



# CSR Report 2019



## Corporate Message

# Expanding the Possibilities of Plastics to Contribute to Establishing a Sustainable Society

Sumitomo Bakelite Co., Ltd. is committed to offering life-enhancing products through high performance manufacturing.

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## Special Feature

### Editorial Policy

This report presents the Sumitomo Bakelite Group's CSR activities in fiscal 2018 clearly and succinctly to facilitate communication with all stakeholders inside and outside of the company. In March 2019, the Responsible Care Committee determined the content and the editorial policies of the report based on consideration of the principle issues concerning our group and stakeholders, in light of the views expressed by stakeholders and the trends influencing society.

The 2019 edition has been created so it may be easily read and understood by all stakeholders with:

- (1) A "Full Online Version" (No. of pages: 83) disclosing information in accordance with guidelines, and containing the details of our approaches to each activity, targets, and results.
- (2) An "Abridged Print Version" (No. of pages: 36), which is easy to read and focuses on the activities and messages of the Sumitomo Bakelite Group that we want stakeholders to know about.

It also features Universal Design Font, and has been written in a simple, concise manner that is easy to understand by all

#### ● Guidelines referenced

The "Full Online Version" follows the "core" option of the Global Reporting Initiative's (GRI) Sustainability Reporting Guidelines / Standards.

#### ● Scope of third party assurance

The information contained in the "Full Online Version" is assured by a third party (KPMG AZSA Sustainability Co., Ltd.), and the information that is covered by this assurance is indicated with .

#### ● Period

In principle, the report covers fiscal 2018 (April 2018 through to March 2019). Cases in which the coverage is different from this period are listed separately.

#### ● Published

January 2020 (The Fiscal 2018 Report was published in December 2018 and the Fiscal 2020 Report will be published in October 2020)

#### ● Boundary

(The names of the companies are generally stated in simplified forms by omitting "Co., Ltd." and "Inc.," etc.)

In principle, this report covers Sumitomo Bakelite Co., Ltd. and its consolidated subsidiaries.

Regarding environmental and occupational health and safety, the coverage is limited to the following business sites, which are mostly production sites.

#### [Japan]

Sumitomo Bakelite

Head Office and marketing offices etc.\*1, Amagasaki Plant, Kanuma Plant, Utsunomiya Plant, Shizuoka Plant, Kobe Facility Office, Akita Sumitomo Bakelite, S.B. Techno Plastics, Hokkai Taiyo Plastic, Yamaroku Kasei Industry, Kyushu Sumitomo Bakelite, S.B. Sheet Waterproof Systems, Tsutsunaka Kosan, S.B. Research Osaka Center, Seibu Jushi, Softec\*\*1

#### [Overseas]

Sumitomo Bakelite Singapore, SumiDurez Singapore, SNC Industrial Laminates, Indopherin Jaya, SBP Indonesia, Sumitomo Bakelite (Suzhou), Sumitomo Bakelite (Dongguan), Sumitomo Bakelite (Shanghai), Sumitomo Bakelite Macau, Sumitomo Bakelite (Nantong), Sumitomo Bakelite (Taiwan), Vaupell China (Dongguan), Durez Corporation, Durez Canada, Sumitomo Bakelite North America, Promerus, Sumitomo Bakelite Europe, Sumitomo Bakelite Europe (Barcelona), Vyncolit, Vaupell Industrial Plastics, Vaupell Molding & Tooling, Russell Plastics Technology Company

\*1 These business sites and companies are included in the compilation of energy consumption and CO2 emissions data.

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." and "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.

## Message from the President

# Expanding the Potential of Plastics to Become “A Company That Makes Your Dreams for the Future a Reality”

## Introduction

It has been more than 100 years since the beginning of plastics production in Japan. In that time, many different types of plastic products have been invented and developed, and they continue to develop and advance as an essential material for a wide variety of uses, including everyday items, transport equipment, medical equipment, semiconductors, and the aerospace industry.

As a true pioneer of these plastics, our company has pursued the potential of plastics amidst rapid social change, expanding our business on a global scale. We consider it our mission to create plastics with more advanced functionality, and focus on the concept of “Customer Satisfaction (CS) First” to contribute to social development and the standard of living through building customer value. As part of our advancement into global business, we comply with the laws and regulations of other countries and strive to understand their diverse cultures, enhancing and strengthening our corporate governance. Moreover, as a chemical company, we also intend to fulfill our social responsibility by incorporating environmental safety in our operations and working toward realizing a sustainable society.

Until now, our business activities have prioritized CS, in line with customers’ perspectives, but in October 2017, this moved on, and we have begun One Sumibe Activities for the first time. We are carrying out these activities as a whole company, transcending our organizational framework and aiming for further growth.

## Emphasizing Environmentally and Socially Responsible Management

We emphasize environmentally and socially responsible management as a top-priority management issue, based on 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.”

This is the business spirit ever-flowing throughout Sumitomo, and we firmly believe that business management along these lines offers a guarantee of safety, security, and trust to the world and society.

We have also established materiality (priority items) in order to recognize social issues that need to be solved, and to respond to stakeholders’ expectations and requests. Materiality is reviewed when appropriate, and matches the

October 2019  
President and  
Representative Director

*H. Fujiwara*



SDGs\*<sup>1</sup> of each area.

In order to realize even better manufacturing, we are developing original SBPS (Sumitomo Bakelite Production System) activities based on those of the Toyota Production System, and focusing on reforms, including quality improvement, production innovation, and reduced leadtime. Strengthening our manufacturing capability through the SBPS is an important activity to reliably link demand creation from our customers’ perspective to our revenue. It is also connected to the eradication of quality-related complaints, and energy and resource conservation. In addition, we thoroughly control chemical substances, and are carrying out initiatives that consider the environment, safety, and health on each level from development to disposal.

Occupational health and safety is at the heart of our business activities, and we promote activities that create a working environment where we can ensure the safety and health of employees throughout the company. We will continue to strive to create even safer working environments in the future.

## Thoroughness of Compliance

Compliance with laws, regulations, and corporate ethics is our duty as a member of society. All of our employees strive to carry out their duties following “Our Code of Conduct,” the standard of conduct set down by our company, and we have established a Compliance Committee aiming to be even more thorough in our compliance.

## Finally

As a pioneer in plastics, our company contributes to the creation of customer value through the development and provision of new functions of plastics, aiming to grow and become “a company that makes your dreams for the future a reality” through our One Sumibe Activities. Today, we have operations in 15 countries and regions around the world. I feel it is important to fulfill our social responsibilities by making efforts to comply with local laws and understand the culture, enhancing and reinforcing corporate governance, and giving consideration to environmental safety as a chemical company.

We will continue to focus on fulfilling our social responsibility as a member of the chemical industry, supporting and implementing the Responsible Care Global Charter.

\*1 See p.8



**We consider One Sumibe Activities as a window for our customers; they are company-wide activities that promote the sales of existing products, keeping solutions and products from all business areas in mind, and creating new development projects.**

### The Origin of the Logo

An infinity symbol represented by a handshake, with an expanse of clear sky inside realizes stronger relationships both inside and outside of the company, including those with our customers, demonstrates infinite development and mutual prosperity through coordination and cooperation, and was created with the wish to “Give happiness in people’s futures.”

# Taking the lead in building a sustainable recycling-based society through mid- to long-term initiatives centered around the SDGs

President and Representative Director  
**Kazuhiko Fujiwara**

Presenter  
**Miho Nakai**



## One Sumibe activities and SDGs for achieving the top share in niche markets

**Nakai:** About one year has passed since you assumed office as the President of the company. How do you feel about your first year as President?

**Fujiwara:** To be honest, it has been a very busy year. Fiscal 2018 was the final year of the mid-term business plan that we have been putting into practice since fiscal 2016. I assumed office as the President of the company in the final year of the plan. Regrettably, we failed to achieve both the sales and profit targets for the final fiscal year. However, reflecting on the past year, I am able to see clearly the things that we succeeded in achieving, and the things that we did not achieve.

**Nakai:** Could you provide details about the results of the mid-term business plan that covered the fiscal years 2016 to 2018?

**Fujiwara:** Under the plan, we established three strategies right from the start. The first was new growth in existing businesses and change of business model. In addition to optimizing human resources in Japan and abroad as well as optimizing business sites and sales systems, we have also downscaled or withdrawn from unprofitable businesses or businesses that generate low profits, such as general-purpose Decola (high-pressure melamine decorative laminates, noncombustible melamine decorative laminates) and single-sided laminates, thereby succeeding in strengthening our revenue base toward sustainable growth in the future. In this respect, we have achieved this first strategy. In other words, we have become a company that is able to generate profits securely. The second strategy is increase in profitability and scale of growing areas. We had been making smooth progress in this area until autumn last year. Unfortunately, due to the downturn of recent market conditions, the final figures were not sufficient for us to meet our targets. However, we have steadily produced results in the three "Creation Areas" that have strong potential for the future, namely highly integrated device materials, automobiles and aircraft, and healthcare. The third strategy was new business start-ups and creation. We were unable to produce adequate results in this area, and this was the main reason behind the failure to realize the mid-term business plan.

**Nakai:** A new mid-term business plan has been launched from fiscal 2019. Has this plan been drawn up while taking into consideration the factors for not achieving the targets in the previous plan?

**Fujiwara:** Exactly. Based on the issues that we have identified, we will put active effort into resolving the issues with a view to achieving our targets.

**Nakai:** Could you give us an overview of the new mid-term targets, and the points of focus?

**Fujiwara:** Sumitomo Bakelite is a company engaged in the business of functional chemical products. We do not manufacture products of several hundreds of thousands of pounds at one go; rather, it is our job to equip each plastic product with optimal functions using new technology. That is why we have a very small market to compete in. It is our aim to secure the top share in this niche market. I have previously spoken about the "top share in niche markets," and the

SDGs\*<sup>1</sup> is the approach that we have incorporated into the new mid-term targets in order to achieve this goal. The SDGs, which aims to realize sustainable growth on a global scale, represent the ultimate potential needs that society requires, and are also aligned with Sumitomo Bakelite's company policy. From this perspective as well, there are no reasons for us not to tackle the SDGs. From fiscal 2019, we will engage in new product development and sales activities that constantly keep the SDGs in view.

**Nakai:** Since this approach is aligned with the company policy, it means that there is no change to the business direction that the company has taken so far, doesn't it? As the SDGs are beginning to spread across the world, for a global company like Sumitomo Bakelite that has business interests in various parts of the world, I think that the approach will be highly effective in uniting and raising the motivation of employees beyond their countries and regions.

**Fujiwara:** There are also parts of the new mid-term business plan that have been passed on from the previous mid-term business plan. This is the philosophy of "CS First." We have established teams that cut across the various businesses of Sumitomo Bakelite to implement "One Sumibe" activities, which seek to provide cross-cutting values to customers, such as implementing the proposals made to customers. In this way, we aim to work as one with our customers to quickly roll out technological innovation and the development of new materials. These activities started in Japan, but have finally spread to the management teams of our respective overseas business sites, and will be rolled out globally going forward.

**Nakai:** Could you tell us about the new mid-term targets?

**Fujiwara:** The targets are to achieve revenue of ¥250 billion, and business profit of ¥25 billion. The new mid-term targets anticipates future revenue to reach ¥300 billion and business profit to reach ¥30 billion respectively, so we will strive to achieve the targets of ¥250 billion in revenue and ¥25 billion in business profit over the mid-term. To achieve these targets, it is vital to expand the scale of our business. Hence, we will strive to develop new products with a competitive advantage and to quickly develop their full potential, strengthen the profitability of existing products and expand their fields, and take active steps to invest strategically in growth areas. In addition to our usual policy of expending research and development costs at the ceiling of 5% of sales, we will maintain capital investment at a level of about ¥10 billion per year. Furthermore, we also plan to allocate about ¥40 to ¥50 billion over a three-year period as our budget for strategic investment toward the early development of the potential of priority areas.

\*1 Please refer to p.8 for details on the SDGs.

## Product development in line with the SDGs

**Nakai:** The SDGs set out 17 goals, and capture a very wide range of current global issues. Could you provide some concrete examples of new product development based on the SDGs?

**Fujiwara:** As our aim is to make steady contribution to the SDGs, we have to assess our results in numerical form every year. In this respect, it would be difficult to tackle all the 17

goals. In light of this, we have identified the goals that we should focus our contributions towards, and tied them in with the relevant products. There are five goals with strong connections to our business, and one (14: Life Below Water) that we cannot neglect as a company that is engaged in the plastics business\*<sup>2</sup>. As long as there are sales of the products that are tied in with the SDGs, it would mean that we are contributing to that extent to the realization of the SDGs. By 2030, which is the target year for the realization of the SDGs, we aim to make our SDGs-contributing products generate more than 50% of the sales for the entire company.

**Nakai:** It is a great approach to establish numerical targets. These are clear and easy to understand, and it is good for such targets to be easy to understand not only for external parties, but also for the employees who are engaged in the day-to-day efforts to achieve the said targets. When targets are clear and the results visible, the hard work will feel rewarding, and it will also be easier to share the mindset as a team. For individual consumers, understanding that the products of Sumitomo Bakelite are closely related to their everyday lives in extensive ways can create the sense that they are contributing actively to the SDGs through the things that they come into contact with in their everyday lives, and this will bring them joy and pride.

**Fujiwara:** I shall introduce some of these products. Firstly, in the area of automotive-related products, we are replacing metal parts with plastic parts to reduce weight, thereby conserving energy and reducing the emission of CO<sub>2</sub>, which is one of the causes of global warming. In recent years, much research and development has been carried out on metal and resin composites for large-sized parts such as engines and drive motors, and Sumitomo Bakelite has also been engaged in the development of practical applications jointly with external organizations such as Fraunhofer-Gesellschaft (Fraunhofer Society) of Germany. This contributes to SDG 9: Industry, Innovation and Infrastructure. Next, in the healthcare sector, we are producing minimally invasive medical equipment. Alongside with the development of minimally invasive medical treatment that is gentle on patient's bodies, we have introduced to the market devices such as a steerable microcatheter with a tip that can move freely without any guide wires, as well as a catheter for the brain with the world's smallest diameter of 0.43mm. Furthermore, in pursuit of the development of new products that are faster, safer, and offer greater peace of mind,

we entered into a capital and business partnership with the medical equipment manufacturer, Kawasumi Laboratories, Inc., from March 2019. Just like automotive-related parts, the development of medical equipment for minimally invasive treatment is also related to SDG 9, and further, has full potential for contributing to SDG 3: Good Health and Well-being.

**Nakai:** The application of Sumitomo Bakelite's plastic technologies and products to the development of the healthcare sector is a fresh surprise. I also serve as a director on the board of a medical NPO, which gives me many opportunities to hear directly from patients. There are patients who are resistant towards advanced medical technology and complex medical equipment because it is simply too difficult for them to understand. In such cases, allowing them to actually come into contact with the medical equipment themselves and experience how incredible such equipment is, can immediately create a sense of familiarity and make these patients adopt a more positive mentality towards treatment. I definitely hope that Sumitomo Bakelite will actively communicate the merits of your products to the general public.

**Fujiwara:** A product that is close to our everyday lives is the film used for food packaging. P-Plus<sup>®</sup>, which preserves the freshness of fruit and vegetables, as well as cut vegetables, has been widely adopted by supermarkets and convenience stores, among others. In addition to pleasing both shop-owners and domestic consumers, it also offers a variety of merits such as reducing food loss by extending the period in which freshness can be preserved, and expanding the areas that fruit and vegetables can be exported to. Moreover, it is also equipped with anti-condensation and mold prevention functions, and we are expanding its application to food products other than fruit and vegetables, such as noodles. We anticipate further development for this product in future. The reduction of waste and food loss corresponds to SDG 12: Responsible Consumption and Production.

**Nakai:** Sumitomo Bakelite's plastic products really do play an active role in a wide range of fields. Even now, I believe many people would simply associate plastic with supermarket bags and straws, but the reality is completely different. I now understand that plastic fulfills various functions, and is indispensable for the development of many sectors including medicine, food, and energy.

\*2 SDG 14 incorporates the target of carrying out sustainable management and protection in order to achieve healthy and productive oceans.



President and Representative Director

## Kazuhiko Fujiwara

He joined Sumitomo Bakelite Co., Ltd. in 1980.

He became the Team Leader of the Biotechnology-related Product Development Project in 2003, Department Manager of S-Bio Development in 2007, Manager and Executive Officer of S-Bio Business in June 2009, Managing Executive Officer in 2013, Director in 2014, Director and Senior Managing Executive Officer in 2016, and President in 2018.

## “People power” as the source of innovation

**Nakai:** The SDGs do not only cover initiatives related to products and aspects outside of the company, but also place an emphasis on initiatives toward employees in the company. Could you tell us your thoughts on topics such as promoting female empowerment, securing work satisfaction, improving quality, and promoting compliance?

**Fujiwara:** We recognize that these elements are of such great importance that neglecting them would reduce our corporate value. With regard to compliance and quality, there have been successive reports in recent years about the discovery of false advertising and false declarations. Ensuring compliance is an important premise in carrying out our business activities. I think that this increasingly disappears from sight when habits are practiced continuously for many years. There is a tendency to let things go even when we know that they constitute bad practices, simply because “we have been doing this from a long time ago.” This is a truly scary phenomenon. That is precisely why we have established and implemented systems for human resource management, periodic patrols, and the proper supervision and management of sites by managers and supervisors. Moreover, Sumitomo Bakelite has positioned customer service (CS) as its top priority. We will not tolerate the over-prioritizing of immediate profits and responses over quality and compliance, and actions that lead to a loss of trust from customers and the market.

**Nakai:** How about human resource development and promoting female empowerment?

**Fujiwara:** The SB School and SBPS (Sumitomo Bakelite Production System) activities are the pillars of our approach to human resource development. We move beyond the acquisition of knowledge necessary for the job, and place the focus on education that enhances the “people power” of individual employees. To develop the business and contribute to the SDGs, I conveyed the word “innovation” to employees this year. The word “innovation” alone can refer to various things, including digital innovation, but the important point to note is that all innovation is created by human beings. This is “people power.” Innovation is not merely new technologies or major development projects; rather, the people who take a positive and aggressive approach towards the implementation of such activities

are the sources behind innovation. We have to ensure that outstanding human resources continue to play an active role, so there is, of course, no discrimination based on gender. Recently, there has been an increase in the number of female employees active in the fields of research and development, manufacturing, and sales. We will spare no effort in developing systems and workplace environments to ensure that they can further fulfill their potential.

**Nakai:** Based on our conversation so far, I am now very much looking forward to seeing what the future brings for Sumitomo Bakelite and plastics. Our society is undergoing changes day by day, and the same can be said for the environment. In an era of such intense changes, it is extremely difficult to create products that improve society and the environment. What do we keep, and what do we discard? The approach of incorporating that decision into SDGs, and looking ahead to new values and goals based on a foundation of a philosophy that has long been passed down as the company policy, gives me a sense of the aspirations and warmth of the company. With the anticipation that Sumitomo Bakelite will help to enrich our lives and make them more convenient through its products, I will continue to support the company going forward.

**Fujiwara:** Thank you. When I assumed office as the President last year, I set out this vision for the company: “Expanding the potential of plastics and creating value for customers (stakeholders), to become ‘a company that makes your dreams for the future a reality.’” Our source for value creation lies in the fundamental technologies in the field of functional plastics that we have built up over many years. By leveraging on this strength, we aim to bring about the realization of the SDGs, or in other words, to achieve them through “One Sumibe” activities, human resource development, and active external collaboration and partnerships. As a corporate group with business interests spread across the globe, we have the responsibility of contributing to the realization of a sustainable society in addition to generating economic value. We will develop our business with a clear awareness of the fact that fulfilling that can enhance our corporate value. Going forward, we will continue to support the Responsible Care Global Charter for the implementation and improvement of environment safety measures through voluntary efforts.

### Presenter Miho Nakai

After graduating from the Nihon University College of Art in 1987, she joined Fuji Television Network, Inc. As a presenter, she has appeared on many TV programs such as “Puro Yakyu Nyusu” [“Professional Baseball News”] and “Heisei Kyoiku Iinkai” [“Heisei Board of Education”], and gained much popularity. She left Fuji Television Network, Inc. in 1995. Since 1997, she has served as the main presenter on “Sekai Rikujyo” [World Athletics] (TBS), and appeared as a regular guest on “Takarazuka Café Bureku” [“Takarazuka Café Break”] (TOKYO MX TV) and “Sujinashi BLITZ Shiata” [“Ad-lib BLITZ Theater”] (TBS), among others. She is also active in various other fields, including writing a series on traditional art for the Yomiuri Shimbun (“Nakai Miho no Misomemasita”), penning columns on film and theater, acting as master of ceremonies for events, serving as navigator for classical concerts, and recitation. She also supports the cause of CancerNet Japan, an NPO, and partakes actively by serving as master of ceremonies for events and academic conferences to raise awareness on cancer, such as the Blue Ribbon Caravan. Since 2013, she has been serving as a member of the selection committee for the Yomiuri Theater Awards.



# Sustainability and SDG Efforts of Sumitomo Bakelite Co., Ltd.

Director and Senior  
Managing Executive  
Officer,  
Masayuki Inagaki



Sumitomo Bakelite has incorporated the SDGs into the mid-term business targets beginning in fiscal 2019, established the Sustainability Promotion Committee to oversee activities throughout the company, and commenced its SDG initiatives in earnest.

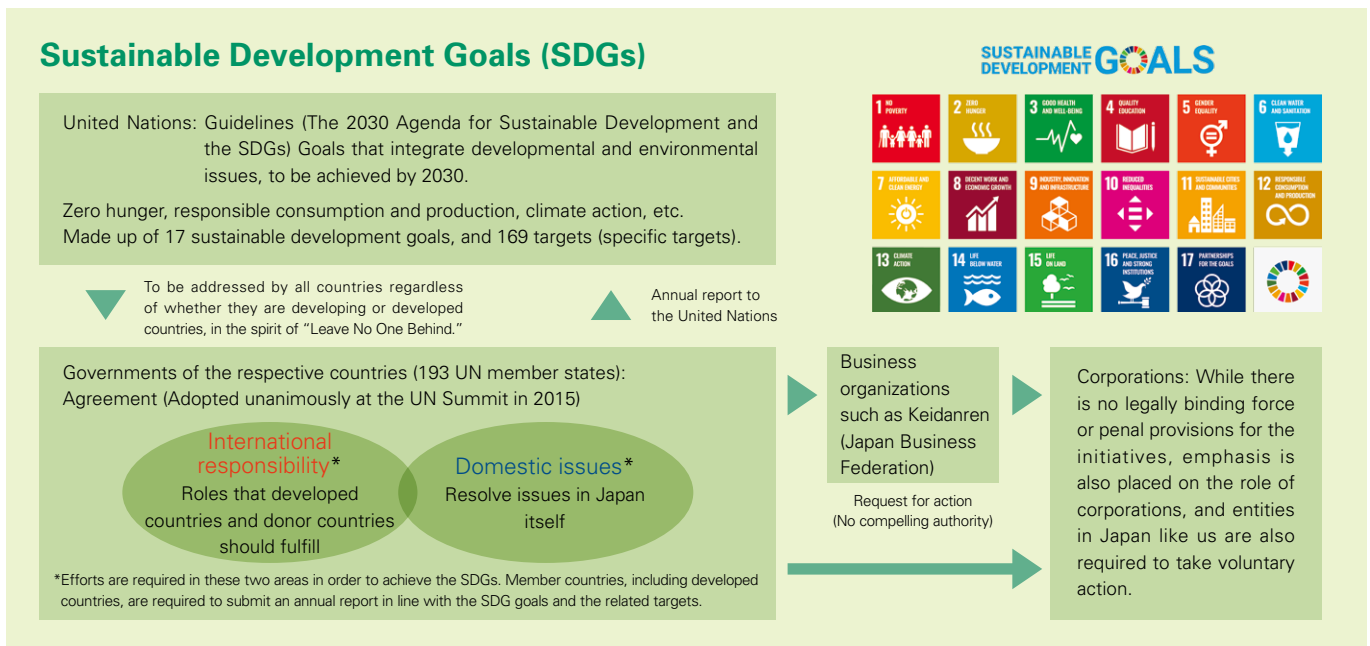
Director and Senior Managing Executive Officer, Masayuki Inagaki, who is the Vice-Chairperson of the Sustainability Promotion Committee and takes the lead in SDG initiatives, explains the core concept of the activities, the promotion system, concrete examples of the initiatives, and the future vision.

## SDGs as the “ultimate potential need” as well as a business opportunity

I will begin by explaining the reasons and significance of addressing the Sustainable Development Goals (SDGs) not only by our company, but by corporations around the world.

Corporations are also expected to play a significant role toward the achievement of the goals set out in the SDGs. This is what sets the SDGs apart from its predecessor, the MDGs\*<sup>1</sup>. As a result of factors such as environmental destruction on a global scale and climate change, the growing complexity of social structure, and coexistence of diverse values, it is becoming increasingly difficult for us to visualize the goals and ideals that modern society should reach for, and the ideal state of affairs in society. Even in the manufacturing industry such as ours, we cannot tell which direction we should take going forward, and what we should produce. Every company is now desperately exploring and searching for solutions. Against this background, when it comes

down to the question of what the SDGs are, we could say that they represent a signpost that all the people in the world should arrive at, resolve various social issues, and continue to achieve growth and development for a richer future. This also coincides with the objectives of a corporation’s economic activities. In these times, companies that still hold the mindset “It will be fine as long as our company makes money” will become irrelevant and eliminated. Rather, considering what we can do, and how we can contribute toward realizing sustainable development for the world as a whole through the business, is becoming indispensable for the growth of corporations. In short, SDGs represent the “ultimate potential needs” for corporations. If a company produces and sells products that are in line with the SDGs, which set out what the society and market ultimately desire, and these products are accepted by society, it would offer the company a major business opportunity. There are even economists who predict that SDGs-related economy will reach as much as 80% of total GDP. In the aspect of meeting and fulfilling customers’ wishes with sincerity,





Sumitomo Bakelite seeks to achieve this through the One Sumibe activities\*<sup>2</sup> that the company has been implementing since fiscal 2017. Furthermore, if we were able to raise our rating in aspects such as ESG investment\*<sup>3</sup>, it would also deliver satisfaction to the

## The Principles of SDGs that Coincide with Our Company Policy

From before, the Sumitomo Bakelite Group has considered it vital to enhance not only our economic value, but also our social value, in order to resolve social issues and bring about the realization of sustainable growth and the creation of value. This stance is founded upon our Business Philosophy (company policy)\*<sup>4</sup>. The stance of our company policy matches the principles of the SDGs perfectly. Furthermore, Sumitomo Bakelite is a company that produces functional chemical products. It is our role to assign the optimal function to each and every plastic through new technology, and

shareholders and investors. Initiatives to address the SDGs can contribute to a wide range of different stakeholders.

\*1 MDGs: Millennium Development Goals  
 \*2 Please refer to page 3 for details about One Sumibe activities.  
 \*3 See the glossary on page 78.

these added functions have to match the needs of our customers. Now, what are the needs for even more customers? If we were to approach the question in this way, we would eventually arrive at the answer, "SDGs." That is precisely why we can say that the SDGs represent the "ultimate potential needs" that we should capture now. The mid-term business targets that begin in fiscal 2019 clearly set out the basic policy of conducting business activities in line with the SDGs. Rather than tackling the SDGs because "It is good for society and the environment," we will incorporate the global shared goal of the SDGs into our business plans, everyday work, and into the mindset of each and every employee, so as to expand and develop the business over the long term.

\*4 Please refer to the following figure for the Business Philosophy (company policy).

### Our manufacturing that contributes to the SDGs

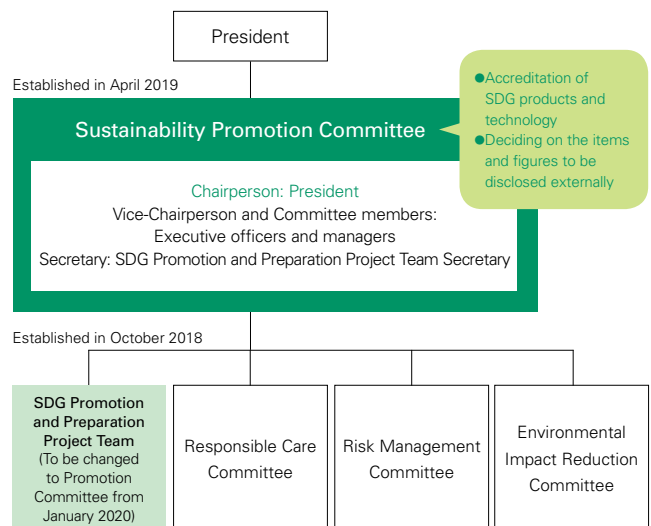


**We promote research and development that leads to the creation of new products and expansion of existing products in the "Three Creation Areas," through the One Sumibe activities that are in line with the SDGs.**

## System for Promoting Sustainability and SDGs

The Sustainability Promotion Committee, established in April 2019, plays a central role in promoting the SDGs. Since October 2018, activities commenced under the SDG Promotion and Preparation Project Team as the initial stage. However, as the promotion of SDGs calls for the three axis of environment, society, and economic viability, the Sustainability Promotion Committee was launched, chaired by the President, with the aim of establishing a system for putting in place company-wide initiatives. The Responsible Care Committee and Risk Management Committee, which have been involved in CSR to date, will continue to undertake activities under the auspices of the Sustainability Promotion Committee. Taking the SDGs into account across all our business activities means that an integrated approach will be taken with regard to the advancement of the business and promotion of SDGs. I believe that this system also makes it clear that all departments and employees are involved and will participate in these activities.

### Sustainability Promotion System\*<sup>5</sup>



\*5 Please refer to page 29 for details about the Sustainability Promotion System.

## Fostering Human Resources for Promoting SDGs

First, we will begin by deepening understanding about the SDGs. To incorporate the SDGs into the work processes and products, it is necessary to have a strong understanding not only of the 17 goals, but also of the 169 targets that are related to these goals. However, it is difficult to learn that on top of our everyday work. In light of that, posters were produced to show in one glance how the everyday work that we are engaged in is related to the SDGs, and these posters were put up in each office. Next, checks are conducted on the degree of awareness, which serves as an indicator of how far understanding has penetrated across the company while at the same time furthering the understanding of each individual employee. These are implemented through study group meetings and the use of e-learning, and are attended by all employees including the Chairperson and President.

To apply the SDGs to business activities, it is not sufficient just to know the wording of the goals and targets. In particular, it is vital to consider if there are any negative factors in the business. Even if improvements are made only to the work under one's own jurisdiction, it would not be considered an improvement if the situation in other departments or business partners deteriorates. SDGs cannot be achieved through our company's efforts alone. Hence, to promote the SDGs, we need to have human resources who have a strong understanding of that, and who are able to approach their work with a broad perspective and insight.



Scene of an SDG study session for directors and managers, facilitated by an external lecturer



Project to explain the SDGs through a series feature in the internal newsletter

## Tackling initiatives as the "Pioneer of Plastic" 5+1 priority goals

There are 17 SDG goals. While it is our ultimate goal to achieve all the 17 goals, there is a limit to what a single corporation can contribute through its business. In light of that, we have identified five goals that are directly related to the businesses of Sumitomo Bakelite and established them as priority goals for our efforts to address the SDGs in earnest. These are: 3. Ensure healthy lives and promote well-being for all at all ages; 7. Ensure access to affordable, reliable, sustainable and modern energy for all; 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all; 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster

### Priority SDG goals of Sumitomo Bakelite Co., Ltd.

Taking into account our company's business domains and strengths, **"five goals + one goal"** were selected (focusing on the goals that suit our company to put particular effort in).



- 3 GOOD HEALTH AND WELL-BEING
- 7 AFFORDABLE AND CLEAN ENERGY
- 8 DECENT WORK AND ECONOMIC GROWTH
- 9 INDUSTRIAL INNOVATION AND INFRASTRUCTURE
- 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
- +
- 14 LIFE BELOW WATER

innovation; 12. Ensure sustainable consumption and production patterns. This was done by assigning points to the 17 goals from a number of perspectives, such as the goals that are relevant to the business domains that Sumitomo Bakelite is putting effort into, and goals that harness the strengths of our company. The five goals with the top points were then selected. Another goal that has to be included in our position as a company that has taken on the title of "Pioneer of Plastic" is 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development. This is because it also covers the problems of marine plastics\*<sup>1</sup> and microplastics\*<sup>2</sup>. However, as it is difficult for Sumitomo Bakelite, as a manufacturer of functional chemical products, to be directly involved in tackling these issues, we will contribute to resolving the issues by participating in alliances that involve a wide range of corporations and organizations. Furthermore, there are four stages in addressing the problem of marine plastics: not generating it, not disposing of it in the sea, recovery, and disposal. Of these, Sumitomo Bakelite aims to carry out initiatives related to not generating plastic waste. For example, we will reduce the amount of plastic use by half by making the same product thinner and lighter. By doing so, even if it were to flow into the sea as trash, the amount of trash would be halved. Another initiative would be the development of new materials such as biodegradable plastic. This is an area that is currently making great leaps forward, but many problems remain that have to be studied and researched, such as the durability of plastic and the carbon dioxide that is generated when the plastic is broken down. The 5+1 goals that we have identified are our priority goals as of this current point in time. Going forward, if the business of Sumitomo Bakelite continues to grow, there is a strong possibility that other

goals will be added to the list. For a start, we aim to produce results steadily through our existing products, and approach the initiatives more broadly as we move forward.

\*1 Marine plastics: Plastic waste that flows into the seas.

\*2 Microplastics: Fine plastic chips below 5mm in size. Mainly refers to plastic waste that is broken up into fine pieces while floating in the sea.

## Continuous Efforts in Environmental Protection and Work Style Reform

As we can also tell from the fact that the SDGs are in line with the company's policy, there are initiatives that contribute to the SDGs among the various initiatives that we have implemented to date. The biotope that we built at the Shizuoka Plant is one such example. At the biotope, named "Ikoi no Mori" (Comfort Forest), we are engaged in efforts to protect species of plants and animals that are endemic to Japan, as well as restore the unique ecosystems of the region. The protection of ecosystems contributes to goal number 15: Protect, restore and promote sustainable use of terrestrial ecosystems. The Japanese killifish, which is an endangered species, has also made its home in the biotope. In addition to passing it on to elementary schools and corporations in the neighborhood to increase their numbers, opportunities for local exchanges and environmental education are also provided. Furthermore, the water flowing through the biotope is processed and purified from the wastewater generated by the Shizuoka Plant. We believe that the opportunity to observe the living things that make their home in these clear streams of water, such as the kingfisher and killifish, contributes to promoting understanding of the chemical industry.

Initiatives within the company, such as promoting work style reform and diversity, are also included in the SDGs. For initiatives that are already being implemented, such as the eradication of long working hours and promoting the empowerment of female employees, reviewing them along the axis of the SDGs will probably shed light on the inadequate aspects and areas where we can be more effective.

SDGsの17目標・169ターゲットと住友ベークライトのSDGs重点領域(目標3,7,8,9,12+14)



Biotope at the Shizuoka Plant. The sparkling wetlands are the habitat for the rare Oga lotus.

## Contributing Through the Development and Sale of Products SDGs-Contributing Products

When we think only about products that contribute to the SDGs, there are in fact many products that fit the bill. Sumitomo Bakelite has a wide range of products that also have a diverse range of applications. P-Plus<sup>®</sup>\*1, which is directly related to food loss and keeping fruits and vegetables fresh, is one such example that is easy to understand. There are also other instances where indirect contributions are made, such as where Sumitomo Bakelite's products are used by our customers as the raw material for creating products that promote energy conservation. In light of this situation, we have launched a system for certifying products that contribute especially

to the SDGs as "SDGs-contributing products."

A key point is that the degree of the product's contribution to SDGs is measured in quantitative terms through life-cycle assessment (LCA). For example, assuming that X kilograms of resin is sold, enabling the reduction in weight of an automobile by Y kilograms, based on that, the CO<sub>2</sub> emitted from the automobile will fall by Z tons per year. If such a formula could be established, we would be able to evaluate the final CO<sub>2</sub> emissions reduction in numerical terms.

From April 2019, the Sustainability Promotion Committee has commenced deliberations to certify products recognized as having fulfilled the criteria as "SDGs-contributing products."\*2

\*1 With regard to P-Plus<sup>®</sup>, the special feature introduces examples of products that contribute to the SDGs. For details, please refer to page 14.

\*2 For details on the accreditation criteria for SDGs-contributing products, flow of accreditation, and sales revenue, please refer to page 13.

### Examples of Sumitomo Bakelite Co., Ltd. Products that Contribute to SDGs

#### 1. Molding materials for automobile

Parts made from metal are made with plastic while maintaining the same degree of strength and durability. This reduces the weight of the automobile, improves fuel efficiency, and realizes improvements in energy efficiency. This contributes to enhancing the performance of electric vehicles, which are becoming increasingly popular as an environmental measure.



[SDG target]

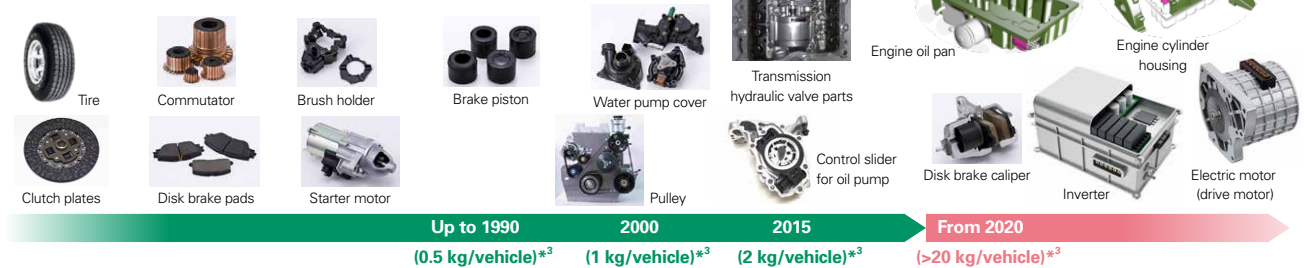
7.3 Improve energy efficiency.



[SDG target]

9.4 Expand environmentally sound technologies.

#### The history of the use of phenolic resin in automobiles



\*3 The weight of phenol within the total weight of an automobile

#### 2. PTP\*4 packaging materials for pharmaceutical products

PTP packaging sheets that are used to wrap pills and other pharmaceutical products to make it easy for patients with weak fingers or elderly patients to extract the medication, as well as fulfill a wide range of functions such as high moisture resistance, resistant to UV and visible light, oxygen permeability, and moldability. If these functions could be realized using plastic that is half as thin as conventional plastic, it would be possible to satisfy the customers, such as pharmaceutical companies and patients, while at the same time contribute to reducing the impact on the environment by cutting the amount of waste by half.



[SDG target]

12.5 Reduce waste.

\*4 PTP: Push-through Pack

## Toward 2030 and Further Beyond

Plastic has now become an indispensable part of our lives. To create a sustainable society that can continue to grow while ensuring that plastic is used appropriately, Sumitomo Bakelite, as the "Pioneer of Plastic," has to have the necessary technology, as well as develop and sell products. To that end, it is vital to generate much innovation. In some cases, the ideas of engineers

and researchers within the company may not be sufficient. We believe it is becoming increasingly important to form alliances that include external experts and research institutes, business partners that can share their ambitions, and start-up companies with new ideas.

Furthermore, it is vital to share a clear vision in order to carry out our day-to-day operations with a view to 2030, the target year for the SDGs, as well as into the future beyond that. While we

are currently drawing up our long-term vision, there are plans to incorporate the two indicators, SBT Initiative\*<sup>5</sup> and CDP\*<sup>6</sup>, as a first step forward starting from fiscal 2019. Initiatives to address the SDGs are already a part of our day-to-day operations. We will continue to promote the initiatives in order to ensure that Sumitomo Bakelite, as a strong presence for building a sustainable society, continues to be a corporation that fulfills the needs of society going forward.

\*5 SBT: Abbreviation for "science-based target." It refers to an initiative that aims to achieve the Paris Agreement target of "keeping a global temperature rise this century well below 2 degrees Celsius" through the public declaration, setting, and implementation of a greenhouse gas emissions reduction target by corporations that is consistent with science. It is a joint, international initiative.

\*6 CDP: Previously "The Carbon Disclosure Project." The abbreviation "CDP" has now become the official title of the project. This project seeks to realize the public disclosure of climate change strategies and concrete greenhouse gas emissions by corporations, in cooperation with institutional investors.

## Contribution to SDGs (Products, technologies, activities)

Since fiscal 2018, Sumitomo Bakelite Group has been accrediting products, technologies, and activities that contribute to the SDGs as SDGs-contributing products, SDGs-contributing technologies, and SDGs-contributing activities. By promoting the development and spread of these products, technologies, and activities, we aim to contribute to the achievement of the SDGs.

### Targets for SDG certification

Items that satisfy one or more of the certification targets (1) to (7) below are eligible for accreditation.

#### Priority SDG Goals of Sumitomo Bakelite Co., Ltd

- (1) Goal 3: Contributes to promoting good health and well-being.
- (2) Goal 7: Contributes to improvements in energy efficiency and the realization of new energy (including energy storage).
- (3) Goal 8: Contributes to decent work and economic growth.
- (4) Goal 9: Contributes to the expansion of environmentally-sound technologies, and infrastructure for industries and technological innovation.
- (5) Goal 12: Contributes to the reduction of waste (including food waste) and hazardous substances, reduction of environmental impact, and realization of recycling and resource conservation.
- (6) Goal 14: Contributes to the conservation and use of the oceans and marine resources, and to preventing and reducing marine pollution.

#### SDG goals other than the priority goals

- (7) Contributes to the achievement of one or more of the 17 SDG goals apart from the abovementioned 3, 7, 8, 9, 12, and 14.

### SDGs-contributing products/SDGs-contributing technologies

The SDGs-contributing products and technologies for Sumitomo Bakelite (on a non-consolidated basis) that have been newly accredited based on the 2015 standards adopted by the United Nations, made up 14.3 billion yen in sales and a sales ratio of 15.7% in fiscal 2018.

Sales of Sumitomo Bakelite Group's SDGs-contributing products and technology in fiscal 2018 were 49.3 billion yen, with a sales ratio of 23.1%.

Going forward, we plan to continue increasing the SDGs-contributing products and technologies (on a consolidated basis) for the Sumitomo Bakelite Group, with the aim of achieving a sales ratio of 30% in fiscal 2021.

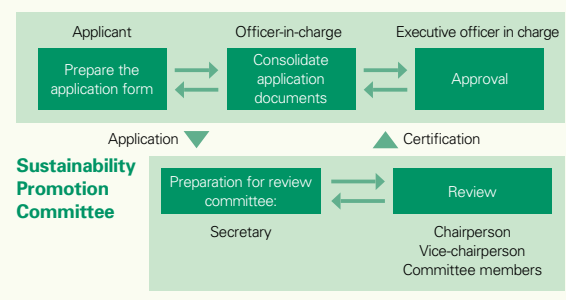


### Certification process

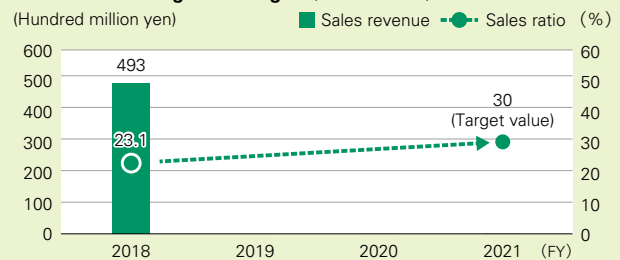
#### Items reviewed, and assessment criteria

- Concrete explanation about contributions: Presented through objective figures based on actual data or publicly disclosed information.
- SDG targets that the products/technologies/activities contributes to: Selected appropriately

#### Each business department (including affiliates)



### Sales of SDGs-contributing products/ SDGs-contributing technologies (consolidated)



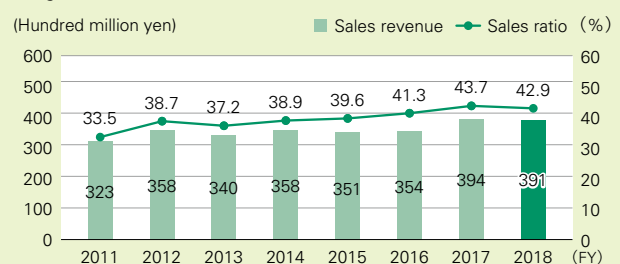
### Reference data

Since fiscal 2001, Sumitomo Bakelite has accredited products that contribute to reducing environmental impact within the company, to users, and in society, either directly or indirectly, through ways such as resource-saving, waste reduction, preventing environmental pollution, energy-saving, and reduction of greenhouse gas emissions, as "environmentally friendly products" (Target data: Sumitomo Bakelite, non-consolidated). The sales revenue and sales ratio of environmentally friendly products in fiscal 2018 were 39.1 billion yen and 42.9% respectively.

