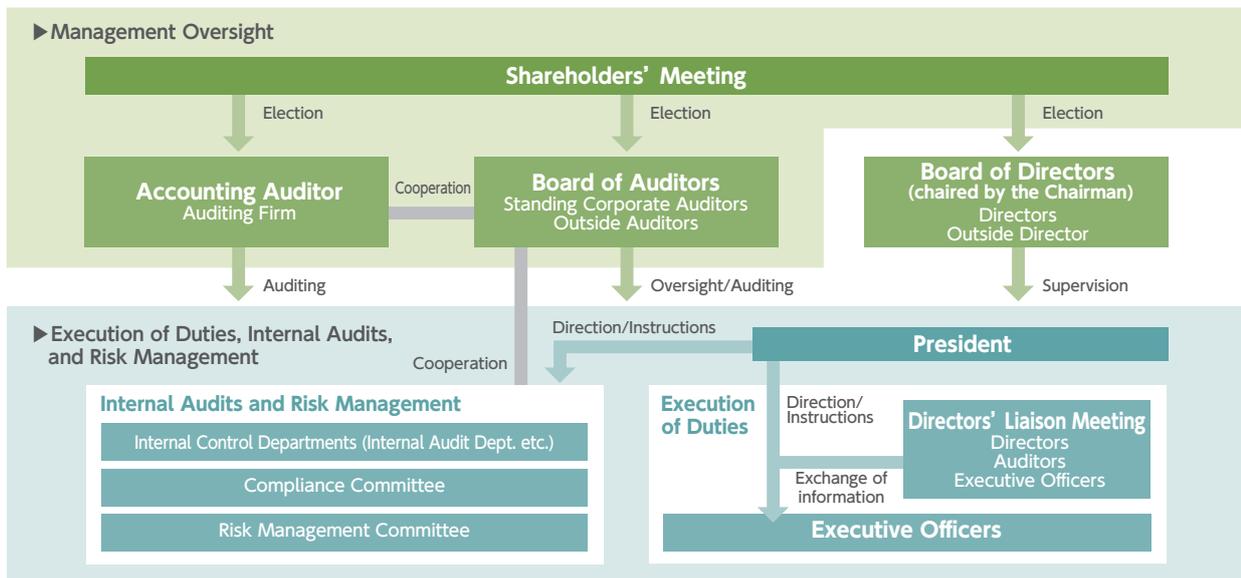
Internal Control

Sumitomo Bakelite has systems in place for ensuring appropriate operations in accordance with its business philosophy. In accordance with the Basic Policy on Internal Control Systems determined by the Board of Directors in May 2006, we periodically review the systems and promote various activities to enhance internal control. For details, please visit the Company's website (<http://www.sumibe.co.jp/english/company/internal-control/index.html>).

With respect to internal control over financial reporting, based on the Company's Basic Rules and Regulations for Internal Control over Financial Reporting established in April 2008, we endeavor to enhance systems for ensuring the reliability of the Group's financial reporting, appropriately operate internal control systems in terms of implementation, assessment, reporting, correction, etc., and ensure appropriate and timely disclosure of corporate information. The Comprehensive Guidelines for Internal Control in Consolidated Subsidiaries established in April 2010 covers the items subsidiaries are required to address in establishing their internal control systems and in their subsequent ongoing implementation of control activities.

The internal control over the Group's financial reporting

Structure of Corporate Governance



as of March 31, 2013, was assessed and deemed to be effective. In addition, as a result of the accounting auditor's audit, it was confirmed that the internal control report

prepared by the Company's management presents fairly the result of its assessment of internal control over financial reporting.

Rigorous Compliance

At Sumitomo Bakelite, we emphasize compliance because we recognize that adherence to laws and corporate ethics is integral to the conduct of business.

We endeavor to ensure that all the individuals constituting the Company are fully informed about the Standards of Conduct, a code of conduct that every employee is expected to follow in conducting business. Under the leadership of the Compliance Committee, we are also pursuing various compliance initiatives. In addition, each Group company is implementing similar initiatives to ensure uniform operations, and our subsidiaries and affiliates, in Japan and overseas, are establishing codes of conduct based on the Standards of Conduct.

In accordance with the Basic Policy on Internal Control Systems, the Internal Audit Department and other departments involved in internal auditing consider and assess the compliance of operating activities with laws and their conformity with various standards. Regarding the compliance situation in fiscal 2012, there were no material violations of laws or regulations with respect to the environment, human rights, occupational health and safety, provision and usage of products and services, management of customer information and data, improper accounting, discrimination in the workplace, or improper or illegal conduct, including violation of antitrust law.

Code of Conduct for Employees

To familiarize employees with corporate ethics and ensure compliance, Sumitomo Bakelite has established the Standards of Conduct, a code of conduct for its employees at Group companies throughout the world. A booklet distributed to all employees contains the Standards of Conduct, and offers guidance about their practical implementation. To raise consciousness throughout the Group, employees take turns reading the Standards of Conduct aloud at workplaces.



Ten Articles for Emphasis in Compliance

To make compliance an integral part of daily activities throughout the Group's worldwide operations, each department decides on the key items for compliance, in light of its circumstances and roles, and prepares Ten Articles for Emphasis in Compliance, which is displayed prominently in all workplaces. The Ten Articles are confirmed with all employees periodically by having them read them aloud in unison.

The Sumitomo Bakelite Group Compliance System

As part of the framework to ensure the appropriate conduct of business by directors and employees, Sumitomo Bakelite has established the Compliance Committee. This committee is responsible for promoting compliance through assessments of compliance levels and, as necessary, undertaking related improvements as well as education and training.

Whistleblower System

In the event that an employee discovers a compliance violation or suspects that there may have been a violation, he or she reports this directly to the supervisor or to a designated contact point.

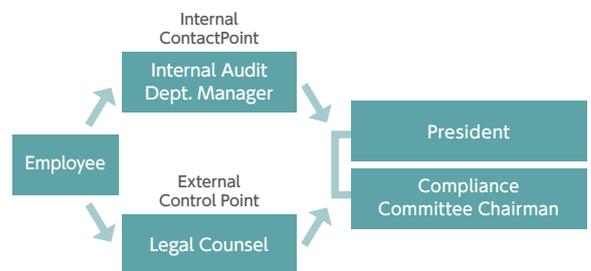
In addition to this internal reporting system, employees with such information to disclose can elect to report externally via designated legal counsel. The identity of those disclosing such information is kept strictly confidential.

Three cases were reported in fiscal 2012, but none of these involved major improprieties, and the matters were dealt with appropriately.

Compliance System



Flow of the Whistleblower System



Strengthening Risk Management

To prevent potential risks from materializing and to minimize losses, Sumitomo Bakelite has established the Risk Management Committee, which operates on a permanent basis and whose responsibilities are Group-wide in scope.

In April 2008, we instituted our Basic Risk Management Regulations, which establishes the fundamental policy regarding the risk management of Sumitomo Bakelite and its Group companies. The Regulations require precise management of diverse risks and implementation of appropriate measures.

In fiscal 2012, the Risk Management Committee deliberated on risks of unfair transactions, such as formation of cartels and bribery of foreign officials, and risks of fire, explosions and other accidents and took action to eliminate these risks.

Initiatives to Protect Personal Information

We recognize that the personal information of customers, shareholders, employees, and others in our possession is important and must be protected. Therefore, we are committed to ensuring that this information is not leaked.

Communication with Employees

The Sumitomo Bakelite Labor Union represents non-

Risk Management Committee



managerial employees of the Company. Representatives of the Union and the Company's management regularly hold labor-management meetings, and Corporate-level meetings are held twice each year. The president and other executives participate in these meetings, at which they explain the circumstances of the Company, exchange opinions with union representatives, and respond to questions. Moreover, at each of the Company's business sites in Japan, labor-management meetings are held each month for the purpose of exchanging opinions on various subjects. In addition to labor-management meetings, labor-management conferences are held whenever major issues arise related to changes in labor conditions. Such conferences are held at the corporate or business site level depending on the nature of the issue. They provide a forum for cooperative efforts to resolve problems.

We set targets and promote activities concerning the environment and society

The Group's activities concerning the environment and society are listed in the table below. The table presents the big picture of the Group's activities.

Area of activities	Major items	FY2012 targets	FY2012 results	FY2013 plan	Achievement evaluation
Environmental initiatives	Reduction in CO ₂ emissions (compared with FY2005)	In Japan: 27% reduction	In Japan: 25% reduction	In Japan: 26% reduction	▲
		Overseas: 0.5% reduction	Overseas: 13% reduction	Overseas: 11% reduction	○
	Reduction in material loss (compared with FY2005)	In Japan: 28% reduction	In Japan: 25% reduction	In Japan: 31% reduction	▲
		Overseas: 30% reduction	Overseas: 43% reduction	Overseas: 45% reduction	○
	Reduction in chemical substance emissions (In Japan: compared with FY2005) (Overseas: compared with FY2010)	In Japan: 64% reduction	In Japan: 50% reduction	In Japan: 68% reduction	△
		Overseas: 20% reduction	Overseas: 13% reduction	Overseas: 29% reduction	▲
Relationships with society	Environmental and safety audits	In Japan: 5 sites, 7 affiliated companies, 8 plants Overseas: 6 companies in East Asia, 3 companies in Europe	In Japan: 5 sites, 7 affiliated companies, 8 plants Overseas: 6 companies in East Asia, 3 companies in Europe	In Japan: 5 sites, 7 affiliated companies, 8 plants Overseas: 5 companies in Southeast Asia, 5 companies in North America	○
	Prevention of occupational accidents (in Japan)	Number of accidents resulting in lost work time: 0	Number of accidents resulting in lost work time: 3	Number of accidents resulting in lost work time: 0	△
	Quality audits	In Japan: 10 sites Overseas: 5 sites	In Japan: 13 sites Overseas: 5 sites	In Japan: 13 sites Overseas: 6 sites	○
	Increasing customer satisfaction	Continue activities to strengthen ties with customers under the leadership of the CS Promotion Committee	<ul style="list-style-type: none"> Continued activities to strengthen ties with customers under the leadership of the CS Promotion Committee Established a system for organizational CS promotion activities at sites 	<ul style="list-style-type: none"> Continue activities to strengthen ties with customers under the leadership of the CS Promotion Committee Promote organizational CS promotion activities at sites 	○
	CSR procurement	Take initiatives to ensure that the Group companies are thoroughly aware of the Group's procurement policy	Provided briefing at procurement meetings in Europe, the U.S. and Asia and requested the Group companies to either adopt the Group's procurement policy as is or establish their own policy based on the Group's procurement policy	Establish green procurement guidelines and post it on the website	○
	Support for environmental NPOs	Continue support for an NPO "Morino Chonai-Kai" (Forest Neighborhood Association)	Use of "Morino Chonai-Kai" paper increased by 20% compared with the previous year	Continue support for "Morino Chonai-Kai"	○
	Support for education of the next generation	Continue to hold study and exchange meetings with science teachers (support activities); provide teaching materials for demonstration of experiments	Held a seminar for science teachers in Fujieda City, which consisted of a lecture and a science experiment by Dr. Kazuko Ogino, Professor Emerita at Tohoku University. Held an exchange meeting at BATHCLIN Corporation (lecture on technology development and factory visit)	Continue to hold study and exchange meetings with science teachers (support activities), continue provision of teaching materials for demonstration of experiments	○
	In-house human resources development	Continue employee education and training at SB School	Cumulative total of about 19,000 employees participated in training programs Cumulative total of about 30,000 hours of education and training	Continue employee education and training at SB School	○

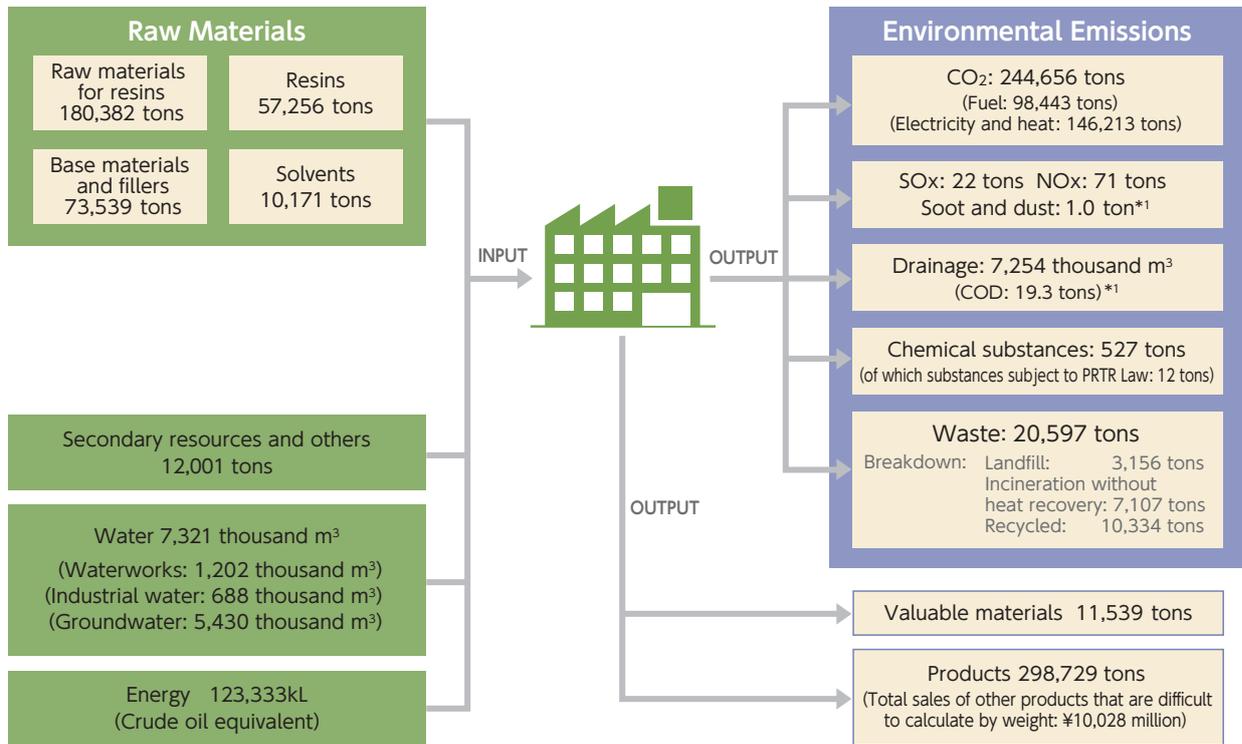
○: Attained goal △: Goal not attained (but improvement over the previous fiscal year) ▲: Goal not attained (deterioration from the previous fiscal year)

Clarifying environmental impacts of overall business activities and investments in environmental protection

Material Flows

The figure below shows inputs, including raw materials and energy, and outputs that are products and emissions released into the environment. Since fiscal 2011, the boundary has been extended to include overseas Group companies.

The Group is working to minimize its impact on the environment by means of waste reduction and resource saving through the more efficient use of raw materials, energy, and water.



*1 Since methods of calculating emissions of soot and dust and chemical oxygen demand (COD) differ among countries, these figures are compiled solely for business sites in Japan at present.

Note: For information on the coverage of the data, please see the "Boundary" section on page 2.

Investments in Environmental Protection

Sumitomo Bakelite has compiled data annually on the amounts of investments in environmental protection of all Group companies in Japan since 2000.

The figure on the right shows the breakdown of investments in environmental protection by all Group companies in Japan in fiscal 2012. The Group is stepping up its environmental protection efforts.

Note: For the period and business sites covered for data compilation, please see page 2.

Amounts of Investments in Environmental Protection in Fiscal 2012

Item	Investment amounts (millions of yen)
Emissions control	134
Energy saving	163
Waste reduction, recycling, and treatment	58
Total	355

Based on medium- to long-term reduction targets, we are working to reduce environmental impacts

In fiscal 2009, we summarized our medium- and long-term plans, and then in fiscal 2010, to strengthen our initiatives to reduce environmental impacts of our activities, we formulated and began to implement a new medium- to long-term plan covering the period through fiscal 2020.

Graphs on the right show the results for fiscal 2012 and the plan for fiscal 2013.

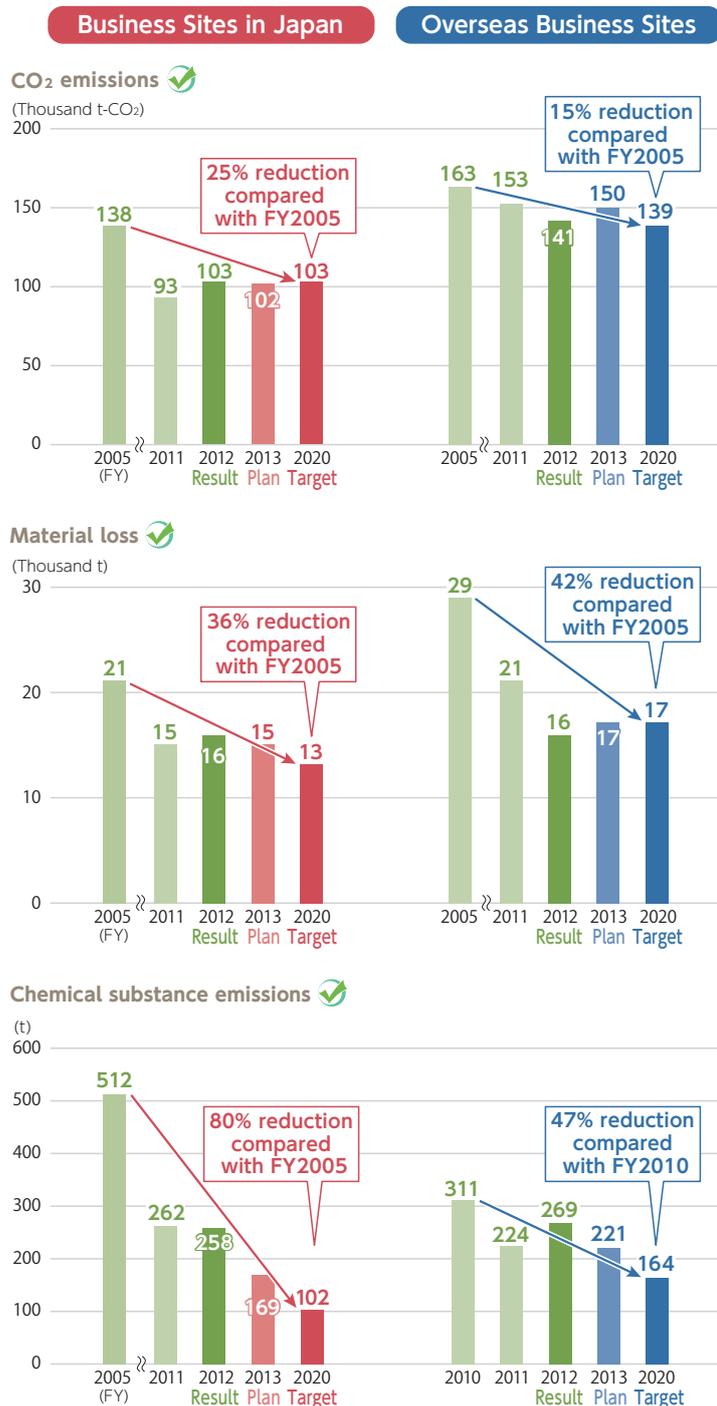
CO₂ emissions from the Group's business sites in Japan increased in fiscal 2012 owing to deterioration of the CO₂ emission coefficient as a consequence of the stopping of operation of nuclear power stations.

Material loss and chemical substance emissions were virtually unchanged from the previous year, but they are expected to decrease in fiscal 2013 owing to waste reduction through MFCA* and reduction of emissions to the atmosphere because of the introduction of facilities.

At the Group's overseas sites, CO₂ emissions and material loss greatly decreased, reflecting a decline in production output, but they are expected to increase in fiscal 2013 because of the recovery of production. However, the downward trend is expected to continue over the long term owing to productivity improvement.

Chemical substance emissions have been increasing since fiscal 2011, partly because of the launch of new businesses. We will implement measures to reduce their emissions step by step.

Notes:
 1. For information on the coverage of the data, please see the "Boundary" section on page 2.
 2. For definitions and the calculation method of CO₂ emissions, material loss, and chemical substance emissions, please refer to Data Section on page 48 of the Web edition.
 *MFCA : Material Flow Cost Accounting. MFCA is designed to concurrently reduce environmental impact and costs. Sumitomo Bakelite uses MFCA as an analysis method.



Reduce material loss and chemical substance emissions while saving resources and energy

The Environmental Impact Reduction Committee

The Environmental Impact Reduction Committee has two subcommittees: the Life Cycle Subcommittee and the Energy Conservation Subcommittee. In fiscal 2012, the Life Cycle Subcommittee focused on ensuring that all R&D departments implement design for energy efficiency and life cycle assessment (LCA) from the development phase in order to realize energy-saving production from the ramp-up of production of new products. Another priority was the fostering of researchers capable of LCA and design for energy efficiency. The Life Cycle Subcommittee intends to increase the scope of application of design for energy efficiency and LCA in fiscal 2013.

