

# CSR Report 2018

Corporate Social Responsibility Report

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# Editorial Policy

## Editorial Policy

- The CSR Report 2018 is published with the goals of informing stakeholders about the Sekisui Chemical Group's social responsibilities and the various initiatives in which it is involved to resolve social issues and of increasing public understanding of the group's activities.
- The report consists of the CSR philosophies set forth in the CSR Medium-term Plan drawn up in 2017, namely "Three Prominences ("the environment," "CS & quality," and "human resources"), "Pledge to Society" ("working environments," "safety," and "compliance and respect for human rights"), "Stakeholder Engagement," and "Governance"—along which lines this site has been built.
- The information posted here has been decided upon in reference to various report-drafting guidelines, based on internal and external surveys and third-party reviews, and in consideration of what is important for both society and the Sekisui Chemical Group.
- The CSR Report 2018 has been edited with an anticipated readership of all stakeholders involved with the Sekisui Chemical Group, particularly institutions that evaluate ESG and long-term investors.
- The "pamphlet edition" that was published through fiscal year 2017 has been done away with; all information relating to the CSR activities of the Sekisui Chemical Group are posted on this website as the "CSR Report 2018 Web Edition." The "CSR Report 2018 PDF Edition," which has the same content as the Web Edition, can also be downloaded from the PDF download page.
- The standards used for calculating the major reported performance indicators are compiled together and listed after each set of performance data.
- To ensure reliability, the environmental and social information in the Japanese version of "CSR Report 2018 PDF Edition" has been assured by a third-party organization.

## Guidelines Used for Reference, etc.


- The CSR Report 2018 was written following the Core options of the GRI Standards.
- The Ministry of the Environment's "Environmental Reporting Guidelines (2012 Edition)" were also used as a reference.

# Scope of the CSR Report 2018

## Scope of This Report

<b>Entities Encompassed by This Report</b>	<b>:The basic function of this report is to comment on the activities of the Sekisui Chemical Group, focusing chiefly on the business facilities that play key roles in those activities.</b>
<b>Timeframe Encompassed by This Report</b>	<b>: April 2017-March 2018 (Includes some activities that occurred outside this timeframe.)</b>
<b>Published</b>	<b>:July 2018 (Previous report was published June 2017 / Next report is scheduled publication in July 2019)</b>

## Scope of Independent Practitioner's Assurance

The environmental and social information in the Japanese version of "CSR Report 2018 PDF Edition" has been assured by third-party organization. Information that falls within the scope of independent practitioner's assurance is identified by  mark. Further, for "Independent Practitioner's Assurance Report," see the posting on Page 304 on Independent Practitioner's Assurance Report.

## Disclaimer

Readers are requested to note the following: The information in the CSR Report 2018 includes not only past and present facts concerning Sekisui Chemical Co., Ltd, and its affiliates but also future forecasts based on current plans and projections and management plans and management policies as of the time of publication. Changes in various factors could cause the results of business activities in the future and other circumstances to differ from these forecasts. Also, since the figures in the tables and graphs contained in this report have been adjusted through rounding off and other means, in some cases total figures may not be equal to the sums of their parts. In addition, for some items data for past fiscal years has been revised in line with expansion in the scope of summation, revision of calculation methods, and changes to environmental load coefficients.



## Top Message



The Sekisui Chemical Group is involved in social issues through our outstanding technology and quality based on our Group vision of "contributing to the improvement of people's lives around the world and the Earth's environment," with the aim of managing the creation of social value while balancing the environmental, social, and economic aspects, and implementing business activities accordingly.

We aim to further increase our corporate value, based on the understanding that it is equal to economic value plus the value of the positive and negative impacts on the environment and society caused by corporate activities. In our medium-term management plan "SHIFT 2019 -Fusion-," we are engaged in the following initiatives: "Sustainable : Establish sustainable business base from E/S/G viewpoint," "Human Resources : Empowerment of diverse employees who support the business," "Innovation : Create new products and new businesses with prominent technologies and quality," "Frontier : Develop new fields, new area, and new applications," and "Transformation : Promote transformation (strengthening earnings power) and establish strong business structure."

Concerning our business performance in terms of economic value, in fiscal year 2017, we achieved record-high levels of profit at all stages through expanding sales of high-value added products and other means, even against headwinds, such as a rise in raw material costs. Just as planned, we were also able to pursue initiatives aimed at future growth, including launching new products, venturing into new fields, and making investments (M&A, general investments, capital expenditures, and research and development). The core keyword we are emphasizing as we proceed with our medium-term management plan is "Fusion." We are encouraging going beyond the silos of each Company and fusing their technologies, business opportunities, talent, and other resources together within the entire Group, and we have fully laid out the results that can be expected in the future for endeavors such as the "SEKISUI Safe & Sound Project" for urban development, which brings together the total capabilities of the Sekisui Chemical Group.

Meanwhile, concerning the fiscal year 2017 CSR activities that affected our impact on the environment and society, we revised the definition and scope of contribution of our Environment-contributing Products—which also respond to what is called for in the SDGs—established an investment framework for contributing to the environment and reducing our environmental impact, created a declaration on work-style reforms, shored up our Group governance through the establishment of a new regional headquarters in Thailand, engaged in activities for making our facilities safe at the essential level, and implemented various other measures.

Progress toward our fiscal year 2017 targets in the CSR Medium-term Plan is somewhat behind schedule, but we will aim to attain our current medium-term targets through the measures we have implemented thus far and those that we will implement in fiscal year 2018 onward.

The next 30 years will see rapid changes, and it will be an era in which it is extremely unclear what might happen. However, it is certain that there will always be a need for products and services that underpin healthy lifestyles for people. Clean water, clean air, disaster-resistant and clean houses and towns, healthy bodies. It will continue to be the Sekisui Chemical Group's mission to contribute to resolving issues related to these things that no one can do without through our prominent technology and quality.

We will hold fast to our will to contribute to “people’s lives and the environment” through prominent technology and quality and act on that will. This will take the form of putting our Corporate Philosophy of the “3S Principles” and our Group Vision into practice, in line with the essence of the Sekisui Chemical Group.

We will continue to put the essence of the Sekisui Chemical Group on full display as we contribute to building a sustainable society.

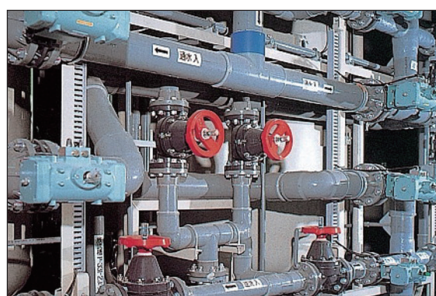
We would like to thank all our stakeholders in advance for the continued support.

## Our Company

Globally rolling out diverse businesses that create social value based on 3 Group companies



Housing Company



Urban Infrastructure & Environmental Products Company

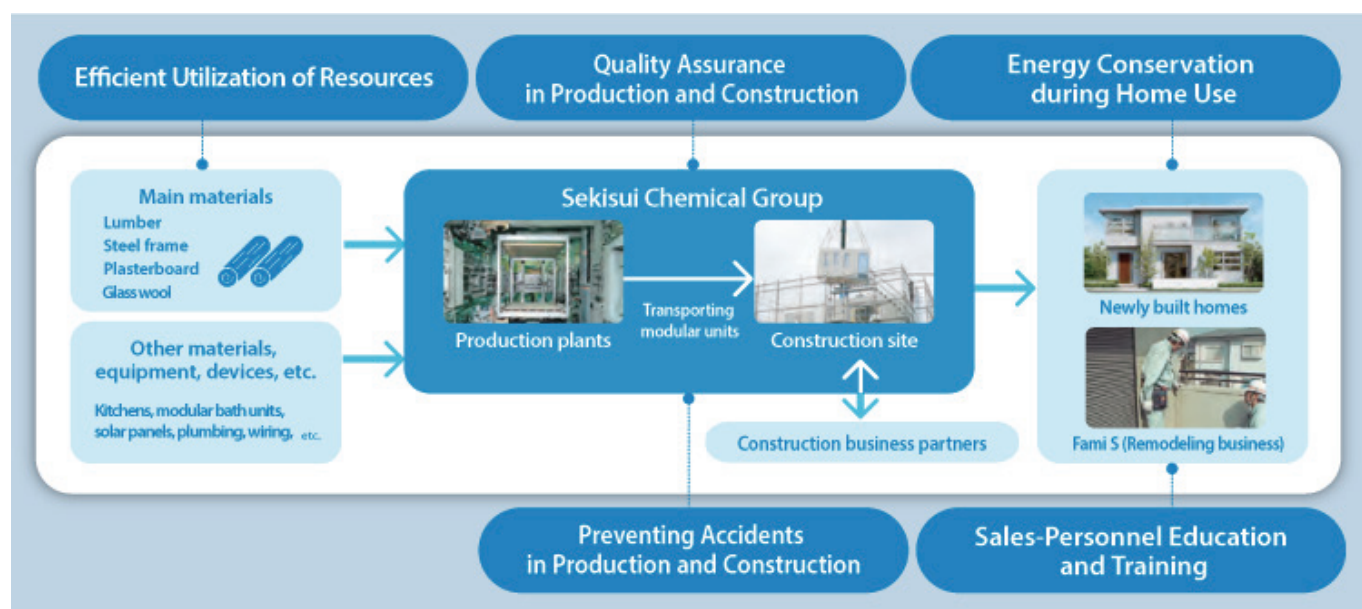


High Performance Plastics Company

### Housing Company

- Housing business** :Steel-framed unit housing "Sekisui Heim," wooden-framed unit housing "Sekisui Two-U Home," land for sale in lots
- Remodeling business** : "Sekisui Fami-S"
- Real estate business** :Second-hand distribution, rental management
- Home lifestyle service business** :Homes for the elderly with services, interiors, exteriors, etc.

### Business Value Chain



## Urban Infrastructure & Environmental Products Company

### Pipes and infrastructure fields

:PVC pipes and joints, polyethylene pipes and joints, plastic valves, pipe rehabilitation materials and methods, reinforced plastic complex pipes, water tanks

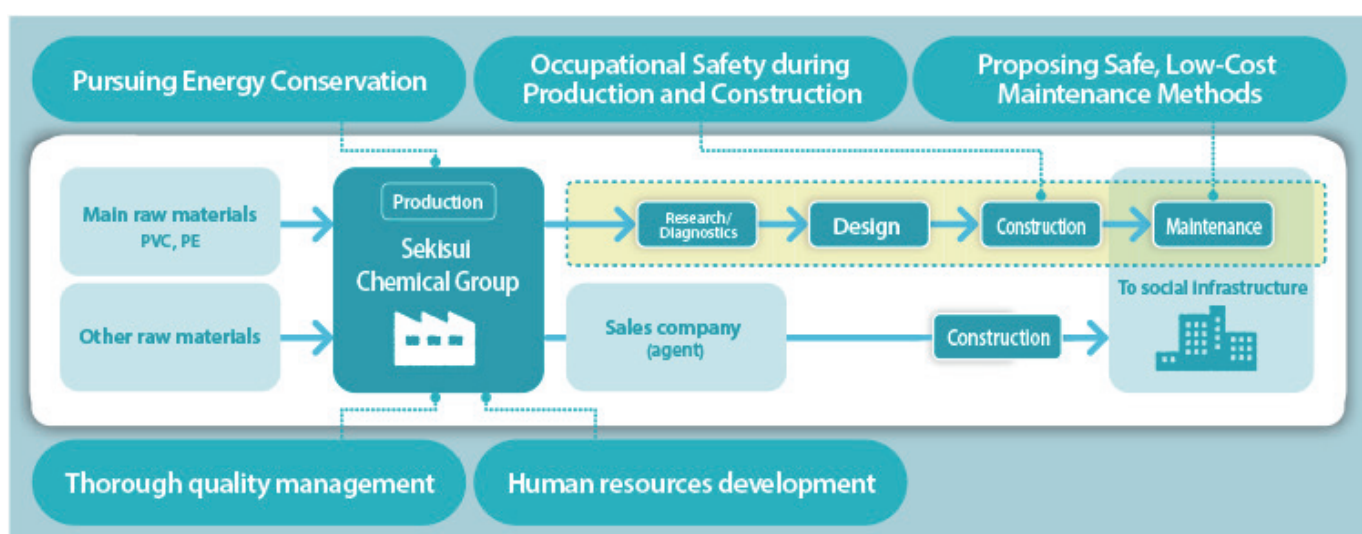
### Construction and housing environment fields

:Construction materials (guttering, exterior materials), heat-resistant materials, functional mats, care instruments, bathroom units