Taking the opportunity of the launch of full-scale SDG initiatives, we will continue to contribute to the SDGs going forward based on the aforementioned indicator of "products and technologies that contribute to SDGs" (consolidated basis), with the aim of developing and spreading these worldwide.

### Changes in sales of environmentally friendly products

(Target data: Sumitomo Bakelite, non-consolidated)



# P-Plus<sup>®</sup>: Preserving Freshness and Bringing about Food Loss Reduction and a Distribution Revolution



Sumitomo Bakelite's SDGs-contributing products cover a wide range of areas and fulfill various functions, including products that are related to human health and products that serve as measures against climate change.

A representative example of SDGs-contributing products is the freshness-preserving film, P-Plus<sup>®</sup>, which contributes to reducing food loss and to revitalizing the local agricultural industry.



A doll of the "P-Plus Man." P-Plus Man is a product mascot developed to promote sales of P-Plus<sup>®</sup>. He is a boy who invigorates vegetables.

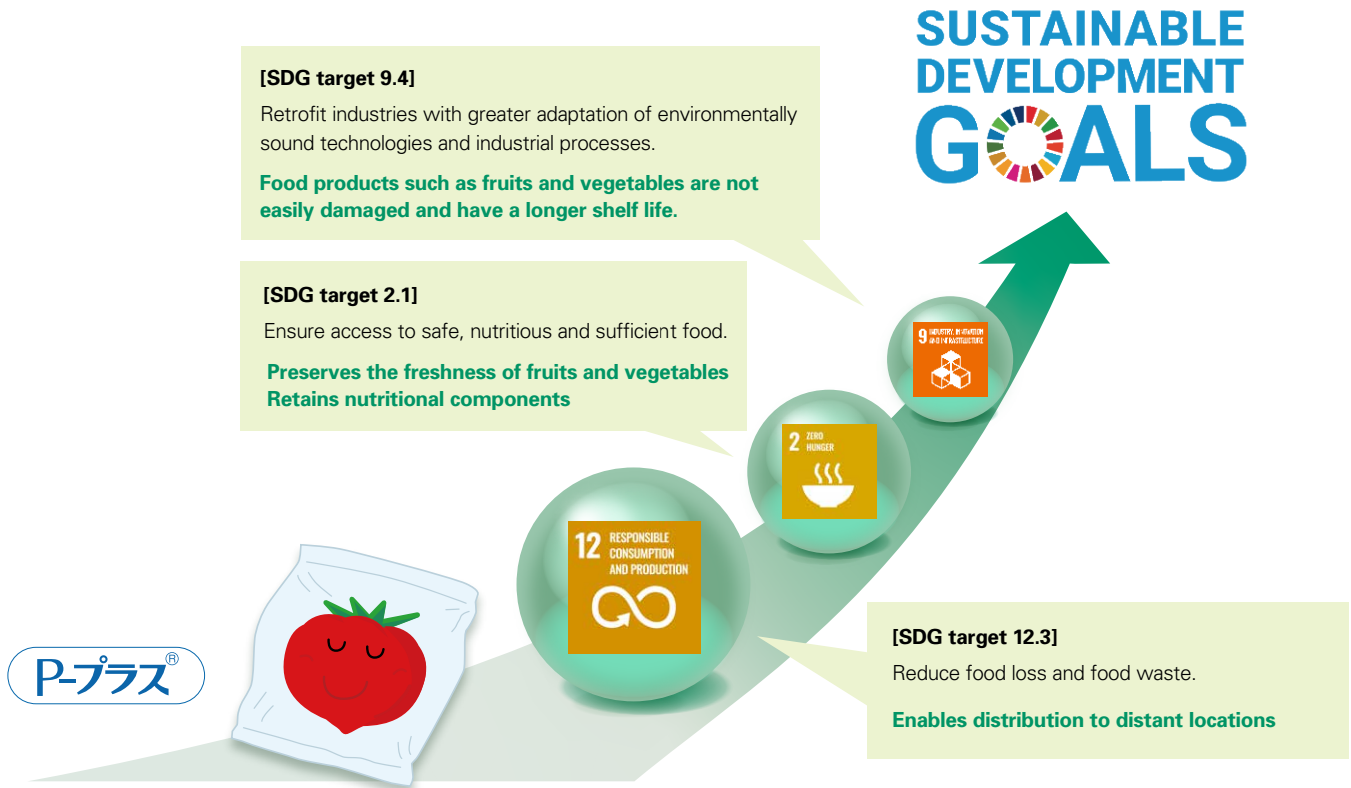
## A film that preserves the freshness of fruits and vegetables by putting them into a "state of hibernation"

The freshness-preserving film, P-Plus<sup>®</sup>, is a product that helps to expand the region of distribution and raise the added value of products by putting fruits and vegetables into a "state of hibernation" (a state of equilibrium when the breathing is significantly slowed down), thereby reducing the speed of quality degradation and prolonging the freshness of the fruits and vegetables.

P-Plus<sup>®</sup> is used in the shipping of distinctive fruits and vegetables from all parts of Japan. It is also highly rated by producers seeking

to expand the export of their produce, for its ability to keep the freshness of fruits and vegetables during the time-consuming transportation to remote locations and overseas. In recent years, convenience stores and supermarkets have also begun to use P-Plus<sup>®</sup> for packaging popular pre-cut vegetable products. By popularizing pre-cut vegetables and promoting the consumption of such convenient vegetable products, P-Plus<sup>®</sup> has a significant impact on society. Furthermore, it also contributes to resolving the problem of waste generation, as the use of P-Plus<sup>®</sup> allows producers to change the packaging material utilized during distribution from Styrofoam containers to cardboard boxes. It can also help to reduce food loss by prolonging the freshness-retention period of produce.

## SDG targets to which the product contributes

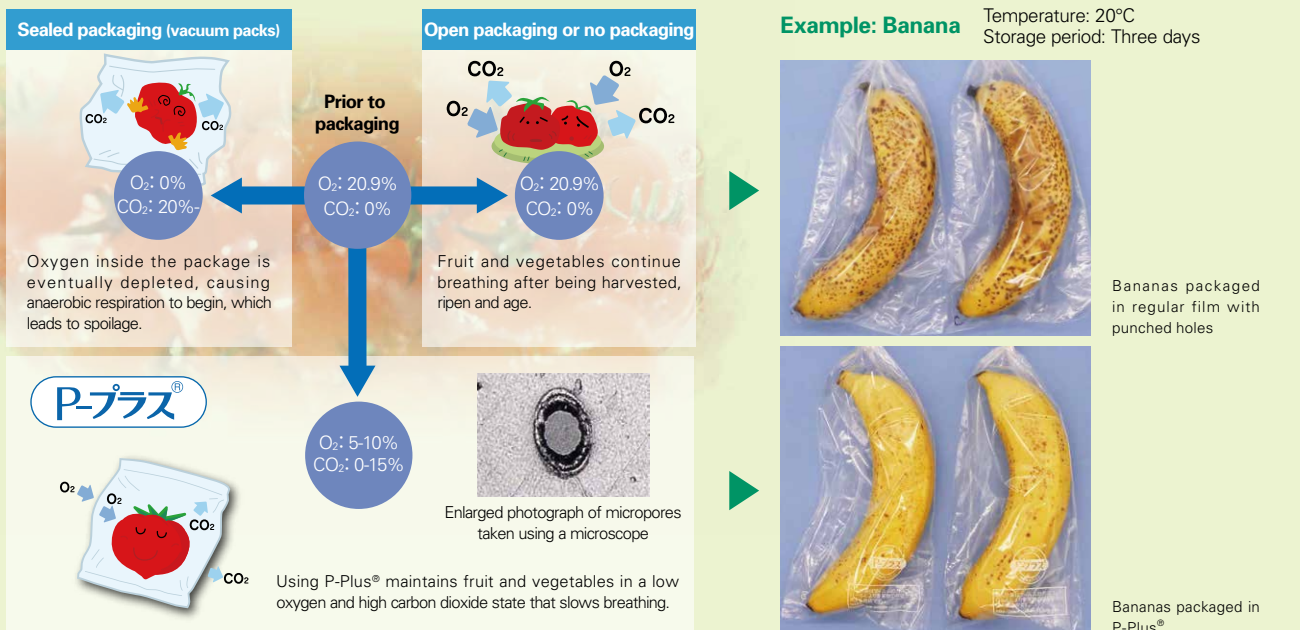


\*The social contribution effects of P-Plus® are shown in the application examples on the following pages.

### P-Plus® system

The secret to P-Plus® lies in its finely tuned technology for adjusting permeation (small holes that are invisible to the eyes). The amount of oxygen that can be transmitted through the

film is adjusted through methods such as making micro-sized vent holes in the film. The size and number of such micro vent holes are adjusted finely to match the distribution requirements of individual fruits and vegetables.



## Application examples for P-Plus®



### SDG 2: Zero hunger

Goal 2 of the SDGs is to “End hunger, achieve food security and improved nutrition and promote sustainable agriculture.”

Even today, extreme poverty and poor nutrition poses a major obstacle to the development of many countries. By promoting sustainable agriculture and improving agricultural productivity, we aim to put an end to all forms of hunger.



### SDG 12: Responsible consumption and production

Goal 12 of the SDGs is to “Ensure sustainable consumption and production patterns.”

Specific examples include achieving the sustainable management and efficient use of natural resources, reducing food loss, reducing the release of chemicals and all wastes into the air, water, and soil, preventing the generation of waste, and promoting recycling and reuse.

#### Application example 1: Soba-dokoro Ichirikiya

### Functions: To prevent degradation in the freshness of food products by using the anti-condensation film

Food product that it is used for: Fresh soba (buckwheat noodles)

Soba-dokoro Ichirikiya uses the freshness preserving film equipped with an anti-condensation function, developed from the original P-Plus®.

When sealed with conventional antifogging film, the moisture in the food product itself gives rise to condensation on the surface of the film, which in turn leads to the degradation of product freshness. By using the anti-condensation film, which has both an antifogging function and water vapor permeability, it is possible to reduce condensation that arises within the packaging and thereby preserve the freshness of the food product. As a result, fresh soba noodles can be consumed even one day later without any loss of flavor, and can therefore be prepared and stored one day in advance.

### Shelf life: — Extended by one day

(Before this, the noodles had to be consumed on the same day that they were produced, and could not be sold on the following day. Extending the shelf life by one day has made it possible for the noodles to be prepared and stored one day in advance.)



### Voice Masato Ogura second-generation owner of Soba-dokoro Ichirikiya

The busiest day for a soba restaurant is on New Year's Eve. Many customers come in to have the traditional “toshikoshi soba” (buckwheat noodles eaten on New Year's Eve). At the same time, there is also considerable demand for take-outs by customers who wish to enjoy a delicious “toshikoshi soba” meal while being relaxed in their own homes. However, as it is difficult to preserve the freshness of uncooked soba, it had previously been difficult to allow customers to bring the soba home while retaining the delicious flavor of the noodles. We, then, came to learn about the film equipped with an anti-condensation function. When we tried a sample of the film, we found that fresh noodles placed in the packaging and stored in a cool place did not dry out or produce any condensation, and did not deteriorate even when it had been left overnight. Thanks to this product, we have been able to strike a balance between producing soba and selling fresh noodles on busy New Year's Eve.

#### Application example 2: Asahibussan Corp.

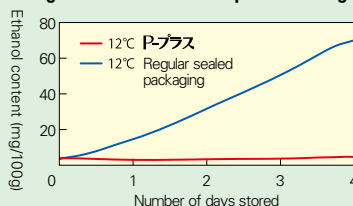
### Functions: Preserve freshness and reduce odors

Food product that it is used for: Pre-cut vegetables

Asahibussan Corp. has been using P-Plus® since around 2002 as a packaging material for pre-cut vegetables that are meant to be consumed raw. In recent years, there has been growing demand for pre-cut vegetables that can be consumed conveniently at any time among a wide range of consumers, including busy housewives, young people who tend to neglect their meals, and the elderly who find it difficult to cook every day. However, the quality of vegetables deteriorates more quickly after they have been cut. As they can only be sold for a short period of time, there was a concern that it might lead to increasing the risk of significant food loss. In light of that, the company introduced the use of P-Plus®, which is effective in preserving the freshness and reducing the odors of pre-cut vegetables, thereby successfully reducing the risk of significant food loss.

### Reduces odors — No odors are detected even after four days, stored at 12°C

Changes in ethanol content in pre-cut cabbage\*



(A large amount of ethanol is detected in pre-cut cabbage stored in regular sealed packaging, due to a lack of oxygen. In contrast, pre-cut cabbage packed in P-Plus® can reduce the generation of ethanol and thereby reduce odors.)

\*Test data obtained at Sumitomo Bakelite's laboratories



### Voice Person-in-charge at Asahibussan Corp.

In recent years, pre-cut vegetables have become widely accepted in general households. However, despite their convenience, it is difficult to preserve the quality of pre-cut vegetables. P-Plus®, which is able to preserve freshness for a long time, plays a very important role here. Our brand message is to bring happiness to people through vegetables, and we feel that P-Plus® has contributed significantly to the realization of our philosophy.



**Application example 3: JA Oita**

**Functions: Preserve freshness + Reduce material cost, reduce waste**

Food product that it is used for: Oita Ajiichi Negi (green onions)

JA Oita, which covers almost the whole of Oita Prefecture, aims to realize a unified brand strategy promoted by Oita Prefecture and the integration of quality management, establish a prefectural-wide production and distribution system, achieve systematic production, and revitalize the production regions. "Oita Ajiichi Negi" is a small green onion that is the product of this unified brand strategy.

As small green onions turn bad quickly, they were initially packed and shipped in Styrofoam to preserve their freshness, in spite of the higher material cost that was incurred. However, after they arrive at the retail stores, the Styrofoam generated a large amount of waste. To respond to feedback from the retailers who wish to reduce waste without any loss in quality, JA Oita introduced the use of P-Plus® packaging, which is able to preserve freshness even when shipped in cardboard boxes. This made it possible to retain the freshness of the green onions while reducing waste and material cost.

**Reduction in the cost of Styrofoam disposal: —1.2 million yen/year**

(Change in packaging from Styrofoam to cardboard boxes)



**Voice**

**Tomohito Ueyama**  
Ajiichi Negi Packaging Center, JA Oita

The most important characteristic of Oita Ajiichi Negi is its balanced texture, which is neither too soft nor too hard. In terms of nutrition, it is rich in vitamins A and C, calcium, and alliin that is effective for recovery from fatigue, and has long been regarded as a vegetable that is deemed effective in preventing summer heat fatigue and colds. That is precisely why preserving freshness in the shipping process, in order to ensure that it reaches the consumer without any loss in flavor or nutrient, poses such a great challenge. We adopted the use of P-Plus® at the suggestion of the wholesale market. Since then, we have received feedback from distributors that the shelf life of the product has improved, and improvements have been observed with regard to the degradation of freshness. Going forward, we will continue to put effort into ensuring that green onions remain appealing to consumers.

**Application example 4: JA Tonenumata**

**Functions: Preserve the flavors of freshly harvested produce**

Food product that it is used for: Edamame (green soybeans) (Mineral-cultivated soybeans "Mame-o")

JA Tonenumata covers the northern part of Gunma Prefecture. The region is surrounded by mountains reaching around 2,000m in height, with Mt. Tanigawadake and Mt. Hotaka in the north, and Mt. Akagi in the south. The source waters of the Tone River lie to the west, while Katashina River, flowing with melted snow from Oze, flows through the east. It is a region blessed with an abundance of water and greenery. Many high-quality, delicious vegetables are harvested here, one of which is the mineral-cultivated edamame (green soybeans) that is popular in summer. The motto of JA Tonenumata is to cultivate healthy and delicious vegetables from healthy soil, and its aim is to deliver the flavors of freshly harvested vegetables to consumers. To that end, it has taken the lead among edamame producers across Japan to adopt the use of P-Plus®, which preserves freshness as well as taste and nutrients.

**Voice**

**Masatoshi Otake**  
Head of Edamame Working Group, JA Tonenumata

Edamame is a vegetable that loses its freshness quickly. As such, P-Plus®, which helps to preserve the freshness of produce, is indispensable in enabling us to deliver the flavors of freshly harvested vegetables to consumers across Japan. Since we began using P-Plus®, it has become possible to ship safely even to destinations far away. As our delicious edamame have been produced with great care given to the cultivation method, we would like consumers across the whole of Japan to have the opportunity to savor them.



**Shelf life: ————— Extended by three days**

(Compared to bags with punched holes, the number of days that the edamame can be kept fresh for has been extended.)

Temperature	Punched holes	P-Plus®
10°C	Four days	Seven days
25°C	Three days	Five days

\*Test data obtained at Sumitomo Bakelite's laboratories



**SDG 2: Zero hunger**

Goal 2 of the SDGs is to “End hunger, achieve food security and improved nutrition and promote sustainable agriculture.”

Even today, extreme poverty and poor nutrition poses a major obstacle to the development of many countries. By promoting sustainable agriculture and improving agricultural productivity, we aim to put an end to all forms of hunger.



**SDG 9: Industry, innovation and infrastructure**

Goal 9 of the SDGs is to “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.”

We aim to improve the sustainability of society by promoting sustainable industries, enhancing the efficiency of resource utilization, and introducing clean technologies and eco-friendly technological and industrial processes.

**Application example 5: Yamanashi Prefecture (JA Fruits Yamanashi, JA Fuefuki, JA Minami-Alps City), Nagano Prefecture (JA Nagano, JA Nakano City)**

**Functions: Freshness-preserving storage until seasons of high demand**

Food product that it is used for: Shine Muscat

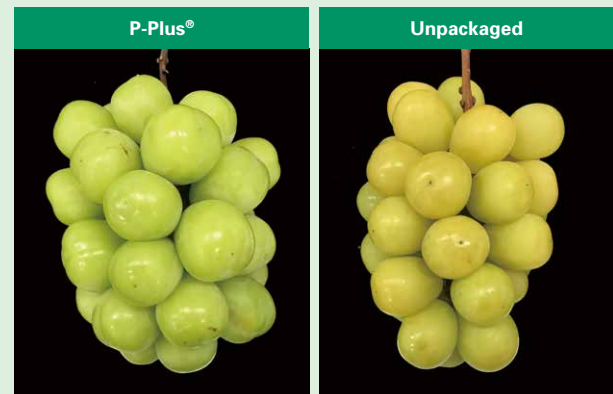
Shine Muscat has attracted attention as a Christmas merchandise and year-end/New Year gift, due to its bright color and rich flavor. It is also becoming increasingly well-received overseas, particularly in Taiwan and Hong Kong, and there has been a rapid increase in the number of sales enquiries. However, as Shine Muscat is harvested from the end of September to the end of October, it has to be stored for about two-and-a-half months before the peak sales period at the end of the year. Keeping it chilled in the refrigerator alone would cause changes in the color of the stem, shedding of the grape, or shriveling of the grape. In light of that, the method of placing the Shine Muscat in P-Plus® and then storing it in the refrigerator was developed. This successfully extended the period in which the Shine Muscat could be shipped while still looking and tasting good, and it also expanded the areas to which it could be shipped, including overseas.

**Extension of sales period: Can be sold until December/January**

(Shine Muscat harvested in October can be stored for two months or more)



**Three months after storage**  
(Temperature: 0 to 1°C; Humidity: 80% - 90%)



**Voice** Yamanashi Prefecture (JA Fruits Yamanashi, JA Fuefuki, JA Minami-Alps City)  
Nagano Prefecture (JA Nagano, JA Nakano City)

The birth of the special grape known as the Shine Muscat has helped to revitalize the production regions. By leveraging on the excellent opportunities provided by the peak year-end sales period and overseas export, and developing it to become a nationwide brand, we hope to contribute to the revitalization of the local agricultural industry. To achieve that, greater expectations are placed on P-Plus®.

**Comments from the representative of the Film and Sheets Division**

**A product that can contribute to multiple SDGs**

Sumitomo Bakelite is now engaged in business activities that are in line with the SDGs, with the aim of achieving the top share in the niche market of functional chemical products. Among the product lines offered by Sumitomo Bakelite, the P-Plus® freshness-preserving film can contribute to SDGs in the most visible manner. These contributions include reducing nutrient loss in fruits and vegetables, reducing food wastage and loss by extending the freshness preserving period (SDG Goal 2: Zero hunger. SDG Goal 12: Responsible consumption and production), and enabling long-distance transportation including overseas destinations, making it possible to establish a new production and consumption system (SDG Goal 9: Industry, innovation and infrastructure). For many years, we have been continuously collecting data on preserving the freshness of fruits and vegetables at the CS evaluation center in response to requests from customers, and this is now being applied to more than 60 types of fruit and vegetables. We are also partnering with mass retailers and wholesalers, as well as public research institutes and machine manufacturers to develop a system that can provide solutions through total coordination. At the same time, we are also moving forward on research and development with the aim of developing new functions.



**Katsuhisa Shiramoto**  
Manager of P-Plus/Food Packaging Sales Department  
Deputy General Manager of Film and Sheets Division

**Conducting evaluation that doubles the “happiness” of customers**

The CS evaluation center conducts various forms of evaluation to ensure that the company can offer customers much “happiness” through P-Plus®. For example, the center may check on the actual number of days that a customer’s product can be preserved when it is packed in P-Plus®. When doing so, the customer’s storage conditions are checked carefully, and tests are conducted while keeping in mind repeatability. Evaluation is carried out from multiple facets, including external appearance, smell, taste, nutritional components, and bacteria count. By reporting to customers on the many merits that the P-Plus® offers, we believe we can double the “happiness” experienced by customers. We have also recently introduced manufacturing facilities for pre-cut vegetables. Manufacturing of pre-cut vegetables involves a wide range of recipes depending on vegetables and cutting methods. By developing an integrated system within the center from production to evaluation, we have made it possible to carry out evaluation with a higher degree of precision. This process has also been highly rated by our customers.



**Midori Otsuki**  
West Japan CS Center P-Plus/Food Packaging Sales Department  
Film and Sheets Division

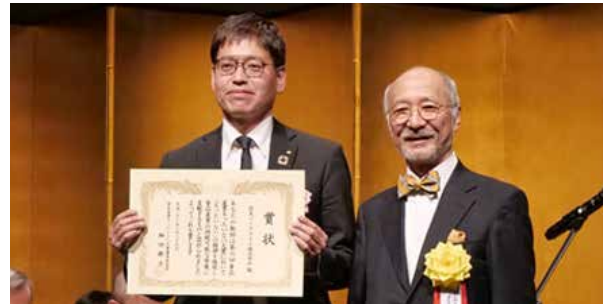
## 6th Food Industry “Mottainai” Award Received President of the Jury Award

In January 2019, Sumitomo Bakelite received the President of the Jury Award in the 6th Food Industry “Mottainai” Award in recognition of its efforts to reduce food loss through total coordination and total solutions for fruit and vegetable packaging. In addition to the ability of P-Plus® to preserve the freshness of fruits and vegetables, Sumitomo Bakelite was also highly commended for its efforts to resolve issues

comprehensively, including comprehensively capturing issues in preserving freshness and distribution, and developing film equipped with functions such as anti-condensation and mold prevention, in cooperation with producers in the development processes as well as food manufacturers and other customers, companies involved in the fruit and vegetable distribution process (markets, wholesalers, mass retailers, etc.), and other related corporations (seed and seedling producers, packaging machinery manufacturers, research institutes, etc.).

### Food Industry “Mottainai” Award

This award was established with the aim of uncovering food-related businesses that have achieved remarkable results and corporations, organizations, and individuals that promote and support initiatives in areas such as energy-saving and CO<sub>2</sub> emission reduction, waste reduction and recycling, and education and awareness-raising, with a view to realizing the sustainable development of the food industry. The award commends and publicizes such initiatives widely in order to promote global warming prevention and energy-saving measures, as well as the reduction of food loss, across the entire food industry. The award is supported by the Ministry of Agriculture, Forestry and Fisheries.



Atsushi Tanaka, Manager of the Film & Sheets Division (left), receiving the certificate from Eiji Hosoda, President of the Jury

## Used to ship fruits and vegetables across all parts of Japan

**Kyoto Prefecture JA Zen-noh Kyoto**

Murasaki-zukin (Edamame)

**Kagoshima Prefecture Kagoshima Kumiai Shokuhin Co., Ltd.**

Kinusaya Ingen (green beans)

**Niigata Prefecture JA Sado**

Okesa Kaki (persimmon)

**Aomori Prefecture JA Yuuki Aomori**

Chinese yam

**Kagawa Prefecture JA Kagawa Prefecture**

Rapeseed blossoms

Look for the following logo

Every month, we cover topics related to fruits and vegetables on our corporate website as part of “This month’s P-Plus produce” page.

Link → <https://www.sumibe.co.jp/product/p-plus/topics/>

# Familiar Sumitomo Bakelite Co., Ltd. Products Around You

Most of Sumitomo Bakelite's products are processed in various ways after being supplied to customers and then delivered around the world as finished goods. Here, we will introduce a number of products made by our group that are used in various situations and play an important role in our lives.

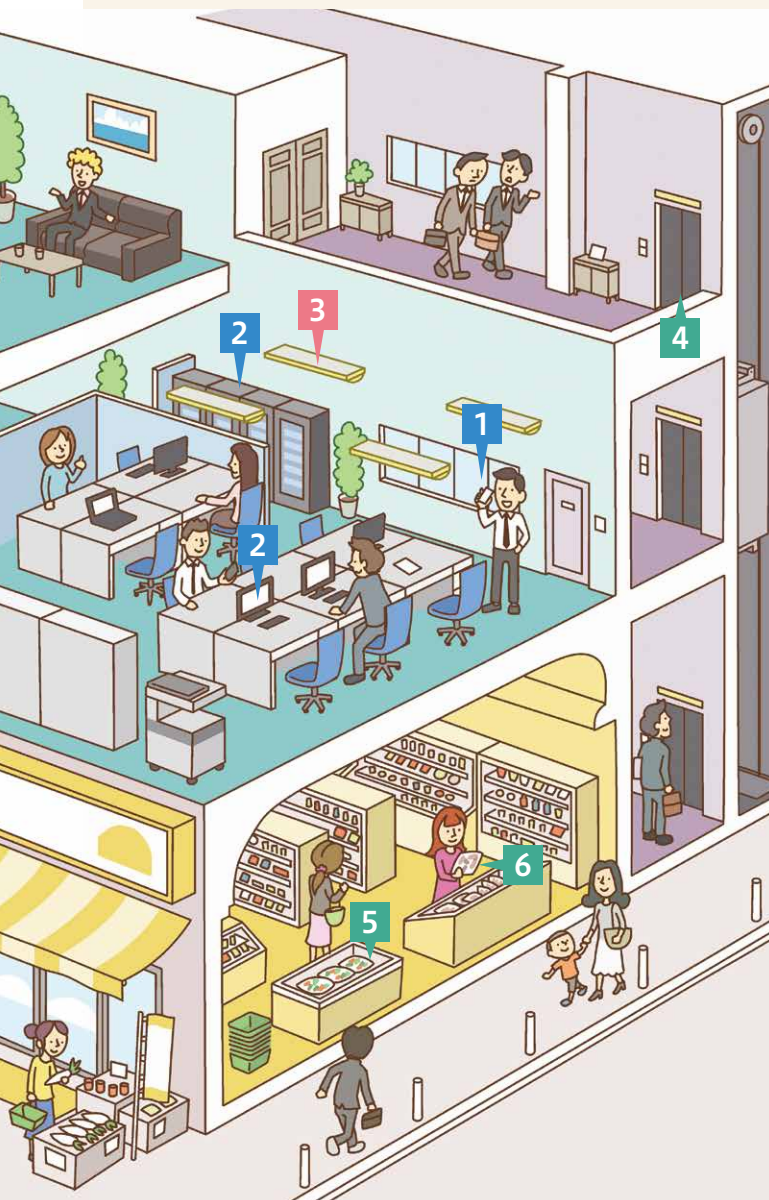


- ...Semiconductor Materials
- ...High-Performance Plastics
- ...Quality of Life Products

Please visit the "Familiar products of our company around you" page on our corporate website to learn more about the products we make.

Link → [https://www.sumibe.co.jp/around\\_you/en.html](https://www.sumibe.co.jp/around_you/en.html)

## Shop/Office



### 1 Electronic components for computers and mobile phones, etc.

**Epoxy Resin Molding Compounds for Encapsulation of Semiconductor Devices (SUMIKON® EME)**

We carry a lineup of epoxy resin molding compounds that protect delicate semiconductors from the external environment, including moisture and impacts, contributing to improved reliability.

**Semiconductor Package Substrate Materials (LαZ®)**

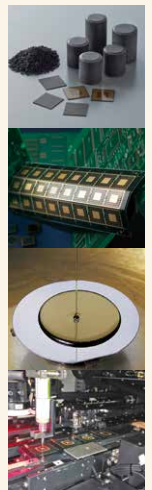
We deliver new value to customers with our substrate material for semiconductor packages called "LαZ®," which offers reduced thermal expansion and highly consistent dimensions.

**Coating resins for semiconductor wafers (SUMIRESIN EXCEL®CRC)**

Coating resins protect semiconductor elements from external stress and impurities, greatly improving reliability.

**Paste for Die Bonding (SUMIRESIN EXCEL®CRM)**

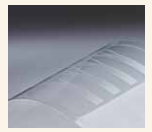
Semiconductor paste is used to attach semiconductor chips or LED chips to various substrates (lead frames, organic substrates, ceramic substrates).



### 2 Optical circuit products for servers, etc.

**Optical waveguide sheets**

Optical waveguide sheets are film-like materials for optical circuits. They are very flexible and easy to form into any shape, making them ideal for not only data communications, but various other purposes as well.



### 3 Lighting substrates

**Copper-clad laminates (SUMILITE®ELC/ALC)**

Composite materials and aluminum substrates with excellent heat dissipation are used in LED lighting applications, helping to reduce energy usage.



### 4 Interior materials of elevators and office walls

**Non-flammable melamine film (decola innovai®)**

We provide 0.2mm-thick non-flammable melamine film, which is ideal for the walls of apartments, buildings, hotels, stores, and hospitals, as well as the interior material for elevators.



### 5 Freshness preserving films (for fruit and vegetables and cut vegetables, etc.)

**Freshness Preserving Films (P-Plus®)**

This cling wrap slows deterioration in quality of fruits and vegetables in transit and storage, maintaining them as fresh as possible at the point of sale.



### 6 Food packaging films for ham, sausage, etc.

**Multilayered 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.



## Car

### 7 Materials for Encapsulating Automotive Electrical Components

**Epoxy Molding Compounds for Encapsulation (SUMIKON®EME)**  
We offer a lineup of materials that boast excellent heat-resistance, water-resistance, and insulating performance to support electronic technologies including electric vehicles and automatic driving technology, which are used in applications such as Electric-Control-Units (ECU), Power-Control-Units (PCU), sensors, and motors. In this way, we contribute to higher reliability and reductions in size, weight, and total cost.



### 8 Substrate for electronic devices such as car navigation and car audio

**Copper-Clad Laminates (SUMILITE®ELC)**  
Our highly heat-resistant substrate material is used in electronic control circuit boards improving fuel economy and riding comfort.



### 9 Tire reinforcement

**Tire-Reinforcement Material (SUMILITERESIN®PR)**  
Our phenolic resins are added to the rubber components required for the tire stiffness, contributing to improved rolling resistance in fuel conserving tires.



### 10 Material for powered parts

### 11 Materials for brake components

**Materials for Pulleys and Disc Brake Pistons (SUMIKON®PM)**  
**Phenolic resin for motor vehicles (SUMILITERESIN®PR)**  
Industrial phenolic resin and phenolic resin molding materials with superior heat-resistance and durability are used for engine accessories and brake components, contributing to reducing the weight of motor vehicles while improving their fuel efficiency.



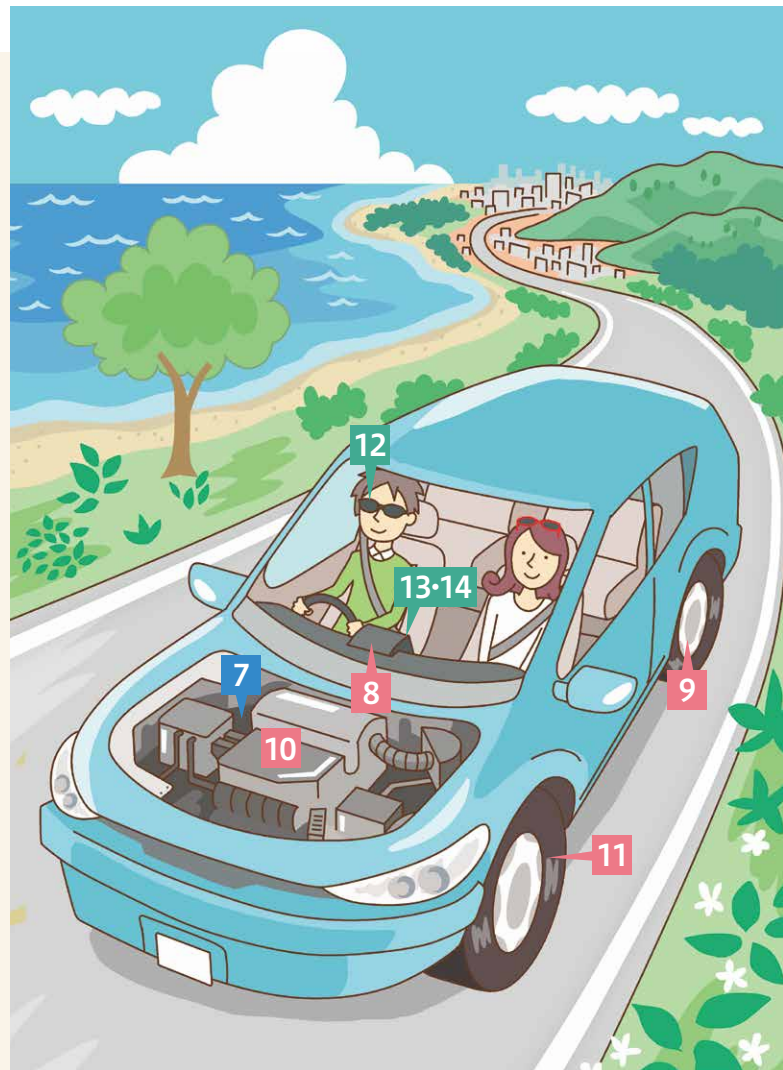
### 12 Polarizing plate for sunglasses, etc.

**Polycarbonate polarizing sheets**  
Made from polycarbonate with excellent optical qualities and impact resistance for safer and more comfortable vision.



### 13 Covers for head-up displays

**Polycarbonate Sheets (Coated PC sheets)**  
Excellent optical qualities contribute to high resolution and brightness in projection images.



### 14 Display panel of in-vehicle meters and in-vehicle center panel

**Polycarbonate Sheets (Extruded PC sheets)**

Offers improved reliability and visual design of instruments because it is made from polycarbonate sheets with excellent printability and moldability.



## Aircraft

### 15 Window assembly

### 16 Ventilation lid (for cabin pressure adjustment)

- 17 • Air outlet valves
- Service unit for AC, lights, etc. (for passengers)
- Seat markers

High performance plastics for metal replacement achieve weight saving, low-fuel consumption, and a comfortable environment for passengers.

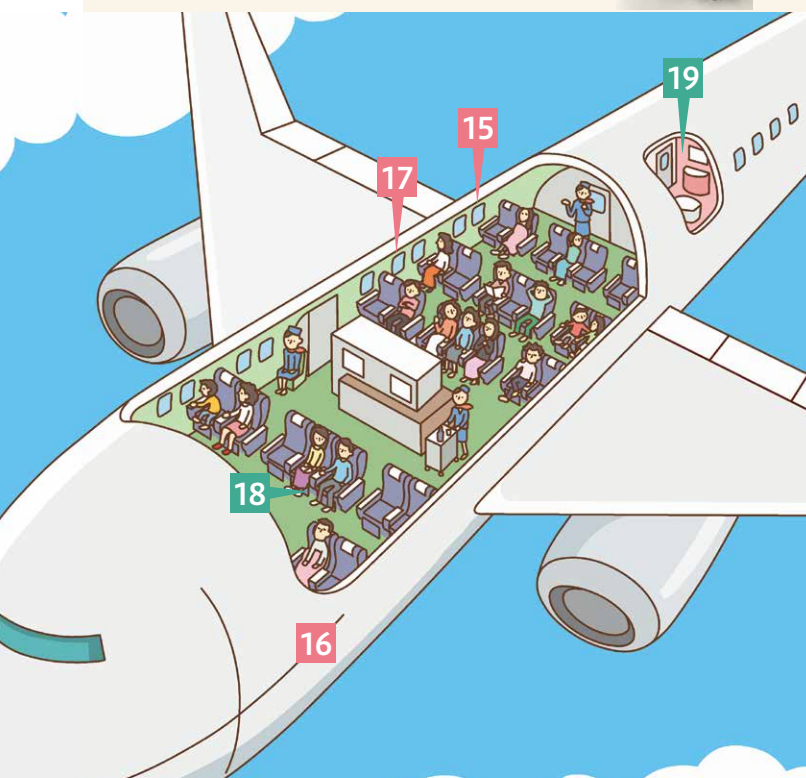


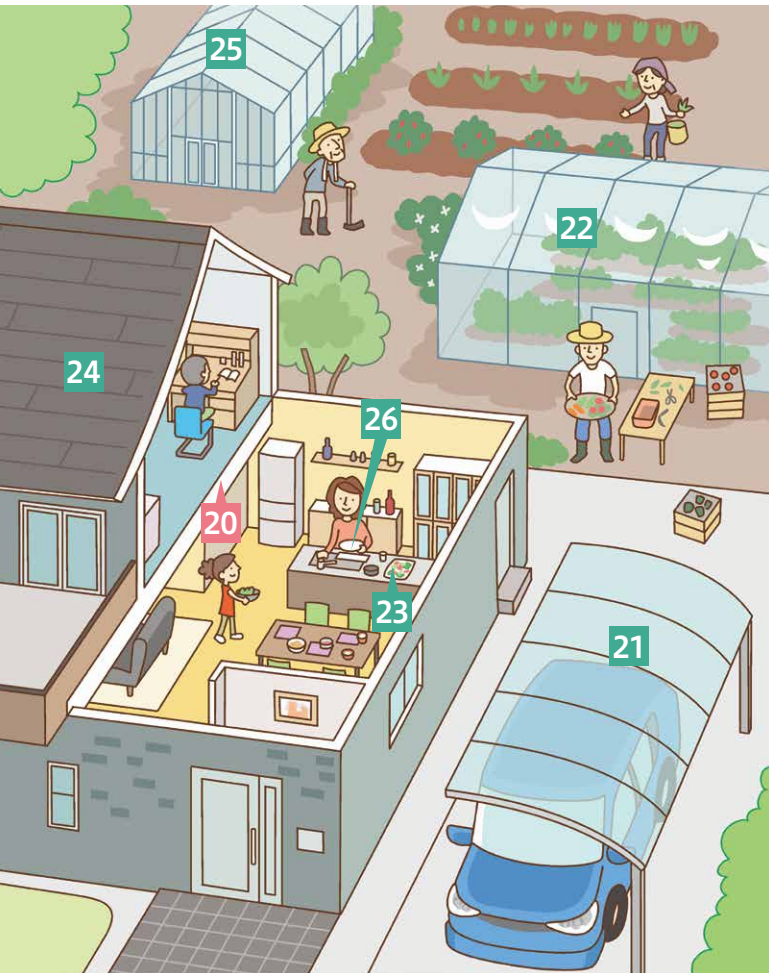
### 18 Seat tables

### 19 Lavatories

**KD, Acrylic-modified PVC Plate**

Having many superior properties such as flame retardancy and impact resistance, these plates are used for various applications such as interior decoration for aerospace transportation and trains.





## House/Farms

### 20 Plywood adhesive used for floors, walls and residential fixtures

#### Adhesives for Plywood Production and Boards (Sumitac)

This adhesive uses low formaldehyde phenol that cures quickly at low temperatures, improving the productivity of plywood manufacturing and contributing to protecting the environment.

### 21 Carport roofs

#### Polycarbonate Plates (Extruded PC Plates)

Having outstanding impact resistance and transparency, these plates are applicable for construction and architectural needs such as canopies and windows.

### 22 Hemmed film for vinyl greenhouses

#### Polycarbonate Films for Agricultural Use

This product is a film that retains the functions of polycarbonate plate, such as transparency and impact resistance. It is used for covering lower parts of agricultural greenhouses.

### 23 Freshness preserving films (fruit and vegetables including sliced vegetables, etc.)

#### Freshness Preserving Films (P-Plus®)

This cling wrap slows deterioration of fruits and vegetables, maintaining them in a fresh state for a longer time. Our lineup includes not only films for commercial applications, but also zipper bags for home use.

### 24 Waterproofing sheets/systems for roofs

#### Waterproofing Sheets and System (SUNLOID DN®)

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.

### 25 Covering materials for agricultural greenhouses

#### Polycarbonate Plates (Extruded PC Corrugated Sheet)

Transparent corrugated plate made of polycarbonate, with excellent impact strength as well as weather resistance. It also has excellent heat insulation and thermal resistance. A plentiful assortment of colors is available for a wide range of uses.

### 26 Plastic chopping boards

#### Plastic Chopping Boards (MYKITCHEN®)

Since developing the first plastic chopping board in Japan (MYKITCHEN®), we have developed a number of kitchen utensils under the theme cleanliness and hygiene that meet various needs from commercial to common kitchens, including the Super Heat Resistant Chopping Board, which offers excellent heat resistance and disinfecting qualities.



## Medical

### 27 Packaging materials for medical and pharmaceutical products

#### Push-through pack (PTP) packaging materials for pharmaceutical products (SUMILITE®)

These materials help maintain the quality of a wide range of medical equipment and drugs with an emphasis on sanitation and safety.

### 28 Plastic labware for cell culture

#### Laboratory ware (SUMILON®)

A wide variety of plastic lab ware for cell culture including dishes, plates, flasks, and cryogenic vials.

### 29 Testing kits

#### Bio-related Products (S-BIO®)

S-BIO chips and beads help to reduce waste and lower costs by downsizing and speeding up analysis and testing of biological specimens.

### 30 Medical devices for general surgery

### 31 Medical devices for patient drainage and nutrition management

#### Medical and Therapeutic Devices (sumius®)

Our medical equipment contributes to safety and reliability in healthcare, supporting everyone's health.