The Energy Conservation Subcommittee promoted horizontal deployment of a project executed in fiscal 2010 under the guidance of external consultants. In this initiative, each business site has formulated and is implementing a plan to reduce energy consumption by 10-20%. In fiscal 2013, the Shizuoka Plant and the Amagasaki Plant, which are on track to achieve their action plans, will proceed to the next step, energy-efficient factory design. The Energy Conservation Subcommittee is also working to establish a framework for ongoing energy-conservation activities through the Energy Conservation Promotion Team (PEC), which was formed in fiscal 2012 to apply the expertise gained from the consulting company to Group companies worldwide.

Material Flow Cost Accounting (MFCA)

Implementation of MFCA enables more efficient use of resources and contributes to waste reduction and energy conservation. We introduced MFCA at all production sites in Japan in fiscal 2011 to clarify losses in various processes. MFCA was also introduced at overseas production sites in fiscal 2012.

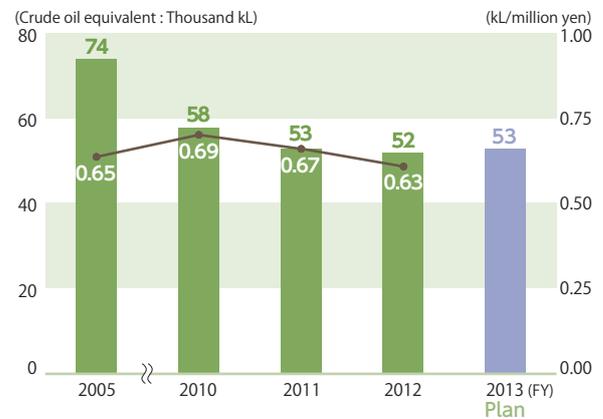
Comment from an Engineer at the Nara Plant of S.B. Sheet Waterproof Systems

Our environmental policy at the Nara Plant is to promote efficient use of resources, reduce waste, and recycle. Through strict sorting of waste for landfill and recovery of waste as raw materials for refuse paper & plastic fuel (RPF), we were first able to shift from a big 8m³ container for landfill to a small 2.4 m³ one, and eventually we found we could dispense with that. Now we only use flexible containers as we have achieved zero emissions. We are determined to maintain zero emissions by continuing to implement measures.



Yoshimi Nishitsuji
General Affairs
Department
Nara Plant
S.B. Sheet
Waterproof Systems

Energy Usage and Energy Usage per Production Amount Value*



* Energy usage per production amount value is determined using the following equation: Energy usage per production amount value = energy usage/(production amount x unit price)

Note: Data covers all the business sites in Japan listed on page 2.

CO₂ Emissions and CO₂ Emissions per Production Amount Value*



* CO₂ emissions per production amount value are determined using the following equation: CO₂ emissions per production amount value = CO₂ emissions/(production amount x unit price)

Note: Data covers all the business sites in Japan listed on page 2.

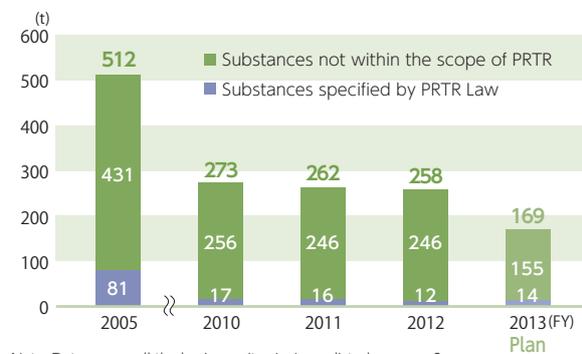
Reduction of Emissions of Chemical Substances

Since fiscal 1996, the Group has been involved in JCIA PRTR*1 initiatives, keeping track of the release and transfer of specified substances and setting medium- to long-term targets for reducing emissions of chemical substances into the environment.

Beginning in fiscal 2010, we expanded the scope of the management target from the volume of atmospheric emissions of solvents to include emissions of applicable chemical substances into the atmosphere, hydrosphere, and soil. The emissions volume in the base year of 2005 and the recent trends are shown in the graph. Emissions have been on a moderate downward trend since fiscal 2010 thanks to countermeasures. We expect to further reduce emissions in fiscal 2013.

Emissions of substances subject to the PRTR Law*2 were reduced to 12 tons from fiscal 2011. Based on the medium- to long-term plan, we will work for further reduction to attain the goals set for fiscal 2020.

Emissions of Chemical Substances



Note: Data covers all the business sites in Japan listed on page 2.

*1 Pollutant Release and Transfer Register (PRTR) is a system for measuring, compiling, and reporting data on various harmful chemical substances, including their sources, amounts released into the environment, and amounts transferred from business sites in the form of waste.

*2 The PRTR Law is an abbreviation of "The Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof." The amounts of the 38 substances subject to control under the PRTR Law, which were released/transferred by the Company, are shown in the Data Section on page 53 of the Web edition. The total amount of emissions of these substances was 12 tons, and the total amount transferred was 120 tons.

Reducing Material Loss

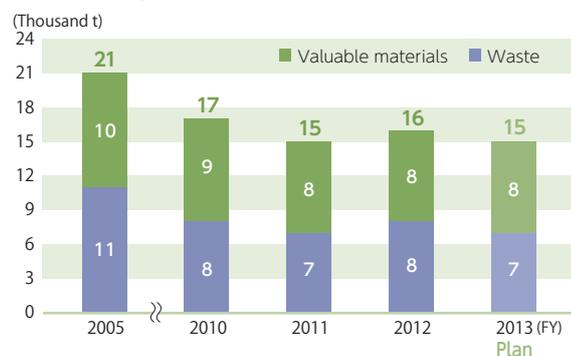
To reduce the environmental impacts of its activities and increase earnings, the Group is working to increase the efficiency of resource utilization through improvement of manufacturing process yields and recycling within processes.

Having revised the medium- to long-term plan for reducing environmental impacts in fiscal 2010, the Group expanded the scope of subject materials to include all valuable materials and set a goal for reducing material loss. In addition, the Group is implementing measures to attain zero emissions of waste in Japan by promoting recycling

and reuse instead of landfill or incineration without heat recovery. In fiscal 2012, the Nara Plant of S.B. Sheet Waterproof Systems gained internal certification as a site with zero emissions. This means that all the Group's production sites in Japan have achieved zero emissions.

The graphs show the volumes of material loss and those of materials subject to zero emissions measures for the base year of fiscal 2005 and for recent years. The volumes in fiscal 2012 were virtually unchanged from fiscal 2011. We intend to promote further reduction through analysis of losses in processes using MFCA.

Material Loss



Notes:

1. Data covers all the business sites in Japan listed on page 2. However, the Head Office and marketing offices are excluded from compilation of data for material loss.

2. Waste comprises landfill waste, externally incinerated waste, internally incinerated waste, and externally recycled waste (expenses paid).

Materials subject to Zero Emissions Measures



Notes:

1. Data covers all the business sites in Japan listed on page 2.

2. Zero-emissions-targeted substances comprise landfill waste, internally incinerated waste, and externally incinerated waste. No waste was internally incinerated at business sites in Japan in fiscal 2012.

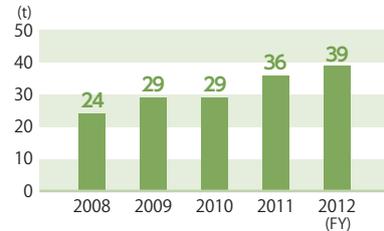
We are implementing countermeasures to prevent contamination of air, water, and soil

Emissions to the Atmosphere

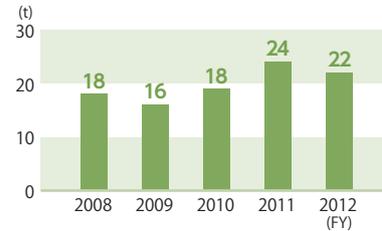
The Group's business sites in Japan have been promoting a shift of boiler fuel from oil to natural gas since fiscal 2004. Emissions of NOx, SOx, and soot and dust

have been low since fiscal 2011 despite slight fluctuations due to changes in the amount of sulfur contained in fuel oil and changes in the N₂ component ratio in natural gas.

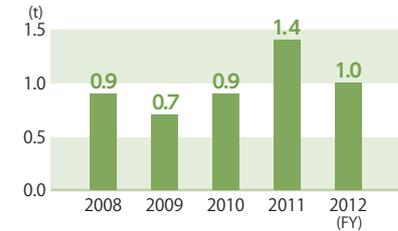
NOx Emissions



SOx Emissions



Soot and Dust Emissions



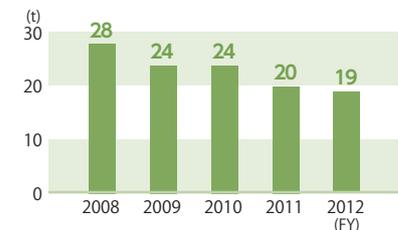
Note: Data covers all the business sites in Japan listed on page 2.

Emissions to the Hydrosphere

Effluent from plants is categorized into industrial and household sewage and rainwater, which includes cooling water. Cyclic use of cooling water is enabling us to reduce use of water resources and the volume of wastewater.

For sewage, treatment facilities, such as high-concentration phenol recovery equipment and activated sludge treatment equipment, and surveillance systems for constant monitoring are in place to ensure compliance with environmental standards and laws and regulations at the national and local government levels.

Impact by COD



Notes: 1. Data covers all the business sites in Japan listed on page 2.

2. Chemical oxygen demand (COD) is the amount of oxygen consumed by potassium permanganate to oxidize organic compounds in water. COD is a measure of water quality.

Soil and Groundwater Contamination Countermeasures

The Group is implementing measures to purify contamination that has been detected. We are also establishing a framework for preventive measures by conducting risk assessment about possible leakage of chemical substances at the Group's business sites worldwide. In fiscal 2012 we had no major case of leakage.

Contamination Countermeasures Act and the ordinance of Yokohama City. Decontamination of heavy metals by excavation and removal was completed in June 2013. Regarding trichloroethylene, decontamination work for soil and groundwater started in May 2013 and is scheduled for completion in December 2013, followed by monitoring for two years.

Soil Decontamination at the Totsuka Office

As a result of the investigation of soil and groundwater of the site of the Totsuka Office in Yokohama, which was closed in June 2012, soil contamination by trichloroethylene and heavy metals (fluorine, hexavalent chromium, and lead) and groundwater contamination by trichloroethylene were detected. We reported these results to the authorities and disclosed the information on our website. At present, decontamination work is underway in accordance with the Soil

Soil and groundwater investigation results, countermeasures, and monitoring results

Site	Results of investigation	Countermeasures and monitoring results
Amagasaki Plant	Lead was detected by soil content sampling in 2009 and 2010 (max. 550 mg/kg whereas the standard is 150mg/kg). No groundwater contamination was detected.	Monitoring of groundwater was continued and it was confirmed that the standard is satisfied.
Akita Sumitomo Bakelite	Lead was detected by soil elution sampling in 2005 (max. 0.032 mg/L whereas the standard is 0.01 mg/L). No groundwater contamination was detected.	Monitoring of groundwater was continued and it was confirmed that the standard is satisfied.

We are helping to preserve woodlands and conserve biodiversity through our business activities

Sumitomo Bakelite's Approach to Biodiversity

We recognize the need for fundamental measures in our mainstay manufacturing operations to reduce the use of substances that have adverse environmental impacts. Through such initiatives, we can help conserve biodiversity.

In addition, as a promotion partner of "The Declaration of Biodiversity by Nippon Keidanren," we are implementing measures to ensure that our operations are fully in accord with the letter and spirit of that declaration.

Topics

Shizuoka Plant Biotope Project : Progress in 2012

Based on the results of a biodiversity assessment conducted in fiscal 2011, we have started creating a biotope at the Shizuoka Plant. The work done in fiscal 2012, the first year of the construction project, is outlined below. Although the project is still in its infancy,

we are delighted with what has been achieved so far.

Killifish, which is designated as a vulnerable species, inhabit the pond at this site. We are hoping that the improvement of the habitat will lead to an increase in the population.

Forestland improvement (Tamamushi Woods)

Jewel beetles (tamamushi) used to be common in Fujieda but their population has declined. We plan to attract them by planting Chinese hackberry (Celtis sinensis), a tree called enoki in Japanese, which is a favorite of the jewel beetle, by the pond. We hope to have a flourishing stand of these trees within a few years.



Development of wetland

The ecotone, that is, where land and water meet, was species-poor. So we reduced the gradient of the shoreline to encourage the growth of emergent plants. The gentler contours also make it easy for turtles to come ashore and for frogs, killifish and other fish species to spawn and conceal themselves from predators.



Removal of water hyacinth

Beds of water hyacinth, a non-native invasive species that tends to flourish at the expense of everything else, even in winter (left), were removed (right). There is still plenty of water hyacinth downstream, which we plan to remove, too.



Irodori no Oka

Rising land offering views of the biotope was made. We also prepared a clump of rocks offering nesting opportunities for kingfishers. Flowering plants native to the locality will be introduced.



Enhancing quality and customer satisfaction by sincerely responding to customer requirements

We are implementing appropriate quality assurance throughout the Group as the precondition for the stable and sustained provision of products and services that customers can use with satisfaction, peace of mind and delight.

Sumitomo Bakelite's Quality Assurance System

The quality management systems (QMS) of the business sites of Sumitomo Bakelite and its Group companies worldwide are based on ISO 9001. 30 sites were certified as of April 1, 2013.

Within a framework conducive to inter-divisional collaboration in all processes—from product planning, R&D, design and development, and preparation for production, through production, sales, service, and quality assurance—the consistent quality of our products and services is maintained and steadily improved so that customers can use them with satisfaction and peace of mind.

Everyone working in the Group is required to be involved in the systematic implementation of quality assurance initiatives based on QMS in accordance with the Quality Management Policy stated on the right.

Examples of Sumitomo Bakelite's Initiatives

The flowchart below shows our Future State Vision of the new product development and commercialization processes. Key aspects of the customer value creation process are introduced.

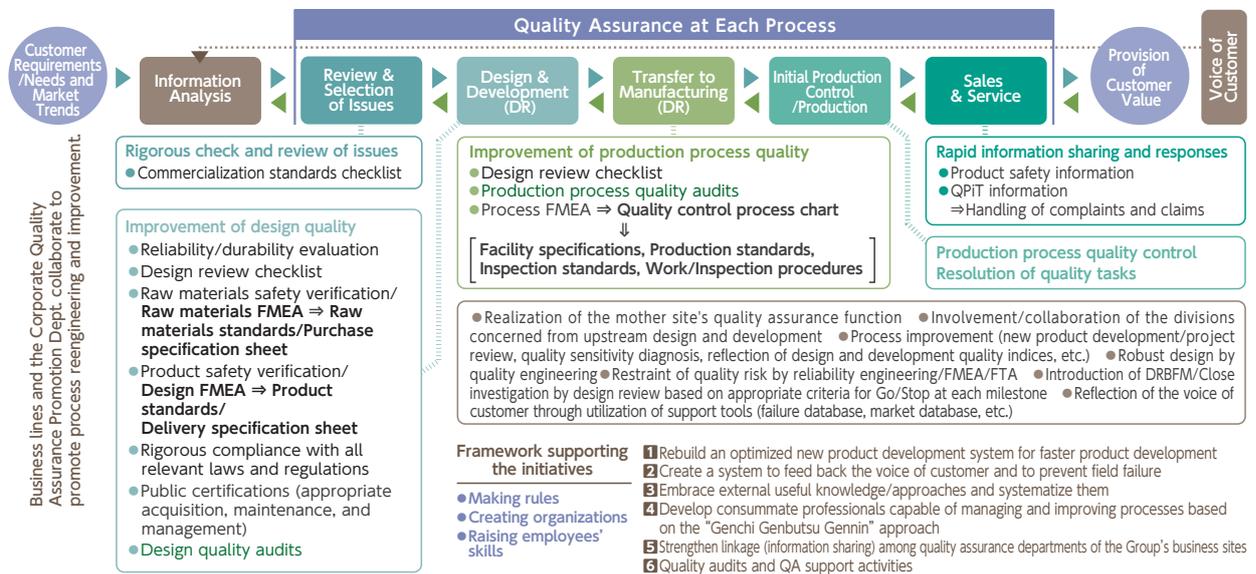
<Basic Policy on Quality Management>

Truly and sincerely responding to customer requirements and changes in the social and business environments, all Sumitomo Bakelite (SB) Group employees shall promote continuous and decisive efforts to enhance "Broad-based Total Manufacturing (Monozukuri) Quality (Products and Service)", which enables customers and markets to use our products with confidence as well as to be offered delight, through consolidating all SB's available resources. And besides, we shall strive for the realization of customer value creation process allowing the company to efficiently and rapidly achieve the planned profit.

<Quality Initiatives>

1. Work on improvement of CS (Customer Satisfaction).
2. Increase revenue through enhancing "Broad-based Total Manufacturing (Monozukuri) Quality".
 - ① Improve output quality in NPD and shorten Product Development cycle.
 - ② Establish "Quality Assurance at Each Process".
 - ③ Ensure full compliance.
3. Improve Total Manufacturing (Monozukuri) Process with quality information.
4. Reduce negative product cost.
 - ① Deal with critical quality problems as an organizational activity swiftly and appropriately.
 - ② Enhance "Broad-based Total Manufacturing (Monozukuri)" Quality by means of process innovation and work-place improvement based on engineering study about abnormality.
 - ③ Reduce failure cost across SB Group by sharing information and knowledge cross-divisionally.
5. Develop human resources capable of controlling quality risk and improving quality, utilizing repeatedly PDCA cycle based on three major components (occurrence, severity and detection) of FMEA in "Genchi Genbutu Gennin" approach.

Sumitomo Bakelite's Future State Vision of the Customer Value Creation Process



Building an optimized NPD system for faster product development

In new product development (NPD), improving the quality of product/process design outputs is the key to minimizing the reworking of designs and accelerating the development cycle. This so-called is "Optimization" and "The shortest processing time". We are pursuing the following initiatives to simultaneously optimize NPD and minimize the development cycle.

① Promotion of cross-functional concurrent engineering

If the R&D division, an upstream organization, operates alone without sufficient inputs of data, information and ideas from downstream organizations, the need for design reworking will likely grow and the NPD process will be delayed. Conversely, completing more of the design development work at upstream phases will help minimize reworking and thus speed the development cycle. This requires cross-functional concurrent engineering, that is, the involvement and collaboration of every related division from the upstream processes through to completion of the development cycle.

② Creating a system of NPD/project reviews to cascade feedback to the next NPD stage

Various problems arise at every phase of the NPD process. It is

vitaly important to analyze and resolve each problem in order to prevent recurrence at a later phase. This requires a system of sequential development process reviews to identify the root causes of problems, which may be systemic, cultural or a combination of the two, and thoroughly solve them to prevent recurrence. We refer to this approach as NPD/project reviews.

Sumitomo Bakelite also pursues a similar approach for non-NPD business processes. We are developing a review process combining "Why-Why Analysis" and "Feedback Review Analysis."

③ Active utilization of a spectrum of quality management approaches

To date, we have primarily employed Failure Modes and Effects Analysis (FMEA) in reviewing NPD-related design processes, in order to create better and more definitive product/process designs. FMEA identifies quality risks and devises precisely targeted measures to restrain such risks in advance.

Since fiscal 2012, with a view to creating designs at the upstream phase that are more robust with respect to "noise" (in terms of external disturbances, internal stress or variability of materials), we have enriched the training curriculum through the addition of Taguchi method quality engineering. Taguchi methods (see chart below) are now being introduced to NPD processes.

Inculcating the "Genchi Genbutsu Gennin" Approach

The SB School has introduced 30 quality-related training programs to heighten awareness of quality issues, restrain quality risks, and upgrade quality technology throughout Sumitomo Bakelite.

Since fiscal 2012, the training available has been augmented by introducing new courses on (1) reliability engineering, FMEA and Fault Tree Analysis (FTA), the former course on FMEA Basic having been thoroughly revised and updated, (2) quality engineering, and (3) training for quality management promoters.

Many engineers have experienced quality engineering training courses, which were held at two sites in Japan in fiscal 2012. The courses have deepened engineers'

understanding of the critical importance of creating robust designs through the design development process. Future plans include broadening the participation of engineers in the courses.

Orientation for the training course for QA managers took place in March 2013. Targeting the quality management promoters at each Group site, this course is planned to begin in 2013. The training lectures are designed to help quality management promoters acquire a surer grasp of what needs to be done and the role of their departments in the overall scheme, so they can take the initiative and plan activities to identify and eliminate disparities between current and best QA practice while resolving related issues.

Quality Audits and QA Support Activities

The Corporate Quality Assurance Promotion Department conducts periodic quality audits of the Group's domestic sites and major Group subsidiaries, both in Japan and overseas. Covering design development and production processes, these quality audits inspect and verify QA activities and product safety measures with the aim of supporting QA programs while raising awareness of quality issues company-wide.