### Functional materials field

:Decorative seats, synthetic wood (FFU), thermoplastic CFRP, soundproof vibration-suppressing materials, blow containers, farming and construction materials

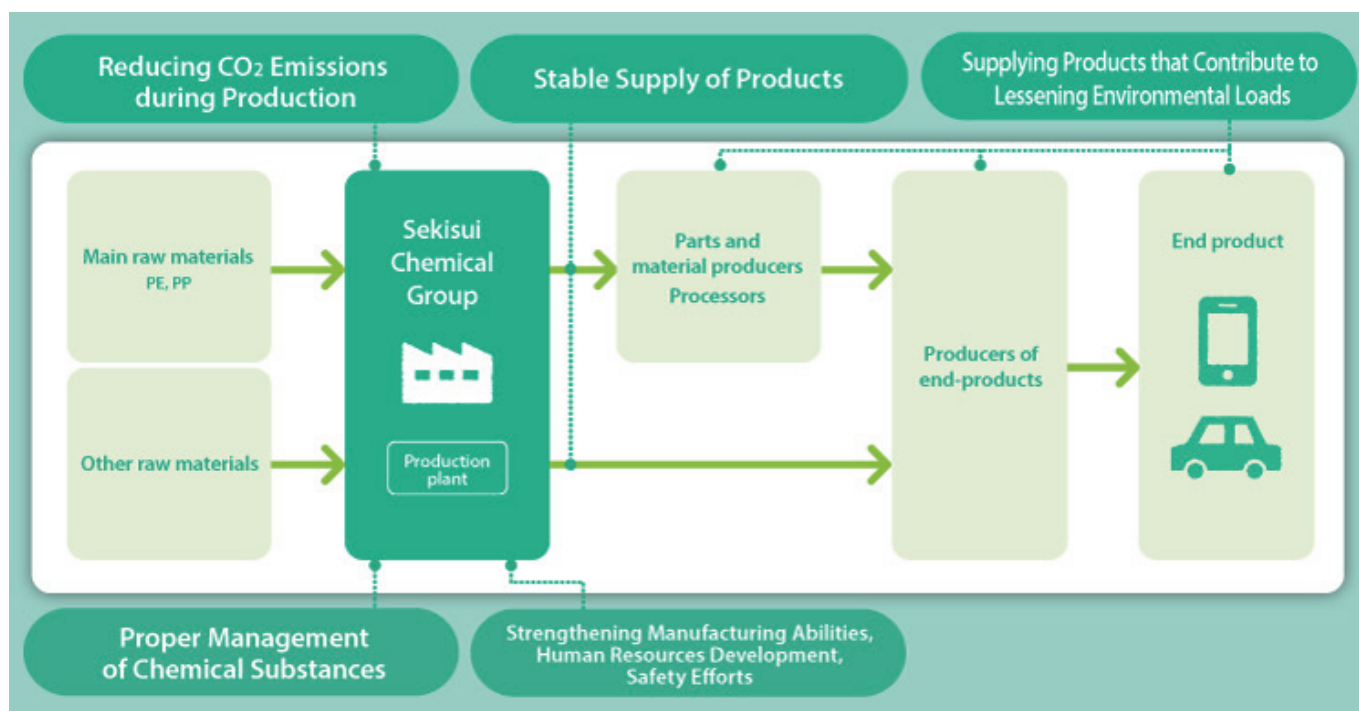
## Business Value Chain



## High Performance Plastics Company

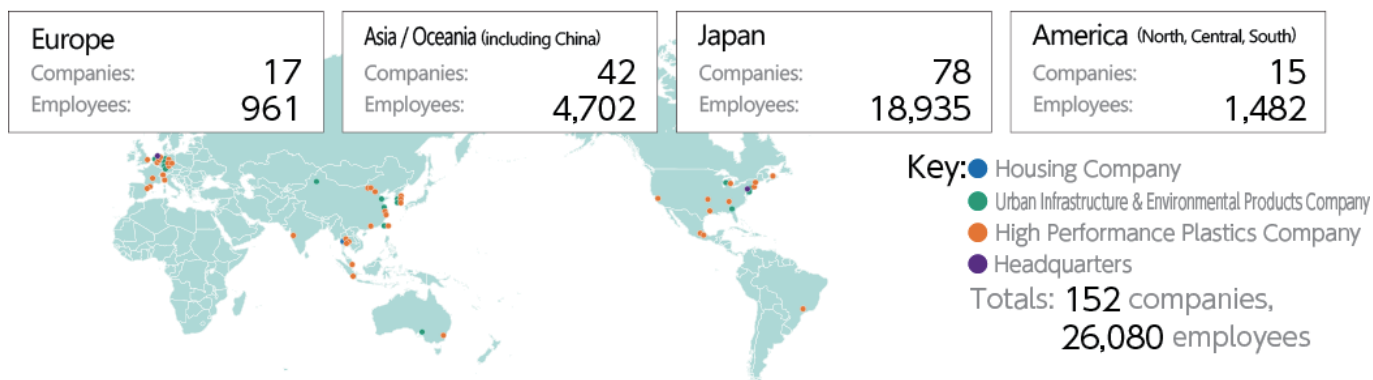
Electronics field	:Liquid crystal particles, photosensitive materials, semiconductor materials, optical film, industrial tape
Vehicle and shipping fields	:Interlayer film for laminated glass, foam polyolefins, vehicle resin and rubber molded products, industrial tape, heat dissipation materials (grease and sheets)
Housing infrastructure materials field	:Functional resin for infrastructure materials, flame-resistant materials, foam polyolefins, non-flammable polyurethane, polyurethane, livestock panels
Life science field	:Reagents, examination instruments, pharmaceuticals, drug manufacture support business, hygiene materials
Other industrial fields	:Adhesives, wrapping tape, plastic containers, polyvinyl alcohol resin

## Business Value Chain





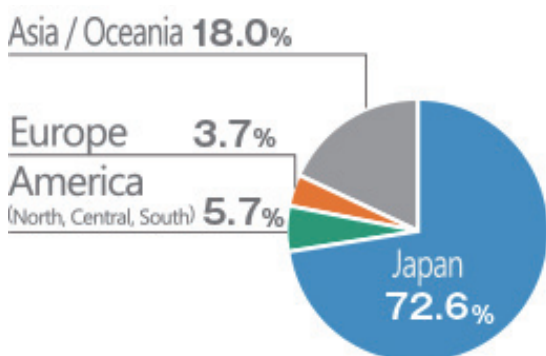
## Sekisui Chemical Group Worldwide



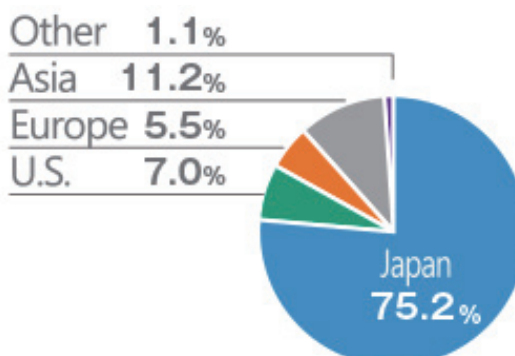
\* Figures current as of the end of March 31, 2018 (on a consolidated basis)

## Business Data

### No. of employees by region



### Sales by region



See the fact book for details of the management indices.

Fact Book

<http://www.sekisuichemical.com/ir/library/fact/index.html>

# Our Approach to CSR

Promoting Activities That are in Tune with Business Strategies as Part and Parcel of Efforts to Put into Effect the "3S Principles" of the Group's Corporate Philosophy

## Basic Stance

### CSR at the Heart of the Group's Management Strategy

Contributing to society and creating value through its business activities, lies at the heart of the Sekisui Chemical Group's CSR activities. Put another way, promoting CSR activities is essential to realizing the Group's vision and the "3S Principles." By positioning CSR at the center of our management strategy, and promoting CSR management, we remain convinced that we will raise the quality of corporate management.

With this understanding, we proactively engage in CSR management regardless of the business environment in order to achieve sustainable growth and innovation in our businesses. We must continue to change and evolve.

## Key Themes

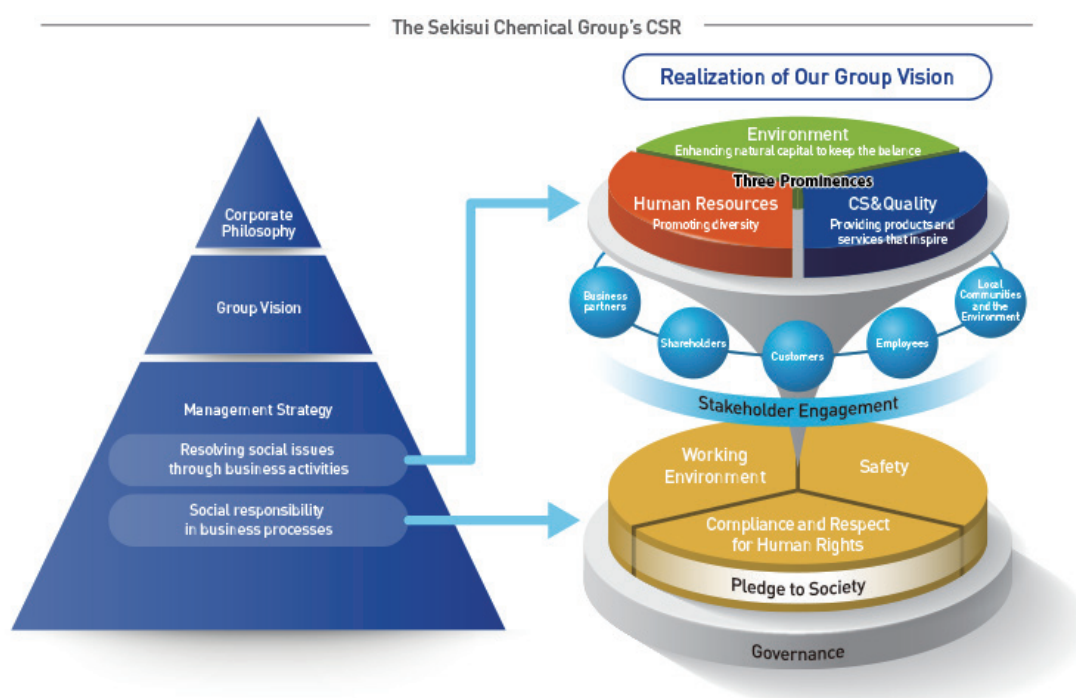
### Three Prominences, Pledge to Society, Governance, and Stakeholder Engagement

The Sekisui Chemical Group has positioned CSR, and in particular "resolving social issues through business activities" as well as "promoting social responsibility in business practices" at the heart of its management strategy.

Through constructive dialogue with stakeholders, who we see as partners in the creation of value, we are working to incorporate expectations and demands into our management and operations.

Recognizing that governance provides the underlying strength for all of the Group's operations, we are building the necessary structure and systems to earn the trust of society.

With a robust governance structure and systems as its platform, the Sekisui Chemical Group maintains its pledge to society to act responsibly in terms of safety, compliance and respect for human rights, and its working environment across all business processes. Moreover, the Group will endeavor to resolve social issues through its business activities across its Three Prominences in the environment, CS & Quality, and human resources. In this manner, the Sekisui Chemical Group will realize its Group Vision.



# CSR Management Promotion System

Promoting CSR Management Across the Group as a Whole in an Effort to Increase Corporate Value

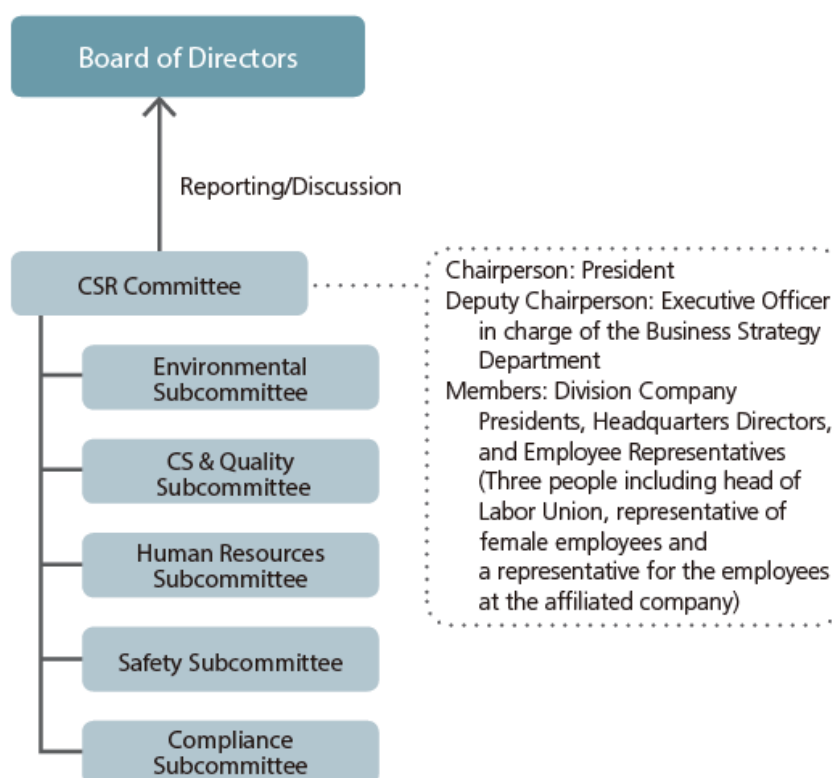
## CSR Committee / Subcommittee Structure

### The CSR Committee, with Participation by Top Management and Employee Representatives

As a venue for deliberation on CSR management, the Sekisui Chemical Group has set up the CSR Committee. Under the umbrella of this Committee, the Group has established five subcommittees covering the environment, CS & Quality, human resources, safety, and compliance.