### 32 Energy-saving heat storage tank waterproofing system

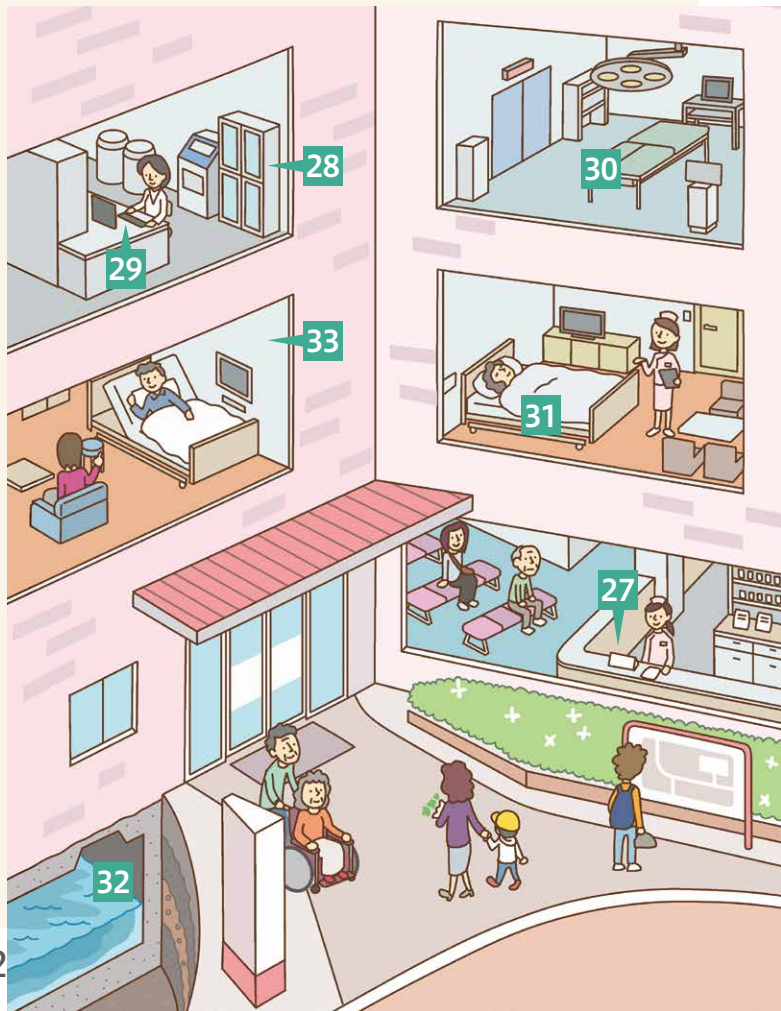
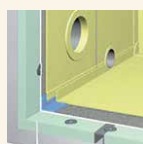
#### Thermal insulation and waterproofing Sheets & System (for thermal storage tanks of energy conservation systems)

Regenerative heat pumps contribute to energy savings. Our waterproofing and insulation system for heat storage tanks supports the energy saving activities in urban cities.

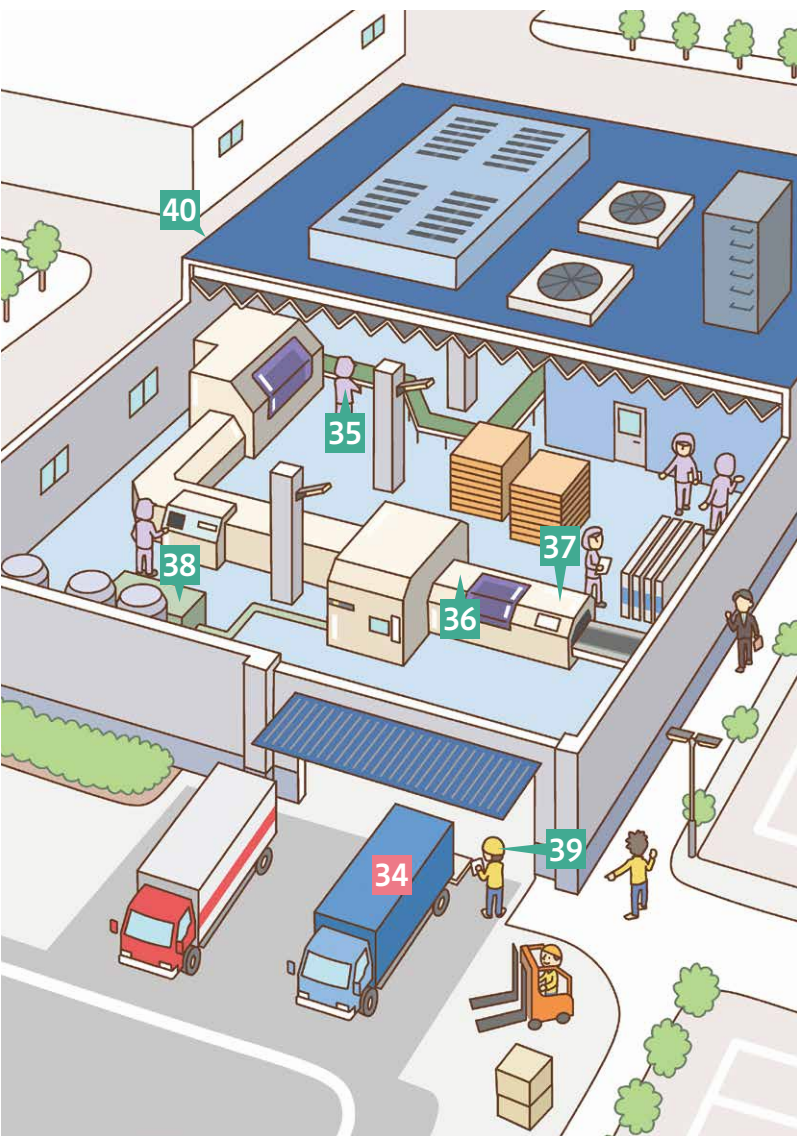
### 33 Walls of medical facilities and elevator interiors

#### Non-flammable melamine film (decola innovair®)

We provide 0.2mm-thick non-flammable melamine film, which is safe and hygienic, making it ideal for the walls of hospitals and welfare homes for the elderly, as well as the interior material for elevators.



## Factory



### 34 Purifying water for nitrogen compounds from diesel engine gas exhaust

#### *Diesel Exhausts Fluid (AdBlue)\**

This high purity urea water is used in systems for lowering nitrogen oxide from diesel exhaust, contributing to protecting the environment.

\*AdBlue® is a registered trademark of the Association of German Chambers of Commerce and Industry (VDA).



### 35 Manufacturing facility covers, security windows, partitions, etc.

#### *Multilayered Films and Sheets for Industrial Use (SUMILITE® CEL)*

Our PVC Heat Resistant Plate offers heat resistance for industrial use, corrosion resistance, and chemical resistance.



### 36 Packaging, transport, and mounting tape for semiconductor parts, etc.

#### *Cover Tapes for mounting semiconductors (SUMILITE® CSL)*

Our tape is used for transferring and mounting semiconductors, playing a role in protecting semiconductors from static electricity.



### 37 Wafer adhesive tape used for the dicing process of semiconductor parts

#### *Tape for the dicing process in semiconductor and related field (SUMILITE® FSL)*

Tape for the dicing process in semiconductor and related fields. Dicing tape is designed to meet a variety of customers' requirements.



### 38 Manufacturing facility covers, security windows, partitions, etc.

#### *PVC Plate (PVC Heat Resistant Plate)*

These products have excellent corrosion resistance and chemical resistance, are used under high-heated conditions.



### 39 Helmets

#### *Safety Helmets (SUMI HAT®)*

Our helmets are used at both factories and plants as well as for disaster relief operations because they offer advanced safety features, comfort and vents.



### 40 Roof waterproofing structures/systems

#### *30-minute Roof Fire Retardant & Waterproofing Method (SUNBRID)*

A light weight and insulating rooftop waterproofing structure made from waterproof sheets with excellent durability and heat shielding performance, which helps conserve energy and lower life cycle costs (LCC).



## Train/Station

### 41 Ceilings, doors, walls, etc.

#### *Aluminum based decorative laminates (ALUMI DECOLA®)*

Having flame retardancy, light weight, and design variations, ALUMI DECOLA® products are used for interior materials of railway vehicles and busses, and contribute to comfortable spaces of vehicles.



### 42 Armrests and tables for seats

#### *KD, Acrylic-modified PVC Plate*

Having many superior properties such as flame retardancy and impact resistance, these plates are used for various applications such as interior decoration of aerospace transportation and trains.



# Materiality of Sumitomo Bakelite Co., Ltd.

In fiscal 2015, we identified Sumitomo Bakelite’s materiality (priority items) in order to determine the social issues we should address and to carry out CSR activities closely in tune with the needs and expectations of stakeholders in an integrated manner on a company-wide basis. In fiscal 2016 and beyond, we have been reviewing and will continue to review the materiality we have identified, and continue to carry out activities.

## Materiality and the SDGs

The Group’s materiality (priority items) are presented below. We compared each category of materiality items with the SDGs, and reviewed this comparison in fiscal 2017.

The Group will now work on initiatives for materiality items that were identified to contribute to the fulfillment of the SDGs.

Field	Materiality item	Related stakeholders	Page number
<b>Issues related to ensuring harmony with environment</b> Related SDGs → <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">                           3 GOOD HEALTH AND WELL-BEING                     </div> <div style="text-align: center;">                           7 AFFORDABLE AND CLEAN ENERGY                     </div> <div style="text-align: center;">                           12 RESPONSIBLE CONSUMPTION AND PRODUCTION                     </div> <div style="text-align: center;">                           13 CLIMATE ACTION                     </div> </div>	Mitigate environmental impacts	<ul style="list-style-type: none"> <li>Local communities</li> <li>Business partners</li> </ul>	Full online version pages 37 to 43
	Resource and energy conservation	<ul style="list-style-type: none"> <li>Business partners</li> <li>Employees</li> </ul>	Full online version pages 37 to 43
<b>Issues related to providing safety and peace of mind</b> Related SDGs → <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">                           8 DECENT WORK AND ECONOMIC GROWTH                     </div> <div style="text-align: center;">                           12 RESPONSIBLE CONSUMPTION AND PRODUCTION                     </div> </div>	Safety and security	<ul style="list-style-type: none"> <li>Local communities</li> <li>Governments</li> <li>Business partners</li> <li>Employees</li> </ul>	Full online version pages 44 to 46
	Management of chemical substances	<ul style="list-style-type: none"> <li>Business partners</li> <li>Governments</li> <li>Employees</li> </ul>	Full online version page 47
	Product liability	<ul style="list-style-type: none"> <li>Customers</li> </ul>	Full online version pages 48 to 50
<b>Issues impacting society</b> Related SDGs → <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">                           5 GENDER EQUALITY                     </div> <div style="text-align: center;">                           8 DECENT WORK AND ECONOMIC GROWTH                     </div> <div style="text-align: center;">                           12 RESPONSIBLE CONSUMPTION AND PRODUCTION                     </div> <div style="text-align: center;">                           15 LIFE ON LAND                     </div> </div>	Biodiversity conservation	<ul style="list-style-type: none"> <li>Local communities</li> </ul>	Full online version page 61
	Improving stakeholder satisfaction	<ul style="list-style-type: none"> <li>Customers</li> <li>Shareholders</li> <li>Local communities</li> <li>Governments</li> <li>Business partners</li> <li>Employees</li> </ul>	Full online version pages 51 to 65
	Human resource development	<ul style="list-style-type: none"> <li>Employees</li> </ul>	Full online version pages 55 to 58
	Diversity, Work-life balance	<ul style="list-style-type: none"> <li>Employees</li> </ul>	Full online version page 53 to 55
<b>Issues representing the foundation of business activities</b> Related SDGs → <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">                           12 RESPONSIBLE CONSUMPTION AND PRODUCTION                     </div> <div style="text-align: center;">                           16 PEACE, JUSTICE AND STRONG INSTITUTIONS                     </div> </div>	CSR procurement	<ul style="list-style-type: none"> <li>Business partners</li> </ul>	Full online version page 36
	Compliance	<ul style="list-style-type: none"> <li>Employees</li> </ul>	Full online version pages 33 and 35

\*Please see page 26 to 27 for more details about our initiatives under each materiality item.



## Materiality determination process

### 1 Identification

We selected issues, referencing international guidelines such as G4 Sustainability Reporting Guidelines of the Global Reporting Initiative and ISO 26000, based on our previous efforts in various fields of CSR including the environment, safety and peace of mind, professional motivation, and society, which form part of our fiscal year plan.

### 2 Prioritization

We assessed the impacts that the identified issues have on the company and on stakeholders. After internal discussions based on the results of this assessment, we selected 14 items with particularly high priority.

### 3 Confirmation of Validity

Further discussions were held with each business division on these 14 priority items. Next, we narrowed the items down to 11 to focus our efforts based on the results of these discussions. On top of this, we asked outside professionals to review and provide comments on these 11 items. Simultaneously, the Responsible Care Committee confirmed the validity of these items.



Responsible Care Committee

### 4 Review

We will now implement CSR activities based on the materiality of these 11 items as well as conduct a review led by outside professionals and employees about the nature of these activities. The results of this review will be utilized for corporate social responsibility reports and subsequent years as well as for activity planning.

### Initiatives for Fiscal 2016 and Beyond

In fiscal 2016, we conducted an annual review of each business division and made changes to next year's targets based on the identified materiality items. In fiscal 2017 and subsequent years, we have been implementing and will continue to implement the PDCA ("plan, do, check, action") cycle based on these materiality items. We are also promoting the organization and internal dissemination of the relationship between materiality, business activities (providing value), and the 17 goals and 169 targets of the SDGs (Sustainable Development Goals).

Furthermore, as we move from the G4 to the GRI Standards, due to the requirements of conformance being clearly defined, we are carrying out a gap analysis in light of the requirements of these GRI Standards.

## Outside opinion of materiality items

Since fiscal 2015, Sumitomo Bakelite has engaged in CSR activities based on the materiality it identified in order to recognize the social issues it should resolve and promote activities that meet the needs and demands of stakeholders. This materiality was identified following the process outlined in "Materiality determination process" (identification → prioritization → confirmation of validity → review) appearing at the top of this page. I commend the company for following these steps. Additionally, the company also examines and revises materiality as needed in line with changes taking place in society and the natural environment. In fiscal 2017, it reviewed the comparison between each materiality item and the SDGs.

According to the Interview with the President (pp.4-7) and Interview with the Chief Sustainability Officer (pp.8-13) in this report, Sumitomo Bakelite has declared that it would engage in business activities following the SDGs within the basic policy of the new mid-term business targets commencing in fiscal 2019. Furthermore, it also established a department responsible for

promoting sustainability that is in charge of the company's entire activities. As a result, the mid-term management policy and management strategy to achieve the company policy along with CSR and materiality items have been linked in stages. In the future, the company's CSR activities will likely be implemented more effectively as a result. In the next fiscal year, we hope that the company will clarify the correlation between the Priority SDG goals (five goals + 1 goal) on p.10 and the materiality of CSR activities.



**Mika Takaoka**

Mika Takaoka is a professor at Rikkyo University's College of Business. She has a doctorate in economics and specializes in retail management, franchise systems, sustainable communication and consumer behavior. She also serves as a member on a number of committees, including the Evaluation/Verification Working Group, Global Environment Subcommittee, Industrial Structure Council (for follow-up on the low carbon society action plan).









# Highlights of Fiscal 2018 Activities

Our group aims to deliver safety and reliability as well as achieve harmony with the environment and coexistence with society. We are working to contribute to the realization of a sustainable society by resolving various issues facing society through our businesses, including energy issues and environmental issues, linking all our activities to the SDGs.

Toward that end, we carry out activities focused on social issues and businesses in need of attention in a steady manner while establishing plans and targets.

○: Target attained △: Target not attained (but improvement over the previous fiscal year) ▼: Target not attained (deterioration from the previous fiscal year)

Area of activities	Relevant SDGs	Major items	Fiscal 2018 targets	Fiscal 2018 results	Fiscal 2019 plan	Achievement evaluation	Related page
Themes related to the promotion of harmony with the environment							
1. Environmental initiatives	3 CLIMATE ACTION	Reduction in CO <sub>2</sub> emissions (compared with fiscal 2005)	In Japan: 39% reduction	In Japan: 40% reduction	In Japan: 42% reduction	○	39
			Overseas: 18% reduction	Overseas: 8.4% reduction	Overseas: 8.5% reduction	△	39
	12 RESponsible Consumption and Production	Reduction in material loss (compared with fiscal 2005)	In Japan: 37% reduction	In Japan: 34% reduction	In Japan: 36% reduction	△	39
			Overseas: 46% reduction	Overseas: 55% reduction	Overseas: 58% reduction	○	39
	13 Climate Action	Reduction in chemical substance emissions (In Japan: compared with fiscal 2005) (Overseas: compared with fiscal 2010)	In Japan: 68% reduction	In Japan: 66% reduction	In Japan: 77% reduction	▼	39
		Overseas: 49% reduction	Overseas: 51% reduction	Overseas: 52% reduction	○	39	
2. Resource conservation, energy saving	7 AFFORDABLE AND CLEAN ENERGY	Energy saving activities and secretariats.	<ul style="list-style-type: none"> <li>As in fiscal 2017, establish an energy conservation plan in Japan and overseas, and continue to roll out good practices with cooperation from Japanese mother plants and secretariats.</li> </ul>	<ul style="list-style-type: none"> <li>In Japan, reduced energy usage by 2,396 kL of crude oil equivalent after implementing specific proposals.</li> <li>Overseas, we reduced energy consumption by 1,640 kL in crude oil equivalent by continuing to promote the rollout of best practices.</li> </ul>	<ul style="list-style-type: none"> <li>As in fiscal 2018, continue to provide technical support by establishing an energy conservation plan and raising the level of energy-saving technology by sharing information across all our business sites in Japan, and to achieve this overseas by promoting the rollout of best practices through collaboration between the mother plants in Japan and offices throughout the company.</li> </ul>	○	37
Themes for providing safety and reliability							
3. Safety and security	8 INDUSTRIAL AND INFRASTRUCTURE	Prevention of industrial accidents	Number of lost-time accidents In Japan: under 2	In Japan: 2	In Japan: 2	○	45
			Number of lost-time accidents Overseas: under 13	Overseas: 40	Overseas: 20	▼	46
		Security and disaster prevention	<ul style="list-style-type: none"> <li>Conduct systematic safety training and disaster prevention training</li> </ul>	Number of fires and explosions: 1 Number of leakage-related incidents: 0	Number of fires and explosions: 0 Number of leakage-related incidents: 0	○	45 46
4. Chemical Substance Management	12 RESponsible Consumption and Production	Chemical Substance Management	<ul style="list-style-type: none"> <li>Prepare SDS*<sup>1</sup> for legislation</li> </ul>	<ul style="list-style-type: none"> <li>Modifications to SDS*<sup>1</sup> for compliance with the Proposition 65 requirements of the U.S.</li> <li>Modifications to SDS*<sup>1</sup> for compliance with Taiwan's Priority Management Chemicals requirements</li> <li>Filing of national chemical inventory for Vietnam</li> <li>Complied with Mexican GHS*<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>Compliance with Japan's revised Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. and Korea's Act on Registration, Evaluation, etc. of Chemicals</li> <li>Maintenance and expansion of data on raw materials and formulations</li> </ul>	○	47
5. Product liability	12 RESponsible Consumption and Production	'Monozukuri' Audit	<ul style="list-style-type: none"> <li>Carry out 'Monozukuri' Audit, combining SBPS*<sup>3</sup>, EHS and QA at major production bases inside and outside Japan</li> </ul> In Japan: Carried out in nine business sites under our direct control and belonging to affiliated companies Overseas: Specified priority business sites in China and Southeast Asia	In Japan: Carried out in 7 business sites under our direct control and belonging to affiliated companies Overseas: Carried out in 7 business sites in China and Southeast Asia	<ul style="list-style-type: none"> <li>Carry out headquarters audit</li> </ul> In Japan: Carry out in six business sites under our direct control and belonging to affiliated companies Overseas: Specify priority business sites in China and Southeast Asia, as well as North America and Europe <ul style="list-style-type: none"> <li>Raise the levels of auditing through auditor training, in order to enhance the auditing process</li> </ul>	○	50

Area of activities	Relevant SDGs	Major items	Fiscal 2018 targets	Fiscal 2018 results	Fiscal 2019 plan	Achievement evaluation	Related page
Themes that affect society							
6. Biodiversity		Conservation Biotope	<ul style="list-style-type: none"> <li>Continue with self-led conservation activities</li> <li>Open to public and begin communicating externally</li> </ul>	<ul style="list-style-type: none"> <li>Added business-site beautification to conventional maintenance as self-led conservation, implemented as whole-site activities</li> <li>Visited by 462 people when made open to public.</li> <li>Continued to offer killifish externally. As a result, regular meetings were held with the schools, and led to the holding of an observation event for elementary school students.</li> <li>Received the Japan Chemical Industry Association's Responsible Care (RC) Effort Award</li> </ul>	<ul style="list-style-type: none"> <li>Continue with self-led conservation activities</li> <li>Continue to be open to the public and communicating externally, as well as regular meetings with schools</li> </ul>	○	61
		Initiatives to preserve forest ecosystems	<ul style="list-style-type: none"> <li>Continue to support forest thinning projects in Iwate Prefecture by mainly using "Paper Products that Contribute to Forest Thinning Efforts" (Morino Chonai-Kai (Forest Neighborhood Association))</li> </ul>	<ul style="list-style-type: none"> <li>Used 6,359 kg of Morino Chonai-Kai paper and contributed to promoting the thinning of 0.43 ha</li> </ul>	<ul style="list-style-type: none"> <li>Continue to support forest thinning projects in Iwate Prefecture by mainly using "Paper Products that Contribute to Forest Thinning Efforts" (Morino Chonai-Kai (Forest Neighborhood Association))</li> </ul>	○	62
7. Improvement of stakeholder satisfaction		Improvement of customer satisfaction	<ul style="list-style-type: none"> <li>Implement education to spread the One Sumibe Activities internally, and disseminate them through the company</li> </ul>	<ul style="list-style-type: none"> <li>Held study group meetings and report sessions for new products</li> </ul>	<ul style="list-style-type: none"> <li>Conduct e-learning programs and continue to organize product study group meetings to spread One Sumibe activities throughout the company</li> </ul>	○	51
		Communicating corporate information, advertising	<ul style="list-style-type: none"> <li>Promote preparation of content that helps customers understand our products easier</li> </ul>	<ul style="list-style-type: none"> <li>Put up new advertisements at MetLife Dome</li> <li>Signed an official partnership agreement with Fujieda MYFC for the 2019 season</li> <li>Continued to provide support for the Japan Inclusive Football Federation, which the company signed a partnership agreement with in 2018</li> </ul>	<ul style="list-style-type: none"> <li>Develop and update contents for information dissemination tools through a wide range of media including external advertising, billboards, and websites</li> <li>Provide company-wide support for social contribution activities</li> </ul>	○	51 · 62 · 64
	Development of products that contribute to the environment	<ul style="list-style-type: none"> <li>Continue to increase sales of environmentally friendly products</li> <li>Expand evaluations on the environmental contributions of existing products</li> <li>Promote development of R&amp;D products with a large contribution to the environment</li> </ul>	<ul style="list-style-type: none"> <li>Increased sales ratio: 43.7% to 42.9% (Data on Sumitomo Bakelite Co., Ltd. (non-consolidated))</li> </ul>	<ul style="list-style-type: none"> <li>Commence group-wide efforts to acquire certification of products that contribute to the SDGs, including environmental contribution, based on the 2015 SDGs standards adopted by the United Nations</li> </ul>	▼	13 · 37	
8. Human resource training	 	Internal human resource training	<ul style="list-style-type: none"> <li>Continue to carry out employee training at SB School*4</li> </ul>	<ul style="list-style-type: none"> <li>About 23,000 employees took part, representing about 33,000 hours of training</li> </ul>	<ul style="list-style-type: none"> <li>Continue to carry out employee training at SB School*4</li> </ul>	○	55 · 56
		Women's empowerment	<ul style="list-style-type: none"> <li>Continue training programs for female managers</li> <li>Conduct team-building programs that take diversity into account</li> <li>Conduct human rights education to prevent harassment</li> </ul>	<ul style="list-style-type: none"> <li>Three female managers attended external seminars</li> <li>Conducted team-building programs, which were attended by 19 employees</li> <li>Conducted human rights education under the training program for all employees, which was attended by 2,846 employees including those from group companies</li> </ul>	<ul style="list-style-type: none"> <li>Enhance education and training programs for female managers</li> <li>Improve and conduct team-building education that gives consideration to the diversity of human resources</li> <li>Continue conducting human rights education that contributes to preventing harassment</li> </ul>	○	53
9. Diversity, Work-life balance	 	Employment of people with disabilities	<ul style="list-style-type: none"> <li>Employment rate of people with disabilities: maintain at 2.2% level</li> </ul>	<ul style="list-style-type: none"> <li>Employment rate of people with disabilities: 2.37%</li> </ul>	<ul style="list-style-type: none"> <li>Employment rate of people with disabilities: maintain at 2.2% level</li> </ul>	○	53
		Work style reform	<ul style="list-style-type: none"> <li>Discussing effective measures to reduce overtime work and disseminating them throughout the company</li> <li>Support so that staff can work and raise children/provide nursing care</li> </ul>	<ul style="list-style-type: none"> <li>A 100% rate of returning to work after taking childcare leave or nursing care leave (In fiscal 2018, people who took childcare leave: 5; people who took nursing care leave: 0)</li> </ul>	<ul style="list-style-type: none"> <li>Discussing effective measures to reduce overtime work and disseminating them throughout the company</li> <li>Support so that staff can work and raise children/provide nursing care</li> </ul>	○	54
		Promoting employee health	<ul style="list-style-type: none"> <li>Continue implementing the Data Health Plan (preventing the worsening of illnesses) (in our company and certain Japanese affiliated companies)</li> </ul>	<ul style="list-style-type: none"> <li>Conducted health education classes at each business site, totaling 13.5 hours with 332 participants from across the company</li> </ul>	<ul style="list-style-type: none"> <li>Continue implementing the Data Health Plan (preventing the worsening of illnesses) (in our company and certain Japanese affiliated companies)</li> </ul>	○	59
Fundamental Themes							
10. CSR procurement		Practice of CSR procurement	<ul style="list-style-type: none"> <li>Carry out the CSR survey on business partners who were not covered in the fiscal 2016 survey, carried each raw material used in products that make up more than 80% of sales, and special materials.</li> <li>Request improvements to business partners based on the results of the CSR survey</li> </ul>	<ul style="list-style-type: none"> <li>Conducted CSR survey on 53 supplier companies, scoring an average of 4.4 out of 5 points. There were no suppliers below standard and requiring requests for improvements</li> </ul>	<ul style="list-style-type: none"> <li>Among suppliers that the survey was conducted on in fiscal 2016 and fiscal 2018, conduct survey on the supply stability of suppliers that handle special raw materials and which have not drawn up business continuity plans (BCP)</li> </ul>	○	36
11. Compliance		Practice of compliance	<ul style="list-style-type: none"> <li>Promote activities that raise awareness of compliance (including prevention of bribery and cartels, security export control, and protection of personal information)</li> </ul>	<ul style="list-style-type: none"> <li>Implemented activities to raise awareness of compliance during the month of emphasis</li> <li>Raised awareness through the internal publication of a four-panel comic titled "The Way to Become a Compliance Master"</li> </ul>	<ul style="list-style-type: none"> <li>Promote activities that raise awareness of compliance (including prevention of bribery and cartels, security export control, and protection of personal information)</li> </ul>	○	33 · 35

\*1,2 See the glossary on page 78.

\*3 SBPS is an acronym for "Sumitomo Bakelite Production System." These activities ensure the necessary revenue and safety (people, facilities, environment, quality) for our company's continued development. They are the same as our daily business: deciding upon a concrete aim (value, quantity, delivery time), planning who will complete each of these and by when, and carrying it out without delay.

\*4 SB School is the name of an in-house training institute for all employees, from new hires to executive officers.

# Sumitomo Bakelite Co., Ltd. Group's Business Policy and Sustainability Promotion Structure

## The Sumitomo's Business Philosophy and Sumitomo Bakelite Co., Ltd. Group's Business Philosophy

We have inherited Sumitomo's Business Philosophy, passed down by the Sumitomo family, which 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. Approximately 400 years ago, Sumitomo (Monjuin) wrote to his family about business wisdom, urging at the beginning, "Strive with all your heart, not only in business, but in all situations."

The rigorous efforts and honesty demanded by the Monjuin Shiigaki as well as other personal character-building precepts continue to form the foundation of the Sumitomo Group's Business Philosophy and make up the basis of our fundamental policy.



Monjuin Shiigaki

[Link](#) → [Sumitomo Group Public Affairs Committee](#)

### Business Philosophy of Sumitomo Bakelite Co., Ltd. Group (Company Policy)

"Business Philosophy" for the Group of Sumitomo Bakelite Co., Ltd. is as follows:

#### 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.**

[Link](#) → [Guiding Principles](#)

### Our Code of Conduct (Code of Ethics)

#### Our Code of Conduct

1. We provide products and services designed from the viewpoints of social benefit as well as customer satisfaction on which we place highest priority.
2. We endeavor to improve business performance of the Group of Sumitomo Bakelite Co., Ltd. from a global perspective.
3. We observe corporate ethics, abide by all applicable laws and regulations as well as our internal rules, and, above all, value fairness and transparency in our business activities.
4. We place importance on safety, and voluntarily take actions for environmental protection.
5. We honor and respect each individual's personality and rights, and make efforts to create amicable and lively workplaces.

### Management Policy of Sumitomo Bakelite Co., Ltd. Group

To become an excellent global enterprise that helps enhance customer value through creating plastics with more sophisticated functions, and achieving sustainable growth in the advanced chemical products sector.

## Sustainability Promotion Structure

Today, initiatives aimed at realizing a sustainable society are gathering speed around the world and the role of companies in these initiatives is increasing. Amidst this, the SDGs are a universal set of goals that both developing and developed countries are working to achieve. Japan, too, is advancing proactive efforts toward the SDGs.

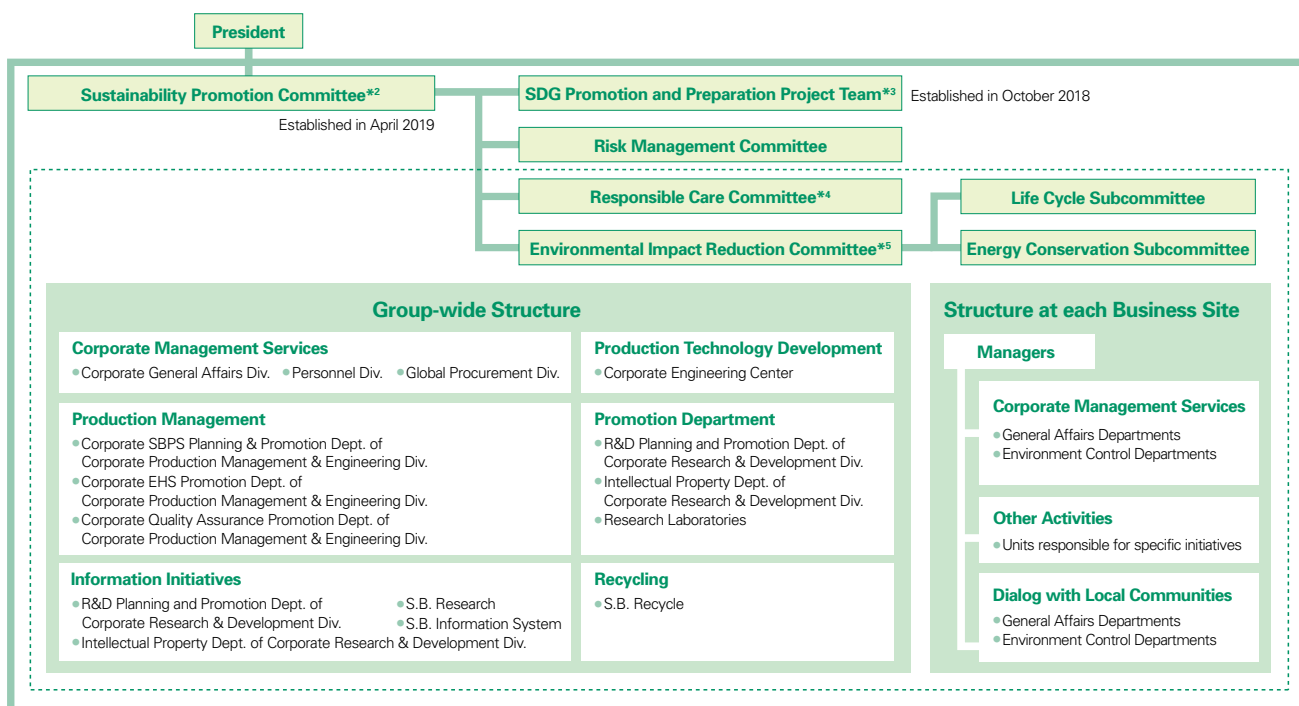
The Sumitomo Bakelite Group decided to incorporate the SDGs as one of its management policies. As a result, in October 2018, we established the SDG Promotion and

Preparation Project Team to identify the SDG fields that the Group would focus on, and began promoting necessary measures across the entire Group. In April 2019, we planned, reviewed and determined measures that contribute to the formation of a sustainable society and fulfillment of the SDGs, based on the recognition and need to address the social responsibilities and impacts the Group's business activities have on society. As a result, the Sustainability Promotion Committee was established to act in a sustained

manner and on a company-wide basis. This committee has launched various efforts while coordinating activities across the entire Group.

Our CSR activities have focused mainly on promoting Responsible Care\*<sup>1</sup> as before. Centered on the activities of the Responsible Care Committee and Environmental Impact Reduction Committee, we engage in various activities through Group-wide cooperation that involves all functions including the head office, administrative divisions, research

and development teams, and all business sites. Given that sustainability and CSR are closely tied (engaging in business activities focused on sustainability will result in fulfilling corporate social responsibilities), the Group intends to improve sustainability by contributing to the SDGs and engaging in various CSR activities.



\*1 Responsible care means that companies should work to secure the environment, safety, and health in all 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 The Sustainability Promotion Committee is a committee headed by the President, while executive officers and directors representing each department serve as the Vice-Chairperson and Committee Members. The SDG Promotion and Preparation Project Team Secretary acts as the Secretariat. Meetings are convened around once every two to three months.

\*3 The team consists of a leader and secretary appointed by the President, as well as members selected from each business division. Team meetings are held monthly.

\*4 Chaired by the officer overseeing the Corporate Production Management & Engineering Div., this committee meets twice each year. It has the objective of promoting Responsible Care activities related to the Company's business operations.

\*5 Chaired by the officer overseeing the Corporate Production Management & Engineering Div., this committee has two subcommittees—the Life Cycle Subcommittee and Energy Conservation Subcommittee. It meets once or twice each year. Its subcommittees meet twice each year. Our goals are to promote the reduction of environmental impact caused by our product life cycles and the conservation of energy and resources at our production plants.

## Policy on Responsible Care Activities\*<sup>6</sup> of Sumitomo Bakelite Co., Ltd. Group

### Philosophy

In all its operations, Sumitomo Bakelite Co., Ltd. will contribute to the sustainable development of society while promoting business activities by meeting the highest standards of the Responsible Care concept and giving due consideration to environmental preservation, human health and safety as well as product quality.

### Policy

- Evaluate the safety, health, and environmental aspects throughout the entire life cycle of a product, from product design to the procurement of raw materials through disposal, strive to minimize the environmental impact of our corporate activities, and undertake to develop safer products and technologies;
- Make sustained, group-wide efforts to promote resource and energy conservation, waste reduction and biodiversity conservation;
- Perform Environmental, Safety & Health Audit and Quality Assurance Audit as well as work to maintain and improve systems for managing environmental protection, safety promotion and disaster prevention, worker safety and health, and quality management;

- Comply with all relevant laws, regulations and agreements associated with safety, health, the environment, and chemicals while autonomously establishing administrative rules with the aim of strengthening management capacity, so as to improve environmental, health and safety conditions for society, customers, and employees;
- Work to ensure and improve the safety of raw materials, products, transportation operations and process safety, and provide product safety information to employees, customers, and others;
- Promote continuous improvement in security over facilities, processes and technologies, and implement operational safety management programs to ensure the safety and health of employees and residents of local communities;
- Publicly disclose information on the environment, safety and products to and promote dialog with interested parties such as customers, employees and residents of local communities, so as to identify their needs and deepen mutual understanding and trusting relationship;
- In order to ensure environmental preservation, human health and safety as well as product quality, provide employees with training to develop necessary human resources for that end.

\*6 Established in August 2015. These policies were newly established by revising the Corporate Policies for Safety and the Environment in line with the amendment of the Responsible Care Global Charter.

# Corporate Data

<b>Name</b>	Sumitomo Bakelite Co., Ltd.
<b>Head Office</b>	5-8 Higashi-Shinagawa 2-chome, Shinagawa-ku, Tokyo 140-0002, Japan
<b>President</b>	Kazuhiko Fujiwara
<b>Established</b>	January 25, 1932
<b>Capital</b>	¥37.1 billion (as of March 31, 2019)
<b>Number of Shareholders</b>	10,893 (as of March 31, 2019)
<b>Stock Listing</b> (as of March 31, 2019)	Tokyo Stock Exchange, First Section
<b>Number of Employees</b> (as of March 31, 2019)	1,632 (non-consolidated) 5,898 (consolidated)
<b>Net Sales</b> (as of March 31, 2019)	¥91.0 billion (non-consolidated) ¥213.0 billion (consolidated)

## Relationships with Stakeholders

The stakeholders of our group are the same as those defined in the Corporate Governance Code, complying with the Corporate Governance Code of the Tokyo Stock Exchange, as resolved by the Board of Directors. There have not been any major concerns up to this point; our group values our relationship with all our stakeholders, and we promote our business while engaging with them. Those stakeholders with whom we engage are those linked to the materiality items of our Group (p.24).

## Major Products by Division

### Semiconductor Materials

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

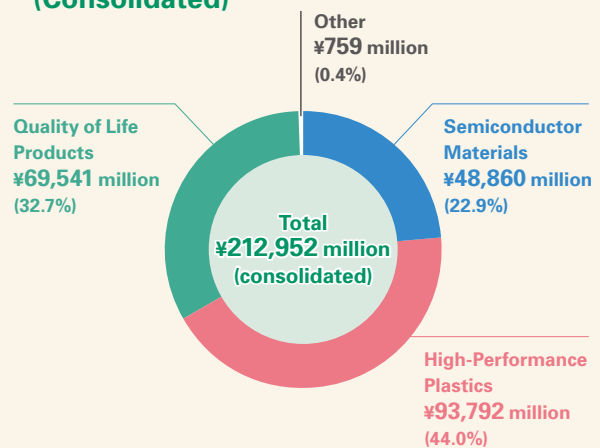
### High-Performance Plastics

- Phenolic molding compounds
- Phenolic resins
- Precision molded products
- Synthetic resin adhesives
- Phenolic resin copper-clad laminates
- Epoxy resin copper-clad laminates
- Aircraft interior components

### Quality of Life Products

- Medical products
- Vinyl resin sheets and multilayer sheets
- Freshness preserving films
- Melamine decorative laminates and fireproof decorative laminates
- Polycarbonate resin plates
- PVC resin plates
- Design and contracting of waterproofing work
- Biotechnology related products

## Fiscal 2018 Sales Composition by Division (Consolidated)



### Customers

#### Main Responsibilities

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 the CS Committee, which continuously endeavors to enhance customer satisfaction.

#### Main Methods of Communication

- Communication through the conduct of daily business
- Quality assurance support
- Exchange of information through trade shows, etc.
- Provision of information through our website and customer support.

### Shareholders

#### Main Responsibilities

The Group is committed to distributing appropriate dividends and is taking steps to disclose all relevant information. To attain these goals, we are increasing the rigor of corporate governance, and ensuring the timely disclosure of relevant information.

#### Main Methods of Communication

- Shareholders' meeting
- Presentation of financial results and business outlook
- Media response
- Publishing of Annual Report and shareholder reports
- Information disclosure via the website

### Local Communities

#### Main Responsibilities

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 factory tours and proactively participating in local events.

#### Main Methods of Communication

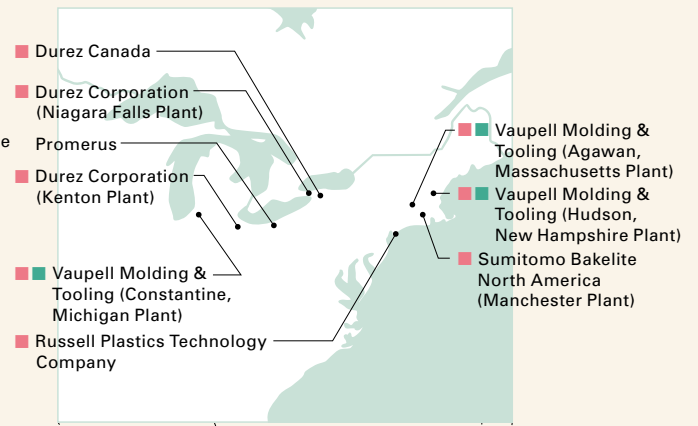
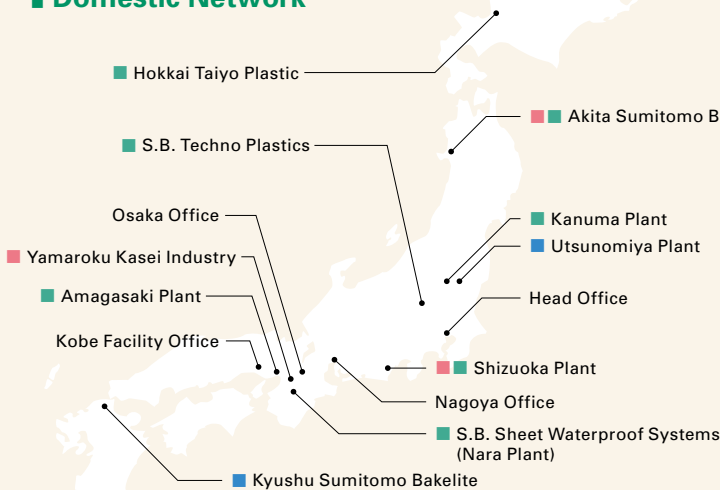
- Relations with local residents and mutual engagement
- Participation in local events
- Acceptance of next generation internships and site visits
- Participation in the conservation of the local environment and beautification events
- Activities via economic and industry organizations

# Group Companies

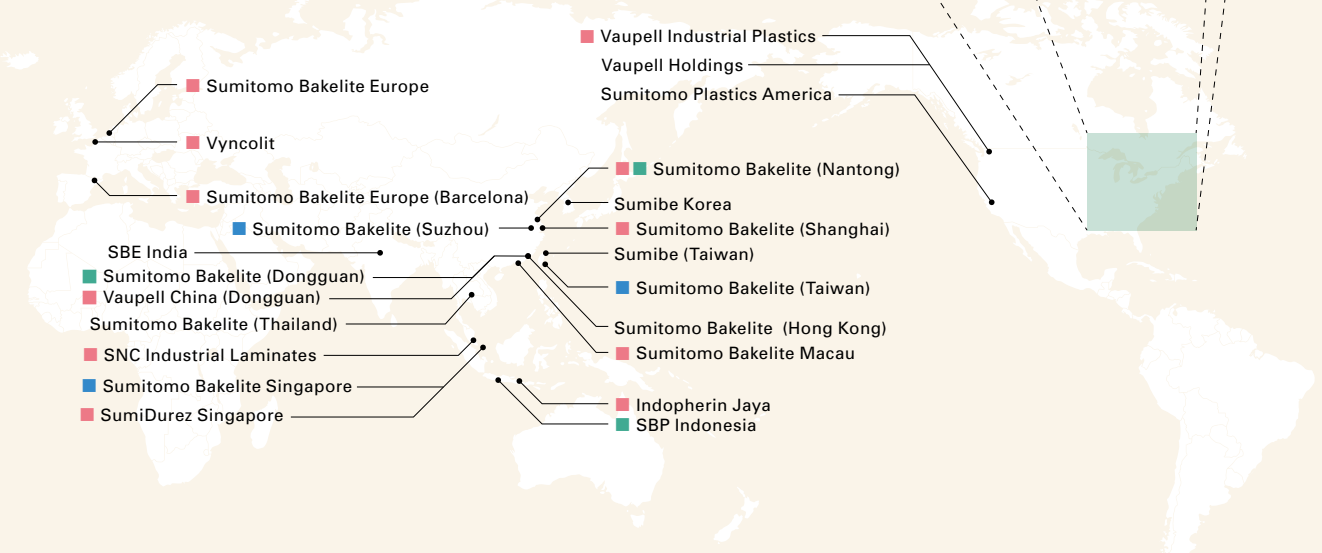
The Group operates in 15 countries and regions, including Japan. Production sites are color-coded according to the category of products manufactured.