In fiscal 2012, quality audits were conducted at 13 domestic sites and five overseas sites (covering 26 operating divisions, in all). The target for the number of quality audits was exceeded. Improvement activities were initiated to address issues identified through these audits.

Separately, with the aim of ensuring smooth commercialization, a collaborative process involving all relevant personnel is being applied to identify and solve quality-related issues concerning the products of new businesses. In addition, quality audits are also executed, as necessary, to inspect and verify QA activities of any of these products supplied on a commercial basis and to verify the degree of perfection of Total Manufacturing Quality attained.

Quality engineering training session (Feb. 25, 2013)



Making sure our chemical substance management is compliant wherever we operate worldwide

We are establishing a comprehensive chemical substance management system to respond to increasingly stringent chemical substance legislation around the world. The objective is to gather all necessary information on chemical substances and ensure appropriate management.

Chemical Substance Management throughout Product Lifecycles

There is a worldwide trend toward mandatory comprehensive management of chemical substances throughout product lifecycles from development through manufacturing, usage, and disposal. We have a system in place for investigating chemical substance-related laws and

regulations in Japan and throughout the world, examining data on chemical substances from the product development phase onward, and managing chemical substances contained in products in order to minimize their environmental impacts throughout product lifecycles.

Provision of Chemical Substance Data

Safety Data Sheets (SDSs) indicate the properties of chemical substances and provide information on safe handling. They are an essential information resource throughout the Group.

We are emphasizing improvement of SDSs. In addition to chemical substances subject to regulatory control in Japan and overseas, we are taking the initiative by voluntarily broadening the scope of our disclosure. In particular, in response to the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), we introduced MSDgen*1 in 2008. Since fiscal 2011, we have been preparing SDSs compliant with regulations of countries in Eastern Europe and Latin America, in addition to those for the leading industrialized countries. We now provide SDSs compliant with the regulations of 38 countries in the

official languages of those countries. We have enhanced the content of SDSs for Japan by adding information related to the revised Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Chemical Substances Control Act) and regulatory information related to waste.

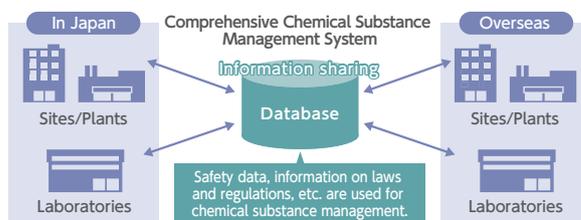
SDS Compliance with GHS

Region	Number of countries covered	Compliance with GHS
North America and Latin America	3 countries	Not compliant because legislation is being preparation
Europe	Non-EU	5 countries
	EU	19 countries
Asia/Oceania	10 countries	Compliant for 5 countries
Japan		Compliant with JIS Z 7253*4

Chemical Substance Management System

Construction of a comprehensive chemical substance management system is underway to unify management of chemical substances contained in products and raw materials handled by the Group's plants and research laboratories worldwide. Fiscal 2012 was the first year of this 3-year project.

This system speeds up investigations of the safety of products and raw materials, regulatory information, etc. and automates quantitative control in response to REACH*5 and the Chemical Substances Control Act. Introduction of this system allows us to provide accurate information in a



timely manner.

We will continue enhancing this system in order to execute exemplary management of chemical substances.

*1 MSDgen: Software suite for authoring SDSs in multiple languages. *2 EC: The EU's system for classifying hazardous and harmful substances based on an EC directive *3 CLP (Classification, Labeling, and Packaging of Substances and Mixtures) Regulations: A set of regulations regarding the classification, labeling, and packaging of substances and compounds in accordance with GHS that during a transitional period must be complied with together with the EC system *4 Japanese Industrial Standards (JIS) Z 7253: "Hazard Communication of Chemicals based on GHS—Labeling and Safety Data Sheet (SDS)" *5 REACH (Registration, Evaluation, Authorisation, and Restriction of Chemicals): A set of regulations passed by the European Parliament and European Council regarding the registration, evaluation, authorization, and restriction of usage of chemical substances

SBPS, our Total Manufacturing (Monozukuri) Management system, offers value attuned to the needs of customers and society

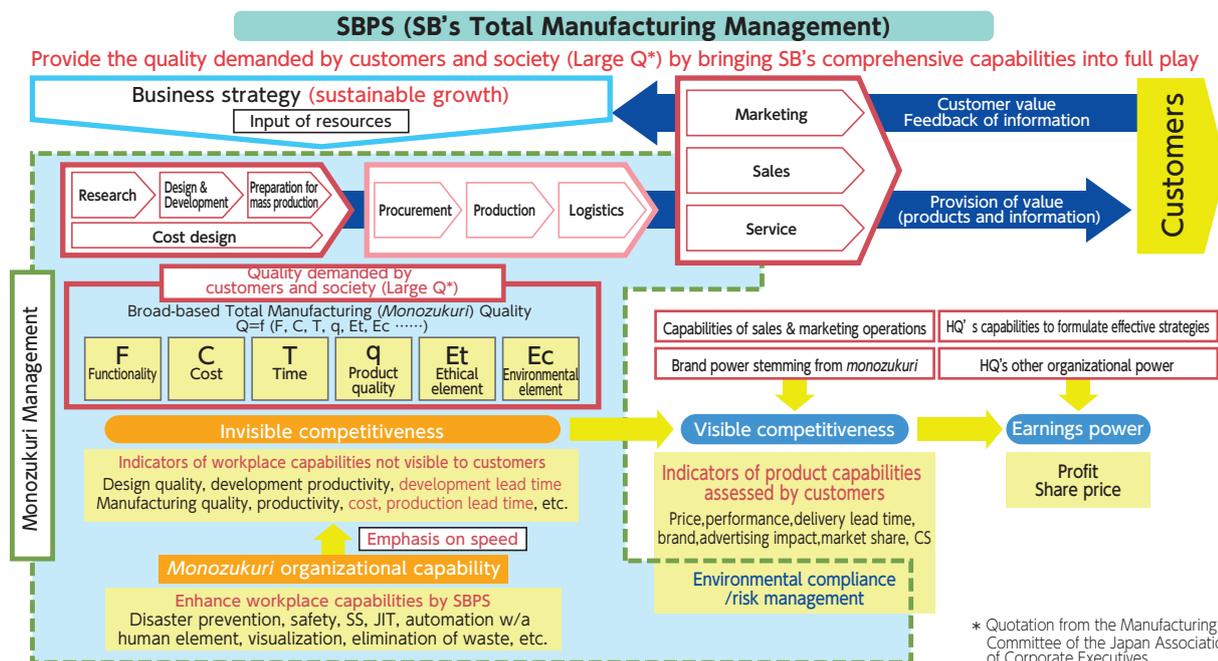
We are focusing the Company's manifold resources in order to return to the path of sustainable growth. With this overriding goal in mind, our operating divisions and other organizations are pursuing quality, efficiency, and speed in business operations.

Sumitomo Bakelite's Vision for Total Manufacturing (Monozukuri) Management

We have been promoting the improvement of our operations by focusing on "Broad-based Total Manufacturing (Monozukuri) Management" that encompasses the entire manufacturing value chain—from marketing to design and development, production, and sales processes. Moreover, we are striving to build optimal

monozukuri systems in accordance with the concept that "Monozukuri = the quality demanded by customers and society (Large Q)*." The aim is to deliver customer satisfaction while prevailing in markets. We are strengthening Monozukuri Management through the involvement of all business operations.

Outline of Total Manufacturing Management Initiatives



Wider Use of IT in Monozukuri

With the objective of establishing high-efficiency, high-precision production processes, we are making full use of IT to improve work efficiency, perfect quality, enhance preventive facilities maintenance, transfer technical skills from one generation to the next, etc.

Human Resources Development

To create a strong organization in order to foster the development of talented individuals (observant, thoughtful, and decisive) and build a strong organization, we offer two types of educational programs: those corresponding to positions and those addressing specialized topics.



The SBPS & Production Engineering Promotion Dept. is promoting improvement of monozukuri based on the 3 Gen approach.

We work to ensure appropriate, proactive information disclosure and compliance with laws and social norms

We aim to cultivate partnerships with our stakeholders through appropriate disclosure and compliance.

Relationships with Shareholders and Investors

Basic Policy for Distribution of Profits

Sumitomo Bakelite is working actively to enhance its corporate value and regards returning a portion of profits generated by its businesses to shareholders as one of its most-important management priorities. In appropriating its profits, the Company considers the balance with retained earnings that will be used for the future development of the business, such as R&D expenditures, capital investment, and M&A, and, seeks to pay stable dividends in line with consolidated corporate performance.

Information Disclosure

In addition to disclosure in accordance with the timely disclosure standards of the stock exchanges where the Company's shares are listed, we post financial results, information on General Meetings of Shareholders, and

other information on our website, as part of our proactive efforts to ensure appropriate and timely disclosure.

Encouraging Exercise of Voting Rights at Shareholders' Meetings

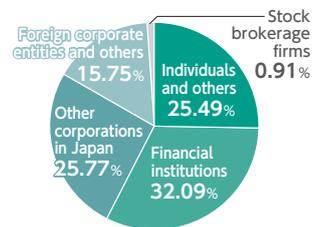
Through such initiatives as enabling shareholder voting by electronic means and posting notices of the general meeting of shareholders on our website, we are working to create an environment that makes it easier for shareholders to exercise their voting rights.

Stock Information and Shareholder Composition

Number of shares issued and outstanding: 262,952,394 shares

Number of shareholders: 19,215

Shareholder composition by type of shareholder (as of March 31, 2013)



Relations with Business Partners

The Global Procurement Division is in overall charge of the purchasing of raw materials, fuel, and equipment for use at the Company's plants and the Group companies worldwide. Our procurement policy is posted on the Company's website. We provide briefings on the procurement policy to Group companies at procurement conferences and on other occasions, in order to ensure that each Group company fully complies with the policy. We are promoting CSR procurement and are in the process of formulating green procurement guidelines. Once they are finalized, we will post the green procurement guidelines together with the revised procurement policy on our website.

Basic Approach

Sumitomo Bakelite strives to ensure compliance with the laws, regulations, and social norms of Japan and the other countries and regions in which it operates and requests that its business partners also observe such compliance standards. In principle, the Company concludes a basic contract with each business partner that requires the contracting parties to fulfill their corporate social responsibilities (CSR). Our criteria for selecting business partners include their CSR and environmental impact reduction initiatives.

Relations with Business Partners

When selecting new business partners, the criteria established by the Global Procurement Division are applied, and the decision to commence transactions is made based on fair judgment. We are convinced that it is important to establish a relationship of equals based on trust with every business partner and that such relationship should be beneficial to both parties.

Initiatives for Stable Procurement

The Global Procurement Division audits materials manufacturers, focusing on their ability to ensure stable supply. The audit covers the overall situation of the manufacturer, the business in question, procurement of raw materials, equipment, location, manufacturing workplace, workers, relationship with the Company, etc. Audit results are judged comprehensively.

Procurement Crisis Management

The Global Procurement Division prepares a list of locations of materials manufacturers' factories and keeps it up to date. In the event of a disaster, the division checks the statuses of manufacturers' factories in the affected areas and formulates countermeasures.

Safety and environmental protection are our top priorities in business

Initiatives for occupational health and safety, accident prevention, and environmental protection are the foundation of sustainable business activities. Management and labor collaborate to continually improve those vital aspects of the workplace.

OHSAS 18001 Certification

Sumitomo Bakelite started preparations to obtain OHSAS 18001 certification for the occupational health and safety management systems at plants and principal affiliated companies in Japan in 2009, and at overseas affiliated companies in 2010. By the end of March 2013, 21 business sites, consisting of four business sites and three affiliated companies in Japan and 14 affiliated companies overseas, were certified.

Reducing Risks of Machinery and Equipment

Beginning in 2008 at plants and subsidiaries and affiliates in Japan and in 2009 at overseas subsidiaries and affiliates, new machinery and equipment have been designed to comply with ISO 12100. We are systematically improving existing equipment based on the results of risk assessment.

Reducing Risks of Chemical Substances

Since 2012 plants in Japan and subsidiaries and affiliates worldwide have been systematically conducting risk assessment of chemical substances based on SDSs. Improvement measures are being implemented in light of the results of risk assessment, in order to prevent exposure of employees to any health hazard.

Promotion of Occupational Health and Safety Education

In parallel with measures to reduce the risks posed by machinery and equipment, We have been executing danger alert training as well as such autonomous initiatives as “pointing and calling” and proposals for special cautions and safety confirmation. The objectives of these activities include increasing awareness of possible dangers and eliminating risky behavior.



Safety and Health Activities at Business Sites in Japan and Overseas

Training on rescuing people from reaction vessels conducted by firefighters



Sumitomo Bakelite Europe (Barcelona), Spain

Workshop on occupational health led by an external instructor

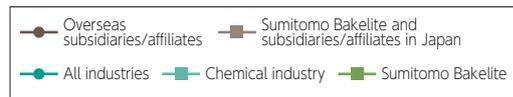


Shizuoka Plant, Japan

Trends in Occupational Accidents

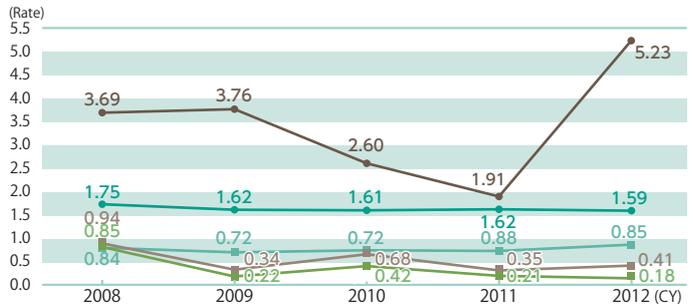
1 Trends of Frequency Rates* at Sumitomo Bakelite and Subsidiaries and Affiliates Worldwide

The graph shows the trends of the frequency rates. In 2012, the frequency rate deteriorated in line with an increase in the number of accidents. At overseas subsidiaries/affiliates, the frequency rate deteriorated greatly because of a decrease in the total working hours as a result of the sellout of Sumitomo Bakelite Vietnam.



Frequency rate = (Deaths and injuries/total working hours) x 1,000,000
 Notes:
 1. Data covers each calendar year.
 2. For information on the coverage of the data, please see the "Boundary" section on page 2.

Frequency Rates at Sumitomo Bakelite and Subsidiaries and Affiliates Worldwide



2 Trends in Occupational Accidents at Sumitomo Bakelite and Subsidiaries and Affiliates in Japan

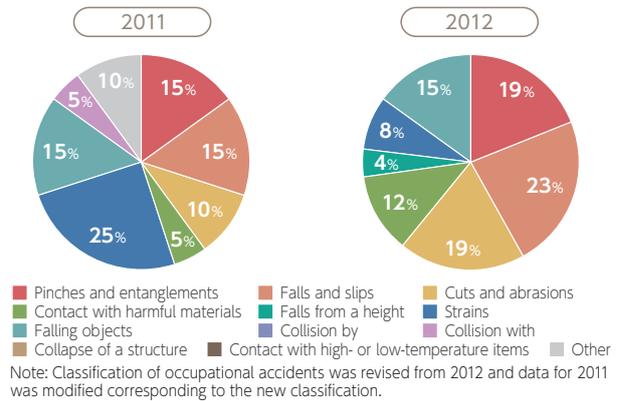
① The graph shows the number of injuries due to occupational accidents at the Company and its subsidiaries and affiliates in Japan. The number of injuries due to occupational accidents in 2012 was the highest in the past five years. ② The graphs show the composition of occupational accidents by type for 2011 and 2012. In 2012 the number of accidents due to human factors, such as falls and cuts during use of hand tools, increased. We have implemented measures to increase employees' safety awareness so as to reduce occupational accidents.

① Number of Injuries due to Occupational Accidents at Sumitomo Bakelite and Subsidiaries and Affiliates in Japan



Note: Data covers each calendar year.

② Composition of Occupational Accidents by Type for 2011 and 2012



Note: Classification of occupational accidents was revised from 2012 and data for 2011 was modified corresponding to the new classification.

3 Trends in Occupational Accidents at Overseas Subsidiaries and Affiliates

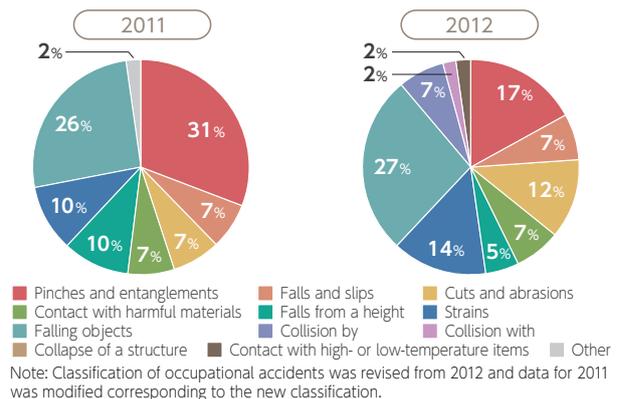
① The graph shows the number of injuries due to occupational accidents at the Company's subsidiaries and affiliates overseas. The number of injuries due to occupational accidents, which had been on a downward trend, increased in 2012. ② The graphs show the composition of occupational accidents by type for 2011 and 2012. In 2012 the number of pinches and entanglements decreased owing to reduced risks associated with machinery and equipment. However, similar to the situation in Japan, falls and cuts during use of hand tools increased. With the aim of reducing occupational accidents, we have implemented measures to increase employees' safety awareness.

① Number of Injuries due to Occupational Accidents at Overseas Subsidiaries and Affiliates



Note: Data covers each calendar year.

② Composition of Occupational Accidents by Type for 2011 and 2012



Note: Classification of occupational accidents was revised from 2012 and data for 2011 was modified corresponding to the new classification.

Environmental & Safety Audits

Sumitomo Bakelite periodically performs field audits of business sites in Japan and subsidiaries and affiliates worldwide that cover environmental protection, accident prevention, and occupational health and safety. Items checked include maintenance and improvement of environmental and occupational health and safety management systems and compliance. The results of audits are shared among the people concerned and measures are implemented to resolve the issues identified.

In Japan Audits are conducted once a year, in principle. In fiscal 2012, we conducted audits of one research laboratory, four plants, and seven affiliated companies with eight plants during the period from June to November.



Shizuoka Plant



S.B. Sheet Waterproof System (Nara Plant)

Overseas Audits are conducted twice a year, in principle. In fiscal 2012, we conducted audits of three affiliated companies in Europe in May and audits of six affiliated companies in China and Taiwan in August and October.



Sumitomo Bakelite Europe, Belgium



Sumitomo Bakelite (Nantong), China

Environmental Education

Our laboratories and plants handle various chemical substances. With the twofold objective of protecting the environment in the vicinity of business sites and ensuring that employees work in safety, we conduct periodic group education programs for employees. These programs are designed to deepen employees' understanding of the properties of chemical substances and the content of relevant laws and regulations, thus enabling them to handle chemical substances appropriately.

In addition to group education programs, environmental education by e-learning is conducted every year for all personnel.



New employee education



e-learning

Accident Prevention

Our objective is to make business sites safe and secure.

Making Business Sites Safe and Secure

Safety is the top priority at all our business sites. Our objective is to make business sites safe and secure, and thus earn the confidence of the local community, ensure employee safety, and maintain stable supplies of products to customers. Each business site formulates action plans and continually implements education and training designed to maintain a workplace free of accidents and capable of responding effectively to any eventuality. To ensure preparedness in the event of an accident or other incident, including a natural disaster, countermeasures are prepared and training is conducted at each business site in order to minimize damage.

Topics

Accident Prevention Activities at Business Sites in Japan and Overseas

Firefighting training conducted with the assistance of the local fire department



Left: Firefighting training (Sumitomo Bakelite Europe (Barcelona), Spain) Right: Rescuing a person (dummy) trapped beneath debris in a training exercise to ensure preparedness for earthquakes (Shizuoka Plant, Japan)



Accident prevention involving the local community



Fire extinguishing competition (Amagasaki Plant, Japan)

Valuing relations with communities and deepening trust

The Sumitomo Bakelite Group is committed to fulfilling its corporate social responsibility through initiatives that ultimately lead to the enhancement of customer satisfaction. We are strengthening dialogue with communities and deepening our relationships with them.

Relations with Customers

Enhancement of Customer Satisfaction (CS)

At Sumitomo Bakelite the CS Promotion Committee consisting of the president and other executives determines the Group-wide basic policy on customer satisfaction. In accordance with this policy, divisions and Group companies share the voice of the customer (VOC) and work to improve business processes based on VOC. We invite customers to an annual conference where we brief them on our business and seek to identify their needs through questionnaires and by other means. Such initiatives help us cultivate mutual understanding and relationships rooted in trust with our customers. The aim of the annual CS Conference is to enhance awareness of CS throughout the Group and to share best practices. Individuals, departments, and Group companies with outstanding CS achievements to their credit are recognized and honored.