Chaired by the President, the CSR Committee's membership also includes the executive officer responsible for the Business Strategy Department serving as deputy chairperson, the president of each division company, headquarters directors, and three employee representatives including the chairperson of the central executive committee of the Sekisui Chemical Labor Union. All members of the CSR Committee are working diligently to improve committee deliberations and measures.

## CSR Committee / Subcommittee Structure





# CSR Management Policies

We have determined all management policies that presume CSR activities such as "environmental management," "CS & Quality management," and "personnel and human rights policies," etc.

## | Sekisui Chemical Group "Environmental Management Policy"

### Mission

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We, Sekisui Chemical Group, aim to be a Global Environmental Top Runner that contributes to the realization of a sustainable society by enabling the continuous growth and co-existence of ecology and the economy.

### Basic Policy

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Each company in Sekisui Chemical Group advances approaches that contribute to the prevention of global warming, the preservation of biological diversity and the construction of a recycling-based society in all countries and regions where they have operations, in order to leave this beautiful earth for our children in the future.

1. We contribute to the environment through our products and services, with consideration given to the environment in all stages of the product life cycle from research to procurement, production, sales, use, and disposal as waste.
2. We carry out environmentally conscious business activities in all our workplaces and offices, and promote our approach to the environment through cooperation with our customers and business partners.
3. We make efforts to reduce the environmental impact of greenhouse gas emissions and hazardous chemicals, etc., and to prevent pollution by promoting the effective use of limited resources and energy.
4. We observe the related laws, regulations, international rules, etc.
5. We make efforts to improve environmental consciousness through education, and advance continual improvements by setting our own objectives and targets.
6. We enhance confidence through close communications with society.
7. We aggressively work on social contribution activities such as nature conservation activities in each region.

## | Sekisui Chemical Group "CS & Quality Management Policy"

### Mission

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We, Sekisui Chemical Group, consider "CS & Quality" as our central concept of management and will consistently innovate to maintain the quality of products throughout all our activities, continuously provide values (goods and services) that meet customer expectations, strive for selection by our customers on an ongoing basis, and develop and grow with the customer over the long time.

## Basic Policy

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We, Sekisui Chemical Group, consider "Customer's Feedback" as precious resources for management and strive to innovate about "Quality of Products," "Quality of People" and "Quality of Systems" based on the motto "We consider customer's feedback as the beginning of our manufacturing." Furthermore, we contribute to the realization of a safe and affluent society by continuously providing our customers and their communities with new value.

### 1. Ensuring basic qualities

To ensure the reliability and safety of our manufactured products, which form the basis of "Product Quality," we effectively leverage customer's feedback and dedicate ourselves with a strong belief in forestalling any potential trouble and preventing any future recurrence throughout our entire value chain.

### 2. Creating attractive qualities

We aim to share the emotional values of our customers by thoroughly pursuing "what the customer value" and constantly creating attractive products and services that should realize such customer values.

### 3. Upgrading technological capabilities

For the sake of ensuring Basic Qualities and for creating Attractive Qualities, we are upgrading our technological capabilities in all fields in order to achieve superb manufacturing development.

### 4. Enhancing communications

We value communication with our customers and the community and make sincere efforts when dealing with them as well as complying with the relevant laws and regulations in each country and region. We place special emphasis on resolving customer complaints or claims at an early stage by responding promptly and empathetically.

### 5. Providing thorough employee education

To gain and maintain the full trust and impression of our customers, we provide employees with continuous CS & Quality education as well as motivating our employees to achieve self-realization through customer satisfaction.

## | Sekisui Chemical Group "Personnel and Human Rights Policy"

### Mission

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Based on our belief that "employees are precious assets bestowed on us by society," we, Sekisui Chemical Group, are committed to developing an environment where employees can work enthusiastically. We also offer various opportunities through which we help individual employees enhance their "specialties" and grow personally.

With the recognition that it is our social responsibility to protect individual human rights, we respect the diversity, personality and individuality of each person, and promote various working styles as well as creating safe and secure work environments in response to conditions in each country and region.

## Basic Policy on Human Resources

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### 1. Creating opportunities for employees to take on new challenges

We encourage employees to exceed their performance goals and actively take on new challenges.

### 2. Culture that empowers employees to learn and grow independently

We strive to enrich our education/training programs and develop a culture where employees learn and grow independently.

### 3. Continuous enhancement of performance and remuneration systems

We recognize our employees' personal commitment and strive to constantly improve the fairness and acceptance of our assessment systems regarding performance and processes.

### 4. Understanding and inclusivity of various working styles

We respect various values and working styles and strive to provide an environment where every employee can work with enthusiasm and achieve a balance between life and work.

### 5. Creating safe and secure work environments

We ensure that our employees work in a safe environment.

#### Workplaces that support teamwork and communication

We strive to offer an environment where all colleagues can work effectively and communicate together with respect.

## Basic Policy on Human Rights

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### 1. Respect for human rights and the prohibition of discrimination

Being aware of our position as a member of the international community, we appreciate and respect the cultures, customs, and values of each region and neither violate human rights ourselves nor participate in any such violations. We also never become involved in any conduct that might lead to discrimination. We never discriminate on the grounds of race, color, gender, age, language, religion, creed, disability, sexual orientation, nationality, geographical or social origin, property, or other status or any similar basis, and we neither violate human rights ourselves nor participate in any such violations.

### 2. Prohibition of harassment

We never commit sexual harassment or other actions that stain personal character.

1. We do not commit sexual harassment or any conduct that might be misunderstood as sexual harassment.
2. We do not misuse the power of a superior position nor use any language or conduct that could sexually annoy any person. In addition, we prevent other employees from using such offensive language or conduct.

### 3. Prohibition of forced labor and child labor

We shall never accept forced labor or child labor in any country or region.

1. We comply with the laws for the minimum working age and other relevant regulations in each country and region and do not use child labor.
2. We do not carry out any form of forced labor in any of our corporate activities.

### 4. Respect for basic labor rights

We respect basic labor rights, including the right of workers to organize and to bargain, in accordance with the laws and customs of each country or region, and do not infringe on these rights.

## Diversity Management Policy

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Diversity is essential to maintain our strong corporate presence for 100 years and beyond. We understand and recognize that every employee's orientation to work and life, and their personal strengths are different and thus we use this to our advantage.

Through employee dialogue, we will strengthen our organizational culture by providing employment, opportunities for development and an enhanced work environment to support growth.

## Statement of Work Style Reform

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We determine work methods that promote growth over time to enable each and every individual employee to manifest their personal "characteristics," and pursue highly productive work methods that maximize success.

In order to improve productivity, the Company actively invests in management resources, and unify the managers and workers to coalesce their wisdom company-wide. We nurture work worth doing by improving the quality of the job, and promote diverse HR activities by returning revolutionary successes to the workers.

## | Sekisui Chemical Group "Safety Policy"

### Mission

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We, Sekisui Chemical Group, recognize that employee safety is essential to achieving sustainable growth. We aim to be a "Safe and Secure" enterprise that establishes safe and secure work environments and has the full trust of its customers and the community as well as its employees.

### Basic Policy

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Based on the concept of human dignity that "everyone is invaluable," we "prioritize safety over anything else" as a basic rule in all of our business activities from development, production, construction to servicing. We are committed to promoting comprehensive safety activities with the aim of achieving zero industrial accidents, facility accidents, commuting accidents or long-term sick leave.

1. We strive to develop a safe and comfortable workplace where everyone is taken care of both mentally and physically, which should lead to good health for each of our employees whom we highly value.
2. We thoroughly disseminate the legal requirements concerning health and safety/disaster prevention to our employees to ensure compliance.
3. We carry out risk assessment and promote risk reduction measures in a systematic way to eliminate hazardous factors that compromise health and safety/disaster prevention.
4. We strive to raise awareness regarding health and safety/disaster prevention through employee education/training and promote continuous improvements by setting voluntary objectives/goals.
5. We proactively disclose any necessary information as well as gain a higher level of trust by having close communication with public administrations and local communities.

## | Sekisui Chemical Group "Social Contribution Activities Policy"

As a good corporate citizen, we, Sekisui Chemical Group, engage in activities that focus on the "Environment," the "Next Generation," and "Local Communities," and contribute not only to business activities but also to society. All employees working for Sekisui Chemical Group are proactively involved in the society and act so that they can serve as prominent human resources in society as well. In addition, their activities are supported by each company of the Group in order to generate synergistic effects.

## | Sekisui Chemical Group "Basic Procurement Policy"

Sekisui Chemical Group will perform its procurement of goods according to the following five basic ideas (openness, impartiality and fairness, compliance with laws and regulations, mutual trust and environmental considerations). We will strengthen our harmonious and mutually beneficial partnership with our business partners through fair transactions. Also, Sekisui Chemical Group will engage in the promotion of CSR activities through the cooperation of business partners in the Group's procurement activities.

### 1-1. Procurement Policy

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#### **Openness**

Sekisui Chemical Group opens its doors not only to domestic companies but also widely to overseas companies.

#### **Impartiality and fairness**

Sekisui Chemical Group selects business partners based on impartial and fair evaluation standards with emphasis on quality, price and delivery lead-time, services, etc., as well as environmental considerations.

#### **Compliance with laws and regulations**

When engaging in purchasing transactions, Sekisui Chemical Group will comply with relevant laws, regulations and administrative instructions in Japan and overseas.

#### **Mutual trust**

Along with conducting transactions with mutual trust and in fulfillment of contractual obligations, we will build and maintain relationships with our business partners that allow for our mutual profitability.

#### **Environmental considerations**

Sekisui Chemical Group will further promote the purchase of raw materials and goods that have minimal negative impact on the environment and strive to establish a resource-recycling society through concerted efforts with business partners.

## 1-2. Request for Cooperation to Business Partners Regarding Procurement

The Group is aware of CSR in all spheres of its business operations based on its philosophy of contributing to society through its business activities. To do so, it is absolutely necessary to engage in activities in mutual cooperation with business partners. We ask all business partners to carry out the following activities proactively.

### (1) Securing excellent

#### Product quality

- Establish a quality assurance system to improve and maintain the quality of products offered to customers
- Establish a quality assurance system in conformity with ISO 9000

### (2) Environmental considerations

Sekisui Chemical Group is working to reduce negative impact of its products on the environment from the development and production stages to disposal. To do so, the environmental consideration of our suppliers concerning raw materials and goods is essential.

- Environmental management system in conformity with ISO 14001
- Reduction of harmful chemical substances, etc.; procurement of goods and materials with minimal environmental impact

### (3) Compliance with laws,

#### Regulations, and social customs

Business partners are requested to ensure compliance with relevant laws, regulations, and appropriate social norms of the countries and regions where their business operations are conducted.

- Comply with relevant laws and regulations in the business operations
- Prohibit forced labor
- Prohibit child labor
- Prohibit discrimination against employees

### (4) Safety and hygiene

Quality is built through human resources and facilities. The safety management of these resources is the basis of production. Business partners are requested to perform the following.

- Safety and hygiene control of the workplace and maintenance of employee health
- Machine safeguarding and safety and hygiene control of facilities
- Appropriate response to occupational accidents, facility disasters, accidents, etc.

# Key CSR Issues

Sekisui Chemical Group Has Defined the Key Issues in Becoming Involved with CSR Activities

## Identification of important issues

### Defining Key CSR Issues (materiality)

We reviewed our involvement issues in CSR management in the midterm management plan "SHIFT2019 -Fusion-," which started in FY2017, and defined the important issues (materiality).