■ Semiconductor Materials ■ High-Performance Plastics ■ Quality of Life Products

## Domestic Network



## Global Network



### Government Entities

- Main Responsibilities**
- 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.
- Main Methods of Communication**
- Engagement with local and regional governments
  - Activities and engagement through economic and industry organizations
  - Reply to surveys and questionnaires
  - Submission of notifications

### Business Partners

- Main Responsibilities**
- 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.
- Main Methods of Communication**
- Engagement through purchasing and procurement activities
  - Engagement through surveys and questionnaires
  - Disclosure of information on our website

### Employees

- Main Responsibilities**
- 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.
- Main Methods of Communication**
- Training of all employees through the SB School
  - Perform a variety of human resources development and training
  - Corporate-level meetings, labor-management meetings, occupational safety meetings
  - Sharing of information through publication of a monthly newsletter
  - President's homepage and intranet
  - Whistleblower system, consultation contact point

# Corporate Governance



We are strengthening corporate governance as one part of the foundation underpinning our business activities. These efforts will contribute to Sustainable Development Goal 16: Peace, Justice and Strong Institutions.

## Strengthening Corporate Governance

As a pioneer in plastics, our company brings “delight” to customers through the creation of new advanced functions from plastics and through the use of its products, with the goal of contributing to value creation for customers and various other stakeholders. For this reason it is important to earn the

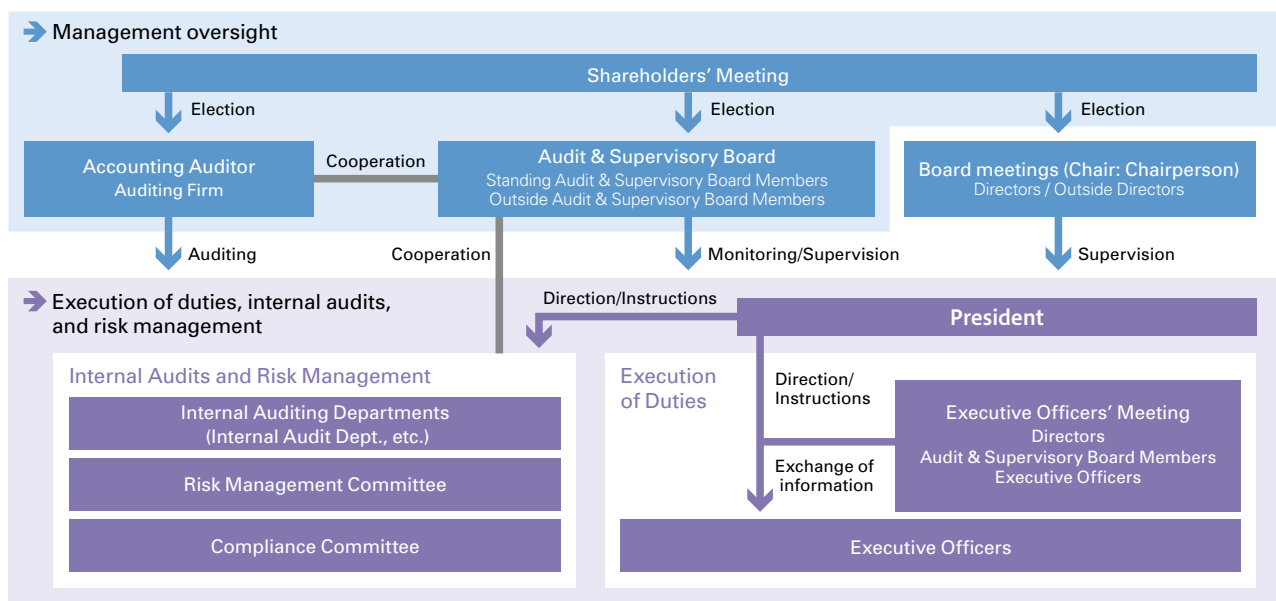
trust of society and be needed by society, and therefore, we are establishing efficient and effective structures for achieving management that are highly compatible with society and the environment and for addressing risks facing management, including rigorous compliance.

## Management System

Our company is a company with a Board of Corporate Auditors. As of June 24, 2019, 10 directors (of which three are outside directors) and four corporate auditors (of which two are outside corporate auditors) had been appointed. The Board of Directors is chaired by the chairperson and the representative director. In addition, we have adopted an executive officer structure, in which executive officers, who are appointed by the Board of Directors, are responsible for executing their assigned tasks under the direction of the president based on the policies approved by the Board of Directors. As of June 24, 2019, 17 executive officers (including six who serve concurrently as directors) had been appointed. All of the aforementioned directors, auditors, and executive officers are over the age of 50, and include 24 men and one woman, with a female board member ratio of 4%. The Board of Directors deliberates on and selects candidates for the positions of director and auditor from among appropriate persons in terms of a comprehensive assessment of their business performance, knowledge and experience, personality, views, and motivation, among other factors, so that the right person is selected for the job. Based on this, directors and

auditors are appointed by resolution of the Shareholders’ Meeting. At its monthly meetings, the Board of Directors renders decisions on important operational matters and receives monthly performance reports and reports on progress regarding important operational matters from each of the directors. The chair also holds hearings on the opinions of and reports from corporate auditors to ensure that a thorough discussion is carried out. In the case of conflicts of interest involving any director, potential conflicts of interest are required to be reported in advance to the Board of Directors to obtain its approval, with reports to be given on the propriety of this after the fact. Executive officer’s meetings, which are comprised of directors, executive officers, and auditors, are held once a month. In these meetings, notification is provided of the policies and important matters decided by the Board of Directors, performance reports and reports on the implementation status of operational matters are given by each executive officer, and reviews of and information on important matters are shared. The remuneration of directors consists of monthly base pay and a bonus. The monthly base pay is fixed based on one’s job title,

### Structure of Corporate Governance (as of June 24, 2019)



[Link](#) → Corporate Governance Report



while the amount of the bonus is determined according to the Company's consolidated business performance during the fiscal year, in order to raise directors' motivation to achieve the fiscal year business plan. The annual amount of the monthly base pay and bonus is determined within the total amount of remuneration approved by the Shareholders' Meeting. Decisions on the amount of monthly remuneration paid to each individual director are entrusted to the representative directors. The amounts paid to each position of chairperson, president, senior managing executive officer, managing executive officer, and executive officer are set. The net amount to be paid for bonuses is determined by the Board of Directors. Allocations of bonuses are entrusted to the representative directors, and the net amount paid is calculated by multiplying a fixed multiplier against business profits. The amount paid to each individual is calculated by multiplying a fixed multiplier determined according to the person's title. Non-executive outside directors are only paid monthly base pay. The remuneration of corporate auditors consists of base pay

(monthly pay). The net amount and the amounts paid to each individual are determined by consultations with the corporate auditors within the total amount of remuneration approved by the Shareholders' Meeting.

The Appointment and Remuneration Advisory Committee has been established to make decisions regarding the appointment of directors and the amount of their remuneration and so forth. It is a voluntary committee that is comprised of independent outside directors (this refers to those outside directors of the company for whom notification has been submitted to the Tokyo Stock Exchange of their position as independent officers) and the representative directors. This Committee holds deliberations over candidates for the role of director submitted by the representative directors, as well as the total annual amount of monthly remuneration and bonuses paid to directors and the amounts paid to individuals. It then reports its findings to the Board of Directors based on the results of these deliberations.

## Internal Control

The Company has systems in place for ensuring appropriate operations in accordance with its business philosophy. In accordance with the Basic Policy on Internal Control Systems drawn up by the Board of Directors in May 2006, we periodically review the systems and promote various activities to enhance internal control.

With respect to internal control over financial reporting, based on the Company's Basic Rules and Regulations for Internal Control over Financial Reporting, 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, and correction, and

ensure appropriate and timely disclosure of corporate information. The Comprehensive Guidelines for Internal Control in Consolidated Subsidiaries covers the items that 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 as of March 31, 2019 was assessed and deemed to be effective by Internal Auditing Departments. In addition, as a result of the accounting auditor's audit, it was confirmed that the internal control report presents fairly the result of assessments of internal control over financial reporting.

[Link](#) Basic Policy on Internal Control Systems

## Compliance



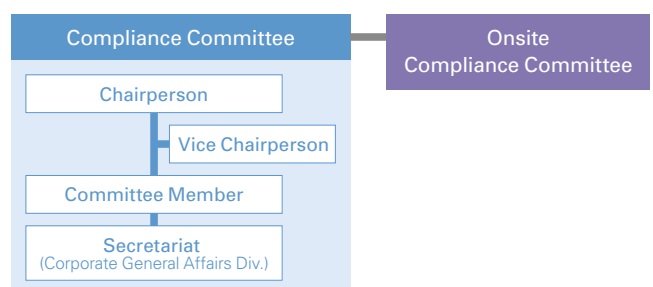
We are strengthening compliance as one part of the foundation underpinning our business activities. These efforts will contribute to Sustainable Development Goal 16: Peace, Justice and Strong Institutions.

## Compliance System

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

As part of the framework to ensure the appropriate conduct of business by directors and employees, the Company 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.

### Compliance System



## Code of Conduct for Employees

Our Group's Code of Business Ethics and Conduct is a booklet that explains the fundamental policy in the Group's Business Philosophy along with Our Code of Conduct, established as a set of standards guiding employees during their day-to-day work to ensure the Group engages in mistake-free business activities. This booklet is regularly used in e-learning sessions and read aloud at workplaces to make the information therein known to all.

The current version of Our Group's Code of Business Ethics and Conduct was revamped in October to 2017, taking into account the latest worldwide trends in customer satisfaction, SBPS, quality control, health and safety initiatives, as well as legal compliance. It has also been translated into seven languages.



The booklet on Our Group's Code of Business Ethics and Conduct

## Articles for Emphasis in Compliance

Workplaces in each department apply compliance to daily operations, decide on the key items for compliance and each prepare Articles for Emphasis in Compliance. Although the Articles differ among workplaces, they are displayed prominently and confirmed with all employees periodically by having them read aloud in unison. Our subsidiaries and affiliates, in Japan and overseas, also undertake similar activities.

## Compliance Education Using Cartoons

Every month, the Company's internal publication contains a fourframe cartoon about compliance under the title "The Way to Become a Compliance Master." This cartoon explains compliance in an easy-to-follow style. Past cartoons have been compiled into two booklets, which were distributed to employees to raise awareness of compliance.



Mamoru-kun joined the company 17 years ago. He's a very active mid-level employee, and everyone relies on him. Mamoru-kun is able to offer appropriate advice throughout the company as a compliance master, which is especially appreciated given the spate of corporate scandals hitting Japan recently.

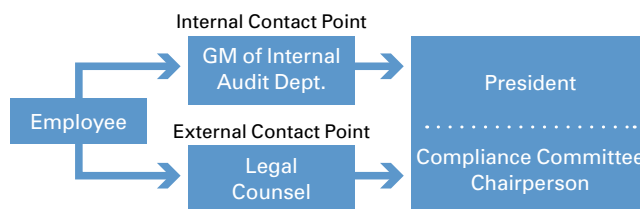
## Whistleblower System

We have established a system that enables the Group's employees who have discovered a compliance violation, or suspect that there may have been a violation, to report the matter directly to a designated contact point, on the assumption that reporting to a direct supervisor is difficult. In addition to having an internal contact point at the Internal Audit Dept., employees with such information to disclose can elect to report externally via designated legal counsel. Employees can report anonymously, and the privacy of whistleblowers is rigorously protected to ensure that they are not placed at a disadvantage as a consequence of reporting violations.

In fiscal 2018, there were zero cases reported, as there were no reports related to discrimination, child labor, forced labor, improper accounting, corrupt practices, or improper or illegal conduct, including violations of antitrust laws, or matters with a

considerable negative impact on society. Additionally, subsidiaries and affiliates in Europe, North America and China have set up individual contact points, giving consideration to the local culture and legal customs, and when necessary, the head office of our company will also step in to address matters reported to these local contact points.

### Flow of the Whistleblower System



## Monitoring

In accordance with the Basic Policy on Internal Control Systems, the Internal Auditing Regulations, the Basic Rules and Regulations for Internal Control over Financial Reporting, the Manufacturing Auditing Regulations, the Security Trade Control Regulations and other company regulations, the Internal Audit Dept., Corporate EHS Promotion Dept., Corporate General Affairs & Legal Dept.,

and other departments involved in internal auditing, audit and assess the compliance of the Company and its subsidiaries and affiliated companies, both in Japan and overseas. This is done mainly by means of site audits, at the actual sites, and written audits, via inspections of the results of self-audits, by the departments being audited. Audits and assessments are

conducted from the standpoint of whether the operations of departments are in compliance with relevant laws and conform to various standards. Departments where issues are identified are required to submit written reports detailing actions taken to resolve the issues.

In fiscal 2018, compliance auditing and assessment was

conducted from the standpoints of environment, human rights, occupational health and safety, provision and use of products and services, management of customer information and data, proper accounting, and fair trade, with no significant violations of laws or regulations.

## Risk Management



We are strengthening risk management as one part of the foundation underpinning our business activities. These efforts will contribute to Sustainable Development Goal 16: Peace, Justice and Strong Institutions.

### Risk Management Structure

Our company views risks associated with its business from a broad perspective and is committed to always taking action from a safety standpoint, even with issues that have yet to be scientifically demonstrated. To prevent potential risks from materializing and to minimize losses, the Company has established the Risk Management Committee, which operates on a permanent basis and whose responsibilities are Groupwide in scope.

We instituted our Basic Risk Management Regulations, which establish the fundamental policy regarding the Group's risk management. The Regulations require precise management of

diverse risks and implementation of appropriate measures. In fiscal 2018, the Risk Management Committee convened on four occasions to take up measures to protect personal information, security export controls, the internal reporting system, measures against quality complaints, and more in working towards mitigating and eliminating the associated risks.



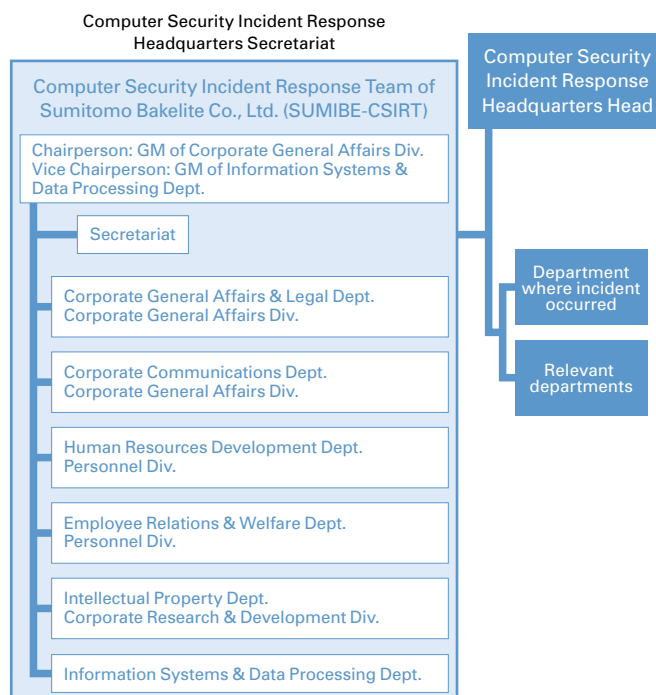
Risk Management Committee

### Information Security

We retain an extensive array of personal information on customers, shareholders, employees, and others. In addition to personal information, we also retain trade secrets and other confidential information relating to our business partners. All of this information in our possession is important and must be protected. Therefore, we are committed to ensuring that this information is never leaked.

We also have measures in place to address computer security incidents (cyber attacks, phishing sites, illegal access, malware infections, DoS, and others) in order to prevent information leakages and improve the security of the information systems we operate. In the event of a computer security incident, relevant departments such as the Corporate General Affairs & Legal Dept., Information Systems & Data Processing Dept., Intellectual Property Dept., and Corporate Communications Dept. work together to address the situation.

### System for Addressing Information Security Incidents



# CSR Procurement



We are implementing CSR procurement as one part of the foundation underpinning our business activities. These efforts will contribute to Sustainable Development Goal 12: Responsible Consumption and Production.

## Basic Approach

Our company strives to ensure compliance with the laws, regulations, and social norms of Japan and the other countries and regions in which it operates. We also require our business partners to observe these standards of fulfilling their social responsibilities given the changing social expectations placed in companies. In principle, we conclude a basic contract with each business partner we purchase from, which 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.

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 and Green Procurement Guidelines are posted on the Company's website.

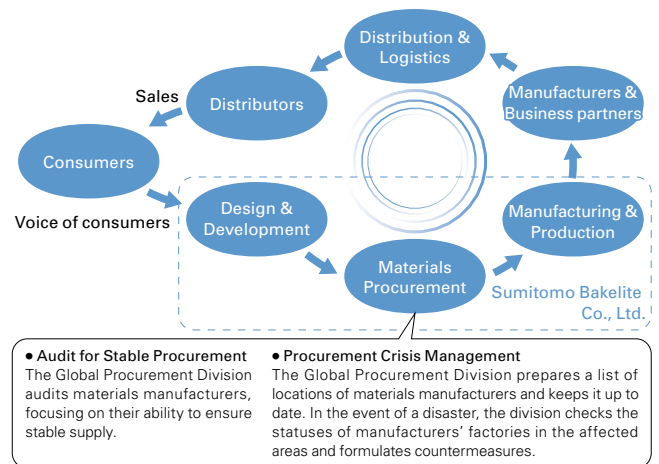
In October 2015, we amended our procurement policy. The new procurement policy is now published in Japanese, English, and Chinese. Given the standards of the Responsible Business Alliance (RBA)\*<sup>1</sup> Code of Conduct (formerly the EICC Code of Conduct) and changing frameworks for general business dealings, we are

working to observe this policy in our procurement activities, and we require our business partners to do the same, too.

\*1 See the glossary on page 78.

[Link](#) Procurement Policy

## Our Group's Supply Chain



## CSR Survey of Suppliers

In fiscal 2018, we conducted a CSR survey on 53 suppliers who handle specialty raw materials used in products that account for 80% or more of the Company's sales, and who were excluded from our CSR survey carried out in fiscal 2016. The survey itself is based on the sample provided by JEITA, with the addition of items taking into consideration the OECD Due Diligence Guidance for conflict minerals and the requirements of the RBA Code of Conduct (formerly the EICC Code of Conduct).

The CSR survey for suppliers involves a self-assessment on a scale of one to five covering eight fields including overall CSR, human rights and labor, health and safety, the environment,

fair trade and ethics, quality and safety, information security, and social contributions. After collecting and confirming the responses of each survey, we found that the average score was 4.4, with no suppliers asked to make improvements owing to scores of less than 2. In fiscal 2019, we plan to sequentially visit suppliers covered in the fiscal 2016 and fiscal 2018 surveys that handle specialty materials and partners who have not formulated business continuity plans (BCP) to survey their ability to supply materials in a stable manner. If suppliers are found to score below the required threshold based on the results of the survey, we plan to ask these suppliers to make improvements.

## Selection of Business Partners

When selecting new business partners, the decision to commence transactions is made based on fair and impartial judgment after applying the criteria established by the Global Procurement Division. When commencing transactions, we check whether the Act against Delay in Payment of Subcontract Proceeds, etc. to Subcontractors applies and if it does, we commence the transaction in accordance with this law and the relevant company rules. If we find that this law applies to existing transactions, we immediately take measures to ensure the legality of these transactions under this law.

We have established company rules requiring that we check whether new raw materials comply with chemical substance controls both domestically and internationally, and new raw materials are not adopted unless they conform to these controls. Relevant departments internally work closely together to investigate and make sure that the Company does not violate chemical substance controls.

We are convinced that it is important to establish a relationship of equals based on trust with every business partner and that the transactions should be beneficial to both parties.

# Environmental Management



We are actively working on environmental management as an issue that ensures harmony with the natural environment. These efforts will contribute to Sustainable Development Goal 13: Climate Action.

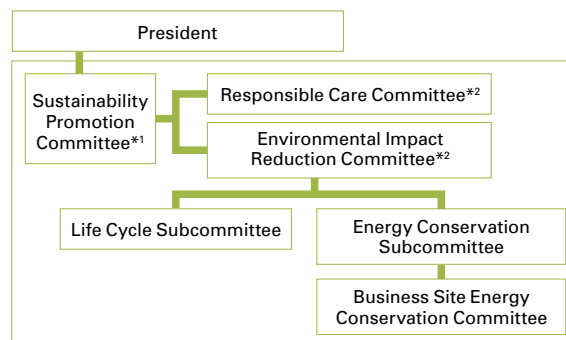
## Environmental Management System

Our company relies upon the earth's natural resources and energy in order to do business. However, doing business will generate garbage and air and water emissions. For this reason, we believe it is important for the Company to adhere to environmental laws and regulations, conduct business in an environmentally friendly manner and engage in initiatives that reduce the environmental impact on the entire society through our products and services.

The entire our group works to conserve the environment under its Responsible Care Policy, with the ultimate goal of contributing to the development of a sustainable society.

To actively reduce environmental impacts, conserve biodiversity, and prevent soil and groundwater pollution, our Responsible Care Committee and Environmental Impact Reduction Committee take the lead in checking compliance with environmental laws and regulations as well as conducting environmental assessments throughout the entire life cycle, from R&D to raw materials procurement, production, sales and final disposal. Based on the results, each workplace and work site take appropriate actions.

### Environmental Management System Diagram



\*1 The Sustainability Promotion Committee is a committee that is chaired by the president, and was launched in April 2019. See pages 28 and 29 for details.

\*2 The above system diagram is just an excerpt of our committees related to environmental management. See page 29 regarding our Responsible Care Committee and Environmental Impact Reduction Committee.

## Activities of the Environmental Impact Reduction Committee

The Environmental Impact Reduction Committee recaps each year's progress toward medium- to long-term environmental targets at the end of the fiscal year and determines the targets for the following fiscal year. Two subcommittees were established within the Committee in order to achieve its objectives, and these subcommittees work to reduce our environmental impact.

The Life Cycle Subcommittee continues to focus on life cycle assessments (LCA) at all R&D departments with the aim of establishing production systems with minimal environmental impacts through scientific, quantitative, and objective assessment of environmental impacts, from the R&D phase onward, under the Policy on Responsible Care Activities. Another priority is the fostering of researchers and development engineers capable of performing LCA and instituting energy conservation, with efforts made to increase the number of researchers to 23 people. In addition, it has worked to expand the number of environmentally-friendly products as well as evaluations of model products to serve as LCA baseline products.

In fiscal 2019, the Life Cycle Subcommittee will work to enhance educational opportunities, expand the number of environmentally-friendly products, and collect Scope 3 baseline data for horizontally deploying LCA evaluations on baseline products.

The Energy Conservation Subcommittee worked to establish, across all business sites in Japan, a mechanism for continuously soliciting and trying out ideas for saving energy through such means as voluntary implementation initiatives in business sites. In fiscal 2018, the subcommittee successfully reduced energy consumption by as much as 2,396 kL (92,883 GJ) in crude oil

equivalent, or 4,630t-CO<sub>2</sub>, compared with fiscal 2017, primarily by reducing urban gas and electricity consumption. Furthermore, the subcommittee established and successfully achieved targets by carrying out unique activities to conserve electricity in the summer and winter months. Outside of Japan, the subcommittee worked to ensure a similar level of activities as in Japan and continued to promote the roll out of activity methods and best practices.

The subcommittee has established an energy conservation target for fiscal 2019 too, and will continue efforts aimed at achieving energy consumption reduction plans at the workplace level. In particular, the subcommittee will focus on creating a system across business sites in Japan for sharing practices for reducing energy consumption and technical information related to energy saving in order to improve the level of energy-saving technology throughout the Company; and having the mother plants in Japan provide technical support to their affiliated sites through a tie-up with the Company-wide Energy Conservation Secretariat.



LCA training in progress

# Material Flows and Investments in Environmental Protection

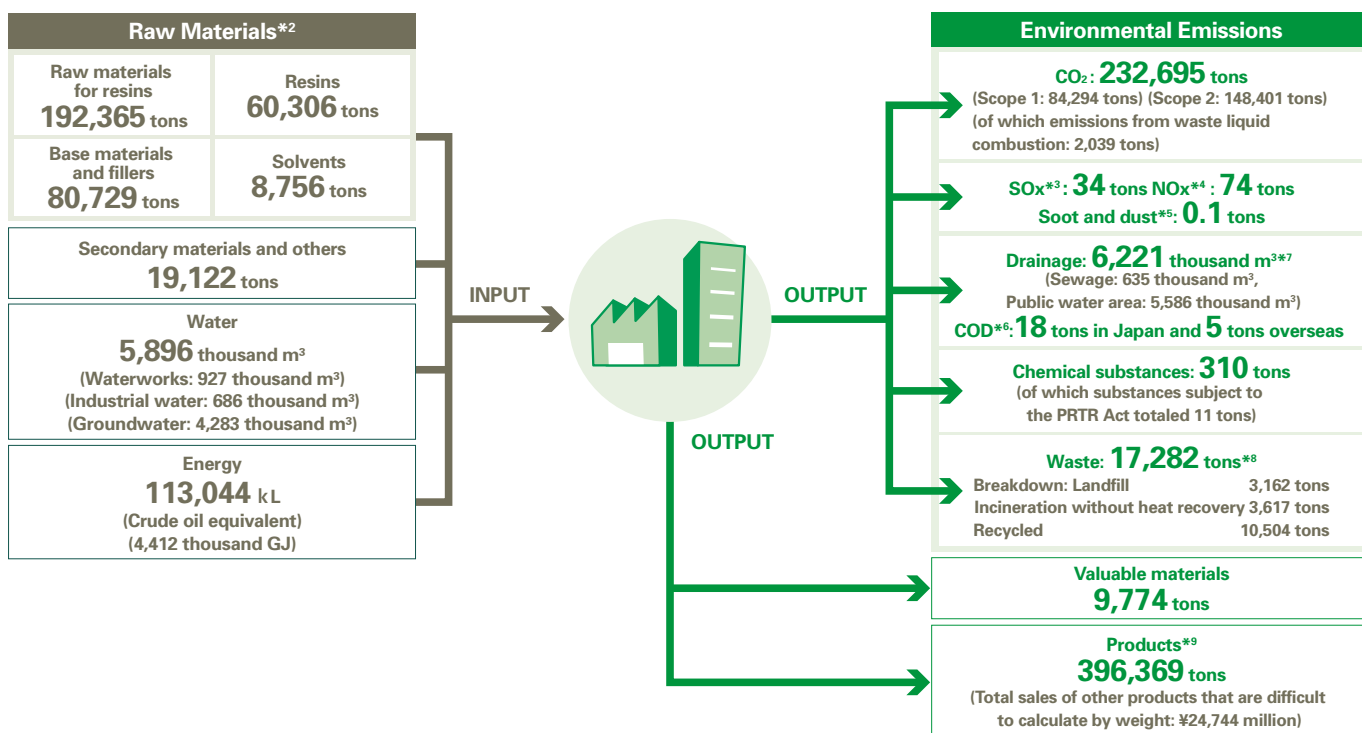


We are actively working on material flows and investments in environmental protection as an issue that ensures harmony with the natural environment. These efforts will contribute to Sustainable Development Goal 13: Climate Action.

The figure below shows inputs, including raw materials and energy, and outputs that are products and emissions released into the environment. The Group is working to minimize its impact on the environment by means of waste reduction and resource saving through promoting more efficient use of raw materials, energy, and water. Starting from fiscal 2018, our inputs have increased as a result of adding purchases of some secondary materials and the like into the calculations. In addition, as it has come to light that some overseas business sites are performing energy recovery using the heat generated when waste is incinerated, they were excluded from calculations of waste emissions. In fiscal 2019, we will make progress with replying to the climate change program of the CDP\*1 in order to provide further disclosures of our initiatives for climate change.

\*1 See the glossary on page 78.

## Material Flow



\*2 The ratio of renewable raw materials to total raw materials used is small at the current point in time, but we will continue to work on ways to increase this ratio.  
 \*3,4,5, and 7 See the glossary on page 78. SOx, NOx, and soot and dust are calculated using the company's own formula based on exhaust gas readings and fuel usage amount, among other variables. Since methods of calculating emissions of soot and dust differ among countries, this figure is compiled solely for business sites in Japan at present. COD is calculated based on the measured concentration and drainage volume. Data on overseas COD covers sites that measure COD within drainage. Data for overseas sites are stated separately because the types of oxidant (potassium dichromate is mainly used overseas) used for measurement differ from those used in Japan.  
 \*6 Drainage volume is determined by calculating drainage into sewages based on the breakdown of total usage. Drainage into public water areas is calculated using readings from flow meters installed at business sites; while water usage volume is used for business sites without flow meters.  
 \*8 The volume of hazardous waste found in our total waste volume came to 7,213t (based on the definitions used by each country). The volume of hazardous waste is not subject to assurance.  
 \*9 The volume of products shipped and value of products sold are not subject to assurance.

## Investments in Environmental Protection

Our group has compiled data annually on the amounts of investments in environmental protection of all Group companies in Japan since 2000. For fiscal 2018, in total 510 million yen in investments were made and measures to conserve energy were taken by means of increasing the efficiency of power supplies, recovering heat from the incineration of biogas and waste solvents, and so forth. These contributed to continuing to achieve average annual reductions of 1% or greater of energy consumption per unit of output, which is a requirement of the Act on the Rational Use of Energy (known as the Energy Conservation Act).

### Amounts of Investments in Environmental Protection in Fiscal 2018

Category	Investment amounts (millions of yen)
Emissions control	79
Energy saving	433
Waste reduction, recycling, and treatment	1
Total	514

\* Data covers the time period and business sites in Japan listed on page 2.

# Medium- to Long-term Environmental Targets and Performance



We formulate medium- to long-term environmental targets as an issue that ensures harmony with the natural environment. These targets will contribute to Sustainable Development Goal 13: Climate Action.

## Medium- to Long-term Environmental Targets

We have established a new medium- to long-term environmental plan starting from fiscal 2018 and ending in fiscal 2030, and are promoting activities based on this.

In particular, we have formulated targets for reducing greenhouse gases that are based on the following.

- Response to sustainable development needs shared by the international community with 2030 as the target year established in the SDGs approved at the UN Summit in September 2015.
- Response to the greenhouse gas reduction target for fiscal 2030 indicated in the Japanese government's INDC in COP21.
- Response to the Act on the Rational Use of Energy and the Act on Promotion of Global Warming Countermeasures.

In addition, we are focusing our efforts on the reduction of greenhouse gas (CO<sub>2</sub> emissions) linked with the Japan Business Federation (Keidanren)'s Commitment to a Low Carbon Society, which we have participated in through the Japan Chemical Industry Association. Furthermore, as we have done in the past, we have set targets for reducing material loss (waste and valuable materials) and chemical substances emissions, and are promoting initiatives to systematically reduce our environmental impact.

### Initiatives at Business Sites in Japan

CO<sub>2</sub> emissions from our domestic business sites continued to decline from the previous year as a result of each business site actively promoting energy conservation. We will continue to promote energy conservation activities in aiming to achieve our medium-term targets. Material loss continues to decline thanks to waste identification and reduction at plants through MFCA\*1 carried out at each business site.

While the reductions in fiscal 2018 came to a bit of a standstill, we

expect to make additional progress with reductions starting from fiscal 2019 onward. Moving forward, we will continue to improve our resource usage rate and promote the effective use of raw materials by means of curbing material loss.

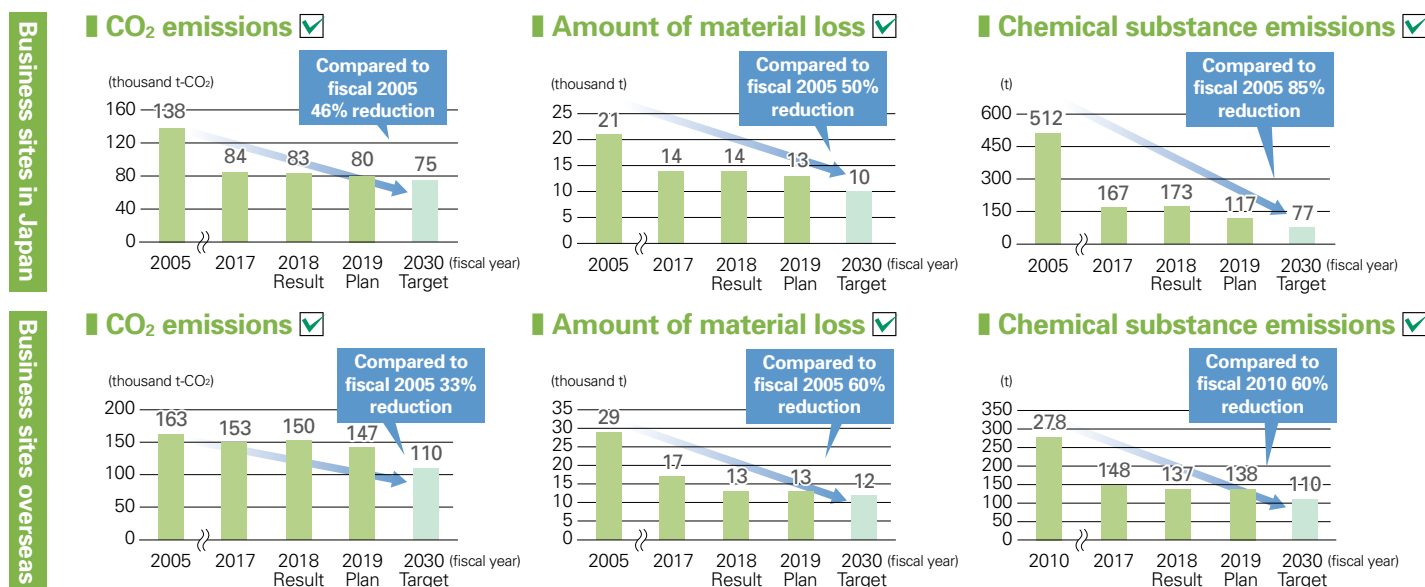
Chemical substance emissions increased temporarily due to the capacity shortage of processing equipment owing to the increase in production at certain business sites. However, they are expected to continue falling from fiscal 2019 onward as a result of measures such as decentralizing production sites. What is more, the substances subject to the PRTR Act found within said emissions is on a downward trajectory, coming in at 11 tons, as a result of introducing incineration equipment, and is expected to fall further in the future.

\*1 See the glossary on page 78.

### Initiatives at Overseas Business Sites

CO<sub>2</sub> emissions at overseas business sites fell compared to the previous year due to promoting energy-saving activities at each business site. We will promote further reductions moving forward. Regarding material loss, it became clear that some of our overseas business sites were recovering heat energy when incinerating waste, and so our material loss fell relative to last year as a result of excluding this from our calculations. Moving forward, these sites will continue with MFCA activities similar to those in Japan in aiming to reduce this further.

We reduced emissions of chemical substances compared with last year by reducing consumption at each business site and introducing exhaust combustion equipment. For the future, we will move forward in reducing this to an even greater extent by further cutting consumption and optimizing the operating conditions for the exhaust combustion equipment at each business site.



\*Note: See the business sites listed on page 2 about the boundary.

\*For definitions and the calculation method of CO<sub>2</sub> emissions, material loss, and chemical substance emissions, refer to page 74.

\*The total of the 36 substances subject to the PRTR Act included in chemical substance emissions released by the Group's sites in Japan amounted to 11 tons and the total amount transferred amounted to 102 tons. For details of the transfer and release of substances subject to the PRTR Act, refer to the Data Section on page 76.

# Environmental Performance

## Reducing Energy Use and CO<sub>2</sub> Emissions

Our company's energy conservation activities are led primarily by the Energy Conservation Subcommittee of the Environmental Impact Reduction Committee.

Our domestic business sites have been able to continually reduce both CO<sub>2</sub> emissions and energy usage. Similarly, the intensity of energy usage and CO<sub>2</sub> emissions both continue to decline.

At our overseas business sites, energy usage for production was the same as last year, while CO<sub>2</sub> emissions decreased slightly over last year. Basic units per unit output remain on a downward trajectory as a result of the increase in our sales volume.



We are actively working on environmental management as an issue that ensures harmony with the natural environment. These efforts will contribute to Sustainable Development Goal 3: Good health and well-being, Goal 7: Affordable and clean energy, Goal 11: Sustainable cities and communities, Goal 12: Responsible consumption and production, Goal 13: Climate action, and Goal 14: Life below water.

## Disclosure of Scope 3<sup>\*3</sup> Data

In 2015, our group began calculating and disclosing Scope 3 emissions in the supply chain of business sites belonging to Group companies in Japan because of the growing importance of understanding CO<sub>2</sub> emissions covering the entire supply chain.

From fiscal 2018, we have enlarged the scope to cover overseas business sites, as we disclosed data for a total of eight categories including Category 1 "Purchased goods and services". In addition, as with last year, it was also confirmed that three categories including Category 8 "Upstream leased assets" are not applicable. Similar to past years, Category 1 "Purchased goods and services" accounted for a large portion of CO<sub>2</sub> emissions, and this includes the portion from overseas.

From the following fiscal year and onward, we will continue to calculate and disclose data on other categories and work to increase the accuracy of the data for categories disclosed on this occasion as part of our ongoing efforts to reduce CO<sub>2</sub> emissions across the entire supply chain.

\*3 See the glossary on page 78.

## CO<sub>2</sub> Emissions in Certain Categories of Scope 3 and Other Scopes (Domestic and Oversea Sites)

No.	Category	Emissions (thousand t-CO <sub>2</sub> / year)
1	Purchased goods and services <input checked="" type="checkbox"/>	947
2	Capital goods	31
3	Fuel- and energy-related activities not included in Scope 1&2	29
4	Upstream transportation and distribution	83
5	Waste generated in operations	5
6	Business travel	3
7	Employee commuting	3
8	Upstream leased assets	Not applicable
13	Downstream leased assets	Not applicable
14	Franchises	Not applicable
15	Investments	6
Scope 3 Total		1,107
Scope 1 (All direct emissions)		84
Scope 2 (Indirect emissions associated with purchased power and steam)		148

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

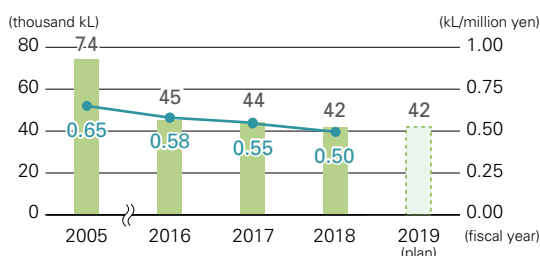
Calculation method: We calculated the amount of emissions in accordance with the Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain Ver. 2.6 issued by the Ministry of the Environment and the Ministry of Economy, Trade and Industry of Japan, using the emission factors stated in the basic database IDEA Ver. 2.2 Carbon Footprint Communication Program developed jointly by the National Institute of Advanced Industrial Science and Technology and the Japan Environmental Management Association for Industry as well as the Emissions Intensity Database for Calculating Greenhouse Gas Emissions of Organizations through the Supply Chain.

\*1 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)

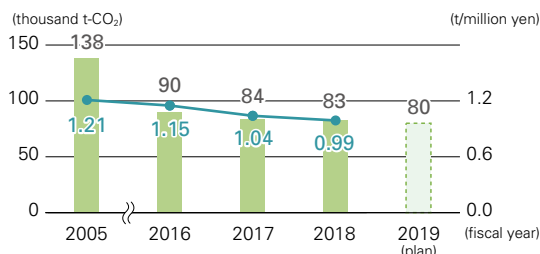
\*2 CO<sub>2</sub> emissions per production amount value are determined using the following equation: CO<sub>2</sub> emissions per production amount value = CO<sub>2</sub> emissions/(production amount x unit price) Also, CO<sub>2</sub> emissions are the sum of Scope 1 and Scope 2 emissions.

\* See the business sites listed on page 2 about the boundary.

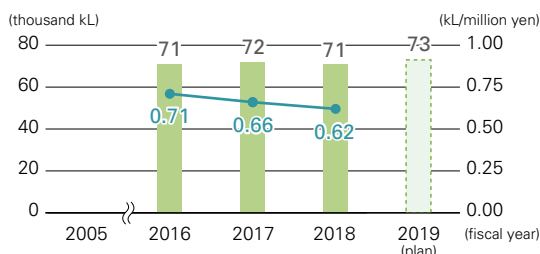
### Energy usage per production amount value\*1



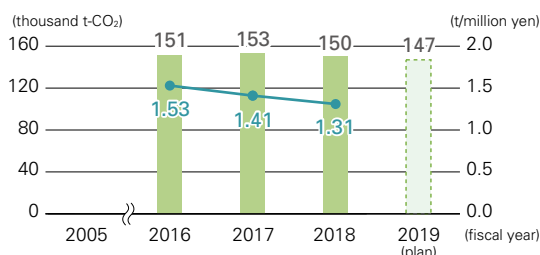
### CO<sub>2</sub> emissions per production amount value\*2



### Energy usage per production amount value



### CO<sub>2</sub> emissions per production amount value





## Reducing Material Loss

Our group is working to increase the efficiency of resource utilization, because it regards the reduction of environmental impacts as an opportunity to improve profitability. Through initiatives in material flow cost accounting (MFCA\*<sup>1</sup>), we are working to reduce not only waste, but material loss, which includes valuable materials.

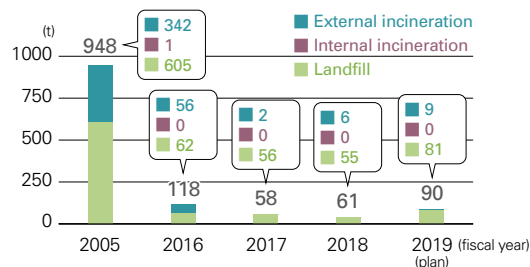
The Group is implementing measures to attain zero emissions of waste in Japan by promoting recycling and reuse instead of disposing of waste in landfills or treating it in simple incinerators without heat recovery in an effort to reduce the environmental impact of our waste.

The graph shows the volume of materials subject to zero emissions measures for the base year of fiscal 2005 and recent years. The volume of externally incinerated waste in fiscal 2018 remained largely the same as that from the previous fiscal year. However, owing to the circumstances with our treatment providers, the amount of waste we dispose of in landfills is slated to increase temporarily in

fiscal 2019 due to the generation of waste that will be switched from recycling to landfill disposal. We intend to continue promoting further reductions through analysis of losses in our processes using MFCA.

\*1 See the glossary on page 78.