In fiscal 2012, in the spirit of the Group's "customer first" policy, we issued the CS Declaration that clarifies our CS

enhancement targets. In accordance with the CS Declaration, each department is working to enhance CS through focused activities.

Themes that require corporate-wide measures are addressed through cross-organizational cooperation involving all the departments concerned.

Dissemination of Corporate Information

In order to help stakeholders deepen their understanding of the Group's diverse activities, we strive to ensure that all our communications are in compliance with applicable laws, regulations and in-house rules. Our watchwords are clarity, fairness and appropriateness.

Besides the dissemination of corporate information whose disclosure is mandated by law, we use diverse media—press releases, advertising in Shinkansen express trains, the Company's website, etc.—to keep stakeholders and the general public informed about our initiatives and progress.

Social Contribution

Donations

We make donations directly and through reputable organizations that benefit worthwhile causes in such areas as schools and education, social welfare, science and technology, culture and the arts, regional development,

and environmental protection.

In fiscal 2012, we focused on supporting culture and the arts, including sponsorship of an orchestra, and environmental protection as a member of the Keidanren Nature Conservation Fund.

Local Communities

Factory Tours

We emphasize two-way communication with local communities. Our plants hold open days for youngsters attending nearby schools and residents of local communities. Everyone from local communities is welcome to join us at summer festivals and other events organized at our plants.

Environmental Protection and Beautification

We participate in cleanups and beautification drives organized by local communities to tidy up the

neighborhood and protect the environment. As a member of local organizations, we are also active in efforts to eliminate illegal dumping.

Participation in Local Events and Community Service

We eagerly participate in local events so that we can strengthen relationships with communities in which we have a presence. By organizing volunteer programs and making donations, we endeavor to enrich the life of local communities.

Social Activities of Our Plants around the World

Plant Open Days



Local university students visiting a plant (Amagasaki Plant, Japan)



Students from a nearby high school on a plant tour (Durez, Canada)



Business school students touring a plant (Sumitomo Bakelite Europe, Barcelona, Spain)



Summer festival with local residents (Shizuoka Plant, Japan)

Participation in Local Events and Community Service



Volunteering at Nanbu Sumire no Ie, a local welfare facility (Shizuoka Plant, Japan)



Running a booth at a summer festival in the industrial park (Advanced Technologies R&D Laboratory, Kobe, Japan)

Environmental Protection and Beautification



Omono River cleanup campaign organized by Akita City, Japan (Akita Sumitomo Bakelite, Japan)



Clearing up illegally dumped garbage in an initiative organized by the Sapporo Port Industrial Park (Hokkai Taiyo Plastic, Japan)



Yamato River and Ishi River clean-up organized by Kashihara City (Yamaroku Kasei Industry, Japan)



Clearing up garbage in the community (SNS Industrial Laminates, Malaysia)



Blood donation drives (top: SNC Industrial Laminates, Malaysia, bottom: Kyushu Sumitomo Bakelite, Japan)



Offering low-price rice at a morning market (Indopherin Jaya, Indonesia)

We strive to create a pleasant work environment through respect for individual personalities and human rights Excerpt from Sumitomo Bakelite's "Our Standards of Conduct"

At Our Company Group, we cast our net wide. We know that the diverse values and distinctive personalities of our workforce fuel the success of our business. By inspiring one another and pooling our talents and energy, we are creating high-performance workplaces where people express themselves and great things happen.

Number of Employees of Our Company Group

Employees in Japan and Overseas 

(People)

	Directors	Executive officers	Employees	Temporary employees*	Total
Sumitomo Bakelite Co., Ltd.	10	9	2,151	307	2,477
Subsidiaries and affiliates in Japan	25		782	128	935
Overseas subsidiaries and affiliates	30		2,227	1,106	3,363
Total	65	9	5,160	1,541	6,775

(Employees in Japan and Europe as of March 31, 2013; Employees overseas (excluding Europe) as of December 31, 2012)

* Part-time and other non-regular employees

Notes:

1. The number of employees on a consolidated basis shown on page 8 of this report includes employees of Sumitomo Bakelite Co., Ltd. who serve as directors of subsidiaries and affiliates.

2. The number of directors of subsidiaries and affiliates shown above includes employees of Sumitomo Bakelite Co., Ltd. who serve as directors of domestic and overseas subsidiaries and affiliates.

Employees by Geographic Area 

(People)

Japan	Europe	North America	East Asia	Southeast Asia	Total
3,412	338	356	1,918	751	6,775

(Employees in Japan and Europe as of March 31, 2013; Employees overseas (excluding Europe) as of December 31, 2012)

Note: The number of employees in Southeast Asia decreased because of the exclusion of Sumitomo Bakelite Vietnam from the scope of consolidation as a result of the divestiture by Sumitomo Bakelite Co., Ltd. of its equity in the Vietnamese company.

Recruitment Activities of Sumitomo Bakelite Co., Ltd.

Employees Newly Recruited 

(Including new graduates and mid-career personnel)

	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013(plan)
Newly recruited	59	54	42	40	37	35
Male	46	45	29	33	34	—
Female	13	9	13	7	3	—

Notes:

1. Excludes personnel transferred from subsidiaries and affiliates in Japan

2. Since employee recruitment is gender-neutral, the gender composition of the planned intake of new employees for FY2013 is unknown.

Continuing Employment Opportunities for Personnel beyond Retirement Age

In a move that is certainly in accordance with the letter and the spirit of the Act on Stabilization of Employment of Elderly Persons, we established a system enabling personnel who have reached the mandatory retirement age of 60 years to continue working as contract employees. By facilitating post-retirement hiring, this initiative harnesses the knowledge, technical skills, and know-how that employees have accumulated in the course of their careers.

Employees beyond Retirement Age 

	FY2008	FY2009	FY2010	FY2011	FY2012
Number of retirement-age retirees	71	61	64	51	59
Number of post-retirement rehires	46	40	44	41	50
Rehiring ratio(%)	65	66	69	80	85

Projected Benefit Obligations

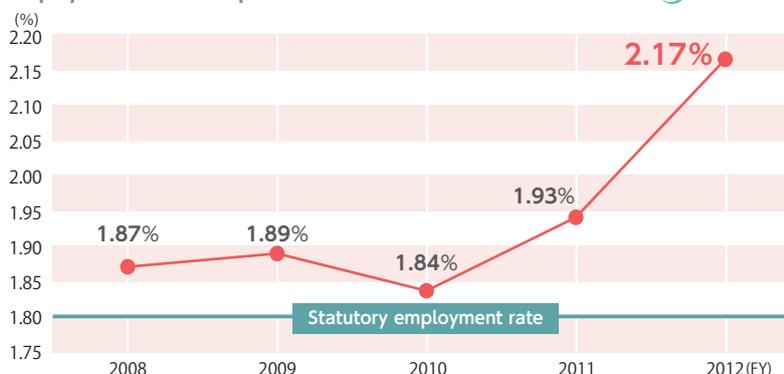
Regarding retirement benefit systems, the Company employs a defined benefit system in Japan. Overseas, some consolidated subsidiaries concurrently use defined contribution and defined benefit systems. At the end of the fiscal year covered by this report, projected benefit obligations of the Company and its subsidiaries totaled ¥29.1 billion, while pension plan assets amounted to ¥23.8 billion.

Note: For details, please access the Securities Report (Yuka Shoken Hokokusho (Japanese only)) on the Sumitomo Bakelite website.

Employment of People with Disabilities

Sumitomo Bakelite considers the employment of people with disabilities, as stipulated by law, to be an integral part of its fulfillment of corporate social responsibility. We endeavor to offer a safe and supportive environment where everyone, whether disabled or not, can fulfill their potential in the workplace.

Employment Rate of People with Disabilities over the Past Five Years 



Initiatives to Achieve a Work/Life Balance

In 2008, Sumitomo Bakelite formed its Work/Life Balance Labor Study Group to consider the options, formulate policies and commence their implementation. The objectives are:

① To promote flexible approaches to work, while also reducing overtime hours and promoting the full use of annual leave entitlements, and encourage employees to devote the additional time available to worthwhile non-work activities, such as educational pursuits and activities related to family and community

② To offer a greater diversity of working styles that benefit employees who must deal with major life events, such as marriage, childbirth, and the raising of children, and thus contribute to nurturing the next generation

In fiscal 2011, in an initiative to help employees achieve a better work/life balance, Sumitomo Bakelite increased the number of accumulated annual paid vacation days (annual unused paid vacation days accrued) that may be carried over from 30 days to 40.

Number of Overtime Hours Worked and Vacation Days of Regular Employees 

	FY2008	FY2009	FY2010	FY2011	FY2012
Average number of overtime hours (annual basis)	240.8	107.5	158.3	142.7	112.7
Average number of vacation days used	13.7	13.0	12.8	13.6	12.8

Note: "Regular employees" means Sumitomo Bakelite personnel working in the daytime hours but managerial personnel are excluded.

Health Management

Sumitomo Bakelite strives to create high-performance workplaces conducive to the maintenance of employees' good health, both physical and mental. Our programs center on regularly scheduled health checks and health guidance based on the results. By ensuring that employees receive timely diagnoses and guidance from in-house and external industrial physicians and other medical staff, the Company is contributing to the prevention or amelioration of lifestyle diseases. In addition, we provide opportunities for employees to receive health consultations at their own discretion with industrial medical staff who offer advice on physical and mental health issues.

Beginning in fiscal 2011, we added blood tests for pepsinogen for the early detection of stomach cancer and tests of the e-GFR level for the early detection of chronic kidney disease. Through these various activities, we are working to monitor and improve the health of our employees. In fiscal 2012, we began to provide health

guidance, in accordance with a scheme introduced by the government, to employees to help them avoid lifestyle diseases such as diabetes, hypertension, and dyslipidemia.

In addition, based on the awareness that the preventive efforts of each and every employee are important for health enhancement, we also emphasize employee education concerning health-related matters. With regard to mental health, recognizing the importance of early awareness, managerial personnel who are responsible for managing other employees are required to attend workshops designed to enhance their sensitivity concerning the mental health of the employees under their direction and to ensure that they deal compassionately with any problems.

We have a program to support people with mental health problems. The program is designed to help them return to work and to prevent relapse.

Labor-Management Relations

We recognize that pleasant working environments are not only intrinsically desirable but also contribute to the development of an enterprise. Moreover, good labor-management relations and the collaboration they engender are an essential ingredient of such working environments. Accordingly, in addition to the corporate-level meetings of the Company's senior executives and representatives of the Sumitomo Bakelite Union (SB Union) held twice a year at the head office, each plant holds a monthly labor-management meeting. These meetings are valuable opportunities to cultivate excellent labor-management relationships by sharing views on the business environment and the Company's operations.

With a view to creating safe and comfortable workplaces through labor-management collaboration, we hold an annual labor-management meeting, attended by SB Union members in charge of occupational safety at facilities across Japan, on occupational health and safety. Through a frank

exchange of opinions, management and labor deepen mutual understanding, share insights and identify priorities. To ensure that the occupational health and safety committee of each plant is fulfilling its mission, SB Union executives, as well as plant managers, receive education on occupational health and safety. This education covers relevant laws and regulations as well as skills necessary for routine activities, such as points to be emphasized during occupational health and safety patrols.



Hazard prediction training

These ongoing initiatives help deepen long-standing labor-management relations. The SB Union participation ratio is 100% on a non-consolidated basis.

Human Resources Development

Sumitomo Bakelite seeks to hire and foster people who will share and commit to its Business Philosophy—"Our company places prime importance on trust and sureness, and shall commit itself to contributing to the progress of society and enhancement of people's welfare and livelihood through its business activities." Further, we need people who will embrace the Company's mission to become an excellent global enterprise. Above all, we seek talented, energetic people eager to contribute on their own initiative to the sustainable growth of Sumitomo Bakelite's business.

Key characteristics of the personnel we seek are listed below.

In September 2007, we opened the Sumitomo Bakelite School (SB School), which is designed to provide lifelong education and training courses that help the Sumitomo Bakelite Group achieve sustained growth of business operations while maximizing corporate value. The SB School offers courses for all grades of employees from all departments. These include "all-

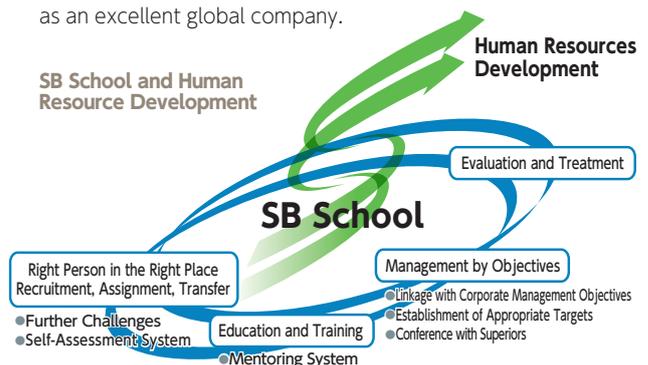
employee education" courses that confirm and reinforce employees' awareness of Business Philosophy as well as fundamental knowledge about such issues as enhancement of CS, compliance, human rights, occupational safety, quality, and environmental protection. The school is also planning and systematically implementing various other kinds of educational and training courses. From September 2007 through April 2013, the cumulative participation in SB School courses was about 120,000, and the number of hours of instruction was approximately 220,000. Going forward, the SB School will implement a wide range of education programs that enhance the knowledge and skills of Sumitomo Bakelite Group personnel.

As business becomes increasingly global and borderless in the 21st century, Sumitomo Bakelite is striving to develop the capabilities of all employees—the Company's most precious management resource—in pursuit of sustained development as an excellent global company.

Key characteristics of the autonomously motivated personnel Sumitomo Bakelite seeks

- 1 People who are growth-oriented and have the drive to acquire new skills and knowledge necessary for their jobs;
- 2 People with a pro-reform stance who are not satisfied with the status quo, but are always looking for ways to do a better job;
- 3 People with a team-oriented approach who can combine their individual strengths with the strengths of those around them to deliver better results; and
- 4 People with outstanding skills and know-how who can produce results through their work anywhere in the world as consummate professionals.

SB School and Human Resource Development



Human Rights Education

Every December, coinciding with Human Rights Week designated by the Japanese government, all employees of Sumitomo Bakelite and Group companies in Japan take an e-learning course on Workplace Human Rights. This course is designed to raising employee awareness of the importance of human rights in the workplace, but also touches on issues concerning discrimination and harassment in society at large. The goals of the course include ensuring every employee respects the human rights of others and fostering a predisposition among employees toward creating bright and pleasant workplaces. In fiscal 2012, a total 677 hours of human rights education was provided through e-learning.

To raise employee awareness of human rights, such issues as sexual harassment and moral harassment in the workplaces are addressed in education according to positions, such as for new employees, young employees, and junior managers. The education focuses on specific

Human rights education corresponding to positions



topics related to human rights that correspond to each position and require careful attention.

Diverse Education and Training Programs at Overseas Business Sites

Our overseas business sites offer diverse education and training programs according to the needs. Objectives include preventing accidents and ensuring safety as well as enhancing employees' skills.

Sumitomo Bakelite (Suzhou) offers wide-ranging

programs, some of which are led by external instructors, including Kiken Yochi Training (hazard prediction training), simulation training to prevent accidents involving equipment and accidents involving hazardous chemicals, fire-fighting training, and forklift skill training.

Employee education and training programs at Sumitomo Bakelite (Suzhou)



Kiken Yochi Training



Simulation training to prevent injury during use of a rotary valve



Forklift skill training



Fire-fighting training

Site Report

CSR initiatives at each of Our Company Group's business sites are presented.

Japan

Advanced Technologies R&D Laboratory



Director
Toshiro
Takeda

Address: 1-1-5 Murotani, Nishi-ku, Kobe-shi, Hyogo
Number of employees: 100 **Commencement of operations:** 1991
Site total area: 16,530m²
Date ISO 14001 certification received: December 2003
Principal R&D themes: Development of high-performance plastics and R&D of technologies for bioplastics and other products

The Lab's environmentally responsive technology development work includes research related to plant-based alternative materials made from biomass. Applying innovative processes as well as sophisticated analytical technologies, we are developing materials that combine low environmental burden with specific functionality. Through our work at the Lab, we aim to contribute to the emergence of a recycling-oriented society.

Shizuoka Plant



Plant Manager
Goichiro
Kuwaki

Address: 2100 Takayanagi, Fujieda-shi, Shizuoka
Number of employees: 887 **Commencement of operations:** 1962
Site total area: 287,000m²
Date ISO 14001 certification received: March 1999
Principal products: Copper-clad epoxy composite sheets, epoxy coating powder, industrial-use phenolic resins, thermoset plastic molding materials, melamine resin decorative laminates, formalin, molds and dies, etc.

This integrated facility for the manufacture of various thermoset plastics is pursuing initiatives to reduce the environmental burden of all its processes from product development through to manufacture of finished products. Having set reduction targets by MFCA, we are promoting various improvement activities, including an energy-saving project that has almost achieved the targeted reduction in energy consumption. Aspiring to be an eco-friendly plant, Shizuoka Plant continues to advance in terms of cost reduction, resource conservation and energy saving.

Kanuma Plant



Plant Manager
Kenji
Takayama

Address: 7-1 Satsuki-cho, Kanuma-shi, Tochigi
Number of employees: 332 **Commencement of operations:** 1970
Site total area: 75,878m²
Date ISO 14001 certification received: March 2000
Principal products: Hard resin sheets made from polycarbonate, polystyrene, PET, ABS, PVC, etc.; waterproofing materials incorporating waterproofing processed steel products

In fiscal 2012 with support from the head office, the Kanuma Plant formulated a plan to reduce energy consumption, which went into full swing in 2013. The plan targets energy consumption in fiscal 2015 17.7% lower than the result for fiscal 2011. We are reducing material losses by cutting waste through the introduction of on-site effluent treatment equipment and by reducing emissions of items with value through yield improvement.

Utsunomiya Plant



Plant Manager
Masaya
Fumita

Address: 20-7, Kiyohara Kogyo Danchi, Utsunomiya-shi, Tochigi
Number of employees: 323 **Commencement of operations:** 1984
Site total area: 99,000m²
Date ISO 14001 certification received: December 1997
Principal products: Semiconductor die bonding pastes, liquid resins for semiconductor packaging, materials for ultra-thin semiconductor packages

Our initiatives to reduce environmental impacts at the Utsunomiya Plant focus on minimizing negative product costs identified by MFCA. The plant launched an energy-saving project involving horizontal deployment of best practices from across the Group. We aim to earn the trust of customers and local residents by ensuring transparency of the plant's activities.

Amagasaki Plant



Plant Manager
Hidehiro
Morita

Address: 2-3-47, Higashi-Tsukaguchi-cho, Amagasaki-shi, Hyogo
Number of employees: 550 **Commencement of operations:** 1938
Site total area: 46,000m²
Date ISO 14001 certification received: October 1998
Principal products: Co-extruded, multilayered films for food product packaging; pharmaceutical product packaging materials (materials for PTP); wrapping tape for electronic parts

In accordance with its "ecoE²NE²2020" project, the Amagasaki Plant targeted a 19% reduction in energy consumption by fiscal 2020 compared with fiscal 2010, and by fiscal 2012 we had achieved 94% of the target. Plans for fiscal 2013 include the launch of an energy-saving project focused on production process improvement. Our initiatives to reduce environmental impacts include MFCA for reducing material loss and risk assessment for preventing leakage incidents.

S.B. Sheet Waterproof Systems Co., Ltd. (Nara Plant)



Plant Manager
Kimimasa Nishimura

Address: 1-2 Techno Park, Nara Kogyo Danchi, Sugawa-cho, Gojo-shi, Nara
Number of employees: 64 **Commencement of operations:** 1991
Site total area: 20,357m²
Date ISO 14001 certification received: April 2000
Principal products: Waterproof sheets

This plant produces waterproofing sheets made with synthetic resin that are used in the construction industry. Since the production processes are energy-intensive, the plant is pursuing initiatives to minimize energy consumption day in, day out. During fiscal 2012, improvements to production processes yielded substantial reductions in energy consumption and industrial waste emissions. Moreover, based on risk assessments carried out at the plant regarding the leakage of harmful substances in the event of an emergency, we have made improvements to equipment and conducted training of personnel.

Kyushu Sumitomo Bakelite Co., Ltd.



Plant Manager
Shigehisa Ueda

Address: 40-1 Oaza-Kamizakai Aza-Mizumachi, Nogata-shi, Fukuoka
Number of employees: 247 **Commencement of operations:** 1972
Site total area: 50,000m²
Date ISO 14001 certification received: December 1998
Principal products: Epoxy resin molding compounds for semiconductor packaging, photosensitive wafer coating resins

The plant produces environmentally friendly epoxy molding compounds and wafer coating resins for semiconductor devices. Based on a plan formulated by a project term in fiscal 2012, the plant will step up efforts in fiscal 2013 to reduce environmental impacts, including at overseas sites.

Yamaroku Kasei Industry Co., Ltd.