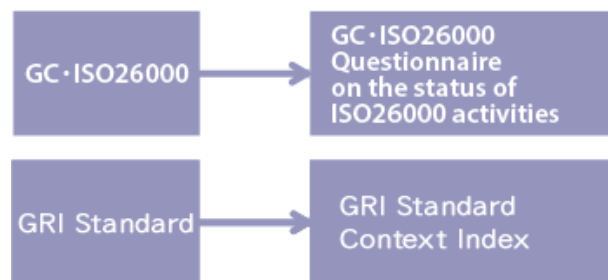
### Definition Process for Key CSR Issues

Key CSR issues were defined for the CRS Medium-term Plan based on the following processes.

#### Step 1. Discussing issues from the global guidelines, etc.

(1) Identify candidate issues from the UN global compact (GC) and ISO26000

While adhering to the 10 principles in the GC, we examined the involvement status within the Group for "relevant activities and aspirations" concerning each of the 7 main core issues in ISO26000, and identified the points where involvement was insufficient.



(2) We identified candidate issues by considering the boundaries both inside and outside the Group while considering the relationship between Sekisui Chemical Group and business regarding the economics, environmental, and social items described in the GRI standard.



(3) We analyzed the social issues described in SDGs, and selected the issues that provide business opportunities for Sekisui Chemical Group. In contributing to these solutions, we identified the necessary involvements.

## Step 2. Identifying issues from SRI surveys and other companies' trends

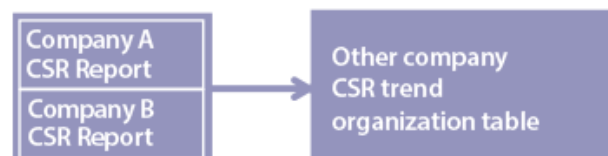
### (1) Identifying candidate issues from SRI surveys

We analyzed the issues based on the details of the replies and evaluation results to each SRI and CSR survey, and identified candidate key CSR issues where future involvement can be considered important.



### (2) Analysis of other companies' CSR involvement and information disclosure trends

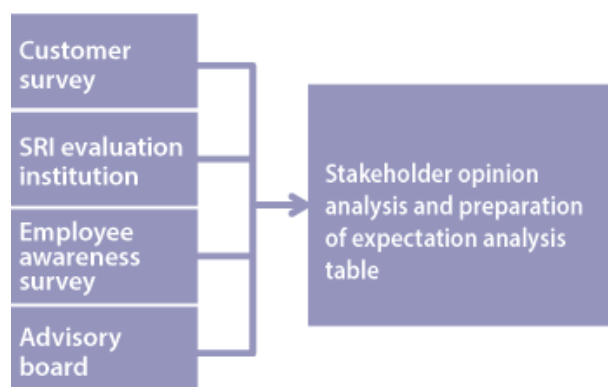
We examined CSR involvement by other advanced CSR companies and trends in their disclosure using CSR reports, etc., and identified issues where improvements to the Sekisui Chemical Group's future involvement and information disclosure are to be desired.



## Step 3. Analysis of stakeholder opinions and expectations

### (1) Sorting the major stakeholder opinions

We collected and sorted the main opinions regarding CSR from the results of talking to various stakeholders such as customers, shareholders, investors, employees, trading partners, and local communities, etc.



### (2) Analysis of major expectations by stakeholder

We took in the main opinions from the various stakeholders described in (1) above, and analyzed the main stakeholder expectations from their relationship to Sekisui Chemical Group business and CSR involvement.



#### Step 4. Identifying key CSR issues / Establishing CSR Medium-term Plan

##### (1) Sorting key CSR candidate issues

We added the CSR issues in which we have been strategically involved from before to candidate CSR issues identified in steps 1 to 3 above, and sorted the future key CSR candidate issues.

##### (2) Evaluating the importance of key CSR candidate issues

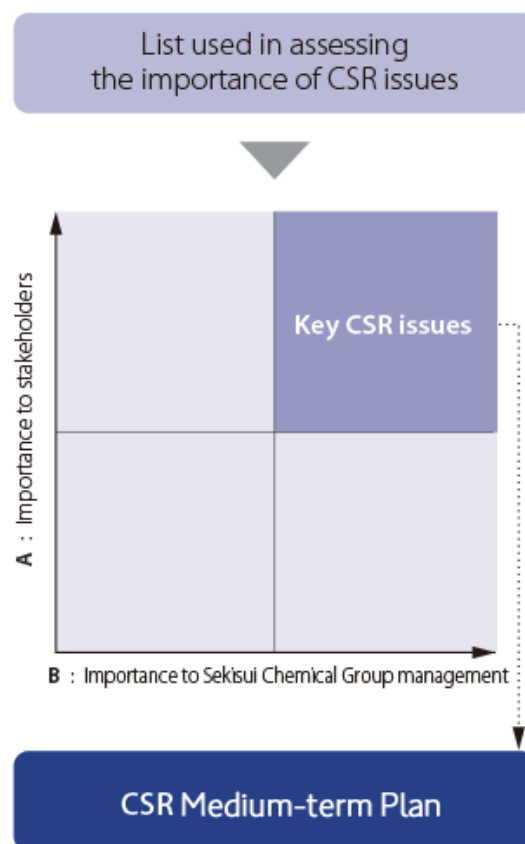
We comprehensively evaluated the key CSR candidate issues sorted in (1) along 2 axes: "A. Important for stakeholders" and "B. Important for managing the Sekisui Chemical Group," and identified the key CSR issues.

Further, we ranked the key CSR issues that had been identified by priority. "A. Important for stakeholders" was evaluated from the viewpoints of "stakeholder expectations," "global trends," and "positive and negative impact on the planet and society," and "B. Important for managing the Sekisui Chemical Group" was identified from the viewpoints of "Conformance to management policy and management strategy," "extent of compliance with CSR issue," "risk and reputation," and "priority considered on the time axis."

##### (3) Establishing CSR Medium-term Plan

The objectives (KPI, etc.) for the designated key CSR issues were discussed by the main departments after deliberation by the CSR committee, and are reflected in the (draft) "CSR Medium-term Plan." Finally, they were approved by the CSR committee and the "CSR Medium-term Plan" was verified. Reflecting the key CSR issues surely and certainly in the "CSR Medium-term Plan" enables them to be managed suitably through the PDCA cycle.

The key CSR issues will also be reviewed when the midterm management plans are created every 3 years, and while on the one hand as a rule the midterm CSR targets will be set, on the other, the necessity of revisions will be discussed annually in light of social expectations and demands, and the business situation, etc.



## Classifying key CSR issues

### Issues where the importance for stakeholders is extremely high, and is also extremely high for management of the Sekisui Chemical Group

- Permeation of CSR management throughout the entire Group
- Sales expansion of Environment-contributing Products
  - Expansion of development and spread of Environment-contributing Products
- Reduction of environmental impact
  - Reinforcement of climate change countermeasures
- Conserving the natural environment
  - Promotion of involvement in preserving biodiversity
- Polishing up basic quality
  - Eliminating important quality problems
- Polishing up attractive qualities
  - Expanding products linked to solving social issues
- Global HR creation
- Promotion of diversity
- Reduction of work accidents
- Promotion of pollution prevention and illegalities
- Elimination of important compliance problems
- Thorough prevention in advance
  - Expansion of BCP policies
- Reinforcement of crisis management systems
- Expansion of dialog with stakeholders
- Reinforcement of global governance

### Issues where the importance for stakeholders is high, and is also high for management of the Sekisui Chemical Group

- Reinforcement of information security
- Reduction of long work hours
- Maintenance of water resources
- Promotion of the sustainable use of resources
- Manage risks related to global labor
- Implementation of human rights due diligence
- Disclosure of the important issues identification process and identification results
- Promotion of social contribution activities

# CSR Medium-term Plan

Promoting CSR Management That is in Tune with Business Activities


## CSR Medium-term Plan (Fiscal 2017 to Fiscal 2019)

In its Medium-term Management Plan SHIFT 2019 -Fusion- the Sekisui Chemical Group places considerable emphasis on balancing the needs to secure both social and corporate value.


The main thrust throughout the period of the Plan is therefore to engage in CSR management that is in tune with business activities.

In addition to creating social value, the Group is conscious of the need to identify what is required to fulfill its corporate social responsibility while promoting long-term growth. With this in mind, we have positioned the "Three Prominences" of the environment, customer service (CS) & quality, and human resources, our pledge to society encompassing safety, compliance and respect for human rights, and the workplace environment, as well as governance and stakeholder engagement as key issues.


### Three Prominences

	Key Measures		Medium-term Targets	FY2017 Targets	FY2017 Results 
Environment	1. Manage progress using integrated indices (sustainability index)		Secure a rate of return on natural capital of 90% or more	Secure a rate of return on natural capital of 85%	Secured a rate of return on natural capital of 84.1%
	2. Expand and create markets for environment-contributing products	1) Environment-contributing product sales ratio	60% or more	50%	50.2%
		2) Number of newly registered products	30 or more	10	24
	3. Reduce environmental impact	1) Reduce greenhouse gas emissions	6% or more (vs. FY2013)	3% (vs. FY2013)	1.5% (vs. FY2013)
		2) Maintain water resources	① Reduce water usage by 3% or more (vs. FY2016)  ② Reduce the total amount of river discharge water chemical oxygen demand (COD) by 3% or more (vs FY2016)	① Reduce water usage by 1% (vs. FY2016)  ② Reduce the total amount of river discharge water chemical oxygen demand (COD) by 1% (vs FY2016)	① Increased water usage by 3.1% (vs. FY2016), with an increase of 1.9% in Japan and an increase of 6.6% overseas ② Increased the total amount of river discharge water chemical oxygen demand (COD) by 28% (vs. FY2016)
	4. Conserve the natural environment		Secure an employee participation rate in SEKISUI Environment Week of 100%	Secure an employee participation rate in SEKISUI Environment Week of 85%	Secured an employee participation rate in SEKISUI Environment Week of 84.9%

### Three Prominences

	Key Measures		Medium-term Targets	FY2017 Targets	FY2017 Results 
CS & Quality	1. Improve basic qualities		1) Reduce the number of major quality issues to zero	1) Reduce the number of major quality issues to zero	1) There were two major quality issues
			2) Reduce new product external failure costs to zero	2) Clarify the definition of new product external failure cost	2) New definitions were finalized at two Companies, while one Company is continuing to work toward clarifying its definition
	2. Improve attractive qualities		Introduce nine new attractive quality products	Introduce three new attractive quality products	Introduce two new attractive quality products
Human Resources	Promote diversity	1) Empower women	① Raise the ratio of women to total hires to 35% ② Raise the number of women in management positions to 200	① Maintain the ratio of women to total hires at 30–39% ② Raise the number of women in management positions to 145	① Maintained the ratio of women to total hires at 30% ② The number of women in management positions: 138
		2) Develop global talent employees	Raise the number of participants in the Global Trainee Program to 20	Raise the number of participants in the Global Trainee Program to 10	The number of participants in the Global Trainee Program: 10

## Pledge to Society


	Key Measures	Medium-term Targets	FY2017 Targets	FY2017 Results 
<b>Safety</b>	Reduce the incidence of occupational injuries	Reduce the incidence of occupational injuries attributable to machinery and equipment to zero	Halve the incidence of occupational injuries attributable to machinery and equipment (vs. FY2016)	The incidence of occupational injuries attributable to machinery and equipment was down by one, at 19 cases (vs. the 20 cases in FY2016)
<b>Compliance and Respect for Human Rights</b>	1.Prevent major violations of laws and ordinances that impact society	Reduce the incidence of major violations of laws and ordinances that impact society to zero	Reduce the incidence of major violations of laws and ordinances that impact society to zero	Reduced the incidence of major violations of laws and ordinances that impact society to zero
	2.Expand the area and scope of CSR procurement	Undertake CSR procurement in five global areas	Undertake CSR procurement in the China area	Undertook CSR procurement in the China area
<b>Working Environment</b>	1.Manage and control prolonged working hours (in excess of 2,000 hours annually)	Reduce the number of Group companies where employees work more than 2,000 hours on an annual basis by 30% (vs. FY2016)*	Reduce the number of Group companies where employees work more than 2,000 hours on an annual basis by 20% (vs. FY2016)	Reduced the number of Group companies where employees work more than 2,000 hours on an annual basis by 2% (vs. FY2016)
	2.Promote health management	Raise the number of Group companies certified as an Excellent Enterprise of Health and Productivity Management . White 500 by Japan's Ministry of Economy, Trade and Industry to 21	Raise the number of Group companies certified as an Excellent Enterprise of Health and Productivity Management . White 500 by Japan's Ministry of Economy, Trade and Industry to four	Raised the number of Group companies certified as an Excellent Enterprise of Health and Productivity Management . White 500 by Japan's Ministry of Economy, Trade and Industry to five

\* The medium-term target was revised, because it required more time than anticipated to formulate a policy and publicize the activities.