### Material Subject to Zero Emissions Measures in Japan



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

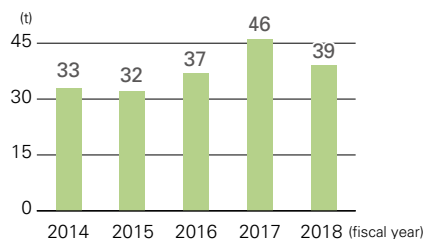
\* Data covers all the business sites in Japan listed on page 2.

## Emissions into the Atmosphere

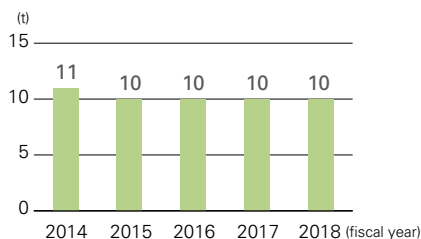
The Group's business sites in Japan have been promoting a shift of boiler fuel from heavy oil to city gas since fiscal 2004. Fuel conversion was almost completed in fiscal 2013 for areas with access to city gas. Emissions of SOx\*<sup>2</sup> and soot and dust\*<sup>3</sup> have been low. Emissions of NOx\*<sup>4</sup> have seen some degree of variance

due to an increase in the nitrogen content of the city gas used and fluctuations depending on the conditions of the combustion of city gas. While these increased in fiscal 2016 and fiscal 2017, they began to fall in fiscal 2018. But on the whole these increases have been and continue to be within expectations.

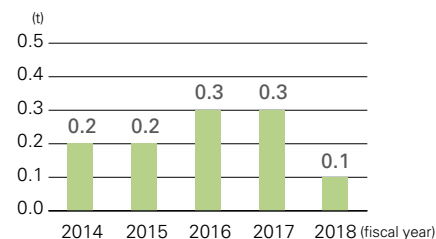
### NOx Emissions



### SOx Emissions



### Soot and Dust Emissions



Note: Data covers all the business sites in Japan listed on page 2.  
\*2,3,4 See the glossary on page 78.

## Emissions into the Hydrosphere

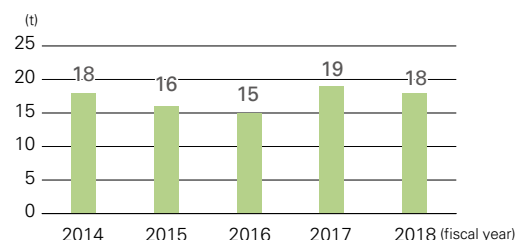
Effluent discharged from plants includes pollutants, which are categorized into industrial and household sewage. Treatment facilities, such as high-concentration phenol recovery equipment and activated sludge treatment equipment, and surveillance systems for constant monitoring are in place to ensure compliance with environmental standards and laws and regulations at the national and local government levels. Additionally risk assessments are conducted on leakages into rainwater that also includes cooling water to prevent sudden and unexpected increases in environmental impacts.

COD\*<sup>5</sup>, which is used as a water quality indicator, had been trending upwards somewhat due to temporary problems with the activated sludge treatment equipment at the Shizuoka Plant,

but this is once again on a downward trajectory as a result of optimizing the operating conditions there. Over the long term it has remained low.

\*5 See the glossary on page 78.

### COD



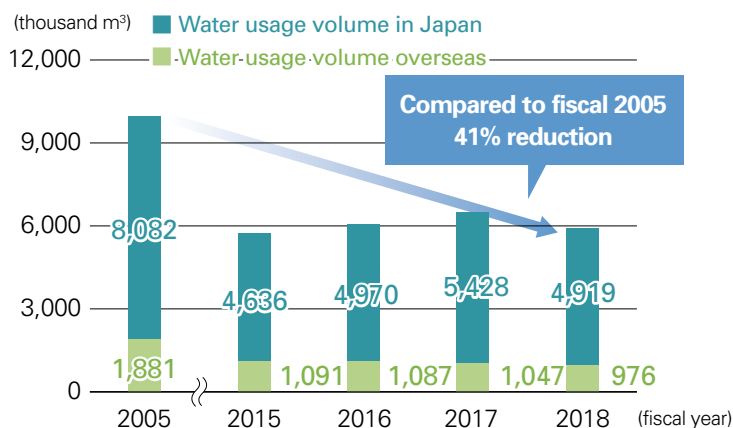
\* Data covers all the business sites in Japan listed on page 2.

## Conservation of Water Resources

Our group's plants and offices use underground water (well water), water from waterworks, and industrial water. In Japan, the rate of ground water usage is high, while overseas the rate of waterworks is relatively higher. The water used in our plants in Japan accounts for 83% of the water used by the entire Group.

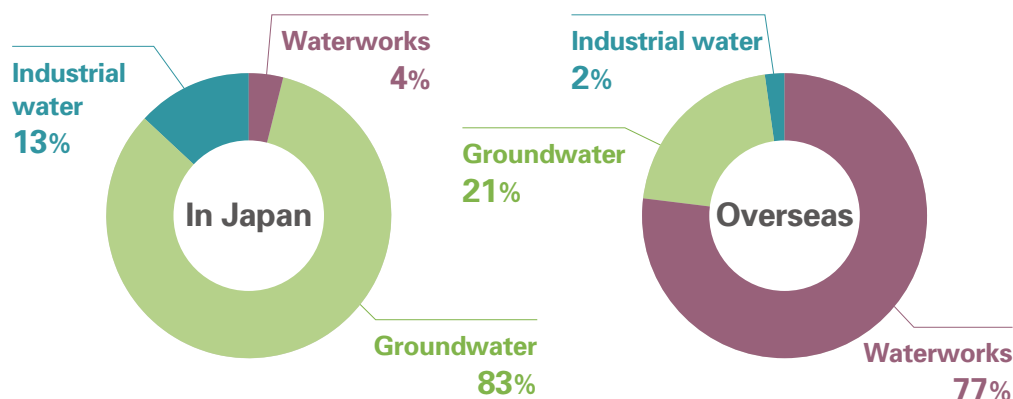
The Group has been continuously working over the years to reduce the amount of water it uses through such measures as increasing the cyclic use of cooling water. In fiscal 2018, our use of cooling water increased owing to increased production at the Shizuoka Plant, which accounts for a large percentage of the Group's water usage in Japan. However, we have been able to achieve substantial reductions by switching cooling water taken in for co-generation to circular use. But overall, water usage by the Group in Japan and overseas has been reduced by 41% compared to fiscal 2005.

### Water Usage Volume



\*Data covers all the business sites listed on page 2.

### Water Usage by Source in Fiscal 2018



### Assessment of Water-Related Risk in Fiscal 2018

Since fiscal 2015, we have been continuously surveying the regional watershed risk of all major plants in the Group (11 sites in Japan and 24 sites overseas). In fiscal 2018, there were significant changes to the WRI Aqueduct\*1 tool, and the rank of districts in China worsened as a result of water resource risks becoming strikingly apparent as a result of economic growth.

Our Group revised risk levels based on the results of WRI studies and independent studies performed on each business site. We compiled the results into a table that contains the risks facing each of the regions in which the Group operates. Using these results, going forward, we will continue working to preserve water resources more effectively.

\*1 A tool providing information on water risks developed and published by the World Resources Institute (WRI).

### Assessment of Water-Related Risk in Fiscal 2018

Region		Risk level				Total	
		Extremely high	High	Medium to high	Low		
Japan	Number of bases			8	3	11	
	Water consumption (thousand m³)			1,177	3,729	4,906	
China (and Taiwan)	Number of bases	1	1	2	3	7	
	Water consumption (thousand m³)	65	8	112	119	305	
Southeast Asia	Number of bases		4	1		5	
	Water consumption (thousand m³)		63	103		166	
North America	Number of bases		1	3	3	2	9
	Water consumption (thousand m³)		5	104	198	79	386
Europe	Number of bases			3			3
	Water consumption (thousand m³)			112			112

## Soil/Underground Water Pollution Countermeasures

### Response to Soil/Underground Water Pollution

Our Group carries out risk assessments relating to leakage of chemical substances at all of our business sites, and we promote both the development and implementation of preventive frameworks. At the same time, when contamination caused by past leakage accidents is confirmed, we actively undertake voluntary surveys and institute countermeasures in order to prevent the environmental impact and health damage from spreading.

### Survey on the closing of the former Kanuma No. 2 Plant and its countermeasures

In April 2017 we closed our Kanuma No. 2 Plant (Kanuma City, Tochigi Prefecture) in order to optimize our arrangement of plants. We performed a voluntary survey on soil contamination based on a soil history survey.

The entire area around the premises was free of contamination from the 27 designated hazardous substances found in the Soil Contamination Countermeasures Act. However, dioxins were confirmed at a restricted location at a workroom in the center of the premises. We reported the results of the survey and a countermeasures plan to Tochigi Prefecture in October 2017, and the cleaning and replacement of contaminated soil with clean soil were carried out pursuant to the Act on Special Measures against Dioxins. In March 2018, we received confirmation of the results of the countermeasures.

In addition, some remnants of oil pollution that had been removed were confirmed in a location where a boiler fuel pipe leak occurred in the past. As such, detailed soil and groundwater surveys were conducted to identify the extent of the contamination. Based on consultations with the relevant authorities, we embarked upon voluntary decontamination work (via a microbial decontamination technique) based on an approximate one-year plan starting from August 2018. The effects of the contamination of groundwater were confirmed in May 2019. The results of this were then reported to the relevant authorities, and in July we completed our series of contamination countermeasures.

No problems with harm to human health or with the preservation of the living environment were observed.

### Results of Soil and Groundwater Studies, Related Actions, 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. 500 mg/kg whereas the standard is 150 mg/kg). No groundwater contamination was detected.	Heavy metals exceeding the standard values of the Soil Contamination Countermeasures Act were detected at the business sites on the left. Monitoring of the groundwater is conducted at these sites every year and their contamination levels have been confirmed to be below standard values.
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.	

## Initiatives for resource recycling

### Marine plastics

When it comes to the problem of marine plastics, we are moving ahead with activities to contribute to reducing plastic marine waste via a number of initiatives based on the Japanese government's Plastic Resource Recycling Strategy. These initiatives include managing the raw materials used and the plastic products we manufacture, promoting the recycling of said products, and developing new products.

We are currently taking part in the Japan Initiative for Marine Environment (JaIME), which was established by major companies and industry organizations in the chemical industry, as well as the Clean Ocean Material Alliance (CLOMA), which was established by a broad range of business operators related to supply chains for plastic products, including those in the chemical industry and distribution/retail industries, with the goal of forming cross-industry

partnerships. Through this, we are working to address a variety of challenges that include further strengthening our initiatives for suitably managing waste and 3Rs for plastic products.

### Recycling

The Group promotes recycling as a means to make effective use of resources. This recycling includes the recovery and recycling of phenol from waste liquid produced by phenolic resin reactions during the product production process, fine grinding of offcuts from phenolic laminated sheets and decorative melamine resin laminate for use as a filler in phenolic resin molding compounds reuse of molded article by-products (sprues and runners) as raw material for molding materials, as well as reuse of excess sludge from activated sludge effluent treatment equipment as compost (organic fertilizer).

# Safety and Security



We are carefully managing occupational safety and Accident Prevention. These efforts will contribute to Sustainable Development Goal 8: Decent Work and Economic Growth.

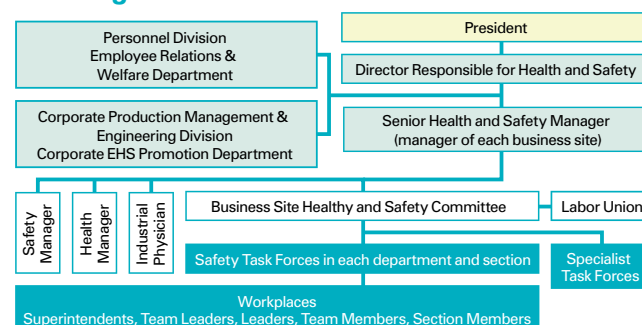
## Occupational Health and Safety Management System

The Group has established a Responsible Care Committee chaired by the director overseeing company-wide safety. This committee determines health and safety activity policies along with important measures for preventing disasters and accidents, and based on these, rolls out health and safety activities across the entire company. Each of our business sites makes efforts closely in tune with the needs of individual workplaces within a company-wide framework and under an accountability structure involving the managers of business sites. At its monthly meetings, the Health and Safety Committee inspects health and safety management activities, ensures thorough compliance with relevant laws and ordinances, and considers capital investments to realize risk reduction, among other actions.

In 2009, the Group's plants and main domestic subsidiaries and affiliates in Japan began pursuing OHSAS18001 accreditation, followed by the Group's overseas subsidiaries and affiliates from

2010. Today, a total of 23 business sites have received accreditation, including five business sites and three affiliates in Japan and 15 affiliates overseas. Alongside with the abolishment of the OHSAS18001 in 2021, work is also ongoing to make the transition to ISO45001.

### Management Structure



## Machinery and Equipment Risk Reduction Activities

All new machinery and equipment installed at domestic production plants and subsidiaries and affiliates from 2008 and at overseas subsidiaries and affiliates from 2009, have been designed in compliance with ISO12100. We repeatedly carry out risk assessments even for existing facilities in an effort to make machinery and equipment fundamentally safer.

## Risk Reduction Activities relating to Chemical Substances

In 2012, we introduced chemical substance risk assessment at plants in Japan and subsidiaries and affiliates worldwide. Since then, we periodically verify our evaluation results, review our risk calculation methods, and advance risk mitigation activities, with the aim of preventing adverse health effects on employees through exposure to chemical substances, and to prevent explosion or fire incidents caused by chemical substances.

## Complaints from Authorities, Local Governments and Local Communities

Our business sites in Japan along with subsidiaries and affiliates worldwide comply with laws and ordinances and address prevention needs in order to preserve the environment. In fiscal

2018, we received one complaint concerning the environment. This was a complaint concerning odors, and we have addressed it in an appropriate manner.

### Topic Amagasaki Plant's Environmental Communication with Residents in the Vicinity

The Amagasaki Plant creates opportunities to communicate with residents in the vicinity on a regular basis (such as inviting members of the local government to attend such sessions), as a part of its efforts to make improvements based on feedback about the environment around the plant. There has been an increase in the number of large-scale apartment blocks near the plant, and there were requests from the residents on this occasion to investigate the cause of odors detected from the residents' verandahs. Soon after receiving the notification about the odors, we collected air samples with the cooperation of the residents at the time the odors were detected, on the very site, and in the presence of the residents. An analysis was carried out on the concentration of malodorous substances used in the plant, and based on the facts, concluded that these substances are not the cause of the odors in this instance. It also provided a valuable opportunity for residents to understand that we are systematically implementing environmental activities aimed at reducing the impact on the environment. We also shared information about the situation with the relevant authorities, and contributed to providing information for improving the local environment. By listening sincerely to the voices of residents with regard to the local environment, we will continue to carry out environmental activities that meet the needs and characteristics of the region.

## Health and Safety Education

We carry out measures to reduce the risks posed by machinery and chemical substances in order to ensure safety on sites where these are used. At the same time, we conduct hazard prediction training as well as initiatives, such as “pointing and calling” and making proposals for reducing near-miss accidents. We have introduced “Safety Gyms” at each production plant to allow employees to learn about the fundamentals of safety. They are able to improve their safety consciousness and learn hazard prediction skills and risk identification skills. Furthermore, we also conduct safety education at every level. This includes safety meetings in which all plant managers participate to share initiatives involving safety activities in which they take a lead and act as a role model, specialized safety education for managers, basic correspondence education on safety for mid-

level employees, and experience-based safety education for new employees. In addition, a Safety Portal Site has been launched online that all employees can access at any time to browse educational materials, information about disasters and accidents, as well as information on the relevant laws and regulations.



Scene of practical training carried out under the education and training program on firefighting equipment.



Experience-based danger education for new hires

## Occupational Accident Figures

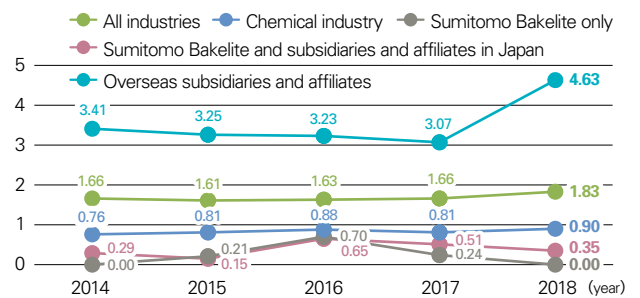
### Trends in the Frequency Rate of Accidents at Sumitomo Bakelite and Subsidiaries and Affiliates Worldwide

The graph on the right shows the overall frequency rate\*<sup>1</sup> of occupational accidents, including those occurring at subsidiaries and affiliates world wide.

Despite an improvement in the frequency rate of accidents domestically in comparison with 2017 figures, the rate increased as a result of the increased number of accidents overseas that resulted in lost workdays.

\*<sup>1</sup> Frequency rate = (Deaths and injuries/total working hours) x 1,000,000  
\* Data covers each calendar year.  
See the business sites listed on page 2 about the boundary.

### Frequency Rate of Occupational Accidents at Sumitomo Bakelite and Subsidiaries and Affiliates Worldwide



### Trends in Occupational Accidents at Sumitomo Bakelite and Subsidiaries and Affiliates Worldwide

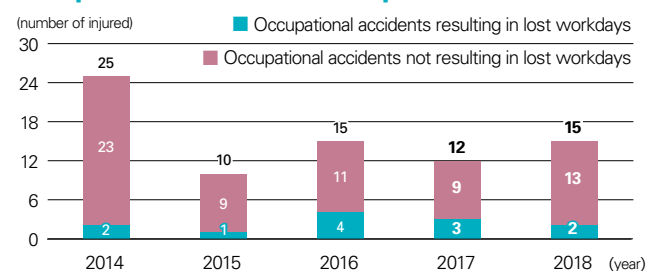
#### Number of Employees Injured as a Result of Occupational Accidents

The graph on right shows the number of employees injured as a result of occupational accidents at our company as well as subsidiaries and affiliates in Japan. Although there was a marginal fall in the number of accidents that resulted in lost workdays in 2018, the total number of employees injured increased due to an increase in the number of accidents that did not result in lost workdays. The Kobe Facility Office achieved five consecutive years of operation without any occupational accidents, while the Amagasaki and Utsunomiya Plants recorded one million consecutive hours of operation without any occupational accidents.

#### Occupational Accidents by Type

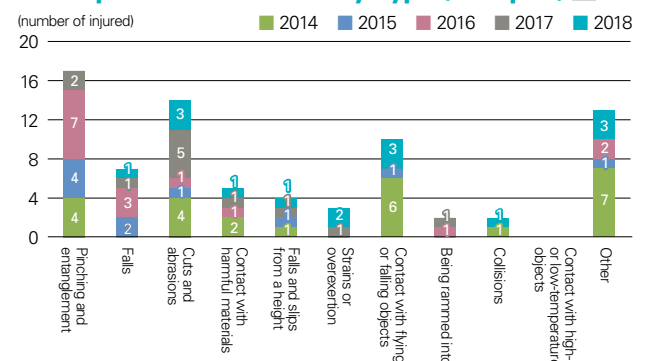
Occupational accidents categorized by type are shown in the graph on right. In 2018, there were no “pinching and entanglement” accidents, partly due to the effectiveness of safety education conducted using experience-based danger education machines. Although no prominent trends were observed with regard to the type of accidents, the majority was made up of accidents caused by unsafe actions taken by workers. By enhancing the materials and data posted on the Safety Portal Site, which was completed in 2018, we will continue with initiatives to enhance the safety awareness of workers.

### Number of Employees Injured as a Result of Occupational Accidents (in Japan)



\* Data covers each calendar year.  
See the business sites in Japan listed on page 2 about the boundary.

### Occupational Accidents by Type (in Japan)

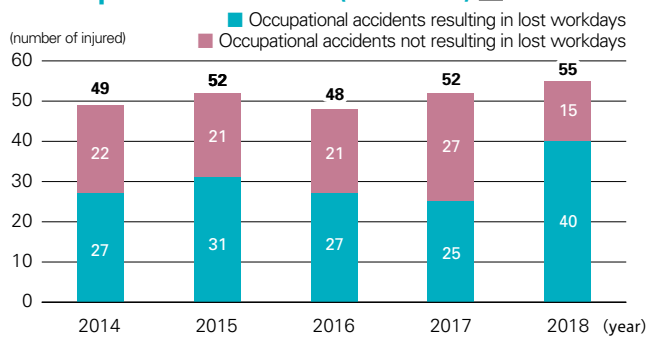


## Trends in Occupational Accidents at Overseas Subsidiaries and Affiliates

### Number of Employees Injured as a Result of Occupational Accidents

The graph below shows the number of employees injured as a result of occupational accidents at our overseas subsidiaries and affiliates. In 2018, the number of accidents resulting in lost workdays increased significantly in comparison with 2017, while the number of accidents not resulting in lost workdays fell by 40%. However, the total number of injured employees increased. Sumitomo Bakelite (Dongguan) Co., Ltd. once again achieved one million consecutive hours of operation without any occupational accidents, reaching a total of two million consecutive hours without any occupational accidents.

### Number of Employees Injured as a Result of Occupational Accidents (Overseas)



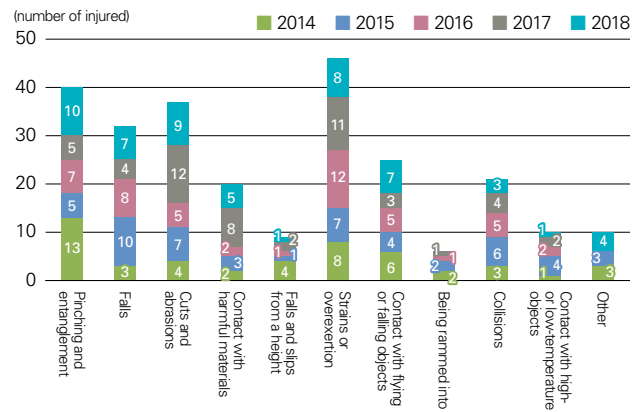
\* Data covers each calendar year. See the business sites in Japan listed on page 2 about the boundary.

### Occupational Accidents by Type

The graph below shows the occupational accidents categorized by type of accident.

In 2018, the following five types of accidents made up 75% of all accidents: pinching/entanglement in machines, cuts by edged tools, falls, improper posture, and flying objects that hit workers. As the number of accidents caused by unsafe actions taken by workers accounted for more than 80% of all accidents, we will promote efforts to raise safety awareness to the same level as Japan, including the use of safety videos, introduction of risk prediction training, and the introduction of versions in multiple languages (English, Chinese) for the Safety Portal Site set up last year.

### Occupational Accidents by Type (Overseas)



## Topic Health and Safety Activities at Each Business Site



Amagasaki Plant achieves one million consecutive hours of operation without any occupational accidents again

The Amagasaki Plant achieved one million consecutive hours of operation without any occupational accidents on September 1, 2018. To commend this achievement, the Plant received a certificate of commendation from Sumitomo Bakelite President Fujiwara.

Sumitomo Bakelite (Dongguan) Co., Ltd. achieves two million consecutive hours of operation without any occupational accidents for second year running

Sumitomo Bakelite (Dongguan) Co., Ltd. achieved two million consecutive hours of operation without any occupational accidents for the second year running on October 28, 2018. For this achievement, the company received a certificate of commendation and a plaque from Sumitomo Bakelite President Fujiwara.



Promerus achieves zero occupational accidents for the year

Of the occupational disasters, accidents, and illnesses that have to be reported to the U.S. Occupational Safety and Health Administration (OSHA) every year, Promerus achieved zero cases reported for 2018.

## Accident Prevention

Accident Prevention is the top priority of all our business sites. Our objective is to make business sites safer and more secure, and thus earn the confidence of the local community, ensure employee safety, and maintain stable supplies of products to customers. The Disaster Prevention Committee is convened and

implements activities systematically with the aim of helping all business sites achieve an accident and disaster-free record. It also conducts drills and puts in place accident prevention measures to minimize damage in the event that an accident does occur.



Firefighting drill at the Utsunomiya Plant



Disaster prevention training at Sumitomo Bakelite Macau



Drill for the recovery of leaked hazardous substances at Sumitomo Bakelite Singapore



Disaster prevention training at the Amagasaki Plant

# Chemical Substance Management



We are carefully managing chemical substances to ensure safety and peace of mind. These efforts will contribute to Sustainable Development Goal 12: Responsible Consumption and Production.

## Chemical Substance Management throughout Product Life Cycles

The targets for 2020 agreed upon at the WSSD\*<sup>1</sup> call for the worldwide and comprehensive management of chemical substances throughout the product life cycle, from development to manufacturing, use and disposal, by 2020 in order to minimize the significant adverse effects on human health and the environment caused by the manufacture and use of chemical substances. Following this trend, the regulatory environment is changing, as new regulations on the management of chemical substances have been established not only in Europe and the United States, but also in Asian countries since 2015. In September 2015, the Sustainable Development Goals (SDGs) were adopted at the U.N. Summit. They comprise 17 goals and 169 targets to be achieved by 2030 to create a sustainable world.

Aimed at achieving the SDGs in 2030, the governments of each country have begun taking proactive actions. The Group (each of our plants and research institutes worldwide) is working on the SDGs through the management of chemicals carried out as part of our Responsible Care activities.

In terms of its management of chemical substances, the Group has a system in place for studying and reviewing chemical substance-related laws and regulations in Japan and throughout the world from the product development phase onward. We manage the chemical substances contained in products in order to comply with the laws of the countries where we operate and to minimize environmental impacts throughout product life cycles.

\*1 See the glossary on page 78.

## Chemical Substance Management System

We are focussing on promoting the use of SDSs\*<sup>2</sup> across the Group not only for disclosing information related to chemical substances under regulatory control in Japan and overseas, but also for disclosing relevant information voluntarily so as to improve the quality of the Group's information disclosure practices. Particularly for the GHS\*<sup>3</sup> system, we have introduced MSDgen\*<sup>4</sup>, and offer SDS and labels that are compliant with the laws and regulations of 40 countries, including Japan, in the official languages of each country. In 2018, we also revised SDS to ensure compliance with the new Proposition 65 requirements enforced by the state of California in the United States, as well as put in place measures to ensure GHS compliance in Mexico.

\*2,3,4 See the glossary on page 78.

### ■ Status of GHS implementation and countries in which we provide SDS

Region	2004	2006	2008	2010	2012	2014	2016	2018	2020
Europe									Compliant with Prop 65* <sup>7</sup>
United States		Compliant with CLP* <sup>5</sup> categories							
Mexico				Compliant with GB/T 16483* <sup>9</sup>					
China									Compliant with NOM* <sup>8</sup>
Taiwan					Compliant with CNS15030 Z1051* <sup>10</sup>				
South Korea						Compliant with Occupational Safety and Health Act* <sup>11</sup>			
Indonesia									Compliant with CLASS regulation* <sup>13</sup>
Malaysia		Compliant with 44/M-DAG/PER/9* <sup>12</sup>							
Vietnam				Compliant with TT-BCT* <sup>14</sup>					
Thailand									
Japan						Compliant with JIS Z 7253* <sup>16</sup>	Compliant with DIV notification* <sup>15</sup>		

Countries in which we provide SDS: 40 (North America/Latin America: 4 countries, Europe: 25 countries, Asia/Oceania: 10 countries, Japan)

\*5 to 16 See the glossary on page 78.

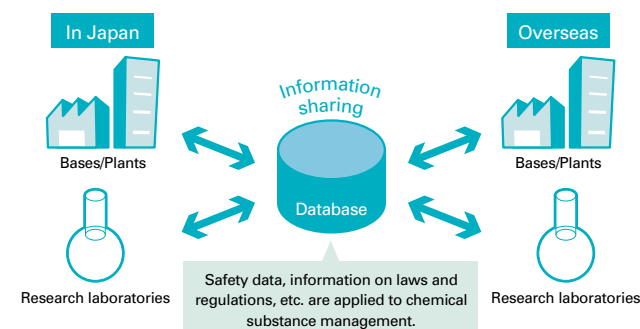
## Chemical Substance Management System

We are creating a comprehensive chemical substance management system to centrally manage all chemical substances contained in products and raw materials handled by the Group. Introducing this system allows us to speed up chemical substance-related investigations (inventory in each country, the safety of products and raw materials, regulatory information, etc.) and to provide accurate information. We are now rolling out the system to plants that manufacture molded articles\*<sup>17</sup> and expanding application of volume tracking management to products for Taiwan and South Korea, in addition to Japan's Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture and Industrial Safety and Health Act as well as Europe's REACH.\*<sup>18</sup> We will continue to enhance our system for managing chemical substances in order to ensure even more meticulous management of these substances.

\*17 "Molded articles" here refers to all molded articles that have a defined shape with dimensions that can be measured. This applies to molded products and parts of devices, electronic components, paper, packaging materials, etc.

\*18 See the glossary on page 78.

### ■ Chemical Substance Management System



# Product Liability

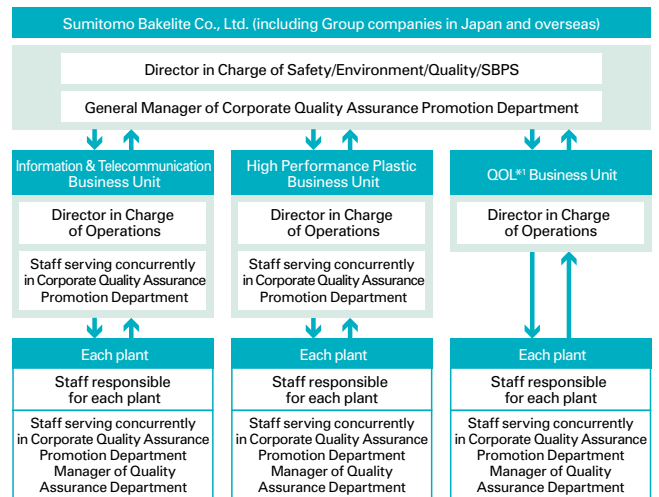


We are addressing product liability as an issue for ensuring safety and peace of mind. These efforts will contribute to Sustainable Development Goal 12: Responsible Consumption and Production.

## The Group's Basic Policy and System for Quality Assurance

The Group has established quality management systems (QMS) based on ISO 9001 and is continuing to acquire relevant certifications (a total of 36 sites have been certified as of May 1, 2019). Recognizing the provision of products and services that customers can always feel satisfaction and peace of mind in using is an important social mission for our company, all relevant departments collaborate on all processes—from product planning, research, design & development, preparation for production, production, sales & service, to quality assurance—with an awareness of the importance of ensuring the safety of products, and create and appropriately implement and management frameworks within which to enhance and maintain product safety and quality. We formulated our Quality Management Policy to ensure that every employee of the Group systematically implements quality assurance initiatives in accordance with QMS.

### Quality Management System



\*1 See the glossary on page 78.

### Quality Management Policy for FY 2019

#### Basic Policy

In mind with Customer First and Quality First, we (all SB Group employees) shall create an efficient workflow of quality formation for fundamental improvement, contributing to increasing the company's profitability and at the same time achieving a sustainable society through SDGs\*:

\*\*\*\*\* One Sumibe\* / Zero Defect\* / Proactive\*\*\*\*\*

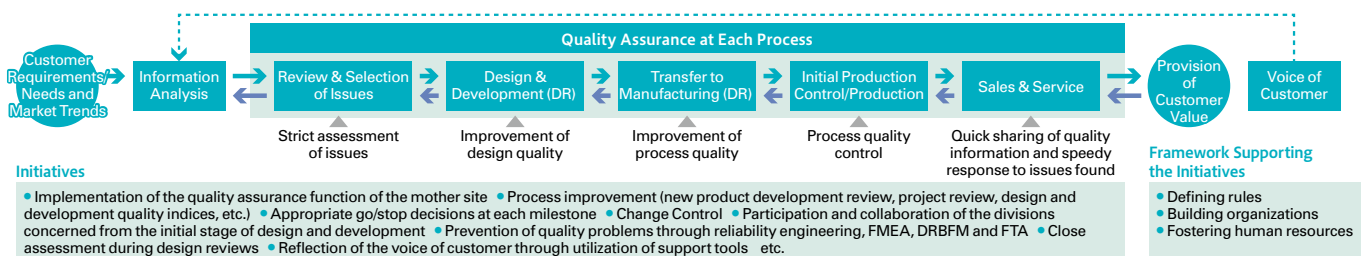
#### Action Plan: SDGs Goal 12. Ensure sustainable consumption and production patterns

- I. Working toward Ensuring Quality that Provides Safety and Peace of Mind (QA Department's Role and Responsibility)
- II. Quality Improvement Activities of Existing Businesses (Complaints Handling Aimed at Improving Customer Satisfaction)
- III. Reducing Risks to New Products or New Businesses
- IV. Improvement of the Entire Total Manufacturing (*Monozukuri*) Process through Daily Inspection and *Monozukuri* Audit
- V. Skill Enhancement to Prevent Risks in Design & Development Process and Each Operational Process

### QMS Certification Received

Certification Standard	Business/products
ISO9001	Quality of life products (packaging films for food and pharmaceutical products, bio-based products, construction materials, waterproofing products, etc.)
	High-performance plastics (included molded articles)
	Semiconductor-related materials
IATF16949	High-performance plastics (included molded articles)
	Semiconductor-related materials
ISO13485	Medical products
ISO15378	Packaging Materials for Pharmaceuticals
FSSC22000	Packaging films for food
AS9100 or JIS Q9100	Aircraft components

## Future State Vision of Appropriate New-Product Development and Commercialization Processes of the Group



## Quality Improvement Activities for Existing Business

We are working to enhance the quality of our existing products through such efforts as ensuring rapid response to complaints, taking measures to prevent reoccurrences of problems, and rigorous 4M change control. Cross-functional responses are

made to rapidly solve not only serious but also minor complaints. In order to prevent new occurrences and recurrence of issues leading to complaints and process abnormality, we use "Why-Why Analysis" and "Further Investigation" to identify what happened,



causes, and countermeasures, among other factors, concerning these issues. This information is organized as knowledge that can be shared and used at any time by relevant divisions.

In fiscal 2018, we continued to build the flow from FTA\*<sup>3</sup>, FMEA\*<sup>4</sup> to QC Process Chart for priority management product, with the

aim of strengthening our system for preventing complaints, and 80% of this workflow has been built. In fiscal 2019, we will move forward on rolling out the workflow laterally to general products aiming for its further establishment.

\*3,4 See the glossary on page 49.

## Reducing Risk Relating to New Business

There is a need to improve (optimize) the output quality (degree of perfection) of product designs and process designs when developing new products and to shorten (minimize) the time required for the development process by minimizing rework.

### 1 Shortening New-Product Development Periods and Improving Work Quality

In new product development, initial plans are often delayed because of the tendency for a variety of problems requiring reworking to arise. To prevent this, we implement the Plan-Do-Check-Action (PDCA) cycle to increase the degree of perfection of design quality and shorten the development period through collaboration of all the divisions concerned from the initial phases. Furthermore, we implement the following to ensure that the problems do not recur in subsequent development work.

- i) Feedback Review Analysis to identify problems through reviews of development processes over time.
- ii) Why-Why Analysis and Further Investigation to identify root causes of the occurrence and out-flowing of problems in terms of technology and management. Why-Why Analysis and Further Investigation are also used to determine why problems were not prevented in terms of organizations, allocation of functions, systems, frameworks, and culture and to identify measures for preventing recurrence and new occurrences.

### 2 Proactive Use of Various Quality Control Techniques

In addition to design review (DR) during each stage of product

design and process design, we conduct Failure Modes and Effects Analysis (FMEA) to predict potential failures or abnormalities by analyzing health and safety risks on people including customers related to our products, along with Design Review Based on Failure Mode (DRBFM) that focuses on changes to the design and changes to conditions and the environment. In turn, we implement risk reduction measures in all processes of DR, FMEA and DRBFM as well as during technical verification at the time of using new raw materials. In addition, we use Fault Tree Analysis (FTA) that rationally analyzes accidents and defects in a hierarchical manner to discover root causes and fundamental solutions for preventing recurrence.

We use FMEA, DRBFM, FTA not only for new product development but also for preventing quality-related problems that tend to occur in the 3H situations (Hajimete: when something is performed for the first time; Henkou & Henka: when there is a change or difference from the previous time; Hisashiburi: when something reoccurs for the first time after a long interval). In fiscal 2018, during the initial development phase of products for new businesses, we continued to carry out an expanded form of FMEA involving experts from outside each applicable business unit in an effort to reduce quality risks.



Quality education (on FTA / FMEA) for second year engineering employees held in June 2018

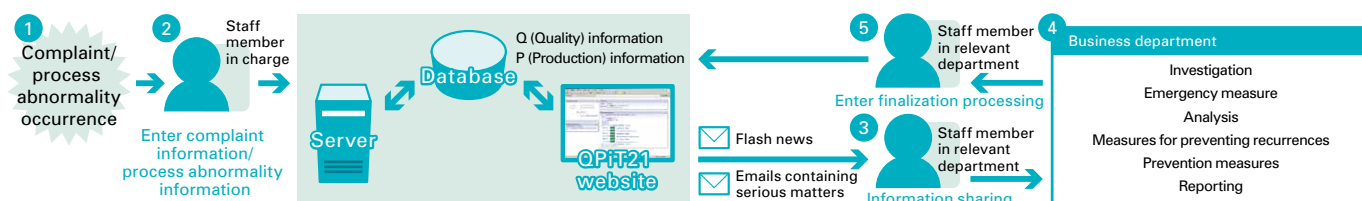
## The “QPIT” System for Processing Quality-Related Complaints

We manage complaints relating to quality using the “QPIT21” system. QPIT21 (Quality & Production information Tools 21) is a system that allows the central management of quality- and production-related information, and it has been built into the Group-wide intranet. The system was introduced in order to accelerate the communication of quality- and production-related information within the Group, facilitate the sharing of information, and encourage the integration and effective utilization of information levels. With this

system it is possible to respond efficiently, rapidly and appropriately to complaints.

In fiscal 2018, we developed a system to monitor the status of responses to incidents that are predicted to become more serious, and began to monitor and manage processes to prevent delays and omissions in responses. In fiscal 2019, we are working on visualizing the effectiveness of complaint reduction activities by developing a system that can constantly monitor and manage the target achievement status visually, including the preparation of graphs that show changes in the target and actual numbers of complaints.

### Complaint Processing Flow



When a complaint or process abnormality occurs, an employee enters the information into the QPIT21 system.

This information is sent to all staff members in charge, and the relevant business units investigate the complaint or process abnormality, and provide an emergency response, carry out analysis, implement measures to prevent recurrences and other similar occurrences, report back to customers, etc.

## Internal Quality Auditing and Daily Inspection/Review

For the quality audit for fiscal 2018, we continued to carry out the ‘Monozukuri’ Audits (see below), a system launched in 2017, which is conducted jointly for the three departments of quality, EHS, and SBPS within the Corporate Production Management and Engineering Division.

The Corporate Quality Assurance Promotion Department inspects and examines operations daily from customers’ perspectives through support of R&D activities at research

departments (participation in DR, cooperation with FMEA, etc.) and support of production activities at each business department (change control, FEMA, FTA, Why-Why Analysis and Further Investigation, participation in quality meetings and DR, maintaining/managing quality information and quality data, and checking the appropriateness of complaint countermeasures, etc.). It also carries out activities to raise awareness about quality improvement.

## ‘Monozukuri’ Audits

### Purpose and method of the ‘Monozukuri’ Audits

Conventional audits that have been conducted for quality, environment, and safety for each business site made it difficult for us to identify the root issues each business site is faced with, due to factors such as insufficient man-hours spent on the audits, inadequate skills of the auditors, and a lack of information provided beforehand.

Furthermore, the internal audits conducted by each business site focused on the management system, and It was not possible to successfully link the activities from the extraction of essential issues to the prevention of recurrence and prevention.

Therefore, in order to resolve these problems, we built an audit system (combining ‘Monozukuri’ Audits and internal audits) that is able to identify the root issues in each business site, correct and improve the situation, and prevent occurrence and recurrence of issues.

- (1) Audits will be conducted in greater detail (review of questions on check sheet) to inspect and cover audit points that could pose or predict problems in terms of quality, EHS, or production that occurred last year.
- (2) Business sites will be inspected jointly by the three promotion departments (quality assurance, EHS, SBPS) within the Corporate Production Management & Engineering Division (‘Monozukuri’ Audits).
- (3) Internal audits conducted by each business site will contain inspection items from ‘Monozukuri’ Audits to enable business sites to correct/improve issues autonomously using the PDCA cycle.
- (4) ‘Monozukuri’ Audits will inspect internal audit results, the status of corrective actions or improvements, and important matters, and also involve follow-ups, etc.

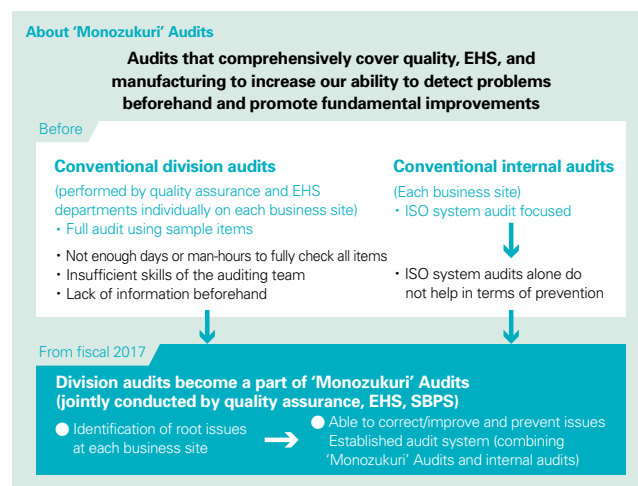
### Results of ‘Monozukuri’ Audits

In fiscal 2018, ‘Monozukuri’ Audits were conducted on three directly managed business sites (Shizuoka Plant, Kanuma Plant,

and Amagasaki Plant) and four affiliate companies (Kyushu Sumitomo Bakelite, Akita Sumitomo Bakelite, the Nara Plant of S.B. Sheet Waterproof Systems, and Yamaroku Kasei Industry) in Japan, while overseas the Audits were carried out in seven business sites in China and Southeast Asia.

By using creative approaches in the internal audits and ‘Monozukuri’ Audits, we were able to improve our ability to identify root issues. As for the issues raised that are linked to the root issues identified, these were disseminated to main business sites in Japan and to overseas business sites where audits were conducted. These business sites then conducted self-inspections, and made corrections or improvements where necessary.

On the other hand, there were also problems caused by insufficient man-hours on ‘Monozukuri’ Audits, and lack of skill among internal auditors and ‘Monozukuri’ auditors. In fiscal 2019, we will work to improve auditing methods and enhance the skills of auditors in order to enhance the effectiveness of ‘Monozukuri’ Audits and internal audits.



Scene of ‘Monozukuri’ Audit being conducted at SumiDurez Singapore Pte Ltd.

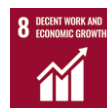


Scene of ‘Monozukuri’ Audit being conducted at Kyushu Sumitomo Bakelite



Scene of ‘Monozukuri’ Audit being conducted at Yamaroku Kasei Industry

# Enhancing Customer Satisfaction (CS)



We are working to enhance customer satisfaction (CS) as an issue impacting society. These efforts will contribute to Sustainable Development Goal 8: Decent Work and Economic Growth.

## CS Promotion System

With customer satisfaction (CS<sup>\*1</sup>) a top priority, we promote “One Sumibe” by conducting company-wide product marketing activities, deepening relationships with customers, and actively promoting collaboration and cooperation within and outside the company. In the past, information, technology, and ideas that could not be shared because each business was divided vertically were gathered, and with the aim of making product proposals and sales that transcend the boundaries of business divisions, a team is formed to make proposals to customers.