President and Representative Director
Masaei Yamada

Address: 19-10 Katayama-cho, Kashiwara-shi, Osaka
Number of employees: 48 **Commencement of operations:** 1948
Site total area: 5,411m²
Date ISO 14001 certification received: June 2005
Principal products: Phenolic resin molding materials and melamine phenolic resin molding materials

Supported by the energy-saving promotion team of the parent company, we are stepping up our energy-saving initiatives. As befits a company adjacent to two rivers, we took part in a riverbank cleanup campaign in fiscal 2012. We intend to deepen our relationship with the local community through vigorous involvement in such activities.

S.B. Techno Plastics Co., Ltd.



President and Representative Director
Keiichi Imura

Head Office Plant

Address: 300-2, Motohara Kamikawa-cho, Kodama-gun, Saitama
Number of employees: 30
Commencement of operations: 1964
Site total area: 13,000m²
Date ISO 14001 certification received: October 1998
Principal products: Plastic sheets, plastic cutting boards

Kitsuregawa Plant

Address: 560-1, Saotome, Sakura-shi, Tochigi
Number of employees: 18
Commencement of operations: 2002
Site total area: 3,638m²
Date ISO 14001 certification received: October 1998
Principal products: Protective helmets, floor mats

In fiscal 2013, with guidance from the parent company, we launched a campaign to reduce electricity consumption. Our waste-reduction initiatives include the collecting of used cutting boards and the manufacture and sale of Repoly polyethylene products made from recycled offcuts accumulated in the manufacture of plastic cutting boards, our principal product. In fiscal 2012, we once again participated with other members of the local community in a cleanup campaign in the industrial park where our company is located.

Akita Sumitomo Bakelite Co., Ltd.



President and Representative Director
Akira Takada

Address: 27-4, Aza Nakashima-shita, Souzen-machi, Tsuchizakiminato, Akita-shi, Akita
Number of employees: 171 **Commencement of operations:** 1970
Site total area: 277,000m²
Date ISO 14001 certification received: January 2001
Principal products: Medical instruments and laboratory ware, phenolic resins, formalin, and adhesives

In addition to production of medical and biotechnology-related products and phenolic resins, we plan to start production of negative electrode materials in fiscal 2013. We are also launching an energy-saving initiative and pursuing new approaches to reduce environmental impacts. Our efforts to contribute to the local community center on participation in cleanup campaigns and events offering opportunities to cultivate fruitful relationships with local residents and listen to any concerns or suggestions that they may have.

Site Report

Hokkai Taiyo Plastic Co., Ltd.



President and Representative Director
Masatoshi Yamasaki

Address: 2-763-7, Shinko-Chuo, Ishikari-shi, Hokkaido
Number of employees: 17 **Commencement of operations:** 1964
Site total area: 13,650m²
Date ISO 14001 certification received: April 2005
Principal products: Industrial-use polyethylene pipes, industrial-use and household-use polyethylene films

In addition to our measures to minimize waste, save energy, and reduce CO₂ emissions in the production and sales of pipes and films, we are emphasizing sales of environmentally friendly films for household use as part of efforts to protect the environment. The area of outstanding natural beauty in which the company is located inspires the workforce to participate wholeheartedly in environmental protection activities.

Overseas: China, Macau, and Taiwan

Sumitomo Bakelite (Suzhou) Co., Ltd.



President
Norihisa Fujimura

Address: 140 Zhongxin Avenue West, Suzhou Industrial Park, Suzhou, Jiangsu, 215021, PRC
Number of employees: 227 **Commencement of operations:** 1997
Site total area: 30,000m²
Date ISO 14001 certification received: November 2001
Principal products: Epoxy resin molding compounds for semiconductor packaging, phenolic resin molding materials

Our target is a 25% reduction in energy consumption in fiscal 20XX compared with fiscal 2011. Plans for fiscal 2013 include introduction of highly efficient control systems for compressors, chillers, and air conditioners to save energy and reduce CO₂ emissions, as well as implementation of noise-reduction measures. Aspiring to be a company that earns the trust and respect of society, we seek opportunities to cultivate fruitful relationships with people in nearby communities and actively participate in social events.

Sumitomo Bakelite (Shanghai) Co., Ltd.



President
Yoshihiko Sasaki

Address: No. 66, Ai Du Road, Wai Gao Qiao Free Trade Zone, Pudong, Shanghai, PRC
Number of employees: 265 **Commencement of operations:** 2000
Site total area: 11,644m²
Date ISO 14001 certification received: April 2007
Principal products: Molded components for automotive applications (plastic mechanical and structural parts)

We produce molded products made of phenolic resin for automotive applications. As environmental pollution is a pressing issue in China, in addition to ensuring compliance with environmental regulations, we are striving to minimize the environmental impacts of our operations through energy-saving initiatives and steps to minimize industrial waste.

Sumitomo Bakelite (Nantong) Co., Ltd.



President
Takashi Kobayashi

Address: No. 81, Tongda Road, Port Industrial Park 3, Economic Technological Development Area, Nantong, Jiangsu, PRC
Number of employees: 162 **Commencement of operations:** 2009
Site total area: 100,000m²
Date ISO 14001 certification received: May 2010
Principal products: Phenolic resins, phenolic resin molding materials

Our phenolic resin plant and molding materials plant started operation in January 2009 and January 2012, respectively. We are the latest addition to Sumitomo Bakelite's network of affiliated companies manufacturing sophisticated plastics. As well as assuring high quality, we are working to reduce environmental impacts from the design phase onward. The plant makes full use of the latest energy-saving facilities and our environmental management is fully in accordance with international standards.

Basec Hong Kong Limited



President
Hiroshi Hiraoka

Address: Lingtou Industrial District, Qiaotou Town, Dongguan-city, Guangdong, PRC
Number of employees: 1,039 **Commencement of operations:** 1994
Site total area: 32,930m²
Date ISO 14001 certification received: September 2004
Principal products: Precision molded products, medical instruments

We manufacture medical devices and molded parts. To reduce the environmental impact of our business activities, we are promoting recycling and pursuing initiatives to lower CO₂ emissions. Our plant is scheduled to receive OHSAS certification in 2013. We emphasize safety and environmental education programs in which all our employees participate to create a safe and comfortable working environment.

Sumitomo Bakelite Macau Co., Ltd.



President
Chiyozo Yamaguchi

Address: Zona Ind. do Aterro Sanitario de Seac Pai Van Lote A, junto a Estrada de Seac, Pai Van, Coloane, Macau
Number of employees: 158 **Commencement of operations:** 2003
Site total area: 27,513m²
Date ISO 14001 certification received: April 2005
Principal products: Epoxy copper-clad laminates

The epoxy copper-clad laminates that we produce are sold in China, Southeast Asia, and Japan. Rising sales of laminates for LED lighting applications, mean that we are making an increasing contribution to energy saving in society at large. Throughout our premises, we have replaced conventional lighting equipment with LED lighting systems to save energy. We are stepping up efforts to reduce industrial waste generated in production processes and to expand recycling.

Sumitomo Bakelite (Taiwan) Co., Ltd.



President
Hikaru Okubo

Address: No. 1, Hwa Syi Road, Ta Fa Industries District, Ta Liao, Kaohsiung, Taiwan, ROC
Number of employees: 129 **Commencement of operations:** 2000
Site total area: 24,271m²
Date ISO 14001 certification received: May 2003
Principal products: Epoxy resin molding compounds for semiconductor packaging

Our plant produces epoxy resin molding compounds that are used for semiconductor packaging. We have switched almost entirely to "green" materials with minimal environmental impacts. Continuing from fiscal 2012, we are accelerating horizontal deployment of the energy-saving project of the Electronics Materials Business while also implementing measures of our own devising to reduce energy consumption.

Southeast Asia

SNC Industrial Laminates Sdn. Bhd.



Managing Director
Shinichi Goke

Address: PLO 38, Jalan Keluli Satu, Pasir Gudang, Johor, Malaysia
Number of employees: 170 **Commencement of operations:** 1992
Site total area: 60,000m²
Date ISO 14001 certification received: April 2001
Principal products: Phenolic resin copper-clad laminates, phenolic resin laminates, aluminum-based copper-clad laminates

As the production process for copper-clad laminates employs many chemicals, we exercise meticulous care to prevent leakages or any accidents that may cause pollution. Mindful that our operation is also energy-intensive, we are also striving to reduce energy consumption by raising production efficiency. We aim to be an environmentally friendly plant with safe working environments.

Sumitomo Bakelite Singapore Pte. Ltd.



Managing Director
Yukihiko Okabe

Address: 1 Senoko South Road, Singapore 758069, Singapore
Number of employees: 193 **Commencement of operations:** 1989
Site total area: 22,276m²
Date ISO 14001 certification received: July 1997
Principal products: Epoxy resin molding compounds for semiconductor packaging, semiconductor die attach paste, semiconductor-use liquid epoxy resin

Our entire workforce shares awareness of the critical importance of environmental protection. While maintaining ISO 14001-based energy-saving initiatives involving all employees, we have launched full-scale MFCA. As a result of our efforts to reduce waste and enhance productivity, we have been gaining a progressively higher evaluation in the annual environmental audit.

SumiDurez Singapore Pte. Ltd.



Senior Plant Manager
Motoharu Amma

Address: 9 Tanjong Penjur Crescent, Singapore 608972, Singapore
Number of employees: 52 **Commencement of operations:** 1989
Site total area: 30,000m²
Date ISO 14001 certification received: September 1998
Principal products: Phenolic resin molding materials

We emphasize environmental protection throughout the production of phenolic resin molding materials. Our initiatives to reduce environmental impacts cover waste reduction, prevention of air pollution, and prevention of noise that might affect the neighborhood. Besides efforts to increase production efficiency, we are also working to reduce energy consumption and CO₂ emissions. We have replaced older facilities with energy-saving ones.

Site Report

P.T. Indopherin Jaya



Plant Manager
Sudarmanto

Address: Jl. Brantas No. 1, Probolinggo, East Java, Indonesia
Number of employees: 94 **Commencement of operations:** 1996
Site total area: 18,000m²
Date ISO 14001 certification received: January 2001
Principal products: Industrial-use phenolic resins

We are creating a clean and friendly working environment and cooperating with the authorities to prevent pollution of the surrounding environment.

P.T. SBP Indonesia



President Director
Takashi Moriyama

Address: Kawasan Industri MM2100 Jl. Irian Blok NN 1-1, Bekasi 17520, Indonesia
Number of employees: 159 **Commencement of operations:** 1996
Site total area: 30,000m²
Date ISO 14001 certification received: December 2010
Principal products: Polycarbonate resin sheets (for signage and construction applications)

Located in a suburb of Jakarta, we produce and sell polycarbonate resin sheets. In an initiative to mitigate the impact of our CO₂ emissions, we planted 65 trees on the site. The transparent roof materials that we manufacture contribute to energy saving. We aim to be an environmentally friendly enterprise fully compliant with all applicable laws and regulations.

North America

Sumitomo Bakelite North America, Inc. (Manchester Plant)



Plant Manager
Barbara Olson

Address: 24 Mill Street, Manchester, Connecticut 06042, USA
Number of employees: 57 **Commencement of operations:** 1920
Site total area: 14,000m²
Principal products: Thermoset resin molding materials

The Manchester plant produces thermoset molding compounds using a variety of polymer systems, including phenolic, epoxy, DAP, and silicone, and is now in the process of developing high-performance thermoplastic composite materials based on a PEKK resin system. Our primary environmental focus is process waste reduction to minimize the quantity of material we send to the landfill. We also strive to maintain our record of 100% compliance with all CT DEEP and EPA regulations.

Durez Corporation (Kenton Plant)



Plant Manager
William Bazell

Address: 13717, U.S. Route 68, South Kenton, Ohio 43326, USA
Number of employees: 60 **Commencement of operations:** 1955
Site total area: 263,100m²
Principal products: Phenolic resins

Kenton continues to concentrate on recycling of process streams. This is most evident in our reduction of solid waste disposal. Our disposal volume dropped by over 400 tonnes, 64% of the previous year's volume. Production volumes declined by only 12% for that period. Future efforts are focused on greater phenol recovery and recycling.

Durez Corporation (Niagara Falls Plant)



Plant Manager
Michael Mitchell

Address: 5000 Packard Road, Niagara Falls, NY 14304, USA
Number of employees: 59 **Commencement of operations:** 1930
Site total area: 18,960m²
Principal products: Phenolic resins

The Niagara Falls plant produces thermal plastic and thermal setting phenolic resins for the food, aerospace, automotive, and many other industries. Our facility operates a hazardous waste incinerator under New York State and EPA regulations. We are continually striving to identify opportunities to reduce our waste streams.

Durez Canada Co., Ltd.



Plant Manager
Robert Hunt

Address: 100 Dunlop Street, Ontario L2A 4H9, Canada
Number of employees: 69 **Commencement of operations:** 1970
Site total area: 93,000m²
Principal products: Phenolic resin molding materials

The year 2012 saw improvement in waste reduction at the Fort Erie site. We reduced our landfill by half from 2011 as a percentage of production volume. This reduction was driven by production improvements as well as greater awareness and effort by our employees. We will continue to look for further improvement in the future.

Promerus LLC



Chief Operating Officer
Andrew Bell

Address: 9921 Brecksville Road, Brecksville, Ohio 44141-3247, USA
Number of employees: 61
Commencement of operations: 2001 acquired by Sumitomo Bakelite
Site total area: 1,020m²
Principal products: Functional polynorbornenes

Our R&D activities are conducted to respect the environment, promote a safe workplace, and ensure that we are a valued member on the Brecksville campus. HSE performance is achieved through: (i) complying 100% with OSHA and EPA regulations, (ii) ensuring that products are handled, transported, and processed in a safe and environmentally responsible manner, and (iii) striving to achieve an injury and incident-free workplace. In the future, our proprietary membrane technology may significantly reduce energy consumption related to the recovery of biobutanol and biophenol derived from renewable resources.

Europe

N.V. Sumitomo Bakelite Europe S.A.



Plant Manager
Peter Arits

Address: Henry Fordlaan 80 3600 Genk, Belgium
Number of employees: 140 **Commencement of operations:** 1967
Site total area: 110,000m²
Date ISO 14001 certification received: January 2001
Principal products: Phenolic resins, polyester resins

The phenolic resins and polyester polyols that SBE Genk produces find use in numerous applications in the building and automotive industries. To cope with the increasing volumes called for in our business plan, SBE achieved an extension of the permit that allows investments for our expansion plan. SBE achieved a new milestone with the certification for OHSAS 18001, which is in addition to our certifications for ISO 9001 and ISO 14001. In 2013 SBE will focus on reducing waste and energy costs. For the community, SBE is participating in and sponsoring a 1000 km cycling event to help in the fight against cancer.

Sumitomo Bakelite Europe (Barcelona), S.L.U.



Plant Manager
José Miralles

Address: 08170 Montornès del Vallès, Barcelona, Spain
Number of employees: 87 **Commencement of operations:** 1949
Site total area: 19,856m²
Date ISO 14001 certification received: March 2005
Principal products: Industrial phenolic resins, friction particles, liquid Mannich bases

2012 has been a year for safety consolidation at the Montornès (Barcelona) plant. We have achieved the milestone of one full year without lost time for accidents and also the certification of the Occupational Health and Safety Management System, OHSAS 18001, was obtained.

Year by year the plant continues implementing measures to reduce energy consumption and pursuing broader initiatives to reduce costs. In fiscal 2012 we achieved notable cost savings by reducing industrial waste and re-using well water in various processes of the plant.

Vyncolit N.V.



Plant Manager
Gerard Wildeman

Address: Wiedauwkaai 6, 9000 Gent, Belgium
Number of employees: 110 **Commencement of operations:** 1992
Site total area: 20,506m²
Date ISO 14001 certification received: 1999
Principal products: Thermoset molding materials

At the Vyncolit plant, our core business is producing compounds for the automotive industry. This year we will start up a new production line featuring state-of-the-art equipment and introducing new processes from various Sumitomo plants. In late 2012 we became certified for OHSAS 18001, which we are all very proud of.

◆ Trends of Environmental Performance

Business Sites in Japan

Item	Unit	2005	2006	2007	2008	2009	2010	2011	2012	2013 (Plan)	2020 (Target)		
CO ₂ emissions	t-CO ₂	137,961	135,326	123,382	109,402	107,233	101,181	93,300	103,165	102,198	103,471		
Energy usage	Crude oil equivalent (kL)	74,370	72,045	68,151	58,544	58,021	58,156	53,307	52,320	53,303	—		
Material loss	Waste generated	Landfill	ton	605	232	143	148	82	33	29	18	13	
		External intermediate processing	ton	342	53	83	52	11	6.2	5.7	5.0	5.3	
		Internal intermediate processing	ton	0.5	2.2	1.2	0.9	1.0	0	0	0	0	
		External recycling	ton	10,495	11,030	9,790	7,617	7,368	7,511	7,338	7,794	6,635	5,708
		Total waste generated	ton	11,444	11,317	10,017	7,818	7,462	7,550	7,373	7,817	6,659	5,725
		Valuable materials	ton	9,501	9,190	9,752	8,705	8,675	9,174	7,970	7,930	7,871	7,605
Total material loss	ton	20,945	20,507	19,769	16,523	16,137	16,724	15,343	15,748	14,530	13,330		
Chemical substance emissions	ton	512	423	340	210	222	273	262	258	169	102		

Overseas Business Sites

Item	Unit	2005	2006	2007	2008	2009	2010	2011	2012	2013 (Plan)	2020 (Target)		
CO ₂ emissions	t-CO ₂	163,259	170,554	170,109	143,314	151,074	160,989	152,735	141,491	150,077	138,770		
Energy usage	Crude oil equivalent (kL)	82,906	84,696	84,966	72,576	72,557	78,702	76,533	71,013	72,438	—		
Material loss	Waste generated	Landfill	ton	6,586	5,608	3,864	4,132	3,189	4,050	4,093	3,138	3,388	
		External intermediate processing	ton	3,547	3,810	3,413	2,802	3,858	3,462	4,951	3,885	3,270	
		Internal intermediate processing	ton	8,196	7,877	6,792	5,549	4,794	6,003	5,620	3,217	3,618	
		External recycling	ton	1,564	1,598	1,583	2,095	2,451	4,332	1,874	2,540	3,747	
		Total waste generated	ton	20,163	18,893	15,652	14,577	14,291	17,847	16,537	12,780	14,023	9,936
		Valuable materials	ton	8,695	10,914	11,138	8,036	3,658	4,010	4,079	3,609	3,386	6,856
Total material loss	ton	28,858	29,807	26,790	22,613	17,949	21,857	20,617	16,389	17,409	16,792		
Chemical substance emissions	ton	—	—	—	—	—	311	224	269	221	164		

Note: For information on the coverage of the data, please see the "Boundary" section on page 2.

<Definitions/calculation method>

CO₂ emissions:

CO₂ emissions are calculated from energy consumed in all business activities (fuels, heat, electric power, etc.).

The emissions calculation method used is based on the Manual for Calculating/Reporting Greenhouse Gas Emissions (March 2009, Ministry of the Environment and Ministry of Economy, Trade and Industry), and figures shown represent the sum of emissions calculated for each energy type (tons-CO₂). For the calorific values of city gas and CO₂ emissions coefficients of electricity, figures published by the respective supplier companies were used.

Waste generated:

Total of aggregate volume of industrial and general waste from business sites. Definitions of each type of waste are as follows.

- ① Landfill: waste disposed of in landfills by the Company or outsourced contractors
- ② External intermediate processing: waste incinerated by outsourced contractors (incineration without energy recovery)
- ③ Internal intermediate processing: waste incinerated in-house (incineration without energy recovery)
- ④ External recycling (expenses paid): waste recycled with payment made to cover processing costs (including thermal recycling)

Note: Waste generated owing to the retirement of facilities, repairs, building demolition (in-house demolition work), etc., is not included in the scope of waste, nor is dismantling scrap material of value sold, facilities resold, or construction material waste (for which a manifest is issued by the Company).

Valuable materials:

The volume of valuable materials that are generated at business sites and sold and that are neither products nor raw materials.

Material loss:

Total of the volume of waste generated and the volume of valuable materials.

Chemical substance emissions:

Total emissions into the air, bodies of water, and the ground (aggregate volume) of chemical substances targeted by the Japan Chemical Industry Association (JCIA)'s Pollutant Release and Transfer Register (PRTR) assessments (including substances subject to the reporting requirements of "The Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof" of Japan (PRTR system))

For overseas business sites, chemical substance emissions represent the total emissions into the atmosphere, bodies of water, and soil of chemical substances targeted by local laws and regulations corresponding to Japan's PRTR system.

The relevant laws and systems of various countries and regions are as follows:

United States: Toxics Release Inventory (TRI), Canada: National Pollutant Release Inventory (NPRI), European Union: European Pollutant Emission Register (EPER) However, excluded from this item are substances for which separate compilation guidelines have been established (including emissions into the atmosphere of CO₂, SO_x, NO_x, and soot and dust and emissions into bodies of water of COD, total phosphorus, and total nitrogen) as well as carbon monoxide, BOD, and total organic carbon emissions. For countries that do not have local laws and regulations corresponding to Japan's PRTR system, Japanese standards (chemical substances targeted by JCIA's PRTR assessments) are employed.