## Governance

	Key Measures	Medium-term Targets	FY2017 Targets	FY2017 Results
Governance	1. Put in place a structure of overseas regional management companies	Complete area coverage	Establish a structure and systems for the Asia and Oceania regions	Established a regional headquarters in Thailand
	2. Increase the effectiveness of risk management (prevent risks before they occur)	Achieve effectiveness of 70% or more	Achieve effectiveness of 60%	Achieved effectiveness of 55%

## Stakeholder Engagement

	Key Measures	Medium-term Targets	FY2017 Targets	FY2017 Results 
Stakeholder Engagement	Promote active engagement between investors and management	Ensure that investors and management engage in dialogues on a cumulative total of 200 occasions throughout the period set forth for the medium-term target	Ensure that investors and management engage on 60 occasions	Ensured that investors and management engage on 88 occasions

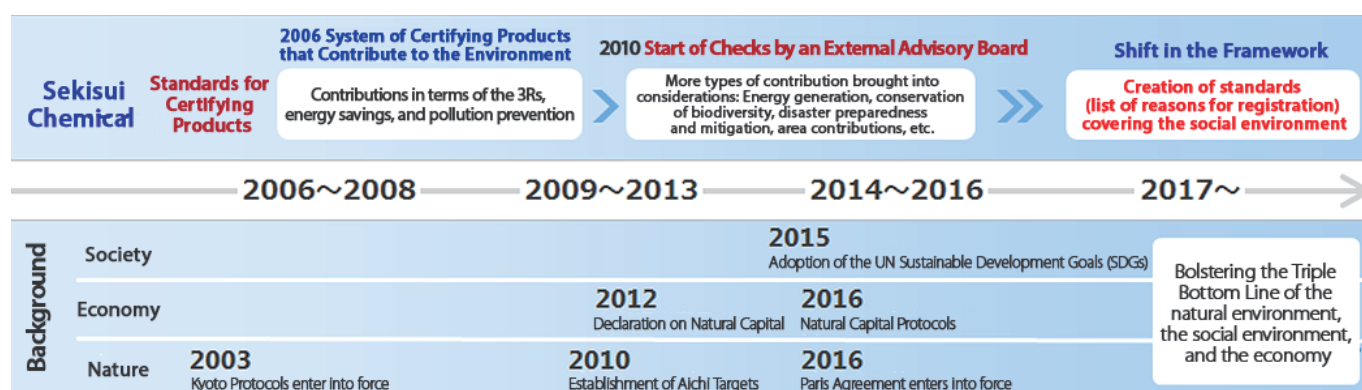
# SDGs Initiatives

## The Sekisui Chemical Group's Contributions to the SDGs through its Business

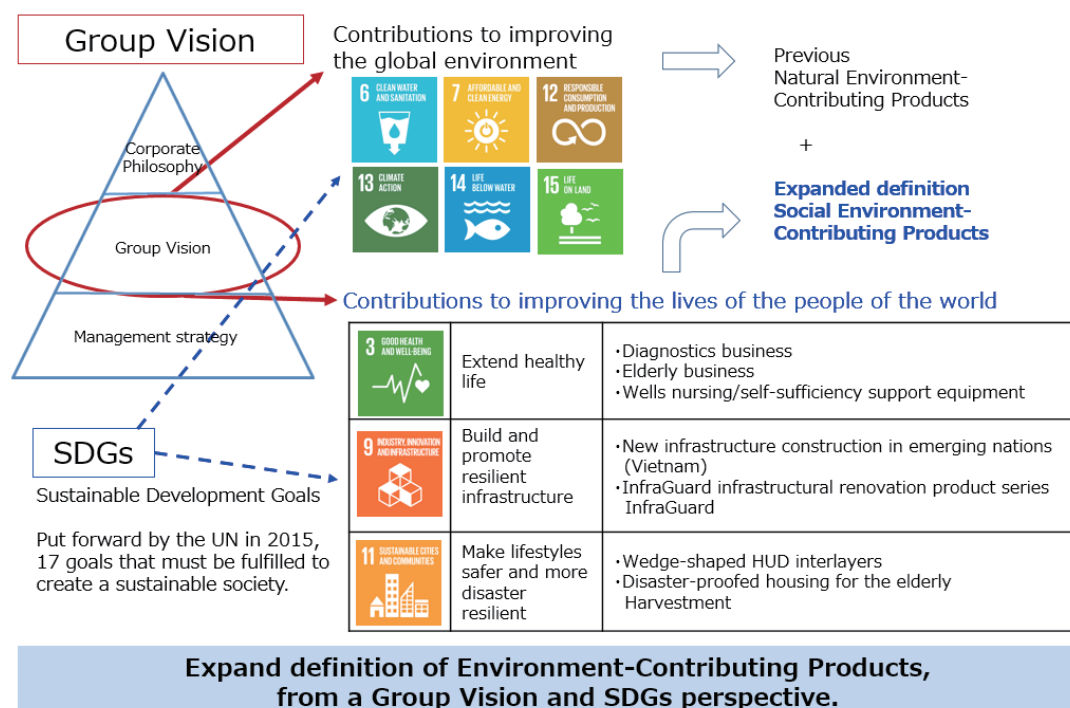
In its Group Vision statement, the Sekisui Chemical Group has declared that it will contribute, through its primary business activities, to “improving the global environment” and “and improving the lives of people around the globe”—that is, the resolution of issues called for in the SDGs.

Hitherto, we designated products with a high degree of contribution to issue resolution as Environment-contributing Products, and strove to create and expand markets where we should increase contributions to “improving the Earth’s environment” (resolutions to issues described in SDGs Nos. 6, 7, 12, 13, 14, and 15). Since FY2017, we have looked back on changes to business content and the social environment, and have declared the creation and expansion of products that heighten contributions to “improving life for everyone around the world” (resolutions to issues described in SDGs Nos. 3, 9, and 11). We will also further accelerate contributions to actualizing a sustainable world.

### Involvement History

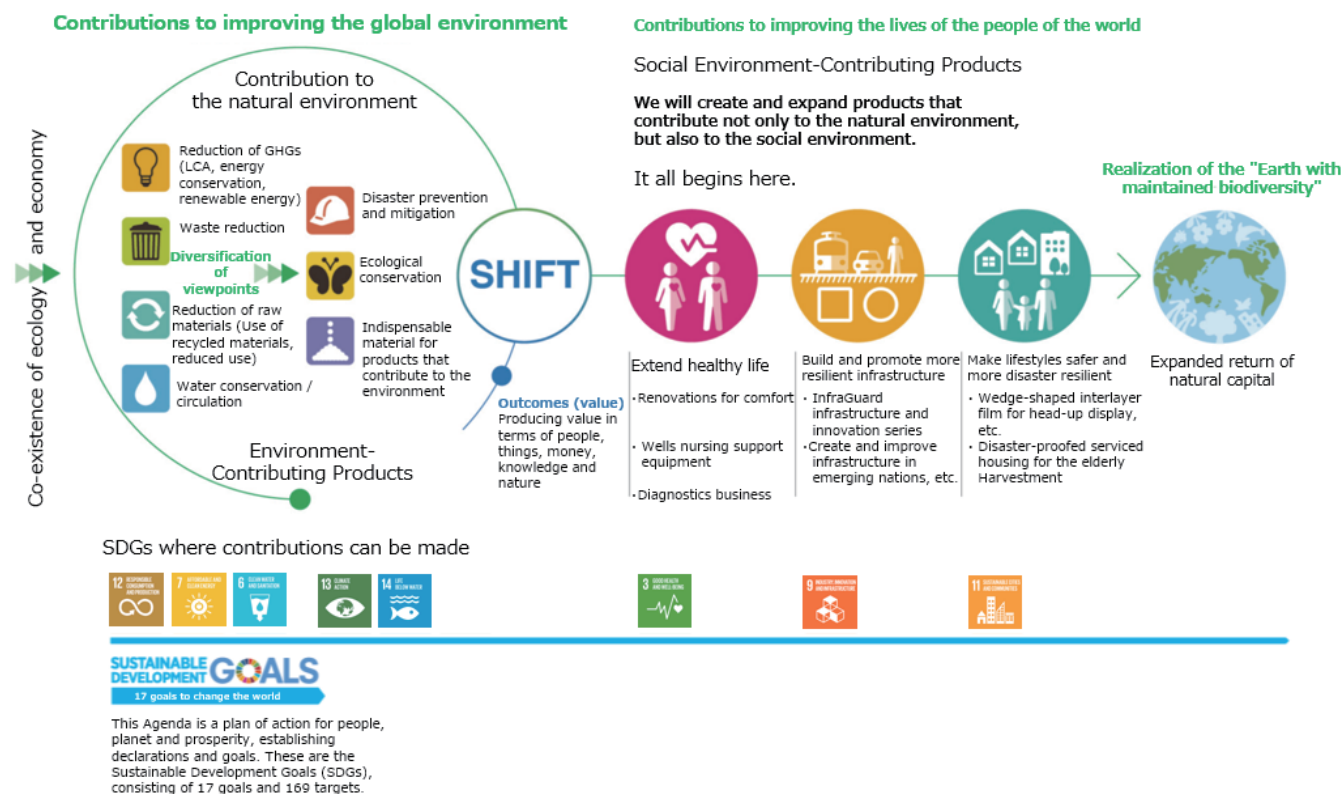


### Environment-Contributing Products – About Expanded Definition





## SHIFT on Approach to Contributions Made by Environment-Contributing Products



# Prominence in Environment

**Continuing to Provide Prominent Value Toward the Realization of a Planet where Biodiversity is Preserved**

## Management Approach

### Our Philosophy

The Sekisui Chemical Group aims for a planet in which the air, water and land provide a healthy living environment for its inhabitants and fosters robust biodiversity. Our daily lives and economic activities are sustained by the natural capital\* provided by our planet. The Sekisui Chemical Group envisions a planet and society like this.

We are engaged in our daily business activities with the aims of halting the deterioration of natural capital, such as by reducing emissions of greenhouse gases, promoting the use of recycled use of resources, and decreasing impacts on ecosystems; contributing to making returns to natural capital through such means as expanding sales of Environment-contributing Products; and achieving a world in which biodiversity is preserved.

\* Natural capital: A term that refers to physical capital, such as soil, air, water, minerals, flora and fauna, as well as biological capital, human capital and social capital.

# Promotion System

## Building Management Systems to Help Activities Progress and to Achieve Targets

The Sekisui Chemical Group formulated the Long-term Environmental Management Vision, the basis of its environmental activities, to advance environmental management.

Under the three-year medium-term plan, we are making progress toward specific targets set to achieve our Long-term Environmental Management Vision.

### Long-term Environmental Management Vision "Sekisui Environment Sustainability Vision 2030"

Established in fiscal 2013, the Sekisui Environment Sustainability Vision 2030 is our policy for advancing environmental management.

### Environmental Medium-term Plan "Sekisui Environmental Sustainability Plan: Accelerate"

We provide details of the Environmental Medium-term Plan Sekisui Environmental Sustainability Plan: Accelerate that covers the period from fiscal 2017 to fiscal 2019.

### Integrated Indicator "Sekisui Environmental Sustainability Index"

The Sekisui Environmental Sustainability Index is a single indicator of the level of impact on the environment by the corporate activities of the Sekisui Chemical Group (i.e. use of natural capital) and the degree of contribution back to the environment (i.e. return of natural capital).

### Environmental Management System

We promote environmental activities through an environment management system based on ISO 14001.

### Environmental Education

The Sekisui Chemical Group implements environmental training programs with the aim of fostering ideal employees who can take one step closer to achieving its long-term vision.

### Environmental Accounting

To express our posture as a company engaged in environmental activities, we quantitatively assess our environmental investments, costs and outcomes, such as reducing environmental impact.

# Long-term Environmental Management Vision

## "Sekisui Environment Sustainability Vision 2030"

### Toward the Realization of "a Planet Where Biodiversity Is Preserved"

The Sekisui Chemical Group is aware that its business activities depend on resources (natural capital). Each and every executive and employee is working to develop into talented personnel with excellent environmental activity promotional skills and will engage in environmental management based on contributions in three areas to "give back more to the Earth than is taken" by 2030.