We invite customers in an annual conference to listen to their voices, deepen mutual understanding and build trust through questionnaires and other means. Internally, we hold CS discussion meetings annually to share CS activities and enhance awareness

of CS. Each business site and business division creates their own CS Declaration comprised of five principles to suit the nature of its business and environment, all employees continue to evolve. Also, we utilize the company newsletter to convey our philosophy toward CS activities to employees.

\*1 See the glossary on page 78.

### CS Promotion System



### Spiraling up of CS activities



## Promoting One Sumibe Activities

With customer satisfaction (CS) a top priority, we promote “One Sumibe” by conducting company-wide product marketing activities, deepening relationships with customers, and actively promoting collaboration and cooperation within and outside the company. In the past, information, technology, and ideas that could not be shared because each business was divided vertically were gathered, and with the aim of making product proposals and sales that transcend the boundaries of business divisions, a team

is formed to make proposals to customers. In fiscal 2018, we created opportunities for the teams to present the results of their initiatives over the past year, and to share information and engage in discussions. We also created opportunities for learning about products across the boundaries of the respective business divisions. In fiscal 2019, we aim to continue deepening and expanding these activities, as well as to further extend the activities to business sites overseas.

## Utilizing QPiT Information to Enhance CS

We are utilizing various kinds of information accumulated in the QPiT, our Group’s system for managing quality-related information such as complaints and customer requests, to enhance CS. There are common threads within complaints and customer requests and such information can be useful for other divisions.

By analyzing the content and trends of such information and implementing measures to address the issues while building a framework to improve these and sharing these internally, a wide range of divisions can work to achieve the aim of improving CS.

[Link](#) → Page 49 The QPiT system for processing complaints relating to quality

## Dissemination of Corporate Information

In order to help stakeholders gain a better understanding of the Group’s diverse activities, we strive to ensure that all our communications comply with applicable laws, regulations and inhouse rules, and use honest, appropriate, and easy to understand display methods and expressions.

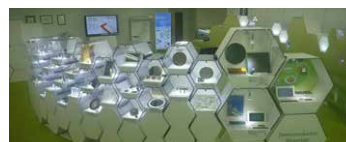
Besides the disclosure of corporate information as mandated by law, we use diverse media to disseminate information, such as press releases, advertising in newspapers and magazines, booklets, as well as advertisements in airports, train stations, Shinkansen carriages, and baseball stadiums,



Advertisement put up from March 2019 on the outfield fence of MetLife Dome, where the Saitama Seibu Lions are based.

signage, along with our website. We made our corporate website compatible with smartphone viewing (Japanese, English and Chinese language versions).

In addition, we display finished products and digital signage that use our products as components or materials at exhibition corners at our business sites and at some product expositions to help customers and business partners understand our products better.



Exhibition corner at the head office



Corner with digital signage displaying products at our head office

# Recruiting and Employment

The Group's business activities would not be possible without its employees.

Recruiting and employment is an important aspect underpinning the continuity of our business operations. We carry out



We are working to enhance the recruiting and employment experience as an issue impacting society. These efforts will contribute to Sustainable Development Goal 5: Gender Equality and Sustainable Development Goal 8: Decent Work and Economic Growth.

recruitment under a policy for the fair selection of talent with an eye on employee diversity. The Responsible Care Committee monitors, reviews and makes changes to our recruitment practices.

## Number of Group Employees and Executive Officers

### Number of Employees in Japan and Overseas (as of March 31, 2019) ✓

	Directors	Executive officers	Employees	Temporary employees*1	Total
Sumitomo Bakelite Co., Ltd.	10	11	1,632	200	1,853
Subsidiaries and affiliates in Japan	21	—	794	156	971
Overseas subsidiaries and affiliates	21	—	3,430	233	3,684
Total	52	11	5,856	589	6,508

\* The number of employees (consolidated) on page 30 includes our company employees who serve as directors of subsidiaries and affiliates.

\* The numbers of directors of subsidiaries and affiliates in Japan and overseas represent the number of full-time directors including our company employees who serve as directors of subsidiaries and affiliates, but excluding those serving concurrently as directors of our company.

\*1 Part-time and casual workers

### Employees by Region/Proportion of male and female employees (as of March 31, 2019) ✓

		Japan	Europe	North America	East Asia	Southeast Asia	Total
Employees	Male	2,120	348	773	751	498	4,490
	Female	306	52	362	542	104	1,366
Total		2,426	400	1,135	1,293	602	5,856

\*The total for Japan includes domestic subsidiaries and affiliates.

### Breakdown of the number of employees in Sumitomo Bakelite and domestic affiliates, by age and by gender (as of March 31, 2019)

		Age 29 or younger	Age 30 to 49	Age 50 or older	Total
Employees	Male	136	1,281	703	2,120
	Female	30	204	72	306
	Total	166	1,485	775	2,426

### Number of Newly Recruited Employees (Including new graduates and mid-career personnel) ✓

	Fiscal 2014	Fiscal 2015	Fiscal 2016	Fiscal 2017	Fiscal 2018	Fiscal 2019 (planned)
Number of people employed	50	38	34	30	40	46
Male	42	31	31	21	33	—
Female	8	7	3	9	7	—

\* Does not include persons forwarded from other companies or employees reassigned from subsidiaries or affiliates in Japan.

\* Includes temporary employees who are not post-retirement hires.

\* Since employee recruitment is gender-neutral, the gender composition of the planned intake of new employees for fiscal 2018 is unknown.

### Breakdown of the number of newly recruited employees in fiscal 2018 (including new graduates and mid-career personnel) (by gender and by age)

	Age 29 or younger	Age 30 to 49	Age 50 or older
Number of Newly Recruited Employees in Fiscal 2018	34	6	0
Male	28	5	0
Female	6	1	0

### Retention of Newly Graduated Recruits (Retention rate three years after hiring) ✓

	Joined in Fiscal 2014	Joined in Fiscal 2015	Joined in Fiscal 2016
Retention rate after three years of employment	93.9%	93.9%	91.7%

\* The numbers in the table represent the rate among newly graduated recruits with at least a bachelor's degree.

\* For fiscal 2016, this indicates the percentage of employees hired on April 1, 2016 who were still employed with the company on March 31, 2019.

### Breakdown of recruitment by the Sumitomo Bakelite group in fiscal 2018, by age, by gender, and by region ✓

	Male	Female	Total	Age 29 or younger	Age 30 to 49	Age 50 or older	Total
Number of persons	456	327	783	349	362	72	783
Ratio of employees as of March 31, 2019	10%	24%	13%	46%	10%	5%	13%

	Japan	East Asia	Southeast Asia	North America	Europe	Total
Number of persons	65	313	53	313	39	783
Ratio of employees as of March 31, 2019	3%	24%	9%	28%	10%	13%

\*Numbers for Japan are the total for Sumitomo Bakelite and its domestic affiliates.

\*Percentages are based on the parameter of the number of employees for each category.

### Employee Turnover and Turnover Rate in Fiscal 2018 (by gender and by age)

	Male	Female	Total	Age 29 or younger	Age 30 to 49	Age 50 or older	Total
Number of persons	57	8	65	14	25	26	65
Ratio of employees as of March 31, 2019	4%	4%	4%	11%	2%	5%	4%

\*Turnover does not include post-retirement hiring.

## Continued employment beyond the age of retirement

Following the passing of the Act on Stabilization of Employment of Elderly Persons, we established a system to enable personnel who have reached the mandatory retirement age of 60 to continue working as contract employees.

By facilitating post-retirement hiring, this initiative harnesses the knowledge, technical skills, and knowhow that employees have accumulated over the course of their careers.

### Continued employment after retirement

	Fiscal 2014	Fiscal 2015	Fiscal 2016	Fiscal 2017	Fiscal 2018
Number of retirement-age employees	34	43	18	18	23
Number of post-retirement rehires	27	31	16	13	20
Rehiring ratio	79%	72%	89%	72%	87%

\* For the rehiring ratio, the first decimal place was rounded to the nearest whole number.

## Regarding Retirement Benefit Obligations

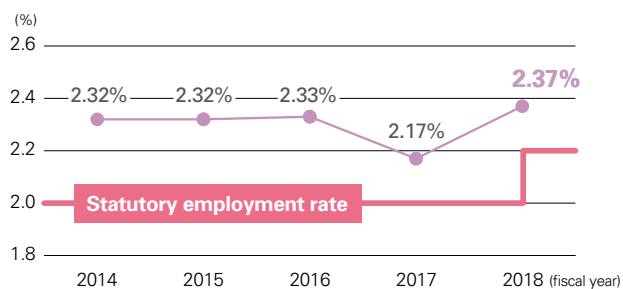
Regarding retirement benefit systems, the Company employs a defined-benefit system in Japan. Overseas, some consolidated subsidiaries concurrently use defined-contribution and defined-benefit systems. The consolidated retirement benefit obligations for fiscal 2018 totaled ¥33.1 billion, ¥31.5 billion of which was for pension funds.

[Link](#) → Securities Report (Yuka Shoken Hokokusho (Japanese only))

## Employment of People with Disabilities

Our company considers the employment of people with disabilities, as stipulated by law, to be an integral part of corporate social responsibility. While giving the necessary consideration to enabling those with disabilities to carry out their work, we endeavor to offer workplaces that are as safe and secure for those with disabilities as they are for others, and that allow employees to continuously hone and cultivate their skills. We are also making continuous efforts to employ new graduates with disabilities by, for example, accepting students with disabilities for internships so as to provide them with opportunities that suit their conditions and workstyle needs. These initiatives are approved, monitored, reviewed and modified by our Responsible Care Committee.

### Employment Rate of People with Disabilities over the Past Five Years (As of March 31, 2019)



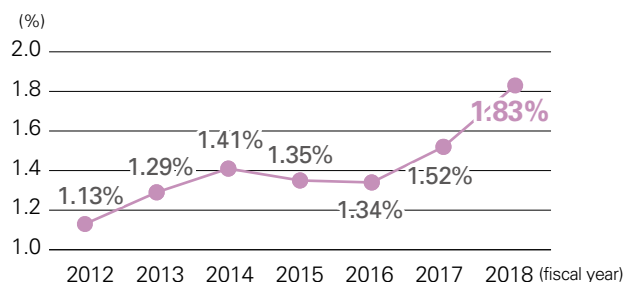
## Initiatives to Promote the Advancement of Women

We acknowledge that it is important for each of our employees to be able to play active their roles and demonstrate their individuality so that we are able to respond to the diverse needs of our customers, and we promote this diversity of talent. Within this, we recognize there are issues that we must actively address concerning the promotion of female advancement, and we are working to provide gender-neutral personnel training and create workplaces in which people can play active roles regardless of their gender. These initiatives are monitored and reviewed by the Responsible Care Committee.

We are carrying out initiatives following the action plan for the promotion of women's advancement that was decided in FY2015. In the four years from April 2016, we are aiming to solve the issues of there being few female management staff and the short length of service of women employed in career track positions. We have set the target of doubling the number of female management staff compared to the end of March 2014. At the end of March 2019, compared to the number of female management staff the previous year there was 0.31 points

increase to 1.83%. We are also offering career education to raise awareness of diversity management in relation to management staff, and to foster awareness of career development for female employees.

### Trends in the proportion of female management staff



\* "Management staff" refers to Sumitomo Bakelite Co. Ltd. employees at or above the level of superintendent and engineer, excluding executive officers.

\* Includes those seconded to other companies with qualifications as managerial staff.

\* The ratios are values for the end of each fiscal year.

# Work-Life Balance



We are working to promote work-life balance as an issue impacting society. These efforts will contribute to Sustainable Development Goal 5: Gender Equality and Sustainable Development Goal 8: Decent Work and Economic Growth.

## Our Position on Work-Life Balance

Our company promotes the creation of workplaces conducive to successful work-life balance of employees.

In 2008, our company 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 communities.
- 2 To offer a greater diversity of working styles that benefit employees who must deal with major life events, such as marriage, childbirth, and child rearing, and thus contribute to nurturing the next generation.

In fiscal 2011, our company 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. In fiscal 2013, we expanded the application requirements to allow use for participation in volunteer activities and use in half-day increments. In fiscal 2014, we increased the number of days of leave for those attending the birth of their child from three days to five days. In 2016, we eliminated the number of days of accumulated annual paid vacation attached to family care leave and in 2017 we introduced a half-day leave system for days off in lieu. In 2018, we commenced the application of accumulated annual paid vacation in one-day increments for infertility treatment and cancer treatment (enforced on June 1, 2018).

We will continue to implement such initiatives as part of efforts to further promote better work-life balance.

### Number of Overtime Hours Worked and Days of Paid Leave Taken by Regular Employees

	Fiscal 2014	Fiscal 2015	Fiscal 2016	Fiscal 2017	Fiscal 2018
Average number of overtime hours (per annum)	140.4	124.5	93.6	146.6	157.7
Average number of days of paid leave used	13.1	13.3	14.3	12.1	13.4

\* "Regular employees" means our company (non-consolidated basis) personnel working during daytime hours, excluding managerial personnel.

## Employee Support for Various Life Events

We are focusing on creating an environment in which our employees can achieve their goals for both work and life events (such as childbirth and childcare).

We are also encouraging employees to proactively utilize various programs provided by the Group to help them deal with important

life events, and since the implementation of childcare leave and nursing care leave programs, the proportion of employees returning to work after taking childcare or nursing leave has been almost 100%. In fiscal 2017 six employees took childcare and no employees took nursing care leave.

Furthermore, we are implementing more employee support programs than the ones mandated by law to make it easier for our employees to continue working as they go through critical life events.



Next-generation Certification Mark: "Kurumin"

## Programs Relating to Childbirth and Childcare

Items	Details
Childcare Leave Program	Childcare leave can be taken until children reach the age of two (until the day before a child's second birthday)
Altering work start times for workers caring for children	Employees with children in the sixth grade at elementary school or lower are able to shift their work start time in 30 minute increments up to either one hour forward or one hour back with the provision that there is no change to the length of their set work day.
Reduced work hours for the purpose of childcare	Employees with children in the sixth grade at elementary school or lower may, if they wish, reduce the length of their work days by up to two hours.
Child nursing care leave	Employees with children in the third grade at elementary school or lower who have been employed at the Company for six months or more can take child nursing care leave in addition to annual paid leave or missing work due to nursing care when any of the following applies. 1. A child is injured or is infected with a contagious disease 2. A child requires a vaccination or a checkup • The number of days of child nursing care leave is up to five days per year for one child and up to 10 days per year for two or more children • Child nursing care leave can be taken in half day increments • Wages will not be paid during leave, but annual paid leave can be used
Childbirth leave	Female employees are granted six weeks' leave prior to giving birth (14 weeks in case of multiple pregnancy) and eight weeks' leave after giving birth.
Outpatient leave	• Pregnant employees can take leave during pregnancy and after giving birth for receiving health guidance from a health professional or receiving postnatal checkups. • Wages will not be paid during leave, but annual paid leave can be used
Exemption from overtime work	Eligibility: Employees with a child under the age of three who request it Details: Exempted from overtime work
Limitation on overtime work	Eligibility: Employees with a pre-school age child who request it Details: Cannot be ordered to work more than 24 hours of overtime per one month or over 150 hours per year
Limitations on night work	Eligibility: Employees with a pre-school age child who request it Details: Cannot be ordered to work late at night

## Programs Relating to Nursing

Items	Details
Nursing leave programs	Employees are able to split leave up to three separate occasions for each situation where a family member requires care Total period of leave: 1 year
Change of work start time	Employees are able to shift their work start time in 30 minute increments up to either one hour forward or one hour back with the provision that there is no change to the length of their set work day
Nursing leave	<ul style="list-style-type: none"> <li>Nursing leave can be taken in half day increments up to five days per year when there is one family member requiring care or up to 10 days when there are two or more family members requiring care</li> <li>Wages will not be paid during leave, but annual paid leave can be used</li> </ul>
Limitations on overtime work	Eligibility: Employees with a family member requiring care Details: Cannot be ordered to work more than 24 hours of overtime per one month or over 150 hours per year
Exemption from overtime work	Eligibility: Employees with a family member requiring care who request it Details: Exempted from overtime work
Limitations on late night work	Eligibility: Employees with a family member requiring care who request it Details: Cannot be ordered to work late at night

### Feedback from a user of our system

### Consecutive use of maternity and childcare leave enabled me to focus on childbirth and childcare with peace of mind

I took maternity leave from July 2016 for the birth of my eldest son, and had planned to remain on childcare leave until my son turned one-and-a-half years old. However, I found out that I was expecting my second child around early 2018 just before I was due to return to work. Hence, I extended my childcare leave for my eldest son, and continued to take maternity and childcare leave for my second child. As I ended up consecutively remaining on leave without returning to work at all, I had honestly felt guilty when I notified the company. However, my supervisor and colleagues from the same department were understanding, so I was able to engage in my childbirth and childcare with peace of mind. In the end, I was able to spend two and a half years together with my eldest son, which was longer than I expected, and the continued leave made it possible for me to have a physical rest while my eldest son attended nursery school during my pregnancy. Hence, I was able to give birth to my daughter without any problems at all. I felt a little anxious about returning to work after a break of two years and nine months, but I am truly grateful to be able to return to my former department, and to receive the warm welcome of everyone at the workplace.



High Performance Plastic Products Business Unit  
**Asami Nakamura**

## Human Resources Development

We believe that the growth of each and every employee is a driving force behind the sustainable growth of our businesses. For this reason, we recognize that human resources development is a critical aspect of management. We have established a policy



We are working on human resource development and education as an issue impacting society. These efforts will contribute to Sustainable Development Goal 5: Gender Equality and Sustainable Development Goal 8: Decent Work and Economic Growth.

on human resources development and actively offer education so that employees can take action toward their own personal and professional growth. The Responsible Care Committee monitors and reviews these initiatives.

## The type of personnel we look for

Our company 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." Furthermore, we need people who will embrace the Company's mission to become an excellent global enterprise that helps enhance customer value through its products and services, creating plastics with more sophisticated functions, and can achieve sustainable growth in the advanced chemical products sector. Specifically we seek personnel with the four characteristics listed on the right.

### 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 professionalism**  
who possess outstanding skills and know-how and can produce results through their work anywhere in the world.

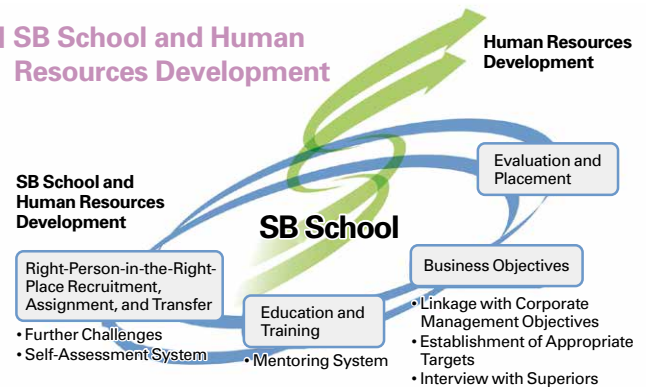
## The Group's in-house training institute, "SB School"

In September 2007, we opened the Sumitomo Bakelite School (SB School) as an in-house training institute.

The aim of SB School is to provide lifelong education and training courses that help our group achieve sustainable growth of business operations while maximizing corporate value. The school offers courses for all grades of employees from all departments. These include "all-employee education" courses that confirm and reinforce employees' awareness of the Company's 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 also systematically plans and implements various other kinds of educational and training courses needed by employees. From April 2018 through March 2019, the cumulative participation in SB School courses was about 23,000 employees, and the number of hours of education provided was approximately 33,000. We will plan and implement an increasingly wide range of programs to develop the capabilities of all employees—the Company's

most precious management resource. In addition, we implement life planning education as a program for providing necessary information for life planning after retirement and rethinking one's career direction. This program was revamped in fiscal 2017 to provide not only information about social insurance systems, but also opportunities to learn about second careers and health. In fiscal 2018, 56 employees took part.

### SB School and Human Resources Development



### Education and Training Structure of SB School

	All-employee education	Training by corporate departments	Special purpose training	Education for each employee grade	Self-development support	
Executive officers	Basic policies/compliance Safety Quality Environment CS (enhancing customer satisfaction) Human rights in the workplace			Education for executive officers	Self-development/English conversation training Correspondence courses	
Management staff				Education for management staff		
Department managers				Education for line managers (advanced) Education for line managers (basic)		
Section chiefs				Education for newly appointed section chiefs		
Supervisors/engineers				Education for newly appointed management staff		
Leaders (team leaders)			<Specialist Education> CS and legal affairs, labor, accounting, IT, intellectual property, environment, safety, quality, SBPS, manufacturing technology, R&D	- Writing emails in English (basic/advanced) - Logical thinking - Presentations (preparation/delivery) - Strategic scenario know-how/do-how - Marketing - Negotiating skills enhancement		Education for site leaders
Sixth year				Statutory education for superintendents		
Second year				Education for mid-career employees		
				Education for employees in their third year in the company		
New recruits				Follow-up education for new recruits Education for new recruits		



Education for new recruits



Education for newly appointed section chiefs



Know-how/Do-how education for strategy scenarios

### SB School Course Participation (fiscal 2018)

Unit: Persons

Type of course	Number of participants
Education for line managers (basic)	16
Education for newly appointed section chiefs	30
Education for newly appointed management staff	32
Education for team leaders	19
Education for mid-career staff	23

Type of course	Number of participants
Education for employees in their third year in the company	18
Follow-up education for new employees	27
Education for new employees	27
Life plan education	56
Total	248



## Topic Manufacturing-oriented SBPS Education

SBPS activities originally began as an offshoot of on-site kaizen (improvement) activities but are now implemented throughout the Company in order to generate the values demanded by customers and society.

The activities are aimed at securing the revenue and safety (personnel, facilities, environmental, and quality) that our company requires to achieve sustainable development. The activities involve setting specific targets (financial, quantitative, and delivery), planning who needs to achieve each of these targets by when, and implementing these plans without delay, meaning the activities are just the same as the daily work tasks carried out by employees.

We believe that, through the ages, technical capabilities, knowledge, experience, and tireless will that each individual has who promotes these activities will always bring about our required results.

Based on this idea, we have organized education programs targeting each employee grade and level as part of the SB School system. The planning and operation of the education is in principle carried out by employees themselves.

Attendees are required to submit reports, and the emphasis is placed on putting what they have learnt into practice in their own departments. Regular follow-ups are carried out to track their progress.

In fiscal 2018, an internship program was held for engineering students at the Amagasaki and Shizuoka Plants. 17 participants used the “monozukuri” experience tools that are also used in the SB School to learn about the importance of cooperating with the team and the approach to work.



SBPS education for new recruits as a part of employee grade-based education



Scene of student internship program

## Quality Control Skill Enhancement

We offer 31 quality-training programs at our SB School to increase our employees' awareness of quality, to prevent quality problems, and to improve quality techniques. November every year is designated as “quality month,” and quality education via e-learning is provided for all employees.

In fiscal 2018, we continued to provide education for second-year employees in the engineering track through the Sumitomo Bakelite educational system, which covers the systematic implementation of easy-to-understand lectures and practical training in areas such as the company's quality policy and approach

to quality, regulations, quality management systems, problem-solving methods (FTA, FMEA, Why-Why Analysis and Further Investigation), and statistical methods from the early stages of the career of employees assigned to the research and production engineering departments. Administrative employees were also included in the eligible group for receiving education in areas such as quality in general, regulations, and management systems.

In fiscal 2019, we will continue to provide quality education from the new-recruit stage (first year of employment), based on a separate curriculum.

## Environmental Education

Our laboratories and plants handle a wide range of chemical substances. We conduct periodic group education programs for employees, including new employees, with the objective of protecting the environment in the vicinity of our business sites and ensuring that employees work in safety. These programs are designed to enhance 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 employees in June, a month dedicated to enhancement of environmental protection.

Sumitomo Bakelite positions the Sustainable Development Goals (SDGs) in line with its corporate philosophy. The Sustainability Promotion Committee headed by the President was established in April 2019, and the company launched its SDG activities

in earnest. In tandem with that, the environmental education provided through e-learning for fiscal 2019 seeks to arm employees with an understanding of the essence and worldview of the SDGs, and help them learn and gain an in-depth understanding about the various activities that the company is undertaking, including the relationship between Responsible Care and SDGs.



## Tech Day Held

On November 7, 2018 we held the “2018 Tech Day” to share information about technology across the boundaries of the various departments and businesses that we operate with the aim of enhancing our overall Group-wide technological capabilities. More than 250 staff members from Japan and overseas, primarily from research departments, manufacturing-related departments, marketing, and sales participated in the meeting. The presentation was live streamed to eight business sites in Japan via the Internet, and viewed by more than 170 people.



Presentation of the top award to the best department at the 2018 Tech Day

## 'Gemba Kaizen' Activity Presentation Meeting Held

On May 25, 2018, we held 'Gemba Kaizen' Activity Presentation Meeting 2018 as a venue for presenting successful outcomes of daily improvements at each business location. Presentations were held on a wider range of themes than previous years, and the event was attended by more than 140 employees mainly from the production-related departments. Like the Tech Day, the event was live streamed via the Internet to eight business sites in Japan, and viewed by 220 employees. The video and materials of the presentation were published on the Intranet as a part of efforts to share information about examples of improvements.



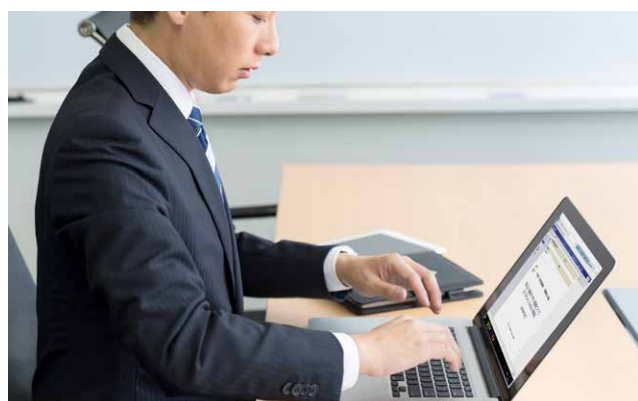
Presentation of the top award to the best department at the 2018 "Gemba Kaizen" Activity Presentation Meeting

## Human Rights Education

We strictly prohibit discrimination and harassment in “Our Standards of Conduct” and other policies and this applies throughout the Group. Employees receive education about the Standards of Conduct when they join the company in an effort to raise awareness of human rights issues. We consider and implement human right education commensurate as a company, and urge each employee to gain a correct understanding of discrimination and harassment in society as a whole. In fiscal 2018, all employees were educated on “human rights at the workplace” through the e-learning system. In addition to deepening their understanding of the representative examples of harassment that have become a social issue (power harassment, sexual harassment, and maternity harassment), employees also learnt about what to be careful of in order to avoid causing harassment issues. Based on the recognition that harassment is a risk that could arise at any time in the workplace, regardless of how large or small the workplace is, efforts are being made to create cheerful, employee-friendly workplaces where all of the employees respect the individuality and human rights of others.



We are working to raise awareness of human rights as an issue impacting society. These efforts will contribute to Sustainable Development Goal 5: Gender Equality and Sustainable Development Goal 8: Decent Work and Economic Growth.



Employees receiving computer-based human rights education

# Health Management

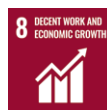
Our company strives to create workplaces conducive to the maintenance of employees' good health, both physical and mental. Our employee health management activities are primarily based on the results of regularly scheduled health checks. In particular, employees over 30 years old are entitled to receive cancer screening (stomach and colon) and those over 40 years old can receive abdominal ultrasonography as well. By ensuring that employees properly understand the results of health checks and 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, employees engaged in work that involves use of organic solvents and specified chemical substances receive special health checkups twice a year for early detection and prevention of health problems attributable to occupational diseases. We also 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.

In fiscal 2012, we began offering health guidance to employees to help prevent lifestyle diseases such as diabetes, hypertension and dyslipidemia. In order to promote health, we are strengthening employee education based on the understanding that it is important

for individual employees to be aware of prevention. With regard to mental health, for which detection at an early stage is deemed as important, education is provided to all employees and proves useful in the acquisition and enhancement of their knowledge. Furthermore, consultations with physicians are arranged once a year for employees who wish to undergo a stress check. The necessary measures are implemented based on the results of the examination, and efforts are made to improve the workplace environment based on the results of a group analysis. For employees suffering from mental health issues, measures are put in place in line with a support program designed to help them return to work and to prevent relapses through the concerted effort of their superiors, people in charge of labor affairs, industrial physicians, and healthcare staff.

As a part of the Data Health Plan, health classes are conducted with the aim of preventing serious illnesses, and to raise awareness among employees about health and improving their lifestyle habits. The classes cover a wide range of contents at the respective business sites, ranging from lectures such as "Nutritional Guidance for the Prevention of Lifestyle-Related Diseases," to practical classes where employees actually get to move their bodies such as "Yoga and Stretching Health Class." A total of 332 employees across the entire company attended these classes.



We are working with the labor union to help the company grow and create comfortable workplaces as an issue impacting society. These efforts will contribute to Sustainable Development Goal 8: Decent Work and Economic Growth.

## Topic Health Instruction with the Head Industrial Physician

We set up a special feature page in our company newsletter authored by our head industrial physician that provides seasonal and event-based health information useful for employees and their families to maintain and improve their health.

The special feature on infectious diseases (influenza and norovirus) covered how to prevent them and what to do if an employee actually caught one to make this important information known to all employees.

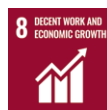


Health Class

# Labor-Management Relations

We recognize that pleasant and satisfying working environments contribute to the development of the company, and therefore, good labor-management relations and the collaboration they engender are essential ingredients of such working environments. Currently, 100% of general employees from Sumitomo Bakelite and its domestic affiliates are members of the Sumitomo Bakelite Union (hereafter, "the Union"). 54.3% of all employees are covered by the company's collective bargaining agreement.

Corporate-level meetings of the company's senior executives and representatives of the Sumitomo Bakelite Union are held twice a year at the head office. These meetings are valuable opportunities to cultivate favorable labor-management relationships by sharing frank views on the business environment and the Company's operations. Major business sites also hold monthly labor-management meetings at which information about conditions in each department is shared. As for health and safety, we aim for creating safe and comfortable



We are working with the labor union to help the company grow and create comfortable workplaces as an issue impacting society. These efforts will contribute to Sustainable Development Goal 8: Decent Work and Economic Growth.

workplaces through labor-management collaboration based on the provisions of the labor agreement. As part of this effort, we hold annual labor-management meetings on occupational health and safety by bringing the persons in charge of safety from the Union across Japan, to deepen mutual understanding through a frank exchange of opinions. We also recognize that occupational health and safety is an important theme to monitor between labor and management. At Sumitomo Bakelite along with its subsidiaries and affiliates with a labor union, provisions on health and safety are included in the labor agreements that establishes a formal agreement between the company and its labor union.

We are also putting effort into developing good labor-management relations at our overseas business sites. Currently, 19 out of 36 overseas business sites have labor unions; of these, 17 have concluded labor agreements, while 13 have established arrangements on safety and health.

# Relationships with Shareholders and Investors



We are working on engagement with shareholders and investors as an issue impacting society. These efforts will contribute to Sustainable Development Goal 8: Decent Work and Economic Growth.

## Basic Policy on Profit Distribution

Our company is working actively to enhance our corporate value and regards returning a portion of profits generated by our businesses to shareholders as one of its most important management priorities. In allocating profits, we take into consideration 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. In line with the

above basic policy, we paid dividends for the year ended March 31, 2019, of 75 yen per share. On October 1, 2018, we carried out a consolidation of shares at a ratio of 1 share for every 5 shares of the company. Dividends for the year without taking into consideration the impact of this share consolidation is 15 yen per share, an increase of 3 yen over the previous fiscal year.

## Information Disclosure

We carry out appropriate and timely disclosure of corporate information in accordance with the disclosure standards of the Tokyo Stock Exchange and in accordance with the "Information Disclosure Guidelines" in which we have set our basic approach to disclosing information to stakeholders including investors and employees simultaneously, fairly, and accurately.

We also make efforts to proactively disclose our information such as financial results, general shareholders' meeting, along with information disclosed in the manner as stated in the above paragraph, through posting them on our website.

Furthermore, for analysts and institutional investors, we host presentations on financial results twice a year, and organize individual meetings after announcement of quarterly financial results. The company's representatives or officers in charge of

accounting visit institutional investors not only in Japan, but also in Europe, the United States and Southeast Asia where they explain the company's business results and business operations, and exchange opinions.



Presentation on financial results and business outlook



Business Report

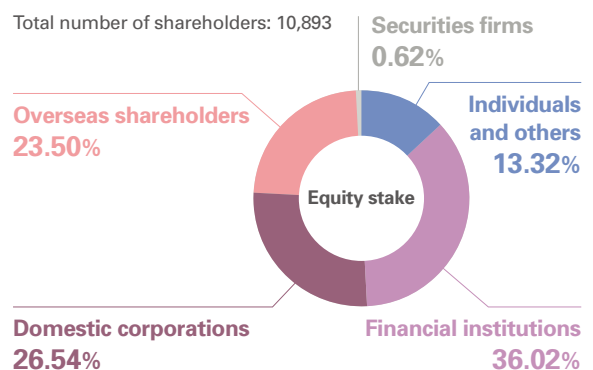
## Encouraging Exercise of Voting Rights at Shareholders' Meetings

Through such initiatives as enabling shareholders to vote by electronic means, sending early and posting on our website convening notices for general shareholders' meetings, we are working to create an environment that makes it easier for shareholders to exercise their voting rights.

### Shareholder Information and Equity Stake (as of March 31, 2019) ✓

Total number of shares issued : 49,590,478\*1

Total number of shareholders: 10,893



\*1 As a result of the consolidation of shares at a ratio of 1 share for every 5 shares of the company, carried out on October 1, 2018, the total number of shares issued fell by 198,361,916 shares to 49,590,478 shares.

# Relations with Local Communities



We are working on engagement with local communities as an issue impacting society. These efforts will contribute to Sustainable Development Goal 15: Life on Land.

## Environment-Related Initiatives

### Biodiversity Conservation Initiatives

Our company's business activities rely on nature's bounty. Following the philosophy of our Responsible Care Activity Guideline, we recognize the importance of conserving biodiversity. As such, we are a promotion partner of "The Declaration of Biodiversity by Nippon Keidanren." Understanding the importance of biodiversity outlined in the guidelines and reflecting it in the basic management stance, and following these declarations, we are promoting environmental impact reductions, compliance with

our procurement policy, and dialogue with communities through preservation activities at biotopes set up at some of our business locations. In terms of our initiatives during the product life cycle, we develop eco-friendly products, while outside of Japan we take part in local initiatives, including those that protect rare tree species.

These initiatives are approved, monitored, reviewed and modified by our Responsible Care Committee.

#### Topic Biotope Initiatives

The results of an investigation into the relationship between the business sites of our group worldwide and protected areas where biodiversity is considered important indicated that none of our business sites were located in these areas. Although not a protected area, the results of an ecosystem survey conducted in fiscal 2011 at the site of our Shizuoka Plant located in Fujieda City, Shizuoka Prefecture, confirmed the presence of Japanese killifish, an IA-rated endangered species. After determining the strong need for preserving the biodiversity of this site, we decided to create a company biotope. The creation and maintenance of the biotope were completed in March 2017. The biotope, which occupies about 5% of the Shizuoka Plant's 287,000m<sup>2</sup> site, is habitat for a wide variety of fauna and flora, including ancient Oga lotus and jewel beetles, among others, in addition to Japanese killifish.

In fiscal 2018, a total of 462 visitors came to the biotope. The biotope continues to provide Japanese killifish, which have settled into the biotope with an increase in its population, to various places as a part of our communication initiatives with the local community.

In particular, we conducted a visiting class at one school through the provision of the fish to a neighboring elementary school, and invited four schools to an observation event. Information about these internal and external initiatives is shared and managed at regular meetings of the Biotope Committee, comprising members from departments at the production plants and head office. In addition, our CSR activities centered on "Ikoi no Mori" (Comfort Forest) were commended with the Responsible Care (RC) Effort Award presented by the industrial organization, Japan Chemical Industry Association. We have updated and submitted the latest information on the area of green spaces, including the biotope. Based on this data, we plan to submit our entry for the "Factory Greening Award Program" organized by the Ministry of Economy, Trade and Industry. Going forward, we aim to contribute to the local community by highlighting the importance of biodiversity to visitors, through means such as by using the biotope as a space for enhancing their environmental awareness and conducting environmental education.



Observation event



Irodori no Oka (hill)



Visiting class



Japanese killifish (Oryzias latipes)



General information board



Presentation ceremony for the RC Award

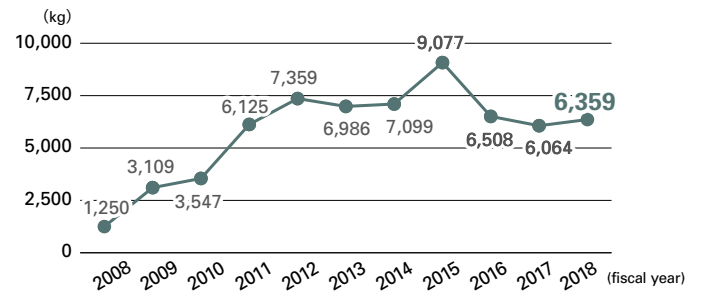
## Initiative to Protect Forest Ecosystems

Our company contributes to conservation of biodiversity by protecting forest environments through supporting forest thinning projects and afforestation activities. Our company has supported forest thinning mainly in Iwate Prefecture since fiscal 2008 by expanding the use of Paper Products that Contribute to Forest Thinning Efforts promoted by the Morino Chonai-Kai (Forest Neighborhood Association). The cumulative amount of this paper used is approximately 63.5 tons, which corresponds to the thinning of 4.29 hectares.

Our business site in Indonesia engages in afforestation activities for growing mangrove forests that protect various species of marine organisms. Going forward, we will continue to conserve biodiversity tailored to the environment surrounding each of our business sites.



### Amount of Paper Products that Contribute to Wood Thinning Efforts Used by Sumitomo Bakelite



SBP Indonesia  
Tree-planting program in the local community of the production plant

## Environmental Conservation and Beautification Activities in the Surroundings of Plants

We are working to conserve and beautify the areas surrounding each of our production plants by cooperating with local environmental conservation activities and campaigns against illegal

dumping of waste as well as cleaning and beautification events organized by local communities.



Indopherin Jaya  
Participated in the city's environment and cleanup activities.



Amagasaki Plant  
Conducted the water sprinkling campaign to mitigate the heat island effect at the request of Amagasaki City.



Yamaroku Kasei Industry  
Participated in the Yamatogawa River and Ishikawa River cleanup campaign.



Hokkai Taiyo Plastic Co., Ltd.  
Participated in a cleanup campaign at the Ishikari Bay New Port area, and collected illegally dumped waste in the industrial estate.

## Initiatives in Society

### Support for Japan Inclusive Football Federation

We concluded a partnership agreement with the Japan Inclusive Football Federation (JIFF)\*<sup>1</sup>, as an initiative from the standpoint of respect for diversity and contributing to the realization of a society where everyone can live in harmony. Based on this agreement, we provide support for the development of inclusive soccer sports.

In fiscal 2018, we supported the Japan Powerchair Football Championship 2018 held in December, and sponsored the IBSA Blind Football World Grand Prix 2019.

Going forward we will continue to support activities as an official partner, toward building a harmonious society where people can interact with one another through soccer, regardless of their disabilities.

\*1 The Japan Inclusive Football Federation is an organization that brings together seven inclusive soccer sports associations. JIFF carries out activities under its commitment to create a vibrant society that respects each person's uniqueness through the benefits of sports and soccer regardless of disability.



Image courtesy of the Japan Blind Football Association (JBFA)

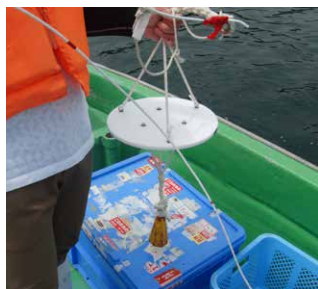


## Environmental and Social Contribution Activities

Our company participates in an environmental survey program run by NPO Earthwatch Japan as a corporate partner, as part of its educational and social contribution activities as well as to expand the scope of these educational and social contribution activities.

In fiscal 2018, we dispatched employees to conduct research and studies in two programs: the Tidal Flats Study Program (Study of Living Things in Areas Affected by the Disaster) under the East

Japan Green Restoration Monitoring Project in Watari, Sendai City (Gamou Tidal Flat, Lake Torinoumi) in June, and the Monitoring Study to Learn from Living Things that have Returned to Kesennuma and Moun Bay (Study of Water Quality and Marine Ecology After the Disaster) in Kesennuma, Miyagi Prefecture, in July.



Kesennuma and Moun Bay, Miyagi Prefecture (Study of Water Quality and Marine Ecology After the Disaster)



Watari, Sendai City (Gamou Tidal Flat, Lake Torinoumi) (Monitoring of Tidal Flat Ecosystem)

### Comment from an Employee who Participated

#### Participating in the “Study of Water Quality and Marine Ecology After the Disaster”

I visited the disaster site under this program, and reaffirmed the importance of monitoring by participating in this study. I also learnt that an ecosystem would ultimately still collapse if we were to work toward restoring it without a clear objective, and that it is human beings who both restore an environment and destroy it.

Our company is also engaged in activities through the “Ikoi no Mori” biotope at the Shizuoka Plant as a part of our efforts to preserve biodiversity. I am also involved in these activities. Going forward, I would like to apply the awareness of the significance of having a purpose as well as the importance of monitoring, gained through this experience, to the environmental activities implemented by our company.



Corporate EHS Promotion Department, Corporate Production Management & Engineering Division  
Sumitomo Bakelite  
Takayoshi Kumagai

#### Participating in the “Monitoring of Tidal Flat Ecosystem”

I had the chance to encounter many living things through this study, and gained a real sense of the diversity of life in the tidal flats.

In the lecture as well, emphasis was put on the point that this diversity in the tidal flats contributes to the maintenance of the natural environment, which further links to the interests and benefits of humankind.

Furthermore, I had the chance to spend time in close contact with people of various backgrounds. I was exposed to values that I would not have the chance to learn about in the company, and the experience made me think about the meaning of diversity of people as well. I am convinced that it is necessary to deepen understanding about diversity while interacting directly with living things and with people, and for our company to continue contributing to securing diversity.



General Affairs and Legal Department, Corporate General Affairs Division  
Sumitomo Bakelite  
Asake Shimizu

### Message from Earthwatch Japan

Over a four-year period, young employees were tasked with visiting the sites of studies on fish and shellfish, wetlands, and tidal flats. While spending time in a different way from their regular lives, they gradually became able to see in concrete ways the significance of conserving living environments. I believe this has enabled them to apply their understanding of the issue to greater consideration for the environment and social contribution in their work.

I would recommend offering such opportunities to even more people through the roll-out of cooperative programs.



NPO Earthwatch Institute  
Executive Director  
Tomoko Nunoi

## Donations

Under the Sumitomo Bakelite Group's business philosophy (Company Policy), we cooperate on cultural and academic activities such as symphony orchestras, environmental conservation activities such as the Keidanren Committee on Nature Conservation that works to actively protect nature and conserve biodiversity, and international events such as the International Chemistry Olympiads (Details: URL on the right) in which senior high school students compete against one another to demonstrate their chemistry capabilities. We also donate directly to specific groups across a wide range of fields including

schools and education, social welfare, academic promotion, R&D, regional development, international exchange, and sports for people with disabilities. Through these donations, we are helping to create a better environment and support the development of the next generation.

Looking ahead, we will continue this support to create a brighter future for all people.



[Link](#) → the International Chemistry Olympiads

## Official Partnership Agreement with Fujieda MYFC

We concluded an official partnership agreement for the 2019 season with Fujieda MYFC, a professional soccer club.