◆ Response to Energy Saving/Global Warming Prevention Acts

		Unit	FY2009	FY2010	FY2011	FY2012
Sumitomo Bakelite Co., Ltd.	CO ₂ emissions	t-CO ₂	84,469	84,035	75,883	81,541
	Energy usage	Crude oil equivalent (kL)	46,699	48,903	43,464	42,314
	Year-on-year ratio of the unit energy usage	%	—	96.8	101.3	92.1
Kyushu Sumitomo Bakelite Co., Ltd.	CO ₂ emissions	t-CO ₂	5,481	6,050	6,325	7,470
	Energy usage	Crude oil equivalent (kL)	3,373	3,740	3,715	3,437
	Year-on-year ratio of the unit energy usage	%	—	96.1	101.1	97.9
Akita Sumitomo Bakelite Co., Ltd.	CO ₂ emissions	t-CO ₂	13,003	8,583	6,183	6,776
	Energy usage	Crude oil equivalent (kL)	5,803	3,751	2,728	2,806
	Year-on-year ratio of the unit energy usage	%	—	123.2	90.4	121.8
S.B. Sheet Waterproof Systems Co., Ltd. (Started reporting from FY2012)	CO ₂ emissions	t-CO ₂	—			3,645
	Energy usage	Crude oil equivalent (kL)				1,941
	Year-on-year ratio of the unit energy usage	%				—

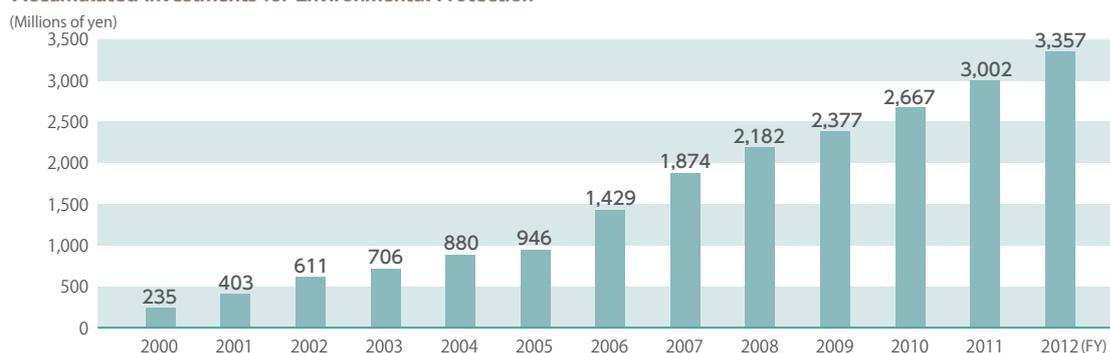
◆ Distribution-Related Energy Conservation Measures

		Unit	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012
Transportation ton-kilometer		Thousand t-km	30,297	41,265	33,647	32,573	37,271	33,663	29,267
CO ₂ emissions associated with energy usage		t-CO ₂	5,090	6,730	5,580	5,270	5,780	5,208	4,592
Energy usage per transportation unit	Energy usage (Crude oil equivalent (kL))/ Transportation ton-kilometer	kL/thousand t-km	0.0632	0.0613	0.0624	0.0609	0.0583	0.0582	0.0590
	Year-on-year ratio (FY2006=100%)	%	100	97.0	98.7	96.4	92.2	92.1	93.4

◆ Fiscal Year and Accumulated Investments for Environmental Protection

	Unit	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012
Fiscal year	Millions of yen	235	168	208	95	174	66	483	445	308	195	290	335	355
Cumulative total	Millions of yen	235	403	611	706	880	946	1,429	1,874	2,182	2,377	2,667	3,002	3,357

Accumulated Investments for Environmental Protection

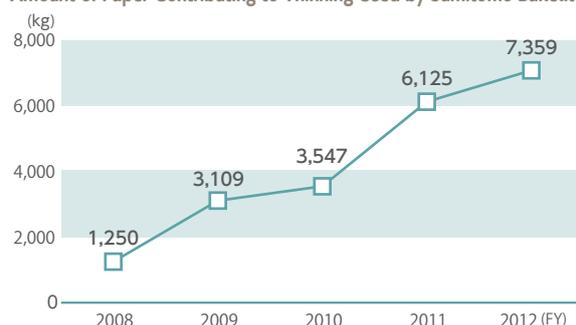


◆ Sumitomo Bakelite Usage of Paper Products that Promote the Use of Forest Thinning Support Paper

Sumitomo Bakelite supports forest thinning by using paper made with wood sourced in this way, which is promoted as Forest Thinning Support Paper by the Morino Chonai-Kai (Forest Neighborhood Association). Starting with the Environmental & Social Report, we have expanded the use of this paper to the Corporate Brochure and other publications. The volume of this paper used has been increasing year by year. During the period from 2008 to 2012, we used approximately 21 tons of this paper, an amount equivalent to the thinning of 1.19 ha.



Amount of Paper Contributing to Thinning Used by Sumitomo Bakelite



◆ Data on Environmental Impacts by Site

1. The regulatory limits shown for business sites in Japan are the most stringent regulations imposed by ordinances, regional agreements, administrative guidance, and other requirements issued by governmental authorities.
2. In the case of overseas business sites, the applicable standards are shown, but, because laws may differ from one country to another, these figures include national and regional regulatory limits, agreement standards, autonomous control standards, reference standards, and other types of standards. In addition, at some business sites, data has been compiled for the January-to-December period of calendar 2012.

Japan

■ Advanced Technologies R&D Laboratory

<Air> No relevant facilities

<Water>

Item	Unit	Regulatory limit	Measured value
pH	—	5.8 ~ 8.6	6.6 ~ 7.9
BOD	mg/L	2000	12
COD	mg/L	—	4
n-hexane extract (mineral oil)	mg/L	5	Less than 1
Suspended solids	mg/L	2000	1

■ Shizuoka Plant

<Air>

Facility	Item	Unit	Regulatory limit	Measured value
Cogeneration boiler	SO x	Nm ³ /hr	—	Less than 0.49
	NO x	ppm	100	52
	Soot and dust	g/m ³ N	0.05	Less than 0.022

<Water>

Item	Unit	Regulatory limit	Measured value
pH	—	5.8 ~ 8.6	7.4 ~ 7.8
BOD	mg/L	15	2.7
COD	mg/L	—	4.4
n-hexane extract (mineral oil)	mg/L	3	Less than 0.5
Suspended solids	mg/L	30	5.9
Phenols	mg/L	1	Less than 0.1
Formaldehyde	mg/L	5	Less than 0.5

■ Kanuma Plant

<Air>

Facility	Item	Unit	Regulatory limit	Measured value
Diesel generator	SO x	K-value	8.0	0.1
	NO x	ppm	950	871
	Soot and dust	g/m ³ N	0.10	0.014

<Water>

Item	Unit	Regulatory limit	Measured value
pH	—	5.8 ~ 8.6	6.9 ~ 7.5
BOD	mg/L	20	11.0
COD	mg/L	20	8.4
n-hexane extract (mineral oil)	mg/L	5	Less than 1
Suspended solids	mg/L	40	5.2

Note: Whereas there was no relevant facility in 2011, a generator was newly installed.

■ Utsunomiya Plant

<Air>

Facility	Item	Unit	Regulatory limit	Measured value
Drying furnace	SO x	K-value	6.0	Less than 0.10
	NO x	ppm	—	Less than 15
	Soot and dust	g/m ³ N	0.20	Less than 0.001

<Water>

Item	Unit	Regulatory limit	Measured value
pH	—	5.8 ~ 8.6	7.3 ~ 7.9
BOD	mg/L	25	3.1
COD	mg/L	25	4.3
n-hexane extract (mineral oil)	mg/L	5	Less than 1
Suspended solids	mg/L	50	1.4

■ Amagasaki Plant

<Air>

Facility	Item	Unit	Regulatory limit	Measured value
Boiler	SOx	m ³ N/h	2.83	Less than 0.03
	NOx	ppm	150	48.6
	Soot and dust	g/m ³ N	0.05	Less than 0.002

<Water>

Item	Unit	Regulatory limit	Measured value
pH	—	5.8 ~ 8.6	7.0 ~ 7.9
BOD	mg/L	25	6.0
COD	mg/L	25	6.0
n-hexane extract (mineral oil)	mg/L	20	1.3
Suspended solids	mg/L	20	5.0

<Water> Released into sewers

Item	Unit	Regulatory limit	Measured value
pH	—	5.7 ~ 8.7	6.2 ~ 7.8
BOD	mg/L	300	220
n-hexane extract	mg/L	30	10
Suspended solids	mg/L	300	310*

* The value of suspended solids exceeded the regulatory limit because suspended solids were erroneously released into the release tank when cleaning the sewage treatment tank the day before the measurement.

After this incident, the Amagasaki Plant established a rule requiring a weekly check of the sewage treatment tank and the return of suspended solids to the bacteria tank.

3. The measured data are the maximum level recorded in fiscal 2012, unless otherwise indicated in the notes. Please note that, in the case of pH figures, the minimum and maximum levels are shown. In addition, when actual measurements are below the quantifiable limits, the amounts are shown as "Less than (the quantifiable limit)." When the substances in question was less than the lower detection limit, the amount is shown as "not detected".
4. Where "—" (a dash) is shown for the regulatory limit, the figures obtained by voluntary measurement are shown for reference.

■ S.B. Sheet Waterproof Systems Co., Ltd. (Nara Plant)

<Air>

Facility	Item	Unit	Regulatory limit	Measured value
Boiler	SO x	m ³ N/h	0.98	0.04
	NO x	ppm	180	98
	Soot and dust	g/m ³ N	0.30	Less than 0.01

<Water>

Item	Unit	Regulatory limit	Measured value
pH	—	5.6 ~ 8.4	7.2 ~ 7.9
BOD	mg/L	50	10
COD	mg/L	50	8
n-hexane extract (mineral oil)	mg/L	2.5	Less than 1
Suspended solids	mg/L	20	3

Note: Because wastewater flows to an industrial park treatment facility, there is no regulatory limit. The autonomous control standards are set at levels that are stricter than those specified by the relevant laws and regulations for the region in which the industrial complex is situated.

■ Kyushu Sumitomo Bakelite Co., Ltd.

<Air>

Facility	Item	Unit	Regulatory limit	Measured value
Boiler	SO x	m ³ N/h	0.63	0.22
	NO x	ppm	180	58.0
	Soot and dust	g/m ³ N	0.30	0.0095

<Water>

Item	Unit	Regulatory limit	Measured value
pH	—	5.8 ~ 8.6	7.5 ~ 7.9
BOD	mg/L	160	12.0
COD	mg/L	80	20.0
n-hexane extract (mineral oil)	mg/L	2.5	Less than 1
Suspended solids	mg/L	100	3.0

■ Yamaroku Kasei Industry Co., Ltd.

<Air> No relevant facilities

<Water>

Item	Unit	Regulatory limit	Measured value
pH	—	5.8 ~ 8.6	6.9 ~ 7.2
BOD	mg/L	25	1
COD	mg/L	25	5
n-hexane extract (mineral oil)	mg/L	4	Less than 1
Suspended solids	mg/L	90	5

■ S.B. Techno Plastics Co., Ltd.

<Air> No relevant facilities

<Water>

Item	Unit	Regulatory limit	Measured value
pH	—	5 ~ 9	8.6
BOD	mg/L	600	1.3
COD	mg/L	—	1.9
n-hexane extract (mineral oil)	mg/L	5	—
Suspended solids	mg/L	600	Less than 5

Note: Wastewater is released into sewers.

■ Akita Sumitomo Bakelite Co., Ltd.

<Air>

Facility	Item	Unit	Regulatory limit	Measured value
Boiler	SO x	K-value	3.00	0.08
	NO x	ppm	110	28
	Soot and dust	g/m ³ N	0.09	Less than 0.01

<Water>

Item	Unit	Regulatory limit	Measured value
pH	—	6.0 ~ 8.5	7.2 ~ 7.8
BOD	mg/L	30	3.8
COD	mg/L	30	4.8
n-hexane extract (mineral oil)	mg/L	—	—
Suspended solids	mg/L	40	4.0
Phenols	mg/L	0.5	0.01
Copper	mg/L	1	0.01
Cyanide	mg/L	0.1	Less than 0.01
Lead and its compounds	mg/L	0.1	Less than 0.01
Soluble manganese	mg/L	5	Less than 0.03

■ Hokkai Taiyo Plastic Co., Ltd.

<Air> No relevant facilities

<Water>

Item	Unit	Regulatory limit	Measured value
pH	—	5.7 ~ 8.7	8.1
BOD	mg/L	300	Less than 2.0
COD	mg/L	—	3.1
n-hexane extract (mineral oil)	mg/L	Mineral oil: 5 Animal/vegetable oil: 30	Less than 2.0
Suspended solids	mg/L	300	Less than 2.0

Note: Regulatory limits of the Ishikari New Port have been applied since fiscal 2012. Wastewater is released into a sewer.

Overseas: China, Macau, and Taiwan

Sumitomo Bakelite (Suzhou) Co., Ltd.

<Air> No relevant facilities

<Water>

Facility	Item	Unit	Standards	Measured value
Outlet on the south side	pH	—	6.0 ~ 9.0	7.0 ~ 7.5
	COD	mg/L	500	55
	BOD	mg/L	300	13.5
	Suspended solids	mg/L	400	8
	Animal/vegetable oil	mg/L	100	1.71
Outlet on the east side	pH	—	6.0 ~ 9.0	7.01
	COD	mg/L	500	158
	BOD	mg/L	300	88.7
	Suspended solids	mg/L	400	19
	Animal/vegetable oil	mg/L	100	2.79

Note: There are no drainage-related regulatory limits for the industrial complex, but Sumitomo Bakelite (Suzhou) performs voluntary measurement for daily monitoring and management.

Sumitomo Bakelite (Shanghai) Co., Ltd.

<Air>

Facility	Item	Unit	Standards	Measured value
Painting booths	Toluene emission concentration	mg/m ³ N	40	4.79
	Toluene emission speed	kg/h	9.0	0.0253
	Total non-methane hydrocarbon emission concentration	mg/m ³ N	120	20.0
	Total non-methane hydrocarbon emission speed	kg/h	27.8	0.0936

<Water>

Item	Unit	Standards	Measured value
pH	—	6 ~ 9	7.24 ~ 7.29
COD	mg/L	500	80
BOD	mg/L	300	29.4
Suspended solids	mg/L	400	27
Animal/vegetable oil	mg/L	100	0.199
Ammonium nitrogen	mg/L	40	6.56

Note: There are no regulations imposed on quality by the national or local governments, nor agreements with the community. However, when Sumitomo Bakelite (Shanghai) obtained ISO certification, it received guidance that the level of water emissions would be considered appropriately managed if the levels of the six items measured were kept within its autonomous standards. Therefore, Sumitomo Bakelite (Shanghai) measures levels of the six items.

Sumitomo Bakelite (Nantong) Co., Ltd.

<Air>

Facility	Item	Unit	Standards	Measured value
PR deodorizer	Phenols emission concentration	mg/m ³ N	100	0.162
	Phenols emission speed	kg/h	0.1	0.002
PR deodorizer	Methanol emission concentration	mg/m ³ N	190	22.1
	Methanol emission speed	kg/h	5.1	0.223
PR deodorizer	Formaldehyde emission concentration	mg/m ³ N	25	7.98
	Formaldehyde emission speed	kg/h	0.26	0.082
PR deodorizer	Butanol emission speed	kg/h	0.61	Not detected
PR deodorizer	MEK emission speed	kg/h	2.43	Not detected
PR bug filter DC504	Particulates emission concentration	mg/m ³ N	120	9.37
	Particulates emission speed	kg/h	3.5	0.062
PR bug filter DC503	Particulates emission concentration	mg/m ³ N	120	2.62
	Particulates emission speed	kg/h	3.5	0.016
PR boiler	Soot and dust emission concentration	mg/m ³ N	100	8.80
	SO ₂ emission concentration	mg/m ³ N	500	16.0
	NO _x emission concentration	mg/m ³ N	400	93.0
P3 bug filter	Particulates emission concentration	mg/m ³ N	120	7.3
	Particulates emission speed	kg/h	3.5	0.004
PM deodorizer	Phenols emission concentration	mg/m ³ N	100	0.108
	Phenols emission speed	kg/h	0.1	0.003

Facility	Item	Unit	Standards	Measured value
PM deodorizer	Formaldehyde emission concentration	mg/m ³ N	25	0.302
	Formaldehyde emission speed	kg/h	0.26	0.017
PM deodorizer	IPA emission concentration	mg/m ³ N	—	Not detected
	IPA emission speed	kg/h	10.32	No value because concentration was not detected
PM deodorizer	Ammonia emission concentration	mg/m ³ N	—	4.84
	Ammonia emission speed	kg/h	4.9	0.039
PM1 bug filter	Particulates emission concentration	mg/m ³ N	120	6.7
PM2 bug filter	Particulates emission speed	kg/h	19.6	0.03
PM2 bug filter	Particulates emission concentration	mg/m ³ N	120	5.0
	Particulates emission speed	kg/h	21.3	0.02
PM3 bug filter	Particulates emission concentration	mg/m ³ N	120	5.7
	Particulates emission speed	kg/h	19.6	0.03
PM4 bug filter	Particulates emission concentration	mg/m ³ N	120	4.6
	Particulates emission speed	kg/h	19.6	0.03
PM5 bug filter	Particulates emission concentration	mg/m ³ N	120	6.0
	Particulates emission speed	kg/h	21.3	0.04
PM6 bug filter	Particulates emission concentration	mg/m ³ N	120	4.1
	Particulates emission speed	kg/h	19.6	0.02
PM7 bug filter	Particulates emission concentration	mg/m ³ N	120	6.2
	Particulates emission speed	kg/h	9.3	0.06
PM8 bug filter	Particulates emission concentration	mg/m ³ N	120	5.8
	Particulates emission speed	kg/h	9.3	0.07

<Water>

Item	Unit	Standards	Measured value
pH	—	6-9	7.3
COD	mg/L	500	60.0
BOD	mg/L	300	3.9
Ammonium nitrogen	mg/L	—	0.259
Phenols	mg/L	2.0	Less than 0.1
Formaldehyde	mg/L	5	0.39
Phosphorus	mg/L	—	1.38
Suspended solids	mg/L	400	12
Oil	mg/L	20	0.07
LAS (anion surface active agent)	mg/L	20	0.18

Note: Sumitomo Bakelite (Nantong) Co., Ltd. voluntarily measures IPA emission concentration and ammonia emission concentration in the air, although there are no standards for these. There are no standards for ammonium nitrogen or phosphorous, either, but the Nantong municipal government's environmental monitoring center measures these for reference.

Basec Hong Kong Limited

<Air>

Facility	Item	Unit	Standards	Measured value
Electric power generator	SO ₂	mg/m ³ N	550	28
	NO _x	mg/m ³ N	240	40
	Soot and dust	mg/m ³ N	120	30.7
	Smoke blackness	—	Class 1	Class 1
Boiler	SO ₂	mg/m ³ N	500	54
	NO _x	mg/m ³ N	400	183
	Soot and dust	mg/m ³ N	80	28.1
	Smoke blackness	—	Class 1	Class 1

<Water>

Item	Unit	Standards	Measured value
pH	—	6 ~ 9	7.07
Suspended solids	mg/L	70	6
COD	mg/L	100	15.3
BOD	mg/L	20	6.1
Ammonium nitrogen	mg/L	10	0.19

Item	Unit	Standards	Measured value
Phosphate	mg/L	0.5	0.05
Animal/vegetable oil	mg/L	10	1.45

Note: The point for water quality measurement is the wastewater outlet of the cafeteria.

Sumitomo Bakelite Macau Co., Ltd.