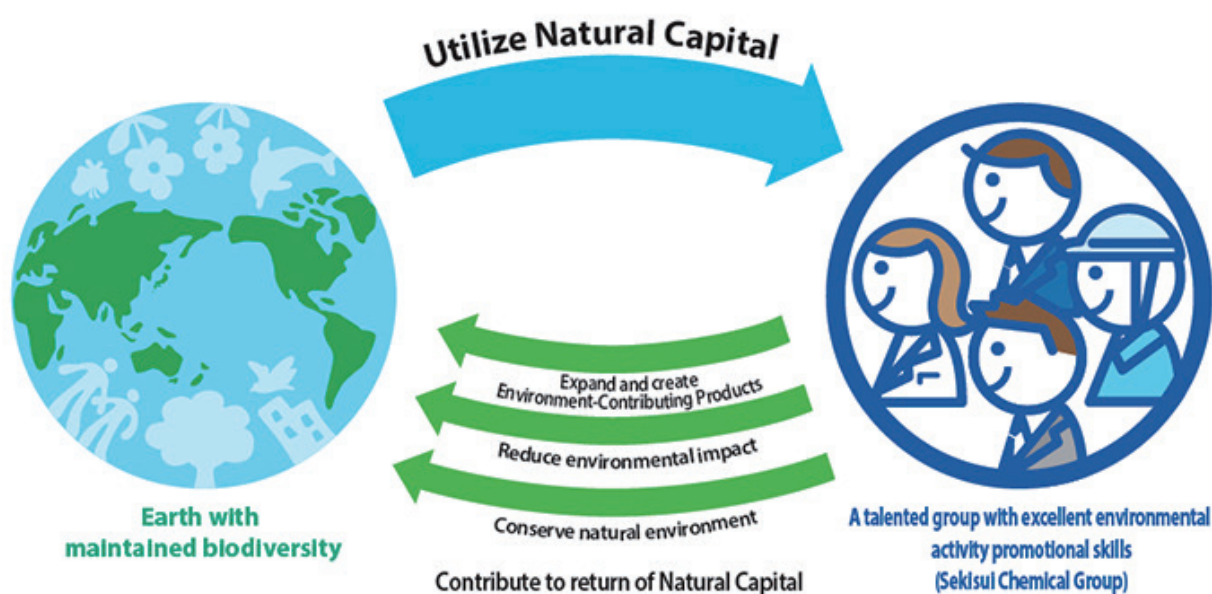
Expand and create markets for Environment-contributing Products

Reduce environmental impact

Conserve the natural environment

With a view toward the return of natural capital, energies will continue to be directed toward creating prominent value as a part of efforts to realize a planet where biodiversity is preserved.

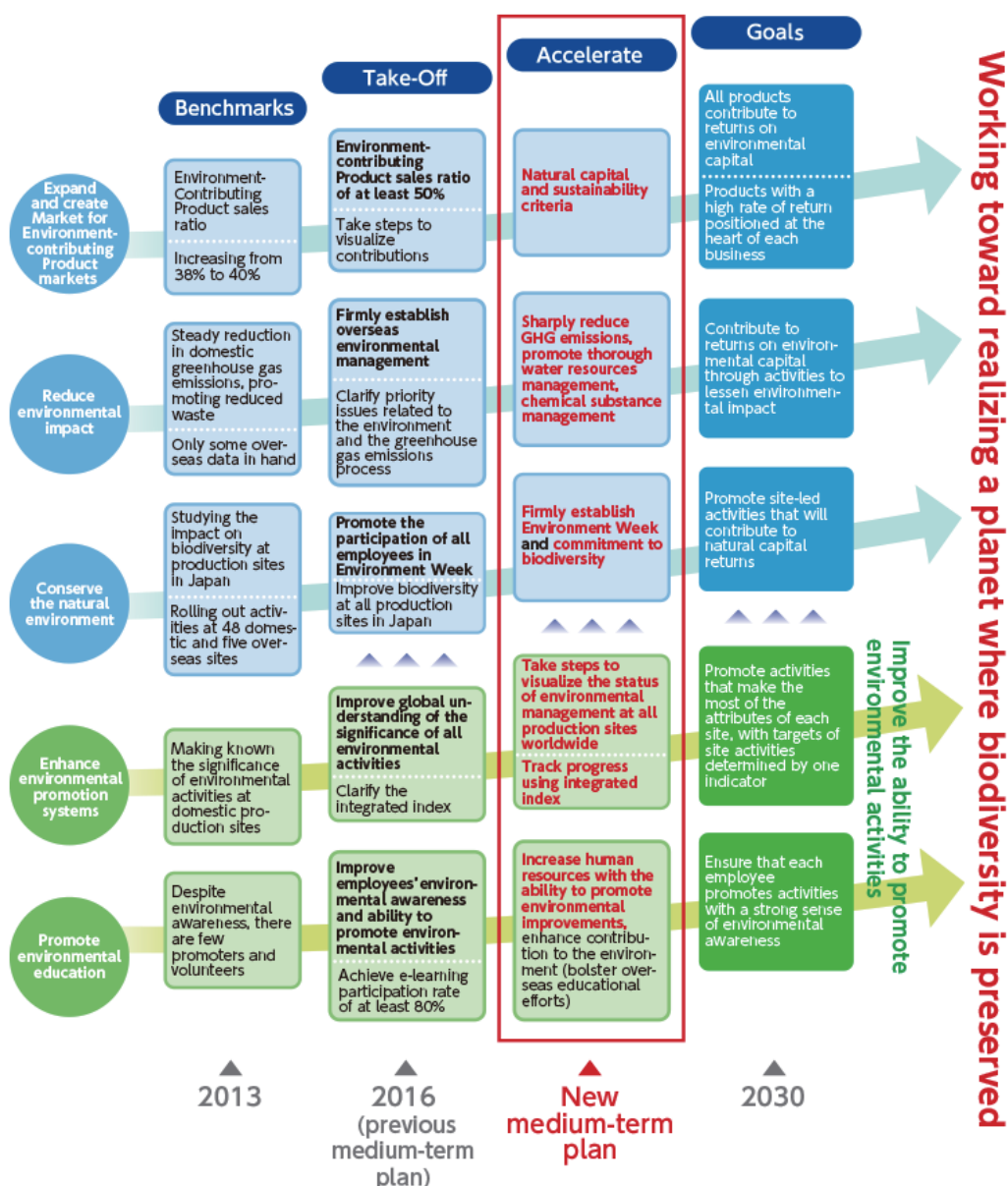
By continuing to create this kind of value, we are confident in our ability to help resolve various issues raised as Sustainable Development Goals (SDGs) by the United Nations.



# Environmental Medium-Term Plan "Sekisui Environmental Sustainability Plan: Accelerate" (fiscal 2017-2019)

## Targets for Crucial Items to Implement within the Environmental Medium-term Plan "Sekisui Environmental Sustainability Plan: Accelerate" (2017-2019)

- Increasing the percentage of revenue from Environment-contributing Products: at least 60%
- Reductions in greenhouse gas emissions: at least 6% (compared to fiscal year 2013)
- Preservation of water resources (quality and decrease in quantity used): Quantity used 3% or more reduction, COD total quantity 3% or more reduction (compared to fiscal year 2016)
- "SEKISUI Environment Week": Participation at all business sites and by all employees
- Monitoring of progress in respect to integrated index "Sekisui Environmental Sustainability Index": Return of at least 90% to natural capital



## Implementing a Two-Stage Environmental Medium-term Plan Based on Backcasting from Our Long-Term Vision

We have established and are implementing a three-year Environmental Medium-term Plan for fiscal years 2017 through 2019. As its name suggests, this Environmental Medium-term Plan, “Sekisui Environmental Sustainability Plan: Accelerate,” will accelerate various initiatives aimed at achieving the posture we have depicted for 2030 in our long-term environmental vision.

Initiatives of particular focus include reducing greenhouse gases and expanding Environment-contributing Products. In the Paris Accords, adopted at the COP 21\* meeting held in 2015, each country has promised to achieve country-level CO<sub>2</sub> emissions reductions targets; Japan has set a target of reductions of 26%, compared to fiscal year 2013, by 2030. To fulfill its responsibilities as a Japanese company, the Sekisui Chemical Group has indicated reduction targets equal to or greater than the state targets and intends to willingly strive to reach them.

Concerning greenhouse gas reductions, the environmental medium-term plan lays out a target of reductions of 6% from the total amount of CO<sub>2</sub> emissions released during business activities, even as the group is aiming to expand its business even further. To ensure that this target is reached, the group has planned for aggressive capital expenditures and has instituted internal investment promotion policies on the scale of 12 billion yen, equivalent to 0.3% of revenue.

Concerning Environment-Contributing Products, the group aims to expand upon the current environmental medium-term plan to change the criteria for recognizing Environment-contributing Products, as well as their degree of contribution, from only looking at the natural environment to embracing a framework that includes contributions to the social environment, encompassing human capital and social capital. The Sekisui Chemical Group aims to improve the lives of the people and the Earth's environment. In terms of improving the lives of the people, it will be essential to resolve the issues noted in the Sustainable Development Goals (SDGs) adopted by the UN in 2015, including “promoting welfare and health” and “securing robust infrastructure.” In terms of the Earth's environment, it will be essential to resolve the issues presented in the SDGs of “mitigating and adapting to climate change” and others. The group intends to produce products and services that display considerable abilities to resolve such issues and to further accelerate the expansion of the market for Environment-Contributing Products.

\* COP 21: The 21st meeting of the parties to the UN Framework Convention on Climate Change.

## Fiscal Year 2017 Results in Respect to the Environmental Medium-term Plan

Fiscal year 2017 results in respect to the Environmental Medium-term Plan are provided below:

### The Creation and Expansion of the Market for Environment-contributing Products

<p>Fiscal year 2017 target of 50% of revenue or more</p> <p><b>Target achieved at 50.2%</b></p>	<p>Number of new registrations:</p> <p>Fiscal year 2017 target of 10 registrations</p> <p><b>Target achieved, with 24 new registrations in fiscal year 2017</b></p>
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#### <Factor Analysis>

- With the expansion of the definition of Environment-contributing Products, we reaffirmed our commitment to contribute in terms of more diverse perspectives

Changes and matters under consideration in the Environmental Medium-term Plan through fiscal year 2016:

- Introduction of the concept of area contributions
- Consideration of expanding the scope of evaluation to include contributions to resolving issues relating to matters such as disaster preparedness and damage mitigation
- Visualization of environmental evaluations (degrees of contribution) of products and business using LCIA evaluations (implemented in relation to the equivalent of around 90% of revenue from Environment-contributing Products)

Going forward, the group will consider as contributions to natural capital those based on resolving issues relating to human and social capital and other aspects of the social environment, as well as those based on resolving issues relating to the natural environment, and will expand its range of products that can contribute by returning to natural capital. Furthermore, the group will leverage the environmental value (degree of contribution) of visualized products and lines of business to release information, raise awareness in society, and step up its activities that allow it receive feedback about its business.

## Reducing Environmental Impact

GHG emissions:

Fiscal year 2017 target of reductions of 3% or more (relative to a fiscal-year 2013 benchmark)

**Target not achieved, with reductions of 1.5%**

Energy savings:

Fiscal year 2017 target of reductions of 1% of energy consumption per unit of output (based on a benchmark of fiscal year 2016)

**Target achieved, with reductions of 1.2% (4.1% reduction in Japan and 2.0% increase overseas)**

### <Factor Analysis>

•We are unable to cover the increase in GHG emissions from M&A and production increases through reduction activities

Going forward, the group intends to step up its energy-saving efforts at business sites in Japan and overseas while visualizing its impact on the environment, and to expand reductions by shoring up ECO-JIT and related activities.

Amount of Waste Generated:

Fiscal year 2017 target of reductions of 1% from per unit of output (relative to a fiscal-year 2016 benchmark)

**Target not reached, with an increase of 0.4% (down 0.6% in Japan, up 3.1% overseas)**

### <Factor Analysis>

•Japan: More composite products because of expansion of manufacturing of, and higher functionality for, chemical-related business

Waste material volumes increased because of the moving in-house of the production of materials previously produced through outsourced processes in our housing business

•Overseas: Roll-outs of measures are at this stage underway but unfinished

Going forward, the group will strive for even greater reductions in waste materials by promoting more-stable manufacturing, developing recycling technologies, decreasing the rate of defects, recycling end materials, and promoting zero-emission activities in overseas business sites.



## Conserving the Natural Environment

### SEKISUI Environment Week

SEKISUI Environment Week: Fiscal year 2017 target for participation rate among employees of 85%  
**Target not reached with participation rate among employees of 84.9%**

#### <Factor Analysis>

- Insufficient promotion of individual action

Going forward, we will roll out positive examples of all-employee participation-based activities to all sites while announcing and publicizing examples of activities by individuals to make the idea of participation by all in both business site-held events and individual actions a more integral part of the corporate culture.