Fujieda MYFC is a J League J3 soccer team hosted by the Shida Haibara districts of Fujieda. This agreement was concluded partly because Fujieda City, which promotes revitalization of the town through soccer, is related to Sumitomo Bakelite's Shizuoka Plant (based in Fujieda City), and also because it contributes to the local community while enhancing the motivation of employees.



Fujieda MYFC logo

## Relations with Local Residents and Participation in Local Events

We are working to enhance the welfare of local communities by proactively interacting with local residents and participating in

local events to deepen our ties with them, as well as engaging in volunteer activities and making donations.



PT SBP Indonesia

Participated in nature tourism activities at Cibodas, Mount Salak in Bogor, West Java



Indopherin Jaya

Donated food to an orphanage foundation during the month of Ramadan



S.B. Techno Plastics (Head Office)

Participated in a softball tournament organized by the industrial association



Shizuoka Plant

Summer festival organized by the plant for local residents

### Topic Donation of pears by the Utsunomiya Plant

Pears are cultivated at the Utsunomiya Plant, and close to 60 pear trees comprising three varieties (Hosui, Kaori, and Nikkori) have been planted in the pear garden. Pears are given as a gift to customers and companies in the vicinity during the harvesting season, while close to 500 pears are donated to welfare facilities in the city every year through the Utsunomiya City Hall. This initiative, which has continued for several decades, has been recognized as a contribution to welfare activities, and Utsunomiya Plant was presented with a letter of gratitude from the Mayor of Utsunomiya on November 20, 2018.



Eiichi Sato, Mayor of Utsunomiya (right) and Plant Manager Kurachi (left)



## Initiatives Relating to Fostering the Next Generation

### Support for Education of the Next Generation (Fujieda City Science Education Support Project)

We are taking the lead in providing support for the education of the next generation as part of an industry-government-academia partnership in cooperation with other companies with production plants located in and around Fujieda City, an initiative that has been ongoing since 2009.

On January 18, 2019, the 10th Fujieda City Science Education Support Project was held at Sumitomo Bakelite's Shizuoka Plant. As with previous years, a lively exchange was held among a large number of participants that included not only science teachers from public junior high schools in Fujieda City, but also staff from the Education Department and Industrial Promotion Department

of Fujieda City as well as employees from companies located in Fujieda City. Our company introduced how our plastic products are used, with a focus on automotive products, our SDG initiatives and activities aimed at reducing environmental impact, and the biodiversity of our biotope.

The principal in charge of the event commented, "The passion of the teachers involved in preparing the classes, which provided our students with the opportunity to conduct eye-opening experiments, was greatly impacted by the cooperation and support that we have received from our local corporations such as we have seen today."



Scene of a lecture conducted in the conference room



Automobile Solution Gallery Showroom

### Welcoming Next Generation Internships and Factory Visits

In order to support the growth of the next generation of students we proactively accept student interns and also welcome students to company briefings and site visit events (factory tours) to aid

their understanding of our business and the work carried out at our production plants.



Sumitomo Bakelite (Dongguan) Co., Ltd.  
Accepted interns from Jiangnan Vocational Senior Secondary School.



Kobe Facility Office  
Accepted international students from Technical University Dortmund.



S.B. Techno Plastics Co., Ltd. (Head Office Plant)  
Accepted interns from Kodamahakuyo High School.

# Site Report

Below you will find summary information about each business site and affiliated company.

\* Air and water quality conservation: "No problems" indicates no particular environmental impacts were detected during the period from April 2018 to March 2019 in measurements and assessments on air and water quality in the form of values exceeding the regulated threshold to be complied with (prefectural ordinances, regional agreements, our own standards, etc.). Data for certain business sites covers the period from January to December 2018.

## Japan

### Kobe Facility Office



Address	1-1-5 Murotani, Nishi-ku, Kobe-shi, Hyogo		
Number of employees	44		
Commencement of operations	1991		
Total site area	16,530㎡		
Month/year of management system certification	Environmental	ISO 14001	December 2003
	Occupational Health and Safety	ISO 45001	June 2019
	Quality	ISO 9001	2010 (S-BIO Business Div.)
Principal R&D themes	Development of high-performance plastics and R&D of technologies for bioplastics and other products		
Air and water quality conservation	<Air> No relevant facilities <Water> No problems		

We are working collectively to promote energy conservation and other activities for the reduction of environmental impact. In addition, we are working to make newly developed products more environmentally friendly from the design stage. We are committed to giving back to the community, while promoting engagement and disclosure of information needed for the community to develop a correct understanding of our operations.

Director  
Masaya Fumita



### Shizuoka Plant



Address	2100 Takayanagi, Fujieda-shi, Shizuoka		
Number of employees	560		
Commencement of operations	1962		
Total site area	287,000 ㎡		
Month/year of management system certification	Environmental	ISO 14001	March 1999
	Occupational Health and Safety	OHSAS 18001	March 2008
	Quality	ISO 9001	1995 (laminates, PM, PR, molded products)
		IATF 16949	2017 (laminates, PM, PR, molded products)
Principal Products	Epoxy resin copper-clad laminates, epoxy resin coating powder, phenolic resins, thermoset molding compounds, melamine resin decorative laminates, formalin, molded products and dies, substrate materials for semiconductor packages		
Air and water quality conservation	<Air> No problems <Water> No problems		

We are pursuing initiatives to reduce the environmental burden of all our processes. In fiscal 2018, we achieved our target, reducing energy-saving intensity by 4.4% year-on-year. The biotope opened to the general public for the second year and welcomed 462 visitors, an increase over the number of visitors in 2017, contributing to both biodiversity preservation and environmental education. In fiscal 2019, we will continue contributing to the realization of the society that the SDGs aims to achieve, and to advancing our efforts to be an environmentally friendly plant.

Plant Manager  
Toshihide Kanazawa



### Kanuma Plant



Address	7-1 Satsuki-cho, Kanuma-shi, Tochigi		
Number of employees	250		
Commencement of operations	1970		
Total site area	75,878 ㎡		
Month/year of management system certification	Environmental	ISO 14001	March 2000
	Occupational Health and Safety	OHSAS 18001	March 2008
	Quality	ISO 9001	2003
Principal Products	Polycarbonate, Thermoplastic resin sheets such as polyvinyl chloride, Waterproof member using waterproof steel plate		
Air and water quality conservation	<Air> No problems <Water> No problems		

We aim to be a plant that is trusted by customers and the local community through our products featuring a variety of functions and designs that cater to everyday living and industrial use. Our entire staff is committed to energy conservation in reducing environmental impacts, reduction of MFC by half, and occupational health and safety in our manufacturing activities. Looking ahead, we will continue to focus on product development and manufacturing with an emphasis on the SDGs (Sumitomo Spirit).

Plant Manager  
Haruhisa Toda



### Utsunomiya Plant



Address	20-7, Kiyohara Kogyo Danchi, Utsunomiya-shi, Tochigi		
Number of employees	198		
Commencement of operations	1984		
Total site area	99,000 ㎡		
Month/year of management system certification	Environmental	ISO 14001	December 1997
	Occupational Health and Safety	OHSAS 18001	March 2008
	Quality	ISO 9001	1991
Principal Products	IATF 16949		
	2018		
Principal Products	Paste for die bonding, liquid resins for encapsulation of semiconductors, substrate materials for semiconductor packages		
Air and water quality conservation	<Air> No problems <Water> No problems		

We are pursuing initiatives to all the employees work on occupational health and safety activities and environmental impact reduction activities in hope of contributing to realizing a society that the SDG aims to achieve. Occupational health and safety includes the continued implementation of activities based on the value of "Safety First Plant Management" to ensure zero accidents or injuries, along with the implementation of conserving energy as a promotion of environmental impact reduction and systematic mitigation through MFCA. By doing these activities, we aspire to be a plant that is trusted by both customers and the local community.

Plant Manager  
Keisuke Kurachi



## Amagasaki Plant



Address	2-3-47, Higashi-Tsukaguchi-cho, Amagasaki-shi, Hyogo		
Number of employees	410		
Commencement of operations	1938		
Total site area	46,000 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	October 1998
	Occupational Health and Safety	ISO 45001	May 2019
		ISO 9001	1994 (film sheets and cover tape)
	Quality	ISO 13485	2016 (medical devices product warehouse)
		ISO 15378	2017 (primary packaging materials for medicinal products)
FSSC22000		2017 (Food safety)	
Principal Products	Multilayered films for food packaging, PTP materials for pharmaceuticals, tapes for mounting electronic components		
Air and water quality conservation	<Air> No problems <Water> No problems		

In fiscal 2018, the plant installed a more effective treatment system in order to reduce the amount of chemical substances emitted into the air. In fiscal 2019, the reduction is estimated to be 69%. In addition, we hold community dialogues jointly with other chemical companies in the Amagasaki area to develop a correct understanding of our operations in the regional society, and promote environmental impact reduction as a plant trusted by the local residents.

Plant Manager  
Masaya Fumita



## Affiliated Companies in Japan

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



Address	1-2 Techno Park, Nara Kogyo Danchi, Sugawa-cho, Gojo-shi, Nara		
Number of employees	47		
Commencement of operations	1991		
Total site area	20,357 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	April 2000
	Occupational Health and Safety	OHSAS 18001	March 2008
	Quality	ISO 9001	2003
Principal Products	Waterproof sheets		
Air and water quality conservation	<Air> No problems <Water> No problems		

At this plant, we are working to mitigate environmental impacts through energy conservation activities, reduction in waste, and reduction in MFC by half, among other initiatives, involving all the employees. In particular, we successfully reduced power consumption in fiscal 2018 by 50% in comparison to fiscal 2005. Going forward, we will continue aiming to be a human and nature friendly plant.

Plant Manager  
Masamori Miura



### Kyushu Sumitomo Bakelite Co., Ltd.



Address	40-1 Oaza-Kamizakai Aza-Mizumachi, Nogata-shi, Fukuoka		
Number of employees	283		
Commencement of operations	1972		
Total site area	50,000 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	December 1998
	Occupational Health and Safety	OHSAS 18001	December 2007
	Quality	ISO 9001	1994
ISO/TS 16949		2017	
Principal Products	Epoxy molding compounds for encapsulation of semiconductor devices, liquid photosensitive coating resins for semiconductor wafers		
Air and water quality conservation	<Air> No problems <Water> No problems		

We produce environmentally conscious products along with epoxy molding compounds and water coating resins for energy efficient equipment. We are promoting a safety aware culture in which every employee considers and stays cautious about safety. We are now working to contribute to the enhancement of the corporate value of customers through the improvement and evolution of initiatives mindful of the environment such as MFC reduction and energy saving activities, and to society and the local environment.

Plant Manager  
Shigehisa Ueda



### Yamaroku Kasei Industry Co., Ltd.



Address	19-10 Katayama-cho, Kashiwara-shi, Osaka		
Number of employees	51		
Commencement of operations	1948		
Total site area	5,411 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	June 2005
	Quality	ISO 9001	2003
Principal Products	Phenolic molding compounds, melamine phenolic resin molding compounds		
Air and water quality conservation	<Air> No relevant facilities <Water> No relevant facilities		

Based on the Environmental Impact Reduction Mid-Term Plan, we continue to promote energy conservation and implement environmental impact reduction activities with MFCA as key management standards, tirelessly moving ahead towards achieving our goals. We are also actively involved in the local community by participating in our annual riverbed cleanup event, in addition to the promotion of working towards the enhancement of work environment.

President and Representative Director  
Tamotsu Ishida



### S.B. Techno Plastics Co., Ltd. (Head Office Plant)



Address	300-2, Motohara Kamikawa-cho, Kodama-gun, Saitama		
Number of employees	34		
Commencement of operations	1964		
Total site area	13,000 m <sup>2</sup>		
Principal Products	Plastic sheets, plastic chopping boards, ceramics made in molds		
Air and water quality conservation	<Air> No relevant facilities <Water> No problems		

### S.B. Techno Plastics Co., Ltd. (Kitsuregawa Plant)



Address	560-1, Saotome, Sakura-shi, Tochigi		
Number of employees	12		
Commencement of operations	2002		
Total site area	3,638 m <sup>2</sup>		
Principal Products	Industrial helmets, injection molding products		
Air and water quality conservation	<Air> No relevant facilities <Water> No problems		

Our chopping board recycling system was established 18 years ago. Through the continuation of this initiative as the only initiative of this kind, we aim to become an environmentally-friendly company.

President and Representative Director  
Shunichi Kuribara



## Akita Sumitomo Bakelite Co., Ltd.



Address	27-4, Aza Nakashima-shita, Souzen-machi, Tsuchizakiminato, Akita-shi, Akita		
Number of employees	227		
Commencement of operations	October 1970		
Total site area	255,568 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	January 2001
	Occupational Health and Safety	OHSAS 18001	March 2009
	Quality	ISO 9001	2010 (bio), 2010 (resin)
		ISO 13485	2005 (medical)
Principal Products	Medical products and laboratory wares, phenolic resins, formalin and adhesives		
Air and water quality conservation	<Air> No problems <Water> No problems		

We carry out all-hands-on-deck safety activities. In fiscal 2019, we will increase safety events, including the KYT exercise, to further raise the level of safety awareness. As part of our efforts to reduce environmental impacts, we are working to conserve energy and on MFC. We intend to make these activities deepen employee awareness that improving conventional operations will also help to reduce environmental impacts. In fiscal 2019, we will add environmental monitoring equipment, such as oil membrane sensors, in an effort to prevent spills.



President and Representative Director  
Noboru Yamawaki

## Hokkai Taiyo Plastic Co., Ltd.



Address	2-763-7, Shinko-Chuo, Ishikari-shi, Hokkaido		
Number of employees	28		
Commencement of operations	1964		
Total site area	13,650 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	April 2005
	Principal Products Polyethylene pipes, polyethylene films		
	Air and water quality conservation <Air> No relevant facilities <Water> No problems		

We have seen an increase in production volume of pipes for geothermal heat harvesting, in addition to our mainstay eco-friendly residential films. We are carrying out energy conservation and MFC reduction activities with the goal of reducing environmental impacts that occur during the manufacturing of our products, including these, and will continue to engage in business activities with integrity and passion in order to pass down the verdant natural surroundings here in Hokkaido to future generations.



President and Representative Director  
Syuichi Tsukamoto

## Overseas: China, Macau, and Taiwan

### Sumitomo Bakelite (Suzhou) Co., Ltd.



Address	140 Zhongxin Avenue West, Suzhou Industrial Park, Suzhou, Jiangsu, 215021, P.R. China		
Number of employees	201		
Commencement of operations	1997		
Total site area	30,000 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	November 2001
	Occupational Health and Safety	OHSAS 18001	November 2010
		ISO 9001	1999 (EME), 2015 (CRM)
	Quality	IATF 16949	2018 (EME)
Principal Products	Epoxy molding compounds for encapsulation of semiconductors, die attach pastes		
Air and water quality conservation	<Air> No relevant facilities <Water> No relevant facilities		

If we continue at the current pace in terms of "no accident" condition, we will achieve one million work hours without an accident about one year from now. Unfortunately, we received strict criticisms at the safety meeting for plant managers held recently. Nevertheless, we will continue working on the environment, health, safety and compliance (EHSC) activities, recognizing that top management's commitment to make good on promises and set the example is the key for any business site.



President  
Hiroshi Fujita

### Sumitomo Bakelite (Shanghai) Co., Ltd.



Address	No. 88, Aidu Road, China (Shanghai) Pilot Free Trade Zone, Shanghai 200131 P.R. China		
Number of employees	127		
Commencement of operations	2000		
Total site area	8,698 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	April 2007
		ISO 9001	2002
	Quality	IATF 16949	2018
Principal Products	Molded products for automotive applications (plastic mechanical and structural parts)		
Air and water quality conservation	<Air> No relevant facilities <Water> No problems		

We produce molded parts made of phenolic resins for use in automobiles. We continue to reduce sprues and runners along with defects that occur during molding, and looking ahead we will also closely manage daily garbage. Since production will increase in fiscal 2019, we will promote further energy savings during manufacturing and reduce waste through activities to lessen the rate of defects. Our goal is to be an eco-friendly company that is trusted by the local community.



President  
Yasuhiro Takenaka

### Sumitomo Bakelite (Nantong) Co., Ltd.



Address	No. 81, Tongda Road, Port Industrial Park 3, Economic Technological Development Area, Nantong, Jiangsu, 226017 P.R. China		
Number of employees	257		
Commencement of operations	2009		
Total site area	100,000 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	May 2010
		ISO 9001	2010 (PM, PR), 2014 (film sheets), 2016 (ECR)
	Quality		2019 (PM, PR, ECR)
		IATF 16949	
Principal Products	Phenolic resins, phenolic molding compounds, liquid epoxy resins, coextruded multilayered films and sheets for food packaging, tapes for electronic components		
Air and water quality conservation	<Air> No problems <Water> No problems		

We manufacture at four plants (phenolic resin, phenolic resin molding materials, liquid epoxy resin, and co-extruded film sheets), and handle a variety of chemical substances. We are actively investing in the environment every year to comply with China's stricter environmental regulations. At the same time, we are striving to reduce emissions into the air and water as a company that is mindful of the environment and safety.



President  
Yoshihisa Fujimura

## Sumitomo Bakelite (Dongguan) Co., Ltd.



Address	No. 2 Qiao Lin Road, Ling Tou Industrial District, Qiao Tou Town, Dongguan, Guangdong, P.R. China		
Number of employees	428		
Commencement of operations	1994		
Total site area	32,930 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	September 2004
	Occupational Health and Safety	ISO 45001	September 2019
	Quality	ISO 13485	2005 (medical)
Principal Products	Medical products		
Air and water quality conservation	<Air> No problems <Water> No problems		

We manufacture medical devices. In October 2018, we achieved the record of zero injuries for two years equaling two million work hours. In 2018, we kept our energy costs at around the same as the previous year while production volume increased. This year we will continue to focus on safety education for employees, cultivating the value of workplace safety, as well as actively carry out energy conservation activities.

President  
Hiroshi Hiraoka



## Sumitomo Bakelite Macau Co., Ltd.



Address	Zona Ind. do Aterro Sanitario de Seac Pai Van Lote A, junto a Estrada de Seac, Pai Van, Coloane, Macau		
Number of employees	157		
Commencement of operations	2003		
Total site area	27,513 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	April 2005
	Quality	ISO 9001	2003
Principal Products	Epoxy resin copper-clad laminates		
Air and water quality conservation	<Air> No problems <Water> Legionnaire's bacteria increased temporarily in the cooling water tower, but the reading has since normalized after proper cleaning of the water tank. We are striving to prevent reoccurrence by keeping the water tank clean as well as increasing the frequency of disinfectant use.		

We produce and sell epoxy resin copperclad laminates. While we use large boilers and handle organic solvents, we are promoting environmental improvements to comply with the environmental regulations in Macau, a major tourist destination. As the regulations on waste disposal are strict, we aim to become a company that is environmentally friendly and trusted by the local community through promoting MFCA activities.

Managing Director  
Kenichi Hasegawa



## Sumitomo Bakelite (Taiwan) Co., Ltd.



Address	No. 1, Hwa Syi Road, Ta Fa Industries District, Ta Liao 831, Kaohsiung, Taiwan, R.O.C		
Number of employees	114		
Commencement of operations	1998		
Total site area	22,334 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	May 2003
	Occupational Health and Safety	OHSAS 18001	February 2012
	Quality	ISO 9001	2003
		IATF16949	2018
Principal Products	Epoxy molding compounds for encapsulation of semiconductor devices		
Air and water quality conservation	<Air> No relevant facilities <Water> Circulating water overflowed due to a pump failure, causing the COD level in sewage to increase temporarily. The level has since been normalized after the pump was repaired. Moreover, we are generally keeping the sewage gate closed in order to prevent discharge into the sewage in the case of trouble.		

Our company develops, manufactures and sells epoxy molding compounds for encapsulation of semiconductor devices. We develop products that are environmentally friendly. We began recycling acetone, which led to 58% reduction in acetone and a decreased amount of VOC emission. In fiscal 2018, the energy basic unit could not be improved because the production volume decreased. As such, we will once again work on energy conservation while also reducing waste by improving yield.

President  
Seiji Shima



## Vaupell China (Dongguan) Co., Ltd.



Address	No. 2 Qiao Lin Road, Ling Tou Industrial District, Qiao Tou Town, Dongguan, Guangdong, P.R. China		
Number of employees	209		
Commencement of operations	2007		
Total site area	Located at Sumitomo Bakelite (Dongguan) Co., Ltd.		
Month/year of management system certification	Quality	ISO 9001	2011
		AS 9100	2011
Principal Products	Aircraft components		
Air and water quality conservation	<Air> No relevant facilities <Water> No relevant facilities		

In line with overall goals of Sumitomo Bakelite, Vaupell China is committed to reducing emission and contributing to saving the environment. It will do so by continually improving its equipment and processes and by recycling where possible.

General Manager  
NANDEKAR SUMIT ARVIND



## Overseas: Southeast Asia

### SNC Industrial Laminates Sdn. Bhd.



Address	PLO 38, Jalan Keluli Satu, Pasir Gudang, Industrial Estate, 81700 Pasir Gudang, Johor, Malaysia		
Number of employees	126		
Commencement of operations	1992		
Total site area	60,000 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	April 2001
	Occupational Health and Safety	OHSAS 18001	August 2012
	Quality	ISO 9001	2002
Principal Products	Phenolic resin copper-clad laminates, phenolic resin laminates, aluminum-based copper-clad laminates		
	Air and water quality conservation <Air> No problems <Water> No problems		

We mainly produce and sell paper substrate copperclad laminates based on phenolic resin. Our manufacturing processes tend to be energy intensive as we use large equipment. In fiscal 2018, we continued our shift to LED lighting, changing over about 80% of mercury lighting at high places. We will work towards upgrade aged chillers and changing to high efficiency pumps as well as advancing steam reduction, striving to reduce energy consumption even further.

Managing Director  
Tomoyoshi Honjo



### Sumitomo Bakelite Singapore Pte. Ltd.



Address	1 Senoko South Road, Singapore 758069, Singapore		
Number of employees	205		
Commencement of operations	1989		
Total site area	22,276 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	July 1997
	Occupational Health and Safety	OHSAS 18001	October 2009
	Quality	ISO 9001	1993
Principal Products	Epoxy molding compounds for encapsulation of semiconductors, paste for die bonding, liquid resins for encapsulation of semiconductors		
	Air and water quality conservation <Air> No problems <Water> No problems		

While operating in a safe & environmentally responsible workplace is key to the success of SBS operations, safety remains the top priority. SBS staff will work diligently towards meeting all legal compliances and zero incidents through constant Anzen training & inculcating the 'Stop & Fix' mindset.

Managing Director  
Yukihiro Okabe



### SumiDurez Singapore Pte. Ltd.



Address	9 Tanjong Penjuru Crescent Singapore 608972, Singapore		
Number of employees	58		
Commencement of operations	1989		
Total site area	18,000 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	September 1998
	Occupational Health and Safety	OHSAS 18001	March 2015
	Quality	ISO 9001	2003
Principal Products	Phenolic resin molding compounds		
	Air and water quality conservation <Air> No problems <Water> No problems		

We manufacture and sell phenolic molding compounds. In fiscal 2018, we worked on increasing productivity by enhancing the utilization rate mainly through improving facilities to achieve higher safety and energy efficiency. These efforts will continue to be carried out going forward. In addition, we will further promote waste reduction through increasing yield while aiming to become a plant offering workplace safety and environmental consciousness that is trusted by the local community.

Senior Plant Manager  
Tomoyuki Saito



### P.T. Indopherin Jaya



Address	JL. Brantas No.1, Probolinggo, East Java, Indonesia		
Number of employees	122		
Commencement of operations	1996		
Total site area	18,000 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	January 2001
	Occupational Health and Safety	OHSAS 18001	December 2012
	Quality	ISO 9001	2001
Principal Products	Phenolic resins		
	Air and water quality conservation <Air> No problems <Water> No relevant facilities		

We develop, manufacture and sell phenolic resins. In fiscal 2018, we focused on facility maintenance, which contributed to a reduction in energy loss and improvement of employee awareness. In fiscal 2019, we will continue to develop products conscious of the environment, such as resins with less odor when used by customers, reduce waste by conserving, and aim to be a safe and secure plant that is trusted by customers and the local community.

Vice President Director  
Toru Kamata



### P.T. SBP Indonesia



Address	Kawasan Industri IMM2100, JL. Irian Blok NN-1-1, Kec.Cikarang Barat, Bekasi, 17520, Indonesia		
Number of employees	93		
Commencement of operations	1996		
Total site area	30,000 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	November 2011
	Occupational Health and Safety	OHSAS 18001	July 2014
	Quality	ISO 9001	December 2003
Principal Products	Polycarbonate extruded resin sheets (for signage and construction applications)		
	Air and water quality conservation <Air> No relevant facilities <Water> No problems		

We manufacture and sell extruded polycarbonate sheets. In fiscal 2018, we strived to conserve energy by switching nearly all lighting to LED, upgrading outdated air conditioners, and simplifying our manufacturing equipment. Moreover, we reduced environmental impacts by refurbishing reusable plates and reducing shavings. Going forward, we will continue to strive to be a safe plant.

President Director  
Takahiro Kitakoji



## Overseas: North America

### Sumitomo Bakelite North America, Inc. (Manchester Plant)



Address	24 Mill Street, Manchester, Connecticut 06042, USA		
Number of employees	72		
Commencement of operations	1920		
Total site area	14,000 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	November 2014
	Occupational Health and Safety	OHSAS 18001	November 2014
	Quality	ISO 9001	2003
Principal Products	Thermoset composites		
Air and water quality conservation	<Air> No problems <Water> No problems		

The Manchester organization's 2018 focus was on accident prevention through changing behavior. There was consistent review of past injuries, injuries around the world and how they relate to our daily activities. Although we did not have an injury free year we did see a 50% reduction. Which leads us to 2019, we will continue to focus on individual behavior along with a focus on improving root cause analysis to eliminate repeat incidences.



Plant Manager  
Dan Higgins

### Durez Corporation (Kenton Plant)



Address	13717 U.S. Route 68 South Kenton, Ohio 43326, USA		
Number of employees	70		
Commencement of operations	1955		
Total site area	263,100 m <sup>2</sup>		
Month/year of management system certification	Occupational Health and Safety	OHSAS 18001	July 2011
	Quality	ISO 9001	2003
Principal Products	Phenolic resins		
Air and water quality conservation	<Air> No problems <Water> The capacity of cleaning equipment using biological processing remains unstable due to increased production volume. Ways to drastically increase wastewater processing capacity are now being considered. In addition, the wastewater temporarily became turbid from cleaning of the facility, but this situation was rectified in a short period of time.		

Over the last couple of years the Kenton plant has been focused on observing and documenting housekeeping and general safety practices in the plant which has helped with operator awareness and a stronger safety culture. In 2019, all employees will be focused on action from these observations and advancing a proactive mindset toward safety. We will continue our focus on operating a safe and environmentally friendly plant and continue our focus on reducing our impact on the community and environment through waste reduction and reuse initiatives.



Plant Manager  
Scott Franks

### Durez Corporation (Niagara Falls Plant)



Address	5000 Packard Road, Niagara Falls, NY 14304, USA		
Number of employees	63		
Commencement of operations	1930		
Total site area	18,960 m <sup>2</sup>		
Month/year of management system certification	Occupational Health and Safety	OHSAS 18001	December 2011
	Quality	ISO 9001	2003
Principal Products	Phenolic resins		
Air and water quality conservation	<Air> No relevant facilities <Water> The concentration of organic substances has increased due to change in the production situation. However, this has been rectified through improvements in wastewater treatment equipment.		

Safety remains the top priority for the Niagara Falls site in 2019. We have added a fulltime safety manager to help drive consistency and improvements. We continue to look for ways to minimize waste generation for the site and reduce the environmental impact on our community.



Plant Manager  
Barbara Pilmore

### Durez Canada Co., Ltd.



Address	100 Dunlop Street, Fort Erie, Ontario L2A 4H9, Canada		
Number of employees	78		
Commencement of operations	1970		
Total site area	93,000 m <sup>2</sup>		
Month/year of management system certification	Occupational Health and Safety	OHSAS 18001	November 2014
	Quality	ISO 9001	1998
Principal Products	Phenolic resin and molding materials		
Air and water quality conservation	<Air> Phenols temporarily exceeded the regulatory requirement after the emissions coefficient had been reviewed based on talks with the province of Ontario. A new exhaust gas incinerator was introduced, and emission concentrations have since been reduced. However, ways of improvement are being considered as the readings still slightly exceed the standard. <Water> The concentration of phosphorus in wastewater slightly exceeds the standard level, while the cause cannot be identified as it is not found within the process. As such, the situation is being continuously monitored.		

Safety continues to be a main focus for the plant. Safe behaviour is a daily topic – whether in meetings or just conversations. The environment is also a high priority. We installed an oxidizer to reduce emissions. We do need to focus on waste generation in FY2019.



Plant Manager  
Robert Hunt

## Promerus LLC



Address	9921 Brecksville Road, Brecksville, Ohio 44141-3247, USA		
Number of employees	28		
Commencement of operations	2001		
Total site area	3,875 m <sup>2</sup>		
Month/year of management system certification	Quality	ISO 9001	2006
Principal R&D themes	Functional polynorbornenes		
Air and water quality conservation	<Air> No problems <Water> No relevant facilities		

In FY2018, Promerus reaped the benefit of our continued emphasis on safety: there were no OSHA recordable incidents or environmental releases. We can attribute these excellent results to several improvements in our safety and environmental programs: We increased emphasis on process safety reviews and non-routine activities; We facilitated near-miss reporting by utilizing our intranet site for reporting with automatic distribution of findings by email to the entire organization; We enhanced our routine housekeeping and equipment inspections by implementing a more rigorous, topic-focused quarterly inspection. In 2019, we implemented a "See something, say something" campaign to encourage employees to provide feedback on practices that could be improved in terms of efficiency and safety.

**General Manager**  
Larry Rhodes



## Vaupell Industrial Plastics, Inc.



Address	1144 N.W. 53rd Seattle, Washington, 98107, USA		
Number of employees	366		
Commencement of operations	1947		
Total site area	10,219 m <sup>2</sup>		
Month/year of management system certification	Quality	ISO 9001	2004
		AS 9100	2004
Principal Products	Aircraft components		
Air and water quality conservation	<Air> No relevant facilities <Water> No relevant facilities		

Vaupell Northwest is committed to the highest standards of corporate responsibility and leadership in our local and regional community. We are mindful of our daily impact to our environment. We strive each day to find innovative and responsible methods to reduce our carbon footprint and enhance our contributions towards a sustainable future. We take pride in making each day better.

**Plant Manager**  
Jeff Brown



## Vaupell Molding & Tooling, Inc. (Agawam, Massachusetts Plant)



Address	101 HP Almgren Dr. Agawam, Massachusetts 01001, USA		
Number of employees	95		
Commencement of operations	2005		
Total site area	9,290 m <sup>2</sup>		
Month/year of management system certification	Quality	ISO 9001	2012
		ISO 13485	2007
		AS 9100	2012
Principal Products	Medical device parts		
Air and water quality conservation	<Air> No relevant facilities <Water> No relevant facilities		

Vaupell NE remains committed to "safety first" throughout the facility. The NE division has a very active Safety Committee and participates in the semi-annual Plant Manager Safety Meetings with SBHPP. We continue to re-cycle over 80% of our plastics and cardboard. In 2019, Vaupell NE will convert it's entire facility to LED lighting with activity sensors to reduce energy consumption by over 462, 000 kW hours per year. As with the other divisions, we always strive for continuous improvement and will remain committed to reducing our carbon footprint wherever possible.

**Plant Manager**  
John Sulikowski



## Vaupell Molding & Tooling, Inc. (Constantine, Michigan Plant)



Address	485 Florence Road Constantine, Michigan 49042, USA		
Number of employees	176		
Commencement of operations	1969		
Total site area	7,525 m <sup>2</sup>		
Month/year of management system certification	Quality	ISO 9001	2009
		ISO 13485	2012
		AS 9100	2009
Principal Products	Medical device parts		
Air and water quality conservation	<Air> No relevant facilities <Water> No relevant facilities		

Vaupell Constantine continues to be mindful of our environmental impact. The change that we implemented to another recycler for plastic parts, scrap, and resins has been maintained. The service that we contract provides an environmentally friendly means of recycling our scrap plastic for reuse in other plastic products that do not have the stringent requirements of our customers.

**Plant Manager**  
Keith Bridgford



## Vaupell Molding & Tooling, Inc. (Hudson, New Hampshire Plant)



Address	20 Executive Drive Hudson, New Hampshire 03051-4917, USA		
Number of employees	46		
Commencement of operations	1995		
Total site area	3,500 m <sup>2</sup>		
Month/year of management system certification	Quality	ISO 9001	2011
Principal Products	Aircraft components		
Air and water quality conservation	<Air> No relevant facilities <Water> No relevant facilities		

Vaupell Rapid Solutions strives to supply our customers with product design support services thru prototyping and production solutions. VRS also provides our employees with a safe, hazardous free work environment and training to build on the knowledge base within our company. This will insure we are giving our employees the tools they need to better support the growth of our business and to service our customers at the highest levels.

**Plant Manager**  
Roger Spurrell





## Russell Plastics Technology Company, Inc.



Address	521 W. Hoffman Ave Lindenhurst, New York 11757, USA		
Number of employees	86		
Commencement of operations	1951		
Total site area	5,575 m <sup>2</sup>		
Month/year of management system certification	Quality	AS 9100	2005
Principal Products	Aircraft components		
Air and water quality conservation	<Air> No relevant facilities <Water> No relevant facilities		

Vaupell Composites embraces the notion of being good corporate neighbors and citizens of the community as well as being responsible to our employees by providing a safe and environmentally friendly workplace. We as an organization recognize our obligation to proactively manage our processes to ensure no harm, or negative impact, to our employees or surrounding community.



Plant Manager  
Richard Spero

## Overseas: Europe

### Sumitomo Bakelite Europe NV



Address	Henry Fordlaan 80, B-3600 Genk, Belgium		
Number of employees	154		
Commencement of operations	1967		
Total site area	110,000 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	January 2001
	Occupational Health and Safety	ISO 45001	July 2019
	Quality	ISO 9001	1992
Principal Products	Phenolic resins, polyester resins		
Air and water quality conservation	<Air> No problems <Water> No problems		

In FY2018, SBE celebrated a 3 year working period without any LTA; an accomplishment thanks to a continued focus on safety and non-routine procedures, even in a very hectic time due to the implementation of a new ERP system (SAP). The daily safety patrol inspection system was reviewed and optimized to make it more effective and touchable for the employees. In the same fiscal year, SBE initiated several projects, as well internally (projects related to ergonomics and safe handling of chemicals) as externally (switch from solvent based to water based resins and R&D project on bio-based resins) to further emphasize the sustainable profile of the company.



General Manager  
Jan Schreurs

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



Address	Gran Vial, 4 Montornes del Valles (Barcelona) 08170, Spain		
Number of employees	90		
Commencement of operations	1949		
Total site area	19,856 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	March 2005
	Occupational Health and Safety	OHSAS 18001	February 2013
	Quality	ISO 9001	2002
Principal Products	Phenolic resins, friction particles, adhesives		
Air and water quality conservation	<Air> No problems <Water> Due to the introduction of phenol recovery equipment, phenol concentration in wastewater decreased and the efficiency of biological treatment declined, which caused the decline in the quality of wastewater due to a temporary increase in concentration of substances such as ammonia. We are now implementing countermeasures by installing more oxygen aeration devices.		

In FY 2018, the phenol recovery plant has been working continuously and despite have had some operational problems, we have achieved satisfactory results helping to reduce the operational costs of the plant. About safety we have had some cases of LTA, despite the fact that the injuries have not been critical they could have been worst, this a signal to continue and increase the actions for 2019 (training, RA, 5S, HK, SOP) helping to the entire organization to be proactive in safety.



Site Manager  
José Miralles

### Vyncolit NV



Address	Wiedauwkaai 6, B-9000 Gent, Belgium		
Number of employees	145		
Commencement of operations	1992		
Total site area	22,683 m <sup>2</sup>		
Month/year of management system certification	Environmental	ISO 14001	1999
	Occupational Health and Safety	ISO 45001	January 2019
	Quality	ISO 9001	1992
Principal Products	Thermoset molding compounds		
Air and water quality conservation	<Air> Phenols in wastewater are controlled using filters. Regular measurement readings temporarily exceeded the regulatory requirement by a small amount, but readings returned to normal after the filter was replaced. <Water> No problems		

Safety is our first priority. Brain storming sessions held with the whole operations team resulted in several actions to make the workplace more safe. A Last Minute Risk Analyses (LMRA) was added to the work permits. The transition audit from OHSAS18001 to ISO45001 was successful. We will execute a revamp project of the Cokes line and also focus to decrease the dust and waste levels throughout the plant.



Plant Manager  
Gerard Wildeman

## Trends in Environmental Performance

### Business Sites in Japan

Item		Unit	2005	2011	2012	2013	2014	2015	2016	2017	2018	2019 (Plan)	2030 (Target)	
CO <sub>2</sub> emissions	Scope1	t-CO <sub>2</sub>	137,961	93,300	103,165	104,556	101,790	97,238	89,667	83,986	83,077	80,403	75,037	
		t-CO <sub>2</sub>	—	51,790	49,306	47,117	46,545	43,956	40,906	41,903	39,279	39,462	—	
	Scope2	t-CO <sub>2</sub>	—	41,509	53,859	57,439	55,245	53,282	48,761	42,083	43,798	40,941	—	
Energy usage	Crude oil equivalent (kL)	74,370	53,307	52,320	50,276	48,845	47,199	45,115	44,051	41,999	42,393	—		
	(thousand GJ)	2,883	2,066	2,028	1,949	1,893	1,829	1,749	1,721	1,659	1,643	—		
Material loss	Waste generated	Landfill	ton	605	29	18	13	16	53	62	56	81	30	
		External intermediate processing	ton	342	6	5	5	7	45	56	2	6	9	2
		Internal intermediate processing	ton	0.5	0	0	0	0	0	0	0	0	0	0
		External recycling	ton	10,495	7,338	7,794	7,477	7,987	7,665	6,090	6,402	6,706	6,435	5,118
		Total waste generated	ton	11,444	7,373	7,817	7,494	8,010	7,762	6,207	6,459	6,767	6,525	5,150
		Valuable materials	ton	9,501	7,970	7,930	8,633	8,326	8,008	7,762	7,508	7,186	6,877	5,323
		Total material loss	ton	20,945	15,343	15,748	16,127	16,337	15,770	13,970	13,967	13,953	13,403	10,473
Chemical substance emissions	ton	512	249	230	268	202	171	139	167	173	117	77		
Emissions of substances subject to the PRTR Act	ton	81	16	12	15	15	13	8	13	11	5	—		

### Overseas Business Sites

Item		Unit	2005	2011	2012	2013	2014	2015	2016	2017	2018	2019 (Plan)	2030 (Target)	
CO <sub>2</sub> emissions	Scope1	t-CO <sub>2</sub>	163,259	152,735	141,491	144,508	142,830	151,698	151,272	152,526	149,618	146,665	109,509	
		t-CO <sub>2</sub>	—	52,647	49,137	49,305	43,228	45,871	44,367	48,740	45,015	45,720	—	
	Scope2	t-CO <sub>2</sub>	—	100,088	92,354	95,203	99,602	105,827	106,904	103,786	104,603	100,945	—	
Energy usage	Crude oil equivalent (kL)	82,906	76,533	71,013	68,231	66,466	70,874	70,710	72,111	71,045	72,850	—		
	(thousand GJ)	3,213	2,966	2,752	2,567	2,576	2,747	2,741	2,795	2,754	2,819	—		
Material loss	Waste generated	Landfill	ton	6,586	4,093	3,138	3,027	2,873	3,066	3,455	3,471	3,107	2,748	—
		External intermediate processing	ton	3,547	4,951	3,885	4,122	3,580	3,637	3,737	3,848	3,459	4,817	—
		Internal intermediate processing	ton	8,196	5,620	3,217	2,869	3,105	2,833	2,671	3,701	152	140	—
		External recycling	ton	1,564	1,874	2,540	3,034	4,387	3,712	2,919	3,018	3,798	2,310	—
		Total waste generated	ton	20,163	16,537	12,780	13,053	13,945	13,247	12,782	14,038	10,515	10,016	9,000
		Valuable materials	ton	8,695	4,079	3,609	2,956	2,800	4,522	3,065	3,309	2,588	2,593	2,600
Total material loss	ton	28,858	20,617	16,389	16,009	16,746	17,770	15,847	17,347	13,104	12,609	11,600		
Chemical substance emissions	ton	—	191	245	204	164	147	126	148	137	138	110		

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

## Definitions/Calculation Method

### CO<sub>2</sub> emissions and energy consumption (crude oil equivalent)

The calculation of CO<sub>2</sub> emissions and energy consumption covers energy (fuel, heat, electricity, etc.) associated with all business activities. CO<sub>2</sub> emissions are calculated based on the Manual for Calculating and Reporting Greenhouse Gas Emissions (Ministry of the Environment and Ministry of Economy, Trade and Industry; April 2019). For city gas and electricity, the coefficient for each business released by each company is used. Energy consumption is calculated as a crude oil equivalent based on the Act on the Rational Use of Energy. Overseas business locations use the applicable domestic laws of each country. In the calculation of CO<sub>2</sub> emissions, the latest conversion coefficient at the start of the fiscal year of each Natural gas and electricity provider supplying each business site is used for city gas and electricity. In case the emissions coefficient of the electricity provider is unknown, the coefficient as of the start of each fiscal year for which data is released by the International Energy Agency is used.

In addition, Our company does not emit any greenhouse gases (CH<sub>4</sub>, H<sub>2</sub>O, HFC, SF<sub>6</sub>, NF<sub>3</sub>) other than CO<sub>2</sub> that meet the reporting requirements of Act on Promotion of Global Warming Countermeasures.

### 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 or treated by other means by outsourced contractors (without energy recovery)
- (3) Internal intermediate processing: waste incinerated or treated by other means in-house (without energy recovery)

- (4) External recycling (expenses paid): waste recycled with payment made to cover processing costs (including energy recovery)

### 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. 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).

### 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)). The emissions calculation method used is based on the latest Manual for Calculating PRTR Emissions (Ministry of the Environment and Ministry of Economy, Trade and Industry). JCIA changed the chemical substances subject to survey in fiscal 2013 and the Group reflected the change in the overall results from fiscal 2014 onward. Major substances that were excluded from the scope of calculation include ammonia and sulfuric acid.