<Air>

Facility	Item	Unit	Standards	Measured value
Boiler / RTO (Exhaust gas combustion unit)	CO	mg/m ³	1000	7/1
	CO ₂	%	–	4.8/0.7
	NO _x	mg/m ³	400/120	76/19
	SO _x	mg/m ³	500	Less than 71/5
RTO	Soot and dust	mg/m ³	100/120	13/26
	TOTAL VOC	ppm	92.3	5

<Water> Regular wastewater (factory disposal)

Item	Unit	Standards	Measured value
PH	–	6 – 9	7.3 – 7.9
Suspended solids	mg/l	60	38
Color	TCU	–	38
COD	mg/l	150	87
BOD	mg/l	40	6
Aluminum	mg/l	10.0	0.191
Cadmium	mg/l	0.2	0.0003
Lead	mg/l	1.0	0.0008
Copper	mg/l	1.0	0.018
Chromium	mg/l	2.0	0.002
Iron	mg/l	2.0	2.27*1
Manganese	mg/l	2.0	0.440
Nickel	mg/l	2.0	0.002
Zinc	mg/l	5.0	0.582
Arsenic	mg/l	1.0	0.01
Selenium	mg/l	0.5	0.01
Mercury	mg/l	0.05	0.0005
Hexavalent chromium	mg/l	0.1	0.02
Residual chlorine	mg/l	0.5	0.2
Total residual chlorine	mg/l	1.0	0.2
Phenols	mg/l	0.5	Less than 5.0*2
Total cyanide	mg/l	0.5	0.2
Sulfide	mg/l	1.0	0.1
Sulfate	mg/l	2000.0	19
Phosphorus	mg/l	10.0	0.4
Ammonia	mg/l	10.0	1.75
Total nitrogen	mg/l	15.0	3.2
Nitrate	mg/l	50.0	2.1
Detergent	mg/l	2.0	0.5
Oil and grease	mg/l	15.0	5.0
Sulfite	mg/l	1.0	1.0
α-Benzene	ug/l	2000 (The sum of the three items on the left equals HCH.)	0.5
β-Benzene	ug/l		1.0
Δ-Benzene	ug/l		1.0
DDT	mg/l	0.2	0.002
Aldrin	ug/l	2.0	0.5
Endrin	ug/l	2.0	0.5
Dieldrin	ug/l	2.0	0.5
PCP	mg/l	1.0	0.01
Hexachlorobutadiene	mg/l	1.5	0.002
HCB	mg/l	1.0	0.004
Carbon tetrachloride	mg/l	1.5	0.005
Tetrachloroethylene	mg/l	1.5	0.005
Chloroform	mg/l	1.0	0.005

Item	Unit	Standards	Measured value
Total petroleum hydrocarbons	mg/l	1.0	0.473
Acetaldehyde	mg/l	1.0	0.01
Isodrin	ug/l	2.0	Not measured*3

<Water> Sewage drainage (dishwater)

Item	Unit	Standards	Measured value
PH	–	6.0 – 10.0	6 – 8
Temperature	°C	45	30.0
Color	TCU	80.0	150.0*4
Solid size	cm	5.0	Less than 1
Suspended solids	mg/l	1000.0	44.0
Sulfate as SO ₄	mg/l	100.0	51.0
BOD	mg/l	1000.0	29.0
COD	mg/l	2000.0	68.0
Total surfactants	mg/l	75.0	Less than 1
Arsenic	mg/l	1.0	Less than 0.01
Cadmium	mg/l	0.2	Less than 0.002
Lead	mg/l	2.5	0.003
Copper	mg/l	5.0	0.199
Hexavalent chromium	mg/l	0.1	Less than 0.02
Chromium	mg/l	2.0	0.010
Nickel	mg/l	4.0	0.009
Mercury	mg/l	0.05	Less than 0.0005
Total cyanide	mg/l	1.0	0.010
Phenols	mg/l	10.0	Less than 0.2
Total petroleum hydrocarbons	mg/l	15.0	Less than 5
Total residual chlorine	mg/l	1.0	Less than 0.2
Oil & grease	mg/l	100.0	Less than 5

*1 It is believed that the considerable rusting of iron covers above ordinary wastewater lines was the cause of this iron content. As a countermeasure, the iron covers have been coated with a rust prevention agent. However, rusting occurs easily. Therefore, replacement of iron covers with concrete covers is underway. The maximum value, 2.27, was measured in January, and since then, the measured value has never exceeded the regulatory limit.

*2 In accordance with the authorities' order to improve the environment of the compounding rooms, the number of exhaust fans has been increased and the ventilation rate has been raised. It appears that, as a result, it has become easier for fine powder containing particulate matter to pass through the filters. Therefore, different filters have been selected, and the drainage line for the rainwater in this area has been switched from the line for regular wastewater to the line for sewage drainage. The value, Less than 5.0, which exceeded the regulatory limit, was measured in March, and since then, the measured value has never exceeded the regulatory limit. Because the drainage line was switched, the content of phenols in sewage drainage is also measured.

*3 According to the company that performs the measurements, if the three items (aldrin, endrin, and dieldrin) do not exceed the regulatory limit, the content of isodrin is virtually zero and, therefore, it is not measured.

*4 As it is impracticable for Sumitomo Bakelite Macau itself to measure the color of the wastewater, Sumitomo Bakelite Macau contracted measurement to a water quality survey service provider. According to the water quality survey service provider, there is no problem if the sampled water is clear. After receiving the report on the measured value from the water quality survey service provider, Sumitomo Bakelite Macau sampled sewage drainage and confirmed that its color was clear, and therefore, decided to monitor the situation for the time being. Since then, no abnormal situation has been detected.

Sumitomo Bakelite (Taiwan) Co., Ltd.

<Air> No relevant facilities

<Water>

Item	Unit	Standards	Measured value
pH	–	6 ~ 9	5.1-7.57*1
COD	mg/L	600	2,336*2
Suspended solids	mg/L	300	145

Note: The standards are the regulatory limit of the industrial complex.

*1 The cause is believed to be the cleaning agent remained the pipes for cooling water. Therefore, a rule has been established to receive the cleaning agent in a tank when it is used.

*2 The cause is believed to be the cooling water flown into the line. In order to prevent cooling water flown into the line, a pit was installed in the cooling water facility. The situation is being monitored.

Southeast Asia

SNC Industrial Laminates Sdn. Bhd.

<Air>

Facility	Item	Unit	Standards	Measured value
Exhaust gas combustion unit	SOx	g/m ³ N	0.2	0.0003
	NOx	g/m ³ N	2	0.0002
	Soot and dust	g/m ³ N	0.2	0.050

<Water>

Item	Unit	Standards	Measured value
pH	–	5.5 ~ 9.0	6.2 ~ 8.8
Temperature	°C	40	28.2
BOD	mg /L	50	47
COD	mg /L	200	186
Suspended solids	mg /L	100	30
Phenols	mg /L	1	0.1
Mercury	mg /L	0.05	Less than 0.001
Cadmium	mg /L	0.02	Less than 0.005
Hexavalent chromium compounds	mg /L	0.05	Less than 0.01
Arsenic	mg /L	0.1	Less than 0.05
Cyanide	mg /L	0.1	Less than 0.01
Lead	mg /L	0.5	Less than 0.05
Trivalent chromium compounds	mg /L	1	0.02
Copper	mg /L	1	0.97
Soluble manganese	mg /L	1	0.08
Nickel	mg /L	1	0.21
Tin	mg /L	1	Less than 0.2
Zinc	mg /L	2	1.33
Boron	mg /L	4	0.61
Soluble iron	mg /L	5	3.96
Chlorine	mg /L	2	0.2
Sulfur	mg /L	0.5	Less than 0.1
Oil and grease	mg /L	10	9
Formaldehyde	mg /L	2	1.96
Selenium	mg /L	0.5	Less than 0.1
Aluminum	mg /L	15	1.19
Silver	mg /L	1	0.01
Barium	mg /L	2	0.04
Fluorides	mg /L	5	3.2
Ammonium nitrogen	mg /L	20	2
Color tone	ADMI	200	38

Sumitomo Bakelite Singapore Pte. Ltd.

<Air> No relevant facilities

<Water>

Item	Unit	Standards	Measured value
pH	–	6 ~ 9	6.7
Temperature	°C	45	28
BOD	mg /L	400	220
COD	mg /L	600	570
Suspended solids	mg /L	400	79
Total dissolved solids	mg /L	3,000	320
Phenols	mg /L	0.5	0.21
Chlorine	mg /L	1,000	67
Sulfate	mg /L	1,000	31
Sulfur	mg /L	1	0.06
Cyanide	mg /L	2	0.02

Item	Unit	Standards	Measured value
Linear alkyl sulfonate	mg /L	30	Less than 1
Oil and grease(hydrocarbon-based)	mg /L	60	8.0
Oil and grease(non-hydrocarbon-based)	mg /L	100	6.0
Caustic alkalinity	mg /L	2,000	Less than 1
Fluorides	mg /L	15	0.89
Arsenic and its compounds	mg /L	5	Less than 0.05
Barium	mg /L	10	Less than 0.05
Tin	mg /L	10	Less than 0.05
Soluble iron	mg /L	50	2.6
Beryllium	mg /L	5	Less than 0.05
Boron	mg /L	5	Less than 0.05
Soluble manganese	mg /L	10	0.08
Cadmium	mg /L	1	Less than 0.01
Chromium	mg /L	5	Less than 0.05
Copper	mg /L	5	Less than 0.05
Lead	mg /L	5	Less than 0.05
Mercury	mg /L	0.5	0.002
Nickel	mg /L	10	Less than 0.05
Selenium	mg /L	10	Less than 0.05
Silver	mg /L	5	Less than 0.05
Zinc	mg /L	10	0.13
Total metals (toxic)	mg /L	10	0.16

Sumicarrier Singapore Pte. Ltd.

<Air> No relevant facilities

<Water> No relevant facilities

SumiDurez Singapore Pte. Ltd.

<Air>

Facility	Item	Unit	Standards	Measured value
Bag filter	Soot and dust	mg/Nm ³	100	15

<Water>

Item	Unit	Standards	Measured value
Temperature of discharge	°C	45	24.3
pH	–	6 ~ 9	6.1
BOD	mg/L	50	Less than 2.0
COD	mg/L	100	23.8
Suspended solids	mg/L	50	12.0
Sulfur	mg/L	0.2	Less than 0.1
Cyanide	mg/L	0.1	Less than 0.02
Linear alkyl sulfonate	mg/L	15	Less than 0.1
Oil and grease (hydrocarbon-based)	mg/L	10	Less than 10.0
Oil and grease (non-hydrocarbon-based)	mg/L	10	Less than 10.0
Arsenic and its compounds	mg/L	0.1	Less than 0.05
Barium	mg/L	2	Less than 0.01
Soluble iron	mg/L	10	0.01
Boron	mg/L	5	Less than 0.05
Soluble manganese	mg/L	5	Less than 0.05
Phenols	mg/L	0.2	Less than 0.01
Cadmium	mg/L	0.1	Less than 0.01
Chromium	mg/L	1	Less than 0.05
Copper	mg/L	0.1	Less than 0.01
Lead	mg/L	0.1	Less than 0.05
Mercury	mg/L	0.05	Less than 0.01
Nickel	mg/L	1	Less than 0.01
Selenium	mg/L	0.5	Less than 0.05
Silver	mg/L	0.1	Less than 0.01

Item	Unit	Standards	Measured value
Zinc	mg/L	1	0.2
Total metals (toxic)	mg/L	1	0.2

Note: Until 2011, water quality inspection had been conducted based on the Surface Water Discharge Regulations.

From 2012 onward, the plant has been subject to the Trade Effluent Discharge to Watercourse Regulations. As a result, the number of regulatory items increased.

■ P.T. Indopherin Jaya

<Air> No relevant facilities

<Water>

Item	Unit	Standards	Measured value
pH	–	6 ~ 9	7.7 ~ 9.5*1
BOD	mg/L	100	75.60
COD	mg/L	300	164
Suspended solids	mg/L	100	39.4
Total nitrogen	mg/L	30	5.395
Phenols	mg/L	1	0.694

Note: The measured value in August exceeded the standard. However, since the effluent is neutralized with well water before it is discharged, the discharged effluent is well within the range of the standard.

■ P.T. SBP Indonesia

<Air> No relevant facilities

<Water>

Item	Unit	Standards	Measured value
pH	–	5.5 ~ 9.5	7.43
Temperature	°C	40	29.3
BOD	mg/L	200	6.51
COD	mg/L	400	18.04
Suspended solids	mg/L	400	19.80
Dissolved solids	mg/L	4,000	155
MBAS	mg/L	10	0.470
Oil and grease	mg/L	10	0.7
Iron	mg/L	10	Less than 0.01
Manganese	mg/L	4	0.14
Barium	mg/L	4	Less than 0.001
Copper	mg/L	4	Less than 0.004
Zinc	mg/L	10	0.106
Hexavalent chromium	mg/L	0.2	Less than 0.005
Chromium compounds	mg/L	1	Less than 0.020
Cadmium	mg/L	0.1	Less than 0.0016
Mercury	mg/L	0.004	Less than 0.0005
Lead	mg/L	0.2	Less than 0.025
Tin	mg/L	4	Less than 0.001
Arsenic	mg/L	0.2	Less than 0.002
Selenium	mg/L	0.1	Less than 0.001
Nickel	mg/L	0.4	Less than 0.020
Cobalt	mg/L	0.8	Less than 0.001
Cyanogen	mg/L	0.1	Less than 0.005
Hydrogen sulfide	mg/L	0.1	Less than 0.04
Fluorine	mg/L	4	Less than 0.92
Chlorine	mg/L	2	0.15
Ammonium nitrogen	mg/L	2	0.040
Nitrate-nitrogen	mg/L	40	3.520
Nitrite-nitrogen	mg/L	2	0.20
Phenols	mg/L	1	0.12

Notes: 1. Standards are set by the industrial complex where the site is located.

2. Since water effluent is discharged into the public water system after it is processed in the regulating pond of the industrial complex, unprocessed water effluent is not discharged into the external environment.

■ Sumitomo Bakelite Vietnam Co., Ltd.

<Air>

Facility	Item	Unit	Standards	Measured value
Boiler	CO	mg/m ³ N	1,000	180
	NOx	mg/m ³ N	850	35.2
	SO ₂	mg/m ³ N	500	11.2
	Soot and dust	mg/m ³ N	200	42.2
Scrubber	HCL	mg/m ³ N	50	11.5
	H ₂ SO ₄	mg/m ³ N	50	3.4
	HNO ₃	mg/m ³ N	500	16.5
Chelation processing equipment	CO	mg/m ³ N	1,000	175
	Soot and dust	mg/m ³ N	200	9.5

<Water>

Item	Unit	Standards	Measured value
pH	–	6 ~ 9	6.8
Temperature	°C	40	26.4
BOD	mg/L	240	2.9
COD	mg/L	350	9
Suspended solids	mg/L	200	Less than 5
Total nitrogen	mg/L	40	2.6
Total phosphorus	mg/L	5	Less than 0.25
Arsenic	mg/L	0.045	Less than 0.001
Mercury	mg/L	0.0045	Less than 0.001
Lead	mg/L	0.09	0.02
Cadmium	mg/L	0.0045	Less than 0.01
Copper	mg/L	1.8	0.3
Zinc	mg/L	2.7	Less than 0.01
Nickel	mg/L	0.18	0.04
Manganese	mg/L	0.45	Less than 0.01
Iron	mg/L	0.9	0.17
Tin	mg/L	0.18	Not measured*1
Hexavalent chromium	mg/L	0.045	Less than 0.01
Trivalent chromium	mg/L	0.18	Less than 0.01
Cyanogen	mg/L	0.063	0.008
Ammonium nitrogen	mg/L	4.5	Less than 1
Phenols	mg/L	0.09	Less than 0.005
Mineral oil	mg/L	4.5	Less than 1
Animal/vegetable oil	mg/L	9	Not measured*1
Sulfur compounds	mg/L	0.18	Less than 0.1
Residual chlorine	mg/L	0.9	Less than 0.1
Fluoride compounds	mg/L	4.5	0.11
Chlorides	mg/L	450	262
Coliform bacteria	MNP/100ml	Less than 10 (9)	93
Odor	–	No odor	Not measured*1
Color	Co-Pt at pH7	20	4
PCB	mg/L	0.0027	0.00001
Pesticide (Organic phosphorus group)	mg/L	0.27	0.0005
Pesticide (Organic chloride group)	mg/L	0.09	0.0005
Gross α activity	Bq/L	0.09	0.0289
Gross B activity	Bq/L	0.9	0.1605

Note: Since water effluent is discharged into the public water system after it is processed in the regulating pond of the industrial complex, unprocessed water effluent is not discharged into the external environment.

*1 No measurement is required pursuant to the new law.

North America

Sumitomo Bakelite North America, Inc.

(Manchester Plant)

<Air>

Facility	Item	Unit	Standards	Measured value
Long fiber process (Drying process)	Acetone emissions	tons/year	40	18.6
	SOx	tons/year	0.002	0.001
Condor process (Drying process)	NOx	tons/year	0.38	0.110
	CO	tons/year	0.32	0.092
	VOC emissions	tons/year	15	4.01
	Soot and dust	tons/year	1.23	0.127
Total site	VOC emissions	tons/year	45	17.77
	HAPs	tons/year	25	0.068

<Water>

Facility	Item	Unit	Standards	Measured value
NCCW discharge (non-contact cooling water)	Chlorine	mg/L	0.029	0.010
	Copper	mg/L	0.031	Less than 0.005
	Flow	gpd	450,000	234,140
	Lead	mg/L	0.006	0.005
	Oil and Grease	mg/L	5	Less than 1.4
	pH	-	6.0 ~ 9.0	7.66 ~ 8.12
	Temperature	F	85 以下	67.7
	Suspended solids	mg/L	30	Less than 5.0
	Zinc	mg/L	0.203	0.002

Facility	Item	Unit	Standards	Measured value
Storm water discharge	Copper	mg/L	0.100	0.028
	Lead	mg/L	0.050	0.003
	Zinc	mg/L	0.500	0.444
	COD	mg/L	75	200
	pH	-	-	6.32-6.39
	Nitrate	mg/L	1.5	1.48
	Oil and Grease	mg/L	5	2.5
	Nitrogen	mg/L	2.5	7.42
	Phosphorous	mg/L	0.5	0.97
	Suspended solids	mg/L	100	60
	Aquatic toxicity - 24 hour	%	>50	100
	Aquatic toxicity - 48 hour	%	>50	100

Note: No action is required even if the thresholds are exceeded.

Durez Corporation (Kenton Plant)

<Air>

Item	Unit	Standards	Measured value
Stack emissions (Non-Title V)	tons/year	-	Less than 50

<Water>

Item	Unit	Standards	Measured value
Phenols	µg/L	20	Less than 10
pH	-	6.5 ~ 9.0	7.0 ~ 8.8

Item	Unit	Standards	Measured value
Ammonia-N	mg/L	12 (Winter)	0.90
		2.25 (Summer)	1.18
CBOD	mg/L	38 (Winter)	5.7
		15 (Summer)	14.0
Oil and grease	mg/L	10	Less than 5.0
Phosphorus	mg/L	-	7.16
Dissolved solids,	mg/L	-	993
Suspended solids	mg/L	45	72*1
Strontium	µg/L	30,000	6,810

*1 High SS was due to sludge build-up in the equalization basin. The basin was cleaned.

Durez Corporation (Niagara Plant)

<Air> No relevant facilities

<Water>

Item	Unit	Standards	Measured value
pH	-	5 ~ 10	6 ~ 8
Phenols	lbs./day	30	0.4789
Flow	MM Gls/Day	0.1	0.0517
Suspended solids	lbs./day	75	15.79
Soluble organic carbon	lbs./day	800	316.53
Phosphorous	lbs./day	17	0.4505

Note: The plant manages the water discharge pH by neutralizing with caustic soda to manage the reading to a pH of 6-8. For items other than pH, values indicated are the average of values measured during the year.

Durez Canada Co., Ltd.

<Air>

Item	Unit	Standards	Measured value
Phenol	kg/year	21,319	3,243
Formaldehyde	kg/year	504	55
NOx	kg/year	93,830	2,123
Ammonia	kg/year	36,881	25,646
Ethanol	kg/year	672,451	48,578

<Water>

Item	Unit	Standards	Measured value
Chloride	mg/L	3,000	Not detected
pH	-	6 ~ 11	8.48
Total phosphorus	mg/L	10	6.0
Sulfate	mg/L	1,500	Not detected
BOD	mg/L	300	110
Kjeldahl nitrogen	mg/L	100	56
Suspended solids	mg/L	350	110
Phenols	mg/L	1	0.044

Promerus LLC

<Air>

Item	Unit	Standards	Measured value
VOC emissions	tons/year	1.0	0.13

<Water> No relevant facilities

Europe

■ N.V. Sumitomo Bakelite Europe S.A. (Belgium) ✓

<Air>

Facility	Item	Unit	Standards	Measured value
Boiler	NOx	mg/m ³ N	150	122
	SO ₂	mg/m ³ N	35	Less than 15
	CO	mg/m ³ N	100	Less than 7

<Water>

Item	Unit	Standards	Measured value
pH	–	6 ~ 9	7.8
COD	mg/L	136	8.1
Suspended solids	mg/L	1,000	3
TOC	mg/L	50	5
Phenols	mg/L	3	0.000094
Chlorendic acid	mg/L	3	Less than 0.0001
Hexachloro-cyclopentadiene	mg/L	0.005	Less than 0.01
Monochloro-benzene	mg/L	5	Less than 0.0005
Total nitrogen	mg/L	15	Less than 2.5
Total phosphorus	mg/L	3	0.034

■ Sumitomo Bakelite Europe (Barcelona), S.L.U. ✓

<Air>

Facility	Item	Unit	Standards	Measured value
Boiler	SOx	mg/m ³ N	4,300	Not detected
	NOx	ppm	300	77
	CO	ppm	500	54

<Water>

Item	Unit	Standards	Measured value
pH	–	5.5 ~ 11	7.0 ~ 8.4
COD	mg/L	2,500	3,290*1
Suspended solids	mg/L	1,500	925
Phenols	mg/L	2	1.30
Conductivity	µs/cm	13,000	7,100
Total chlorine	mg/L	3,500	1,116
Total sulfides	mg/L	1,000	1,654*2
Total phosphorus	mg/L	75	5.70

*1 The cause of the increase in COD is considered to be the black friction particles that are generated in the production process of furfuraldehyde. The corrective action is to collect the waste water from the friction particles facility and later to deliver it to a tank.