## Environmental Medium-term Plan “Sekisui Environmental Sustainability Plan: Accelerate” (fiscal years 2017-2019)

Efforts			Target						Indicators
			Production sites in Japan	Laboratories	Domestic offices	Overseas production sites	Overseas offices	Other	
Manage process utilizing the integrated index			✓	✓	✓	✓	✓	✓	▶ Sekisui Environmental Sustainability Index Rate of return to natural capital
Expand and create markets for Environment-contributing Products	Create Environment-contributing Products		✓	✓		✓			▶ Number of new Environment-contributing Products registrations
	Increase sales of Environment-contributing Products		✓		✓	✓	✓		▶ Environment-contributing Products sales ratio (consolidated)
Reduce environmental impact	Reduce greenhouse gas (GHG) emissions		✓	✓	✓	✓	✓	✓	▶ Reducing GHG emissions attributable to business activities
	Energy reduction		✓			✓			▶ Energy consumption for unit of output
	Waste reduction	Reduce the amount of waste generated per unit of production volume	✓			✓			▶ Waste generated per unit of output
		Reduce the amount of resources used in offices		✓	✓		✓		▶ Copier Paper use per unit of output
		Reduce the amount of waste generated at new construction sites						✓	▶ Waste generated per building
	Maintain water resources		✓			✓			▶ Water usage at production sites
			✓						▶ Total volume of COD discharged into rivers by production sites
	Reduce the impact of chemical substances		✓			✓			▶ VOC emissions
	SEKISUI Environment Week		✓	✓	✓	✓	✓		▶ Employee participation rate
Conserving the natural environment	Improve the quality of the green spaces at business sites		✓	✓					▶ JBIB Land Use Score Card® points
			✓	✓					▶ Number of business sites in harmony with their local environments
	Forest preservation activities at Housing Sales companies				✓				▶ Number of sales companies undertaking activities
	Self-guided activities in partnership with local communities		✓	✓					▶ Ratio of applicable business sites in Japan
						✓	✓		▶ Number of overseas activities
Environmental education	Environmental education		✓	✓	✓	✓	✓		▶ Human resources index average

## Environmental Medium-term Plan “Sekisui Environmental Sustainability Plan: Accelerate” (fiscal years 2017-2019)

Medium-term Targets (FY2017-FY2019)	FY2017 targets	FY2017 results <input checked="" type="checkbox"/>	Evaluation
90% or more	85% or more	84.1%	×
30 products	10 products	24 products	✓
60% or more	50%	50.2%	✓
-6% or more (compared with fiscal year 2013 results)	-3% or more (compared with fiscal year 2013 results)	-1.5%	×
-3% or more (compared with fiscal year 2016 results)	-1% or more (compared with fiscal year 2016 results)	-1.2% (Japan: -4.1%, Overseas: +2.0%)	✓
-3% or more (compared with fiscal year 2016 results)	-1% or more (compared with fiscal year 2016 results)	+0.4% (Japan: -0.6%, Overseas: +3.1%)	×
-3% or more (compared with fiscal year 2016 results)	-1% or more (compared with fiscal year 2016 results)	+0.3% (Japan: +0.5%, Overseas: -14.2%)	×
-10% or more (compared with fiscal year 2016 results)	-2% or more (compared with fiscal year 2016 results)	+0.0%	×
-3% or more (compared with fiscal year 2016 results)	-1% or more (compared with fiscal year 2016 results)	+3.1% (Japan: +1.9%, Overseas: +6.6%)	×
-3% or more (compared with fiscal year 2016 results)	-1% or more (compared with fiscal year 2016 results)	+28.2%	×
-3% or more (compared with fiscal year 2016 results)	-1% or more (compared with fiscal year 2016 results)	+12.1% (performance figures available for Japan only)	×
100%	85%	84.9%	×
+5 points (compared with fiscal year 2016 results)	+1 points (compared with fiscal year 2016 results)	+2.6 points	✓
5 business sites	1 business site	Evaluation standards are currently under consideration	×
7 sales companies	7 sales companies	7 sales companies	✓
50% or more	50% or more	57.4%	✓
5 activities	5 activities	5 activities	✓
+20 points (compared with fiscal year 2017 results)*	Benchmark monitoring	39 points	✓

\*Because we decided to start measuring human resources indicators in fiscal year 2017, the base year was changed to fiscal year 2017.

# Integrated Index

## "Sekisui Environmental Sustainability Index"

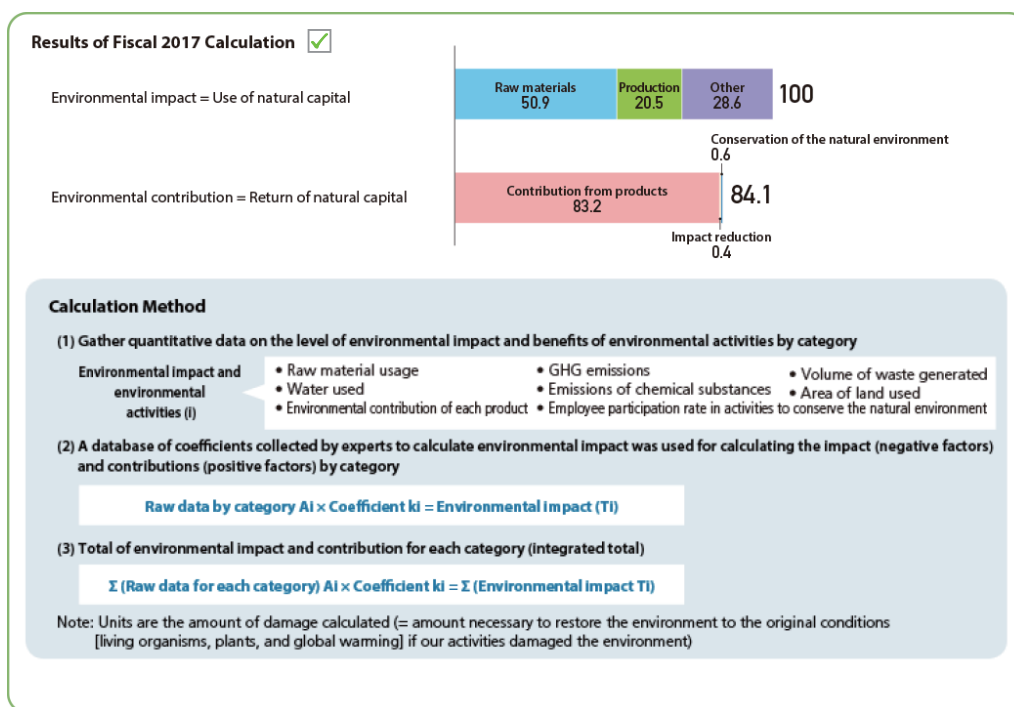
### What is the Sekisui Environmental Sustainability Index?

The Sekisui Environmental Sustainability Index represents the impact on the environment of the activities of Sekisui Chemical Group companies (the use of natural capital) and their degree of contribution to the environment (returns to natural capital) as a single indicator. The major items for implementation in the medium-term plan—reducing various impacts on the environment, conserving the natural environment, and so forth—were integrated into this indicator; the group began trial calculations in fiscal year 2014. Starting in fiscal year 2017, the “rate of return to natural capital,” as reflected in this index, is being used as a KPI to manage the overall progress of group companies’ environmental management. The group aims to achieve 85% in fiscal year 2017 and 90% over the three-year period of the medium-term plan and has established returns of 100% or higher as its target for 2030.

### Results of Calculation

The results of calculating the Sekisui Environmental Sustainability Index, utilizing results from fiscal year 2017, are provided below: Setting the use of natural capital (the impact on the environment) at 100, the return of natural capital (contributions to the environment) were 84.1%. Therefore, fiscal year 2017 results did not reach the target of 85%, but returns are steadily increasing. We plan to further increase the effectiveness of our various initiatives with the aim of achieving returns of 90% in 2019.

We aim for a “world in which biodiversity is conserved” by reaching a return rate to natural capital of 100% or higher by 2030 and thus achieving sustainable use of the earth’s natural capital.



After compiling the raw data in (1), above, the damage calculation-based impact assessment method “LIME2,” developed for use in Japan by Professor Norihiro Itsubo of Tokyo City University, was employed for the calculations in stages (2) and (3).

Indicator	Calculation Method
Sekisui Environmental Sustainability Index	<p>Sekisui Environmental Sustainability Index: Overall volume of returns of natural capital by the group / Overall volume of usage of natural capital by the group</p> <p>Calculating the usage and return volumes of natural capital</p> <p>Employing LIME2 (a damage calculation-based impact assessment method developed for use in Japan by Professor Norihiro Itsubo of Tokyo City University) and covering all the criteria for conservation defined by LIME2, the impacts on each of “human health (including the effects of global warming),” “societal assets (including the effects of global warming),” “the effects on plants (reducing interference with growth),” and “the effects on life (restricting the extinction of living species)” were evaluated and then made into a single indicator*1</p> <p>The amount of return to natural capital was calculated as the reduction in the risk of harm to natural capital because of the whole group’s various initiatives that contribute to the environment, relative to if these initiatives had not been implemented</p> <p>*1 In the previous medium-term plan, the scope of contributions to the environment was limited to the natural environment. Therefore, the calculation of returns to natural capital consisted only of the combination of three targets directly related to the natural environment: “curtailing global warming (the effects on human health only),” “the effects on plants (reducing interference with growth),” and “the effects on life (restricting the extinction of living species)” Starting with the current medium-term plan of fiscal year 2017, criteria for environmental contributions were extended to included contributions to the social environment, thereby adding impacts on “societal assets” to returns to natural capital.</p> <p>Items included in the calculation of the amount of natural capital used</p> <p>Direct usage: Use of land, greenhouse gases, amounts of emissions into the air of PRTR substances and air pollutants, the COD volume of discharges into bodies of water</p> <p>Indirect usage: Purchased raw materials, energy use, amount of water used, amount of waste material emitted, amount of GHGs emitted indirectly in supply chains (Scope 3)</p> <p>Items included in the calculation of returns to natural capital</p> <p>Amount of contributions to reducing usage of natural capital through Environment-contributing Products, the amount of contribution from environmental conservation activities, environment-related donations, mega-solar power generation output</p>

Indicator	Calculation Method
Sekisui Environmental Sustainability Index	<p>Scope of Calculation / Listing by category of calculation: Trial calculations were conducted using the following assumed conditions:</p> <ul style="list-style-type: none"> <li>•Raw materials: Purchased raw materials covered; estimates incorporated into calculations Concerning housing, the calculation includes the constituent raw materials for one structure multiplied by the number of structures manufactured</li> <li>•Manufacturing / Emissions of harmful chemical substances: &lt;Japan&gt;emissions of 1 t per year or more of substances covered under PRTR are included in the calculation. &lt;Overseas&gt;Not included</li> <li>•Manufacturing / Land maintenance: Domestic Japanese and overseas plants and research facilities were incorporated into the calculation using the area of the premises, generally considered in terms of the land used for buildings.*<sup>2</sup> The areas of the premises of overseas plants were estimated. The effects of land usage are included in the calculation based on the 30-year period after the purchase of the land</li> </ul> <p>*<sup>2</sup> Concerning land usage, starting with the current medium-term plan (2017-19), improvements to soil quality in the “JBIB Land Use Score Card®” were deemed as reductions of the impact of land usage, weighted accordingly, and included in the calculation.</p> <ul style="list-style-type: none"> <li>•Others: Capital goods in supply chains, other fuel- and energy-related activities, transport and shipping, waste, business trips, commuting by employees, leased assets (downstream), processing/use/disposal of sold products Business trips and commuting by employees: Covers consolidated numbers of employees and includes some estimation Use of sold products: Covers housing sold during the fiscal year, and included in the calculation with assumed energy usage for 60 years into the future Processing of sold products: Energy usage by customers while processing products anticipated to consume large amounts of energy was estimated and included in the calculation Disposal of sold products: Major raw materials for each fiscal year were covered and included in the calculation based on the assumption that they would be made into products and disposed of during that fiscal year</li> </ul>