## Response to Act on the Rational Use of Energy/Promotion of Global Warming

		Unit	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
Sumitomo Bakelite	CO <sub>2</sub> emissions	t-CO <sub>2</sub>	75,883	81,541	81,471	79,822	76,989	70,764	66,915	66,124
	Energy usage	Crude oil equivalent (kL)	43,464	42,314	40,661	39,747	38,600	36,567	35,974	34,609
	Year-on-year intensity of energy usage	%	101.3	92.1	96.5	96.4	100.5	100.2	91.0	94.8
	Average change in intensity over 5 years	%	-	-	96.6	96.5	96.3	98.4	96.9	96.5
Kyushu Sumitomo Bakelite	CO <sub>2</sub> emissions	t-CO <sub>2</sub>	6,325	7,470	8,038	7,835	7,037	6,365	5,802	6,080
	Energy usage	Crude oil equivalent (kL)	3,715	3,437	3,247	3,159	2,957	3,008	3,012	2,944
	Year-on-year intensity of energy usage	%	101.1	97.9	94.3	93.3	98.1	98.4	90.9	96.1
	Average change in intensity over 5 years	%	-	-	97.3	96.6	95.9	96.0	95.1	95.8
Akita Sumitomo Bakelite	CO <sub>2</sub> emissions	t-CO <sub>2</sub>	6,183	6,776	6,429	6,016	5,176	5,079	4,797	4,896
	Energy usage	Crude oil equivalent (kL)	2,728	2,806	2,547	2,393	2,070	2,095	2,018	2,055
	Year-on-year intensity of energy usage	%	90.4	121.8	86.1	88.0	98.0	95.4	93.3	94.1
	Average change in intensity over 5 years	%	-	-	104.0	95.6	97.5	91.8	93.6	95.2
S.B. Sheet Waterproof Systems (started reporting from FY2012)	CO <sub>2</sub> emissions	t-CO <sub>2</sub>		3,645	4,285	4,098	3,865	3,397	3,220	2,923
	Energy usage	Crude oil equivalent (kL)		1,941	2,017	1,913	1,807	1,683	1,683	1,567
	Year-on-year intensity of energy usage	%		-	96.4	97.8	94.8	95.4	93.8	96.9
	Average change in intensity over 5 years	%		-	-	-	-	96.1	95.4	95.2

## Distribution-Related Energy Conservation Measures\*

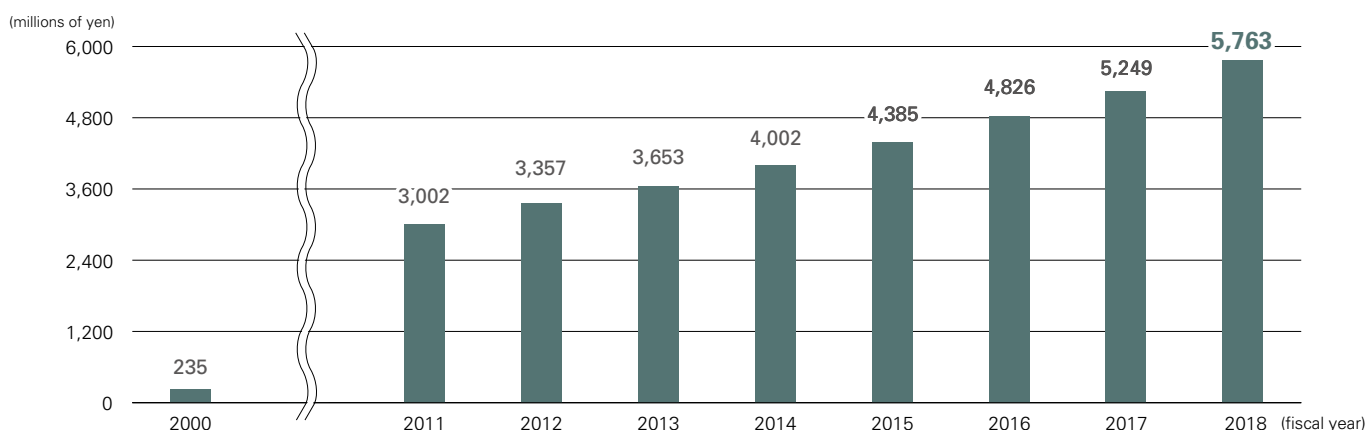
	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Transportation ton-kilometer	thousand t-km	39,328	39,715	40,959	40,467	40,449
CO <sub>2</sub> emissions	t-CO <sub>2</sub>	5,656	5,662	5,816	5,863	5,839
Energy usage	Crude oil equivalent (kL)	2,128	2,135	2,195	2,214	2,205
Year-on-year intensity of energy usage	%	-	99.4%	99.6%	102.1%	99.6%
Average change in intensity over 5 years	%	-	-	-	-	100.2%

\* The data covers Sumitomo Bakelite (non-consolidated). In accordance with the revised Act on the Rational Use of Energy, for consigned transportation items of affiliated companies, we are required to report as the second shipper on items with freight transportation methods, etc. that are effectively decided on by the head office. As such, alongside with including the relevant data for fiscal 2018, past data up till fiscal 2014 has been calculated the same way and is disclosed with effect from this fiscal year. The disclosed data items have also been changed to the same items that are disclosed by the production plants.

## Fiscal Year and Accumulated Investments for Environmental Protection

	Unit	FY2000	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
Fiscal year	millions of yen	235	335	355	296	350	383	441	423	514
Cumulative total	millions of yen	235	3,002	3,357	3,653	4,002	4,385	4,826	5,249	5,763

### Accumulated Investments for Environmental Protection



## Transfer and Release of Substances Subject to the PRTR Act (Fiscal 2018 Performance)

The amounts of the 36 substances subject to the PRTR Act (PRTR system\*<sup>1</sup>) released and transferred by the Group's business sites in Japan are presented in the table below.

(tons/year)

Government order number	Substance	Amount used (manufactured)	Release			Transfer	
			Into air	Into water	Into soil	As waste material	As sewage
1	Zinc compounds (water-soluble)	19.2					
18	Aniline	200.4					0.3
31	Antimony and its compounds	49.2					1.9
37	Bisphenol A	186.6					0.1
51	2-ethylhexanoic acid	1.6					0.1
53	Ethyl benzene	28.6					4.9
56	Ethylene oxide	0.9					
57	Ethylene glycol monoethyl ether	6.4					
78	2,4-xylenol	10.4					
79	2,6-xylenol	10.4					
80	Xylene	39.8					9.8
82	Silver and its water-soluble compounds	9.9					
86	Cresol	1,789.4					1.0
136	Salicylaldehyde	2.4					
207	2,6-di-tert-butyl-4-cresol	1.6					0.1
218	Dimethylamine	1.7					
232	N, N-dimethyl formamide	330.2	1.7				11.5
239	Organic tin compounds	20.3					2.5
258	Hexamethylenetetramine	1,026.5					22.0
265	Tetrahydromethylphthalic anhydride	247.0					
277	Triethylamine	2.3					
296	1,2,4-trimethylbenzene	1.0					
300	Toluene	128.5	8.0				7.5
302	Naphthalene	2.0					
309	Nickel compounds	2.0					0.1
320	Nonylphenol	3.2					0.2
330	Bis (1-methyl-1-phenylethyl) = peroxide	5.5					
349	Phenol	23,786.2	0.2				35.9
352	Diallyl phthalate	5.6					
375	Bis (2-ethylhexyl) phthalate	1.2					
392	n-hexane	1.6	0.3				
401	1,2,4-benzene tricarboxylic acid 1,2-anhydride	11.0					0.9
405	Boron and its compounds	13.3					1.4
411	Formaldehyde	8,861.8 (11,339.7)	0.5 0.3				5.1
413	Phthalic anhydride	1.2					0.2
438	Methylnaphthalene	20.9	0.1				

Specific Class 1 designated chemical substances \*1 See the glossary on page 78.

## Memberships in Leading Organizations (Classifications of Organizations Have Been Omitted)

Organization	Role of Sumitomo Bakelite
Keidanren (Japan Business Federation)	Participates in task forces such as the Nature Protection Deliberation Council and the 1% (One Percent) Club. Participates in Committee on Population Issues, Committee on Innovation, Committee on Intellectual Property, Committee on National Resilience, Committee on Trade and Investment and Committee on Environment and Safety/Subcommittee on Environmental Risk Management.
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.
Japan Chemical Industry Association	Serves in the General Affairs Department, Technical Affairs Committee, Environmental Safety Committee, Responsible Care Committee, Chemicals Management Committee, Council of Human Resource Fostering Program in Chemistry and SDGs Subcommittee.
The Japan Plastics Industry Federation	Participates in Administration/Environment Group and the chemicals management committee.
Japan Plastic Sheet Association	Participates in Hard vinyl chloride plate Committee, Polycarbonate plate Committee and Environmental Regulation committee.
Japan Electronics Packaging and Circuits Association	
Medical Technology Association of Japan	Participates in the raw materials committee, regulatory affairs committee, distribution committee, microbe reduction committee, and other committees
Japan Chemical Exports and Imports Association	Participates in the chemical substance safety, environmental committee
Japan Environmental Management Association for Industry (JEMAI)	Requested dispatch of LCA education lecturer, Purchased a database for LCA, participates in LCA Japan Forum
Japan Industrial Safety & Health Association	Requested dispatch of instructors to in-house training seminars on occupational safety and health, and participated in seminars organized by the association.
Japan Association for Chemical Innovation (JACI)	Participates in the Planning & Management Council as a member on the board of directors. Participates in several committees and subcommittees, including Strategy Committee, Strategic Planning Subcommittee, and Frontier Coordination Committee, and assists in information collection and events.
Japan Initiative for Marine Environment (JaIME)	
Japan Clean Ocean Material Alliance (CLOMA)	Participation in Technology WG

Year	Sumitomo Bakelite Group's Initiatives	Social developments
1969	<ul style="list-style-type: none"> <li>● Pollution countermeasures secretariat established</li> </ul>	
1973	<ul style="list-style-type: none"> <li>● Environmental Management Division established</li> <li>● Environmental auditing of domestic business sites commenced</li> </ul>	
1974	<ul style="list-style-type: none"> <li>● Environmental management departments established for all business sites</li> </ul>	
1978	<ul style="list-style-type: none"> <li>● Environmental auditing of domestic subsidiaries and affiliates commenced</li> </ul>	
1987		<ul style="list-style-type: none"> <li>● Montreal Protocol on Substances that Deplete the Ozone Layer adopted</li> </ul>
1990	<ul style="list-style-type: none"> <li>● Environmental Issue Action Committee established. Appointment of director in charge</li> </ul>	
1991	<ul style="list-style-type: none"> <li>● Recycling Technology Action Office established</li> </ul>	<ul style="list-style-type: none"> <li>● Law Promoting the Use of Recycled Resources enacted</li> </ul>
1992	<ul style="list-style-type: none"> <li>● S.B. Recycle established</li> </ul>	<ul style="list-style-type: none"> <li>● United Nations Conference on Environment and Development (UNCED or Earth Summit) results in the "Rio Declaration on Environment and Development", "Agenda 21", etc.</li> </ul>
1993	<ul style="list-style-type: none"> <li>● Environment and Safety Voluntary Plan drafted</li> <li>● Environment and safety management regulations established</li> <li>● Environmental audits of overseas subsidiaries and affiliates commenced</li> </ul>	<ul style="list-style-type: none"> <li>● The Basic Environment Law enacted</li> </ul>
1994	<ul style="list-style-type: none"> <li>● Use of certain CFCs and 1,1,1-trichloroethane ceases</li> </ul>	
1995	<ul style="list-style-type: none"> <li>● Responsible Care Committee established</li> <li>● The Company joins the Japan Responsible Care Council as a founding member</li> </ul>	<ul style="list-style-type: none"> <li>● Japan Responsible Care Council (JRCC) established</li> <li>● Law for Promotion of Sorted Collection and Recycling of Containers and Packaging enacted</li> </ul>
1997	<ul style="list-style-type: none"> <li>● Corporate Policies for Safety, Health, and the Environment revised, and Utsunomiya Plant and Sumitomo Bakelite Singapore obtain ISO 14001 certification</li> </ul>	<ul style="list-style-type: none"> <li>● Kyoto Protocol adopted by the Third Conference of the Parties of the United Nations Framework Convention on Climate Change (COP3)</li> </ul>
1998	<ul style="list-style-type: none"> <li>● First Environmental Activities Report issued</li> </ul>	
1999	<ul style="list-style-type: none"> <li>● All Sumitomo Bakelite plants obtain ISO14001 certification</li> </ul>	<ul style="list-style-type: none"> <li>● Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management enacted</li> <li>● Law Concerning Special Measures against Dioxins enacted</li> </ul>
2000	<ul style="list-style-type: none"> <li>● Environmental accounting implemented</li> </ul>	<ul style="list-style-type: none"> <li>● Basic Law for Establishing the Recycling-Based Society enacted</li> </ul>
2001	<ul style="list-style-type: none"> <li>● Environmental Report issued (independent reviews conducted)</li> </ul>	<ul style="list-style-type: none"> <li>● Law Concerning Special Measures against PCB Waste enacted</li> </ul>
2002	<ul style="list-style-type: none"> <li>● Scope of Environmental Report expanded to include subsidiaries and affiliates in Japan</li> <li>● Tokyo Kakohin receives an award for promoting a "3R" policy of reduce, reuse, and recycle</li> <li>● Risk Management Committee established</li> </ul>	<ul style="list-style-type: none"> <li>● Soil Contamination Countermeasures Act enacted</li> <li>● Japan adopts COP3 Kyoto Protocol</li> <li>● World Summit on Sustainable Development adopts Johannesburg Declaration on Sustainable Development</li> </ul>
2003	<ul style="list-style-type: none"> <li>● Yamaroku Kasei Industry certified as the Company's first zero waste emissions plant</li> <li>● Compliance Committee established</li> </ul>	<ul style="list-style-type: none"> <li>● Building Code revised to resolve "sick building" syndrome</li> </ul>
2004	<ul style="list-style-type: none"> <li>● Shizuoka Plant commences operations of a cogeneration system</li> </ul>	<ul style="list-style-type: none"> <li>● Air Pollution Prevention Law revised to reduce volatile organic compound (VOC) emissions</li> </ul>
2005	<ul style="list-style-type: none"> <li>● Title of annual Environmental Report changed to Environmental &amp; Social Report to reflect broader coverage of social initiatives</li> <li>● Sumitomo Bakelite (Taiwan) recognized as the Sumitomo Bakelite Group's first overseas zero emissions production business site</li> </ul>	<ul style="list-style-type: none"> <li>● Kyoto Protocol goes into effect</li> <li>● Ordinance on Prevention of Health Impairment due to Asbestos</li> </ul>
2007		<ul style="list-style-type: none"> <li>● The new EU Regulation for Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) comes into force</li> </ul>
2008	<ul style="list-style-type: none"> <li>● Thirty of the business sites of the Sumitomo Bakelite Group in Japan and overseas obtained ISO14001 certification (as of July)</li> <li>● Start of soil and groundwater pollution remediation measures at a site owned by Sano Plastic following the dismantling of a factory building there (February)</li> <li>● The company signs Responsible Care Global Charter (November)</li> <li>● Start of mechanical equipment risk assessment</li> </ul>	<ul style="list-style-type: none"> <li>● G8 Hokkaido Toyako Summit</li> </ul>
2009	<ul style="list-style-type: none"> <li>● Inauguration of multilingual Material Safety Data Sheet (MSDS) system</li> <li>● Begins participating as a partner in the Declaration of Biodiversity of the Japan Business Federation (Nippon Keidanren)</li> </ul>	<ul style="list-style-type: none"> <li>● Revised Act on the Rational Use of Energy takes effect</li> <li>● The 15th Conference of the Parties (COP15) held with the United Nations Climate Change Conference</li> </ul>
2010	<ul style="list-style-type: none"> <li>● Establishment of the Environmental Impact Reduction Committee</li> <li>● The Sumitomo Bakelite Group begins leakage risk assessments at its business sites in Japan and overseas</li> </ul>	<ul style="list-style-type: none"> <li>● The 10th Conference of the Parties (COP10) to the Convention on Biological Diversity</li> </ul>
2011	<ul style="list-style-type: none"> <li>● Presentation to Tochigi Prefectural Government of the report on the remediation construction work conducted at the Sano Plastic site (July)</li> <li>● Standards for preparation of the Environmental &amp; Social Report changed to conform with the GRI guidelines</li> </ul>	<ul style="list-style-type: none"> <li>● The 17th Conference of Parties (COP17) to the United Nations Framework Convention on Climate Change</li> <li>● The Great East Japan Earthquake</li> </ul>
2012	<ul style="list-style-type: none"> <li>● The biotope project starts at the Shizuoka Plant</li> <li>● Work to excavate and remove contaminated soil and to purify contaminated groundwater in the premises of the Totsuka Office after its closure</li> <li>● Zero emissions achieved at all domestic plants</li> <li>● Start of chemical materials risk assessment</li> </ul>	<ul style="list-style-type: none"> <li>● 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 (CMP8)</li> <li>● Following the accident at the Fukushima Daiichi Nuclear Power Plant of Tokyo Electric Power Company caused by the Great East Japan Earthquake, operation of all 54 commercial nuclear reactors in Japan suspended. Of the 54, only two at the Oi Nuclear Power Plant of Kansai Electric Power Company resumed operation</li> </ul>
2013	<ul style="list-style-type: none"> <li>● Completion of decontamination at the former Totsuka Plant reported to Yokohama City</li> </ul>	<ul style="list-style-type: none"> <li>● The 19th Conference of Parties (COP19) to the United Nations Framework Convention on Climate Change and the 9th Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (CMP9)</li> </ul>
2014	<ul style="list-style-type: none"> <li>● The Company signs the revised Responsible Care Global Charter</li> <li>● Environmental rating by the Development Bank of Japan (DBJ environmental rating): Gained A</li> <li>● Compilation of certain Scope 3 data starts at business sites in Japan</li> <li>● Start of risk assessment for fire by explosion</li> </ul>	<ul style="list-style-type: none"> <li>● Revision to the Responsible Care Global Charter (6th element)</li> <li>● Revision to the Industrial Safety and Health Act starts requiring businesses to perform risk assessments of chemical substances</li> </ul>
2015	<ul style="list-style-type: none"> <li>● Revised the Company's Environment and Safety management guidelines, and established a new Responsible Care Activity Guideline in accordance to the Responsible Care Global Charter revised in 2014.</li> </ul>	<ul style="list-style-type: none"> <li>● ISO 14001 Revised</li> <li>● Implementation of the amended Law Concerning the Discharge and Control of Fluorocarbons</li> <li>● Revision to the Water Pollution Control Act (revised wastewater standards)</li> <li>● Revision to the Soil Contamination Countermeasures Act (amended specified toxic substances)</li> </ul>
2016	<ul style="list-style-type: none"> <li>● Changed the name of the Environment and Social Report to the CSR Report and prepared it in compliance with the GRI Guidelines (Ver. 4)</li> </ul>	<ul style="list-style-type: none"> <li>● Revisions to Japan's Industrial Safety and Health Law (concerning chemical substance risk assessment) take effect</li> <li>● Revisions made to Japan's Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes (requiring systematic disposal prior to treatment expiration)</li> </ul>
2017	<ul style="list-style-type: none"> <li>● Opened the biotope at Shizuoka Plant to the general public</li> </ul>	
2018	<ul style="list-style-type: none"> <li>● CSR Report 2018: Prepared report based on the report preparation standards compliance with the "Core" option of the GRI Guideline/Standard.</li> <li>● Established the SDG Promotion and Preparation Project Team, presented in specific detail the areas of SDGs that the Company will focus on, and promoted the necessary measures on a company-wide scale.</li> </ul>	<ul style="list-style-type: none"> <li>● Ocean Plastics Charter announced at the G7 Summit (not signed by Japan and the United States)</li> <li>● Climate Change Adaptation Act enacted (Alongside with "alleviation," which mainly aims to reduce the emission of greenhouse gases, this act provides for a certain degree of "adaptation" to climate change)</li> </ul>

## Glossary for the CSR Report 2019

### ■ 47/M-DAG/PER/9 (page 47)

Rules on Indonesia's chemical substance regulation.

### ■ CDP (page 38)

A project that promotes the disclosure of information related to the environment, such as global warming measures and support for water strategies and forests by corporations, with the approval of institutional investors (preceded by the Carbon Disclosure Project). It is currently one of the sets of data that is most frequently used in the world as a reference for ESG investment.

### ■ CLASS regulations (page 47)

The Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013. Malaysia's GHS regulation.

### ■ CLP (page 47)

Regulation on the classification, labelling and packaging of chemical products based on GHS with the purpose of mainly communicating hazards in the EU.

### ■ CNS15030 Z1051 (page 47)

National standard for classification and labelling of chemicals in Taiwan.

### ■ COD (pages 38 and 41)

Chemical oxygen demand (COD) is a measure used in water quality analysis, indicating the amount of oxygen consumed by potassium permanganate to oxidize organic compounds in water. Overseas, potassium dichromate is often used as an oxidizing agent, and results are different, so we compiled separately in Japan and overseas.

### ■ CS (pages 48 and 51)

Acronym for customer satisfaction.

### ■ CSR

Acronym for Corporate Social Responsibility. CSR collectively refers to activities carried out within the scope of a company's operations not only geared toward generating profits, but also for fulfilling a company's responsibilities to society and growing together with society while emphasizing the correlation with all stakeholders.

### ■ DIW notification (page 47)

Notification of the Department of Industrial Works of Thailand.

### ■ ESG investment (page 8)

Refers to an investment method that involves selecting the companies to be invested in based on its initiatives in the three areas of environment, social, and governance (ESG).

### ■ European REACH (page 47)

European Union regulation to protect the health of people and the environment during the handling of chemical substances.

### ■ GB/T 16483 (page 47)

China's state standard for SDS (Safety Data Sheet for chemicals).

### ■ GHS (pages 26 and 47)

Acronym for the Globally Harmonized System of Classification and Labelling of Chemicals.

### ■ GRI (pages 2,25 and 79 to 80)

Acronym for Global Reporting Initiative, an international NGO. The organization publishes the GRI Sustainability Reporting Guideline.

### ■ HCS (page 47)

Acronym for Hazard Communication Standard. Regulation on workplaces handling dangerous and hazardous chemical substances in the United States.

### ■ ISO 26000 (page 25)

International standard developed in October 2010 to help organizations address social responsibility issues. This is the first international standard created through a multi-stakeholder process, which involved experts representing a multitude of sectors in the deliberation.

### ■ JIS Z 7253 (page 47)

Integrated version of JIS Z7250 and Z7251 for consistency with GHS.

### ■ Materiality (pages 3,24 and 25)

In the context of CSR, "materiality" refers to significant items that need to be worked on. Materiality items are selected in terms of how they reflect significant effects that an organization has on the economy, environment, and society, and how they have an actual impact on evaluations and decisions made by stakeholders.

### ■ MFCA (pages 39 and 41)

Acronym for Material Flow Cost Accounting, an environmental management and accounting tool for companies to improve cost efficiency and reduce environmental impact at the same time. Our Group utilizes this method as an analysis tool.

### ■ MSDgen (page 47)

A multilingual SDS publishing system introduced in 2008.

### ■ NOM (page 47)

Official Mexican Standards prepared by the General Directorate of Standards. They contain the absolute minimum requirements that must be met for preventing workplace dangers.

### ■ NOx (pages 38 and 41)

Nitrogen Oxide

### ■ Occupational Safety and Health Act (page 47)

The Occupational Safety and Health Act for Chemical substance of South Korea.

### ■ Pollutant Release and Transfer Register (PRTR) system (page 76)

Japan's PRTR Act 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.

### ■ Prop 65 (page 47)

An abbreviation for Proposition 65, a California law, officially known as the Safe Drinking Water and Toxic Enforcement Act of 1986.

### ■ QOL (page 48)

Acronym for quality of life. A concept of satisfaction in all aspects of life, which includes not only material wealth possession but also emotional fulfillment, and self actualization.

### ■ RBA Code of Conduct (page 36)

The Electronic Industry Citizenship Coalition (EICC) Code of Conduct establishes standards to ensure that working conditions in the electronics industry supply chain are safe, that workers are treated with respect and dignity, and that business operations are environmentally responsible and conducted ethically.

### ■ Responsible Care (page 29)

Activity that assures environmental safety and health in all stages of a chemical material's existence from development to manufacturing, distribution, utilization, final consumption, disposal, and recycling; publishes process results; and promotes dialogue and communication with the public. (Japan Chemical Industry Association)

### ■ Scope 3 (page 40)

Whereas Scope 1 concerns direct emissions due to combustion of fuel etc. and Scope 2 concerns indirect emissions from consumption of purchased electricity or heat, Scope 3 concerns other indirect emissions, both upstream and downstream, of the supply chain of the reporting entity. The international guidelines of the Greenhouse Gas (GHG) Protocol break down Scope 3 into 15 categories.

### ■ SDS (pages 26 and 47)

Acronym for Safety Data Sheet. This sheet contains the safety information regarding chemical substances, and is attached with products on their delivery to other businesses.

### ■ Soot and dust (pages 38 and 41)

Solid particulate matter found in smoke including dust and cinders.

### ■ SOx (pages 38 and 41)

Sulfur Oxide

### ■ Stakeholders (pages 3,24,25 and 30)

Persons and organizations concerned. People who have an interest in any decisions made or activities conducted by an organization.

### ■ TT-BCT (page 47)

Circular notice on regulation for classification and labelling of chemical substances of Vietnam.

### ■ WSSD (page 47)

Acronym for World Summit on Sustainable Development.

## GRI Standards Comparison Table

This report is compliant with the Core of the Global Reporting Initiative’s (GRI) Sustainability Reporting Standards.

### General Disclosures

GRI Standard – General Disclosures		Page number (title)
<b>1. Organizational profile</b>		
102-1	Name of the organization	P30: Corporate Data Website: Overview <a href="https://www.sumibe.co.jp/english/company/outline/index.html">https://www.sumibe.co.jp/english/company/outline/index.html</a>
102-2	Activities, brands, products, and services	P20-23: Familiar Sumitomo Bakelite Products Around You P30: Corporate Data / Major Products by Division Securities Report P6-7/128: Business Description Website: Products <a href="https://www.sumibe.co.jp/english/product/index.html">https://www.sumibe.co.jp/english/product/index.html</a>
102-3	Location of headquarters	P30: Corporate Data Website: Overview <a href="https://www.sumibe.co.jp/english/company/outline/index.html">https://www.sumibe.co.jp/english/company/outline/index.html</a>
102-4	Location of operations	P31: Group Companies P66-73: Business Sites, Subsidiaries and Affiliates in Japan and Overseas P81: Sumitomo Bakelite Group Website: Group Companies (Overseas) <a href="https://www.sumibe.co.jp/english/company/overseas/index.html">https://www.sumibe.co.jp/english/company/overseas/index.html</a>
102-5	Ownership and legal form	P30: Corporate Data P32: Corporate Governance
102-6	Markets served	P31: Group Companies Securities Report P6-7/128: Business Description
102-7	Scale of the organization	P30: Corporate Data P31: Group Companies Securities Report P2-3/128: Overview of Company P11/128: Employees P29-30/128: Major Shareholders Website: Overview <a href="https://www.sumibe.co.jp/english/company/outline/index.html">https://www.sumibe.co.jp/english/company/outline/index.html</a>
102-8	Information on employees and other workers	P52: Breakdown of Employees by Region and by Gender Securities Report P24-25/128: Main Facilities (Number of Employees at Each Plant and Company at Right) (Reason for omission) It is difficult to obtain information on temporary employees classified by gender and region. Going forward, effort will be made to disclose this information by obtaining information for one or two years.
102-9	Supply chain	P36: CSR Procurement>Basic Approach
102-10	Significant changes to the organization and its supply chain	None
102-11	Precautionary Principle or approach	P35: Risk Management P37: Environmental Management p49: Reducing Risk Relating to New Business
102-12	External initiatives	P77: Environmental Protection Activities
102-13	Membership of associations	P76: Memberships in Leading Organizations
<b>2. Strategy</b>		
102-14	Statement from senior decision-maker	P3: Top Commitment
<b>3. Ethics and integrity</b>		
102-16	Values, principles, standards, and norms of behavior	P28-29: Business Policy of the Sumitomo Bakelite Group, and Sustainability Promotion Structure P34: Code of Conduct for Employees P36: Basic Approach (Procurement Policy at right) P48: Basic Quality Management Policy for Fiscal 2018 P60: Basic Policy on Profit Distribution Website: Guiding Principles <a href="https://www.sumibe.co.jp/english/company/philosophy/index.html">https://www.sumibe.co.jp/english/company/philosophy/index.html</a> Website: Material Procurement>Procurement Policy <a href="https://www.sumibe.co.jp/english/company/purchasing/index.html">https://www.sumibe.co.jp/english/company/purchasing/index.html</a>

GRI Standard – General Disclosures		Page number (title)
<b>4. Governance</b>		
102-18	Governance structure	P29: Sustainability Promotion Structure P32-33: Corporate Governance P37: Environmental Management Securities Report P35-36/128: Corporate Governance
<b>5. Stakeholder engagement</b>		
102-40	List of stakeholder groups	P30-31: Relationship with Stakeholders
102-41	Collective bargaining agreements	P59: Labor-Management Relations Securities Report P11/128: Labor Unions
102-42	Identifying and selecting stakeholder	P24-25 Sumitomo Bakelite’s Materiality P30-31: Stakeholder Engagement
102-43	Approach to stakeholder engagement	P30-31: Relationship with Stakeholders
102-44	Key topics and concerns raised	P30: Relationship with Stakeholders
<b>6. Reporting practice</b>		
102-45	Entities included in the consolidated financial statements	P2: Boundary P81: Consolidated subsidiaries (38 companies) Securities Report P9-10/128: Affiliated Companies
102-46	Defining report content and topic Boundaries	P2: Boundary P24-25: Sumitomo Bakelite’s Materiality P79: Basis to disclose topics identified as material
102-47	List of material topics	P24: Sumitomo Bakelite’s Materiality P79: Basis to disclose topics identified as material
102-48	Restatements of information	None
102-49	Changes in reporting	None
102-50	Reporting period	P2: Period
102-51	Date of most recent report	P2: Published
102-52	Reporting cycle	P2: Published
102-53	Contact points for questions regarding the report	Back cover: Inquiries
102-54	102-54 Claims of presorting in accordance with the GRI Standards	P2: Editorial Policy P79: GRI Standards Comparison Table
102-55	GRI content index	P2: Editorial Policy P79-80: GRI Standards Comparison Table P82: Independent Assurance Report
102-56	External assurance	P2: Editorial Policy P82: Independent Assurance Report

### Basis of to disclose topics identified as material

Identified materiality items	Related GRI Standard Aspects
● Mitigate environmental impacts	Materials/Emissions/Effluents and Waste
● Resource and energy conservation	Energy
● Safety and security	Environment-Overall/Occupational Health and Safety
● Chemical substances	Occupational Health and Safety
● Product liability	Customer Health and Safety
● Biodiversity	Biodiversity
● Improving stakeholder satisfaction	Customer Health and Safety
● Human resources development	Training and Education/Employment
● Diversity and work-life balance	Diversity and Equal Opportunity
● CSR procurement	Supplier social assessment
● Compliance	Socioeconomic compliance/Environmental Compliance

■ Topics determined to be material

GRI Standard – General Disclosures		Page number (title)
GRI 300 Series (Environmental Standards)		
GRI 301 Materials		
103-1	Explanation of the material topic and its Boundary	P39: Medium- to Long-term Environmental Targets and Results P41: Reducing Material Loss
103-2	The management approach and its components	P39: Medium- to Long-term Environmental Targets and Results P41: Reducing Material Loss
103-3	Evaluation of the management approach	P39: Medium- to Long-term Environmental Targets and Results P41: Reducing Material Loss
301-1	Materials used by weight or volume	P38: Material Flows and Investments in Environmental Protection
GRI 302 Energy		
103-1	Explanation of reporting the material topic and its Boundary	P38: Material Flows and Investments in Environmental Protection
103-2	The management approach and its components	P26: Highlights of Fiscal 2018 Activities P37: Environmental Management
103-3	Evaluation of the management approach	P37: Environmental Management
302-3	Energy intensity	P40: Environmental Performance
302-4	Reduction of energy consumption	P37: Activities of the Environmental Impact Reduction Committee
GRI 304 Biodiversity		
103-1	Explanation of reporting the material topic and its Boundary	P61: Biodiversity Conservation Initiatives P63: Environmental and Social Contribution Activities
103-2	The management approach and its components	P27: Highlights of Fiscal 2018 Activities P61: Biodiversity Conservation Initiatives P63: Environmental and Social Contribution Activities
103-3	Evaluation of the management approach	P63: Message from Earthwatch Japan
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	P61: Biotope Initiatives
GRI 305 Emissions		
103-1	Explanation of reporting the material topic and its Boundary	P37: Environmental Management
103-2	The management approach and its components	P38: Material Flows and Investments in Environmental Protection
103-3	Evaluation of the management approach	P37: Activities of the Environmental Impact Reduction Committee
305-1	Direct (Scope 1) GHG emissions	P38: Material Flows and Investments in Environmental Protection P74: Trends in Environmental Performance • Offsetting not used until fiscal 2018.
305-3	Other indirect (Scope 3) GHG emissions	P40: Environmental Performance
305-4	GHG emissions intensity	P40: Environmental Performance
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	P38: Material Flows P41: Air Emission
GRI 306 Effluents and Waste		
103-1	Explanation of reporting the material topic and its Boundary	P37: Environmental Management
103-2	The management approach and its components	P26: Highlights of Fiscal 2018 Activities P38: Material Flows and Investments in Environmental Protection P41: Water Emission P43: Soil/Underground Water Pollution Countermeasures
103-3	Evaluation of the management approach	P37: Activities of the Environmental Impact Reduction Committee
306-2	Waste by type and disposal method	P38: Material Flows P74: Trends in Environmental Performance
306-3	Significant spills	P43: Soil/Underground Water Pollution Countermeasures
GRI 307 Environmental Compliance		
103-1	Explanation of reporting the material topic and its Boundary	P33: Compliance P37: Environmental Management
103-2	The management approach and its components	P3: Thoroughness of Compliance P33: Compliance P34: Whistleblower System P37: Environmental Management
103-3	Evaluation of the management approach	P33: Compliance P37: Environmental Management
307-1	Non-compliance with environmental laws and regulations	P35: Monitoring
GRI 308 Supplier Environmental Assessment		
103-1	Explanation of reporting the material topic and its Boundary	P36: CSR Procurement
103-2	The management approach and its components	P27: Highlights of Fiscal 2018 Activities P36: CSR Procurement
103-3	Evaluation of the management approach	P36: CSR Procurement

GRI Standard – General Disclosures		Page number (title)
308-2	Negative environmental impacts in the supply chain and actions taken	P36: CSR Survey of Suppliers
GRI 400 Series (Social Standards)		
GRI 401 Employment		
103-1	Explanation of reporting the material topic and its Boundary	P52: Recruiting and Employment P55: Human Resources Development
103-2	The management approach and its components	P52: Recruiting and Employment
103-3	Evaluation of the management approach	P59: Labor-Management Relations
401-1	New employee hires and employee turnover	P52: Number of Group Employees and Executive Officers
GRI 403 Occupational Health and Safety		
103-1	Explanation of reporting the material topic and its Boundary	P44: Safety and Security
103-2	The management approach and its components	P26: Highlights of Fiscal 2018 Activities P44: Safety and Security
103-3	Evaluation of the management approach	P26: Highlights of Fiscal 2018 Activities P44: Machinery and Equipment Risk Reduction Activities, Risk Reduction Activities relating to Chemical Substances
403-2	Hazard identification, risk assessment, and incident investigation	P45: Occupational Accident Figures
403-4	Worker participation, consultation, and communication on occupational health and safety	P59: Labor-Management Relations
GRI 404 Training and Education		
103-1	Explanation of reporting the material topic and its Boundary	P55: Human Resources Development
103-2	The management approach and its components	P27: Highlights of Fiscal 2018 Activities P55: Human Resources Development P56: The Group's in-house training institute, "SB School"
103-3	Evaluation of the management approach	P55: Human Resources Development
404-2	Programs for upgrading employee skills and transition assistance programs	P56: The Group's in-house training institute, "SB School"
GRI 405 Diversity and Equal Opportunity		
103-1	Explanation of reporting the material topic and its Boundary	P53: Employment of People with Disabilities P53: Initiatives to Promote the Advancement of Women P54: Work-Life Balance
103-2	The management approach and its components	P53: Employment of People with Disabilities P53: Initiatives to Promote the Advancement of Women P54: Work-Life Balance
103-3	Evaluation of the management approach	P53: Employment of People with Disabilities P53: Initiatives to Promote the Advancement of Women P54: Work-Life Balance
405-1	Diversity of governance bodies and employees	P32: Management System P52: Number of Group Employees and Executive Officers P53: Employment of People with Disabilities P53: Initiatives to Promote the Advancement of Women
GRI 414 Supplier Social Assessment		
103-1	Explanation of reporting the material topic and its Boundary	P36: CSR Procurement
103-2	The management approach and its components	P27: Highlights of Fiscal 2018 Activities P36: CSR Procurement
103-3	Evaluation of the management approach	P36: CSR Procurement
414-2	Negative social impacts in the supply chain and actions taken	P36: CSR Survey of Suppliers
GRI 416 Customer Health and Safety		
103-1	Explanation of reporting the material topic and its Boundary	P48: The Group's Basic Policy and System for Quality Assurance
103-2	The management approach and its components	P48: The Group's Basic Policy and System for Quality Assurance
103-3	Evaluation of the management approach	P48: The Group's Basic Policy and System for Quality Assurance
416-1	Assessment of the health and safety impacts of product and service categories	P48-50: Product Liability
GRI 419 Socioeconomic Compliance		
103-1	Explanation of reporting the material topic and its Boundary	P33: Compliance
103-2	The management approach and its components	P27: Highlights of Fiscal 2018 Activities P33: Compliance
103-3	Evaluation of the management approach	P34: Whistleblower System P35: Monitoring
419-1	Non-compliance with laws and regulations in the social and economic area	P35: Monitoring



## Sumitomo Bakelite Group (as of March 31, 2019)

### Consolidated subsidiaries (38)

Akita Sumitomo Bakelite Co., Ltd.  
 Kyushu Sumitomo Bakelite Co., Ltd.  
 S.B. Techno Plastics Co., Ltd.  
 Hokkai Taiyo Plastic Co., Ltd.  
 Yamaroku Kasei Industry Co., Ltd.  
 S.B. Research Co., Ltd.  
 S.B. Sheet Waterproof Systems Co., Ltd.  
 Softec Systems Inc.  
   └─ Seibu Jushi Co., Ltd.  
 Sunbake Co., Ltd.  
 Tsutsunaka Kosan Co., Ltd.  
 Sumitomo Bakelite Singapore Pte. Ltd.  
   └─ Sumitomo Bakelite (Suzhou) Co., Ltd.  
   └─ Sumitomo Bakelite (Thailand) Co., Ltd.  
 SumiDurez Singapore Pte. Ltd.  
 SNC Industrial Laminates Sdn. Bhd.  
 P.T. Indopherin Jaya  
 P.T. SBP Indonesia  
 Sumitomo Bakelite (Taiwan) Co., Ltd.  
 Sumitomo Bakelite (Shanghai) Co., Ltd.  
 Sumitomo Bakelite (Nantong) Co., Ltd.  
 Sumitomo Bakelite Hong Kong Co., Ltd.  
 Sumitomo Bakelite (Dongguan) Co., Ltd.  
 Sumitomo Bakelite Macau Co., Ltd.  
 Sumitomo Bakelite North America Holding, Inc.  
   └─ Sumitomo Plastics America, Inc.  
   └─ Durez Corporation  
   └─ Durez Canada Co., Ltd.  
   └─ Promerus, LLC  
   └─ Sumitomo Bakelite North America, Inc.  
   └─ H.I.G. Vaupell Holdings, LLC  
     └─ Vaupell Holdings, Inc.  
       └─ Vaupell Molding & Tooling, Inc.  
       └─ Russell Plastics Technology Company, Inc.  
       └─ Vaupell Industrial Plastics, Inc.  
 Sumitomo Bakelite Europe NV  
   └─ Vyncolit NV  
   └─ Sumi Bakelite Europe (Barcelona), S.L.U.

### Non-consolidated companies (13)

S.B Information System Co., Ltd.  
 Sumibe Service Co., Ltd.  
 S.B. Recycle Co., Ltd.  
 SB Bioscience Co., Ltd.\*<sup>2</sup>  
 SB Holland B.V.  
 Sumibe Korea Co., Ltd.  
 SBE India Pvt Ltd.  
 Taiwan Sumitomo Bakelite Co., Ltd.  
 Vaupell Rong Feng Holdings, LLC  
   └─ Rong Feng (H.K.) Industries Limited  
     └─ Vaupell China (Dongguan) Co., Ltd.  
     └─ Rong Chang Sheng Plastics Mould (Shen Zhen) Co., Ltd.  
 Vaupell Europe GmbH\*<sup>3</sup>

### Affiliated companies accounted for by the equity method (2)

P.T. Pamolite Adhesive Industry  
 Kawasumi Laboratories, Inc.\*<sup>4</sup>

### Affiliated companies not accounted for by the equity method (6)

Otomo Chemical Co., Ltd.  
 Green Chemicals Co., Ltd.  
 Akita EV Bus LLP  
 Changchun SB (Changshu) Co., Ltd.  
 Tsu-Kong Co., Ltd.  
 S&G Biotech Inc.\*<sup>1</sup>

	Consolidated	Equity method	Non-consolidated	Other	Total
Japan	11	1	4	3	19
Overseas	27	1	9	3	40
<b>Total</b>	<b>38</b>	<b>2</b>	<b>13</b>	<b>6</b>	<b>59</b>

\*1 Invested in S&G Biotech Inc. in February 2018, which was then added to the table above as an affiliated company not accounted for by the equity method.

\*2 SB Bioscience Co., Ltd. was established in October 2018, and added to the table above as a non-consolidated subsidiary. (Became a consolidated subsidiary from April 2019)

\*3 Vaupell Europe GmbH was established in January 2019, and added to the table above as a non-consolidated subsidiary.

\*4 Invested in Kawasumi Laboratories, Inc. in March 2019, which was then added to the table above as an affiliated company accounted for by the equity method.



## Independent Assurance Report

To the President and Representative Director of Sumitomo Bakelite Co., Ltd.

We were engaged by Sumitomo Bakelite Co., Ltd. (the “Company”) to undertake a limited assurance engagement of the environmental and social performance indicators and environmental accounting indicators marked with  (the “Indicators”) for the period from April 1, 2018 to March 31, 2019 included in its CSR Report 2019 (the “Report”) for the fiscal year ended March 31, 2019, and the Company’s self-declaration that the Report is prepared in accordance with the Global Sustainability Standards Board’s GRI Sustainability Reporting Standards 2016 (“GRI Standards”) at a core level.

### The Company’s Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the “Company’s reporting criteria”), as described in the Report, and for self-declaring that the Report is prepared in accordance with the criteria stipulated in the GRI Standards.

### Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with the ‘International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information’ and the ‘ISAE 3410, Assurance Engagements on Greenhouse Gas Statements’ issued by the International Auditing and Assurance Standards Board. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing the Company’s responsible personnel to obtain an understanding of its policy for preparing the Report and reviewing the Company’s reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical procedures on 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 recalculating the Indicators.
- Visiting the Company’s Kanuma Plant and Sumitomo Bakelite (Shanghai) Co., Ltd. selected on the basis of a risk analysis.
- Evaluating the Company’s self-declaration that the Report is prepared in accordance with the GRI Standards at a core level against the criteria stipulated in the GRI Standards.
- Evaluating the overall presentation of the Indicators.

### 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, and the Company’s self-declaration that the Report is prepared in accordance with the GRI Standards at a core level does not conform to the criteria stipulated in the GRI Standards.

### Our Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control 1, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

*KPMG AZSA Sustainability Co., Ltd.*

KPMG AZSA Sustainability Co., Ltd.

Tokyo, Japan

December 18, 2019

### Onsite plant audit carried out by KPMG AZSA Sustainability



Overseas business site (Sumitomo Bakelite (Shanghai) Co., Ltd.)



Business site in Japan (Kanuma Plant)

# SUMITOMO BAKELITE CO.,LTD.

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## Inquiries

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**Responsible Care®**  
OUR COMMITMENT TO SUSTAINABILITY



## About the Cover

Illustrator: **Satoko Mukumoto**

I depicted Sumitomo Bakelite's biotope centered around a pond where the ancient lotus plant, the Oga lotus, is blossoming. The biotope, where valuable plants and animals make their habitats, is an enjoyable playground for children, and at the same time, a place for them to learn about the natural environment. The images of the children playing freely amongst the rich natural environment, express my wish to protect their bright and rich future.



UD Font: The easy-to-read font is based on the Universal Design (UD) concept.

Published: January 2020