*2 The root cause was an overflow of cooling water, which has high concentration of sulfide. This was due to the level/radar that did not run correctly. A new safety system was installed to avoid this problem. The situation is being monitored.

■ Vyncolit N.V. (Belgium) ✓

<Air>

Item	Unit	Standards	Measured value
Phenols	mg/m ³ N	20	47.0*1
Ammonia	mg/m ³ N	35	51.0*1
Formaldehyde	mg/m ³ N	20	1.3
Total dust	mg/m ³ N	150	5.5

<Water>

Item	Unit	Standards	Measured value
Zinc	mg/L	1.4	0.159
Copper	mg/L	0.2	Less than 0.020
Phenol	mg/L	0.4	0.6*2
Molybdene	mg/L	5	0.0065
Total phosphorus	mg/L	14	Less than 0.15

*1 The use of dust filters of poor quality was the cause. Vyncolit selected a supplier that handles filter bags with the correct specifications. The situation is being monitored.

*2 The cause is believed to be water from the production waste containers that is getting into the wastewater measured. The result of the second measurement satisfied the standard.

Transfer and Release of Substances Subject to the PRTR Law (Fiscal 2012 Performance)

The amounts of the 38 substances subject to the PRTR Law (PRTR system*) released and transferred by the Company are presented in the table below. (tons/year)

Government order number	Substance	Amount used (manufactured)	Transfer			Release	
			Into air	Into water	Into soil	As waste material	As sewage
1	Zinc compounds (water-soluble)	18.0	0	0	0	0	0
18	Aniline	231.9	0	0	0	0.5	0
31	Antimony and its compounds	62.6	0	0	0	2.7	0
37	Bisphenol A	228.8	0	0	0	0.2	0
51	2-ethylhexanoic acid	5.9	0	0	0	0	0
53	Ethyl benzene	25.1	0	0	0	7.0	0
57	Ethylene glycol monoethyl ether	6.3	0	0	0	0	0
58	Ethylene glycol monomethyl ether	3.0	0	0	0	2.0	0
78	2, 4-xylene	11.1	0	0	0	0	0
79	2, 6-xylene	4.5	0	0	0	0	0
80	Xylene	36.0	0	0	0	9.4	0
82	Silver and its water-soluble compounds	18.7	0	0	0	0	0
86	Cresol	1,181.6	0	0	0	0.7	0
136	Salicylaldehyde	1.1	0	0	0	0	0
207	2, 6-ditertiary butyl-4-cresol	6.7	0	0	0	0	0
218	Dimethylamine	3.2	0	0	0	0	0
232	N,N-dimethyl formamide	313.9	1.4	0	0	11.4	0
239	Organic tin compounds	30.6	0	0	0	1.8	0
240	Styrene	3.9	0.2	0	0	0	0
258	Hexamethylenetetramine	1,015.8	0	0	0	22.4	0
265	Tetrahydromethylphthalic anhydride	201.6	0	0	0	0.1	0
277	Triethylamine	9.6	0	0	0	0	0
296	1,2,4-trimethylbenzene	1.2	0	0	0	0	0
300	Toluene	72.6	7.4	0	0	5.4	0
302	Naphthalene	1.9	0	0	0	0	0
309	Nickel compounds	1.0	0	0	0	0	0
320	Nonylphenol	2.3	0	0	0	0	0
330	Bis (1-methyl-1-phenylethyl) = peroxide	5.3	0	0	0	0	0
349	Phenol	22,802.4	1.0	0	0	38.8	0
352	Diallyl phthalate	3.0	0	0	0	0	0
355	Bis (2-ethylhexyl) phthalate	8.2	0	0	0	0	0
392	n-hexane	5.9	0.5	0	0	3.8	0
401	1,2,4-benzene tricarboxylic acid	18.4	0	0	0	1.4	0
405	Boron and its compounds	9.3	0	0	0	0.9	0
411	Formaldehyde	9,408.3	0.8	0.1	0	5.3	0
		(11,003.3)	0.4	0	0	6.0	0
413	Phthalic anhydride	1.2	0	0	0	0.1	0
438	Methylnaphthalene	36.7	0.4	0	0	0	0
448	Methylenebis (4, 1-phenylene) = diisocyanate	27.7	0	0	0	0	0

: Specific Class 1 designated chemical substances

*The Pollutant Release and Transfer Register (PRTR) system

Japan's PRTR Law requires companies using harmful chemical substances to gather data on the amount of harmful chemical substances released into the environment and other data as a means of promoting autonomous efforts by those companies to improve their management of such substances and preventing the pollution of the environment by such substances.

Environmental Protection Activities

Year	Sumitomo Bakelite Group initiatives	Societal developments
1969	● Pollution countermeasures secretariat established	
1973	● Environmental Management Division established ● Environmental auditing of domestic business sites commenced	
1974	● Environmental management departments established for all business sites	
1978	● Environmental auditing of domestic subsidiaries and affiliates commenced	
1987		● Montreal Protocol on Substances That Deplete the Ozone Layer adopted
1990	● Environmental Issue Action Committee established. Appointment of director in charge	
1991	● Recycling Technology Action Office established	● Law Promoting the Use of Recycled Resources
1992	● S.B. Recycle established	● United Nations Conference on Environment and Development (UNCED or Earth Summit) generates several agreements, including the "Rio Declaration on Environment and Development" and "Agenda 21"

Year	Sumitomo Bakelite Group initiatives	Societal developments
1993	<ul style="list-style-type: none"> Environment and Safety Volunteer Plan drafted Environment and safety management regulations established Environmental audits of overseas subsidiaries and affiliates commenced 	<ul style="list-style-type: none"> The Basic Environment Law enacted
1994	<ul style="list-style-type: none"> Use of certain CFCs and 1,1,1-trichloroethane ceased 	
1995	<ul style="list-style-type: none"> Responsible Care Committee established The Company joined the Japan Responsible Care Council as a founding member Japan Responsible Care Council (JRCC) established 	<ul style="list-style-type: none"> Law for Promotion of Sorted Collection and Recycling of Containers and Packaging enacted
1997	<ul style="list-style-type: none"> Corporate Policies for Safety, Health, and the Environment revised Utsunomiya Plant and Sumitomo Bakelite Singapore acquired ISO 14001 certification 	<ul style="list-style-type: none"> Kyoto Protocol adopted by the Third Conference of the Parties of the United Nations Framework Convention on Climate Change (COP3)
1998	<ul style="list-style-type: none"> First Environmental Activities Report issued 	
1999	<ul style="list-style-type: none"> All Sumitomo Bakelite plants acquired ISO 14001 certification 	<ul style="list-style-type: none"> Law Concerning Reporting, Etc., of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management enacted Law Concerning Special Measures against Dioxins enacted
2000	<ul style="list-style-type: none"> Environmental accounting implemented 	<ul style="list-style-type: none"> Basic Law for Establishing the Recycling-Based Society enacted
2001	<ul style="list-style-type: none"> Environmental Report issued (independent reviews conducted) 	<ul style="list-style-type: none"> Law Concerning Special Measures against PCB Waste enacted
2002	<ul style="list-style-type: none"> Scope of Environmental Report expanded to include subsidiaries and affiliates in Japan Tokyo Kakohin received an award for promoting a "3R" policy of reduce, reuse, and recycle Risk Management Committee established 	<ul style="list-style-type: none"> Soil Contamination Countermeasures Law enacted Japan adopted COP3 Kyoto Protocol World Summit on Sustainable Development generates Johannesburg Declaration on Sustainable Development
2003	<ul style="list-style-type: none"> Yamaroku Kasei Industry became certified as the Company's first zero waste emissions plant Compliance Committee established 	<ul style="list-style-type: none"> Building Code revised to resolve "sick building" syndrome
2004	<ul style="list-style-type: none"> Shizuoka Plant commenced operations of a cogeneration system 	<ul style="list-style-type: none"> Air Pollution Prevention Law revised to reduce volatile organic compound (VOC) emissions
2005	<ul style="list-style-type: none"> Title of annual Environmental Report changed to Environmental & Social Report to reflect broader coverage of social initiatives Sumitomo Bakelite (Taiwan) recognized as the Sumitomo Bakelite Group's first overseas zero emissions production business site 	<ul style="list-style-type: none"> Kyoto Protocol went into effect Ordinance on Prevention of Health Impairment due to Asbestos
2007		<ul style="list-style-type: none"> The new EU Regulation for Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) came into force
2008	<ul style="list-style-type: none"> Thirty of the business sites of the Sumitomo Bakelite Group in Japan and overseas had obtained ISO 14001 certification. (as of July) Start of soil and groundwater pollution remediation measures at a site owned by Sano Plastic following the dismantling of a factory building there (February) Signed Responsible Care Global Charter (November) 	<ul style="list-style-type: none"> G8 Hokkaido Toyako Summit
2009	<ul style="list-style-type: none"> Inauguration of multilingual Material Safety Data Sheet (MSDS) system Began participating as a partner in the Declaration of Biodiversity of the Japan Business Federation (Nippon Keidanren) 	<ul style="list-style-type: none"> Revised Act on the Rational Use of Energy took effect 15th Conference of the Parties (COP15) held with the UN Climate Change Conference (Copenhagen Summit)
2010	<ul style="list-style-type: none"> Establishment of the Environmental Impact Reduction Committee The Sumitomo Bakelite Group began leakage risk assessments at its business sites in Japan and overseas. 	<ul style="list-style-type: none"> 10th Conference of the Parties (COP10) to the Convention on Biological Diversity
2011	<ul style="list-style-type: none"> Presentation to Tochigi Prefecture of the report on the remediation construction work conducted at the Sano Plastic site (July) Standards for preparation of the Environmental & Social Report were changed to conform with the GRI guidelines 	<ul style="list-style-type: none"> The 17th Conference of Parties (COP17) to the United Nations Framework Convention on Climate Change The Great East Japan Earthquake
2012	<ul style="list-style-type: none"> The biotope project started at the Shizuoka Plant. Excavation and removal of contaminated soil at the Totsuka Office started. Decontamination work for groundwater is scheduled to start in 2013. 	<ul style="list-style-type: none"> The 18th Conference of Parties (COP18) to the United Nations Framework Convention on Climate Change and the 8th Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (CMP 8) The United Nations Conference on Sustainable Development (Rio+20) Following the accident at the Fukushima Dai-ichi Nuclear Power Plant of Tokyo Electric Power Company caused by the Great East Japan Earthquake, operation of all 54 commercial nuclear reactors in Japan was suspended. Of the 54, only two at the Oi Nuclear Power Plant of Kansai Electric Power Company have resumed operation.

※Items in blue represent developments in international society.

Memberships in Leading Organizations (Qualifying Names of Groups Have Been Omitted)

Organization	Role of Sumitomo Bakelite
Keidanren (Japan Business Federation)	Participates in the Nature Protection Deliberation Council, the 1% (One Percent) Club, and other activities
Japan Thermosetting Plastics Industry Association	Participates in the phenol resin/amino resin extrusion materials subcommittee, laminated panel subcommittee, phenol resin subcommittee, adhesives subcommittee, melamine resin decorative panel subcommittee, electronics materials subcommittee, and environment/recycling research subcommittee
The Japan Chemical Industry Association	Participates in the Responsible Care Committee and chemical products management committee
The Japan Plastics Industry Federation	Participates in the chemical substance management committee
Japan Plastic Sheet Association	Participates in the polyvinyl chloride sheet subcommittee, corrugated sheet subcommittee, PC sheet subcommittee, environmental committee, and Japan PCV Environmental Affairs Council as a member of environmental committees
Japan Electronics Packaging and Circuits Association	
Japan Medical Devices Manufacturers Association	Participates in the raw materials committee, pharmaceutical law committee, distribution committee, microbe reduction committee, and other committees
Japan Chemical Exports and Imports Association	Participates in the chemical substance safety, environmental committee



The Environmental & Social Report 2013 corresponds to Application Level B+ of the GRI Sustainability Reporting Guidelines (G3). This self-declaration is assured by KPMG AZSA Sustainability Co., Ltd.

Report Application Level	C	C+	B	B+	A	A+
Standard disclosures	G3 Profile Disclosures OUTPUT	Report on: 1.1 2.1-2.10 3.1-3.8, 3.10-3.12 4.1-4.4, 4.14-4.15	Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5-4.13, 4.16-4.17	Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5-4.13, 4.16-4.17	Same as requirement for Level B	Report externally assured
	G3 Management Approach Disclosures OUTPUT	Not Required	Management Approach Disclosures for each Indicator Category	Management Approach Disclosures for each Indicator Category	Management Approach Disclosures for each Indicator Category	Report externally assured
	G3 Performance Indicators & Sector Supplement Performance Indicators OUTPUT	Report on a minimum of 10 Performance Indicators, including at least one from each of: Economic, Social, and Environmental	Report on a minimum of 20 Performance Indicators, at least one from each of: Economic, Environmental, Human Rights, Labor, Society, Product Responsibility	Report on a minimum of 20 Performance Indicators, at least one from each of: Economic, Environmental, Human Rights, Labor, Society, Product Responsibility	Report on each core G3 and Sector Supplement* indicator with due regard to the Materiality Principle by either: a) reporting on the Indicator or b) explaining the reason for its omission	Report externally assured

*Sector supplement in the final version

Item	Indicator	Relevant pages
1. Strategy and Analysis		
1.1	Statement from the most senior decision-maker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy.	4,5
1.2	Description of key impacts, risks, and opportunities.	4,5
2. Organizational Profile		
2.1	Name of the organization.	8
2.2	Primary brands, products, and/or services	8-11
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	8,9
2.4	Location of organization's headquarters.	8
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	8,9
2.6	Nature of ownership and legal form.	8
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	8-11
2.8	Scale of the reporting organization, including: • Number of employees; • Net sales (for private sector organizations) or net revenues (for public sector organizations); • Total capitalization broken down in terms of debt and equity (for private sector organizations); and • Quantity of products or services provided.	8,9
2.9	Significant changes during the reporting period regarding size, structure, or ownership including: • The location of, or changes in operations, including facility openings, closings, and expansions; and • Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations).	2
2.10	Awards received in the reporting period.	Not applicable
3. Report Parameters		
Report Profile		
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	2
3.2	Date of most recent previous report (if any).	2
3.3	Reporting cycle (annual, biennial, etc.)	2
3.4	Contact point for questions regarding the report or its contents.	Back cover
Report Scope and Boundary		
3.5	Process for defining report content, including: • Determining materiality; • Prioritizing topics within the report; and • Identifying stakeholders the organization expects to use the report.	2
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers).	2

Item	Indicator	Relevant pages
3.7	State any specific limitations on the scope or boundary of the report.	Not applicable
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	Not applicable
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report.	34,48
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	34
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	Not applicable
GRI Content Index		
3.12	Table identifying the location of the Standard Disclosures in the report.	60,61
Assurance		
3.13	Policy and current practice with regard to seeking external assurance for the report.	62
4. Governance, Commitments, and Engagement		
Governance		
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	18,19
4.2	Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement).	19
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	18
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	20,32
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	18
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	18
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	18
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	6

Item	Indicator	Relevant pages
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	7
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	7
Commitments to External Initiatives		
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	30
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	5
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization.	59
4.14	List of stakeholder groups engaged by the organization.	9
4.15	Basis for identification and selection of stakeholders with whom to engage.	9
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	9
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	15

Management Approach and Performance Indicators

Item	Performance Indicator(● Core/ ○ Additional)	Relevant pages
Economic		
	Management Approach	6,32
Economic Performance		
● EC3	Coverage of the organization's defined benefit plan obligations.	38
● EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	36
Environmental		
	Management Approach	6,7,21,23,48
Materials		
● EN1	Materials used by weight or volume.	22
Energy		
○ EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	49
Water		
● EN8	Total water withdrawal by source.	22
Biodiversity		
● EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	27
○ EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	27
Emissions, Effluents, and Waste		
● EN16	Total direct and indirect greenhouse gas emissions by weight.	22,23,24,48,49
● EN17	Other relevant indirect greenhouse gas emissions by weight.	49
○ EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	23,24
● EN20	NO, SO, and other significant air emissions by type and weight.	26
● EN21	Total water discharge by quality and destination.	22,26
● EN22	Total weight of waste by type and disposal method.	22
● EN23	Total number and volume of significant spills.	26
○ EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	Not applicable
Compliance		
● EN28	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.	19

Item	Indicator	Relevant pages
Transport		
○ EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	49
Labor Practices and Decent Work		
	Management Approach	6,7,21,33,38
Employment		
● LA1	Total workforce by employment type, employment contract, and region.	38
Labor/Management Relations		
● LA4	Percentage of employees covered by collective bargaining agreements.	40
Occupational Health and Safety		
● LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	34
● LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	39
Training and Education		
○ LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	40,41
Human Rights		
	Management Approach	38,41
Investment and Procurement Practices		
○ HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	41
Non-discrimination		
● HR4	Total number of incidents of discrimination and actions taken.	19
Society		
	Management Approach	6,19
Corruption		
● SO2	Percentage and total number of business units analyzed for risks related to corruption.	19
● SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.	19
Anti-competitive Behavior		
● SO7	Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes.	19
Compliance		
● SO8	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.	19
Product Responsibility		
	Management Approach	6,28-30
Customer Health and Safety		
● PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	28-30
○ PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	19
Product and Service Labeling		
○ PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	36
Marketing Communications		
● PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	36
Customer Privacy		
○ PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	19
Compliance		
● PR9	Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services.	19

Independent Assurance Report



Independent Assurance Report

To the President of Sumitomo Bakelite Co., Ltd.

Purpose and Scope

We were engaged by Sumitomo Bakelite Co., Ltd. (the "Company") to provide limited assurance on its Environmental & Social Report 2013 (Web edition) (the "Report") for the fiscal year ended March 31, 2013. The purpose of our assurance engagement was to express our conclusion, based on our assurance procedures, on whether:

- the environmental and social performance indicators and environmental accounting indicators marked with  for the period from April 1, 2012 to March 31, 2013 included in the Report (the "Indicators") are prepared, in all material respects, in accordance with the Company's reporting criteria;
- all the material sustainability information defined by the Japanese Association of Assurance Organizations for Sustainability Information ("J-SUS") is included in the Report; and
- the Company's self-declaration on the Global Reporting Initiative ("the GRI") application level (B+) conforms to the application level criteria stipulated by the GRI.

The content of the Report is the responsibility of the Company's management. Our responsibility is to carry out a limited assurance engagement and to express our conclusion based on the work performed.

Criteria

The Company applies its own reporting criteria as described in the Report. These are derived, among others, from the Environmental Reporting Guidelines of Japan's Ministry of the Environment and Sustainability Reporting Guidelines 2006 of the GRI. We used these criteria to evaluate the Indicators. For the completeness of material sustainability information, we used the 'Sustainability Reporting Assurance and Registration Criteria' of J-SUS. For the GRI application level, we used the criteria stipulated by the GRI.

Procedures Performed

We conducted our engagement in accordance with 'International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information' issued by the International Auditing and Assurance Standards Board, and the 'Practical Guidelines for the Assurance of Sustainability Information' of J-SUS.

The limited assurance engagement on the Report consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviews with the Company's responsible personnel to obtain an understanding of its policy for the preparation of the Report.
- Reviews of the Company's reporting criteria.
- Inquiries about the design of the systems and methods used to collect and process the Indicators.
- Analytical reviews of the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company's reporting criteria, and also a recalculation of the Indicators.
- Visits to the Company's overseas and domestic factories selected on the basis of a risk analysis.
- Assessment of whether or not all the material sustainability information defined by J-SUS is included in the Report.
- Evaluating the Company's self-declared GRI application level against the application level criteria.
- Evaluating the overall statement in which the Indicators are expressed.

Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that:

- the Indicators in the Report are not prepared, in all material respects, in accordance with the Company's reporting criteria as described in the Report;
- all the material sustainability information defined by J-SUS is not included in the Report; and
- the Company's self-declaration on the GRI application level does not conform to the application level criteria.

We have no conflict of interest relationships with the Company that are specified in the Code of Ethics of J-SUS.

KPMG AZSA Sustainability Co., Ltd.

KPMG AZSA Sustainability Co., Ltd.

Tokyo, Japan

September 19, 2013

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This mark indicates that the reliability of the sustainability information in this report satisfies the standards established by The Japanese Association of Assurance Organizations for Sustainability Information (J-SUS; <http://www.j-sus.org/>) for granting an assurance and registration mark.