Indicator	Calculation Method
Sekisui Environmental Sustainability Index	<ul style="list-style-type: none"> <li>•Product contributions: (1) The differences in contribution to the environment between the relevant products and previous technologies were evaluated qualitatively for each criterion, based on the contribution to the natural and social environments for each life-cycle (the five stages of procurement of raw materials, manufacturing, distribution, usage/maintenance, disposal, and recycling) in terms of CO<sub>2</sub> reductions and energy savings, reductions in waste materials, resource savings, water-savings and the water cycle, preventing pollution, direct preservation of biodiversity, QOL improvements, and other factors. For factors for which a significant difference was estimated, data per product unit was investigated. (2) Based on the results of these investigations, a coefficient for calculating the impact on the environment for each series of data was multiplied by the data, yielding a calculation of the degree of contribution to the environment of each product unit. (3) The sales results for products in each fiscal year were multiplied by the results found in (2) to calculate the degree of contribution to the environment for each product, and the results were included in the calculation. Trial calculation performed on the effects of products equivalent to around 90% of Environment-contributing Products</li> <li>•Direct contribution / Contribution from activities reducing environmental impacts: The effects on the environment relating to production for each fiscal year were compared to "the effects on the environment relating to manufacturing in fiscal year 2016 × (revenue in that fiscal year / revenue in fiscal year 2016)," and the difference was included in the calculation. There was a proportional relationship between revenue and the effects on the environment relating to manufacturing, based on the idea that the difference was the result of efforts undertaken in the group's activities.</li> <li>•Direct contribution / Conservation of the natural environment: The group keeps track of the number of participants and the amount of time spent on each activity. In the case of planting cedar trees, a fixed amount of CO<sub>2</sub> (1.1 t-CO<sub>2</sub>/person-hour) was multiplied by the number of people and the amount of time spent and incorporated into the calculation. Because, starting with the current medium-term plan (2017-19), improving the sustainability of activities through local cooperation and by making them stand on their own (autonomous) were made a target, the groups ability to work toward this target was weighted against the growth axis and included in the calculation</li> <li>•Direct contributions / donations: The amount intended to be paid for conservation was deemed equal to the amount of money calculated for damage caused and included in the calculation.</li> <li>•Direct contribution / Mega-solar: Amount of electricity generated included in the calculation as generated energy converted to a CO<sub>2</sub> basis</li> </ul>

# Environmental Management System

## Building an Environmental Management System based on ISO 14001

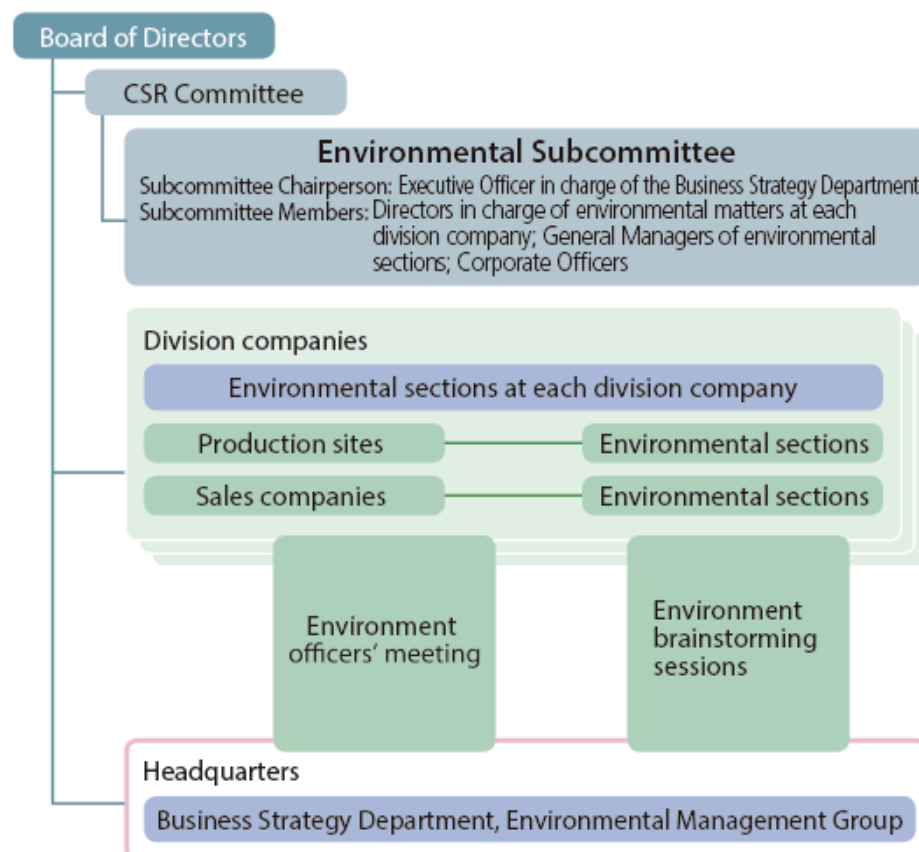
### Management Approach

#### Environmental Management System

#### Establishing a Subcommittee Structure That Reports to the CSR Committee

Shared among all of the Group's companies, Sekisui Chemical has positioned its Environmental Management Policy at the heart of the Group's environmental management. The CSR Committee, headed by the president, and the Environmental Subcommittee of Sekisui Chemical Group meet twice a year to decide on the major policies that guide the activities of the entire Group. Matters decided by these two bodies are then transformed into specific action plans in meetings of environmental managers from headquarters and each division company. Each business site manages its environmental activities through an environment management system based on ISO 14001.

#### System for Promoting Environmental Management





## Environmental Management across the Supply Chain

### Support for Obtaining ISO14001 and Eco-Action 21 Certification

The Sekisui Chemical Group encourages and provides support to its suppliers to acquire ISO 14001 and Eco-Action 21\* certification.

Through its procurement policy, the Sekisui Chemical Group also works to enhance the understanding of suppliers toward its Environmental Management Policy and to convey the Group's requirements regarding awareness toward the environment.

\* Eco-Action 21: An environmental management system created by the Ministry of the Environment.

## Utilizing EMS in the Eco-activities of Offices

### Promoting Environmental Activities in Offices in line with the Group EMS

The Sekisui Chemical Group encourages environmental activities in its offices in accordance with its Environmental Management System. At the headquarters buildings and offices located throughout Japan, we refer to the EMS for guidance on environmental activities, such as turning off lights during lunch breaks and other steps to conserve energy and reducing the use of paper.

## Complying with Environmental Laws and Regulations

### Working to Prevent Risks before They Occur by Setting Self-management Targets That Are Tougher than Regulations

The Sekisui Chemical Group has set its own environmental management targets, such as for reducing emissions into the atmosphere and water environments, that are tougher than legal regulations. Each business site strictly follows these internal targets. We aim to prevent environmental accidents before they occur by conducting internal environmental audits to unveil latent environmental risks. The latest regulatory trends and case studies of accidents at other companies are shared within the Group as a part of comprehensive environmental activities.

In fiscal 2017, the Sekisui Chemical Group had zero environmental accidents, and zero incidents involving administrative guidance from the government. The Sekisui Chemical Group makes every effort to comply with laws and regulations.

## Major Initiatives

### Expansion of EMS Overseas

#### Promoting ISO Certification and Zero Waste Emissions

At our overseas bases, we are also expanding the implementation of environmental management systems (EMS) with similar policies to Japan. We are putting in place systems for obtaining environmental impact data and taking initiatives to reduce environmental impact based on this data.

As of the end of March 2018, 46 business sites in Japan and 36 business sites overseas had acquired ISO 14001 or other certifications. The proportion of all business sites within the Sekisui Chemical Group that have been certified is now 47%.

Additionally, the group aims to achieve ISO 14001 certification and zero emissions at all major business sites.

See pages 74, 75, and 79 of "Efficient Use of Resources" for more information about the standards for the zero emissions achievement criteria and accreditation system.

## Performance Data

### Scope of Tabulation for Environmental Performance Data

\* All of Sekisui Chemical's (consolidated) offices (100% of produced sales amounts) are subject to environmental reporting.

#### Housing Company

##### R&D institute One company and one business site

Sekisui Chemical Co., Ltd. Tsukuba R&D Site

##### Production plants Seven companies and 10 business sites

Hokkaido Sekisui Heim Industry Co., Ltd. / Tohoku Sekisui Heim Industry Co., Ltd. / Sekisui Heim Industry Co., Ltd. / Chushikoku Sekisui Heim Industry Co., Ltd. / Kyusyu Sekisui Heim Industry Co., Ltd. / (Sekisui Board Co., Ltd., etc.)

##### Sales and construction companies 25 companies and 126 business sites

Sekisui Heim sales companies  
Construction and service companies

**33 companies and 137 business sites in total**

#### Urban Infrastructure & Environmental Products Company

##### R&D institutes One company and one business site

Sekisui Chemical Co., Ltd. Kyoto Research & Development Laboratories

##### Production plants 26 companies and 19 business sites

Sekisui Chemical Co., Ltd. Shiga-Ritto Plant and Gunma Plant / Chiba Sekisui Industry Co., Ltd. / Sekisui Chemical Hokkaido Co., Ltd. / Toto Sekisui Co., Ltd. Ota Plant / Okayama Sekisui Industry Co., Ltd. / Shikoku Sekisui Co., Ltd. / Nara Sekisui Co., Ltd. / Hanyu Sekisui Co., Ltd. / Yamanashi Sekisui Co., Ltd. / Sekisui Seikei, Ltd. / Sekisui Hinomaru Co., Ltd., etc.

##### Sales One company and 10 business sites

Sekisui Chemical Co., Ltd. Higashinohon Sales, Nishinohon Headquarters, etc.

**26 companies and 30 business sites in total**

Note: The total number of companies and business sites do not match, since some companies have two or more business sites, and some business sites are shared by two or more companies.

\*1 Scope of summation from September 2017. \*2 Scope of summation from January 2018.

#### High Performance Plastics Company

##### R&D institutes Three companies and three business sites

Sekisui Chemical Co., Ltd. Minase Site  
Sekisui SoflanWiz Co., Ltd. R&D Division<sup>\*2</sup>, etc.

##### Production plants 14 companies and 19 business sites

Sekisui Chemical Co., Ltd. Musashi Plant, Shiga-Minakuchi Plant and Taga Plant  
Sekisui Techno Molding Co., Ltd. / Sekisui Medical Co., Ltd., etc.  
Sekisui Nano Coat Technology Co., Ltd. / Sekisui Fuller Company, Ltd.  
Tokuyama Sekisui Industry Co., Ltd. / Sekisui Polymatech Co., Ltd.<sup>\*1</sup>  
Sekisui SoflanWiz Co., Ltd.<sup>\*2</sup>, etc.

**14 companies and 22 business sites in total**

#### Headquarters

##### R&D institutes One company and one business site

Sekisui Chemical Co., Ltd. Development Center

##### Production plants and headquarters Two companies and three business sites

Sekisui Chemical Co., Ltd. Osaka headquarters and Tokyo headquarters  
ENAX, Inc. Chubu office

**Two companies and four business sites in total**

**Total: 72 companies and 193 business sites**

### Scope of Tabulation for Environmental Performance Data (Overseas)

#### Housing Company

Sekisui-SCG Industry Co., Ltd. **One business site**

#### Urban Infrastructure & Environmental Products Company

Sekisui Polymer Innovations, LLC. Bloomsburg-north Plant  
Sekisui Polymer Innovations, LLC. Bloomsburg-south Plant  
Sekisui Polymer Innovations, LLC. Holland Plant  
Sekisui Eslon B.V.  
Sekisui Industrial Piping Co., Ltd.  
Sekisui Rib Loc Australia Pty. Ltd.  
Sekisui (Wuxi) Plastics Technology Co., Ltd.  
Sekisui (Shanghai) Environmental Technology Co., Ltd.

**Eight business sites in total**

#### High Performance Plastics Company

Sekisui S-Lec America, LLC.  
Sekisui S-Lec Mexico S.A. de C.V.  
Sekisui S-Lec B.V. Film Plant  
Sekisui S-Lec B.V. Resin Plant  
Sekisui S-Lec (Thailand) Co., Ltd.  
Sekisui S-LEC (Suzhou) Co., Ltd.  
Sekisui Specialty Chemicals America, LLC. Pasadena Plant

Sekisui Specialty Chemicals America, LLC. Calvert City Plant  
Sekisui Specialty Chemicals Europe S.L.  
Sekisui Specialty Chemicals (Thailand) Co., Ltd.  
S and L Specialty Polymers Co., Ltd.  
Sekisui Voltek, LLC. Lawrence Plant  
Sekisui Voltek, LLC. Coldwater Plant  
Sekisui-Alveo B.V.  
Sekisui Alveo Ltd.  
Sekisui Alveo BS G.m.b.H.  
Thai Sekisui Foam Co., Ltd.  
Sekisui Pilon Pty. Ltd.  
Youngbo Chemical Co., Ltd.  
Youngbo HPP (Langfang) Co., Ltd.  
Sekisui High Performance Packaging (Langfang) Co., Ltd.  
Sekisui Medical Technology (China) Ltd.  
Sekisui Xenotech, LLC.  
Sekisui Diagnostics, LLC. San Diego  
Sekisui Diagnostics (UK) Ltd.  
Sekisui Diagnostics P.E.I. Inc.  
Sekisui DLJM Molding Private Ltd. Greater Noida Plant  
Sekisui DLJM Molding Private Ltd. Tapukara Plant  
Sekisui DLJM Molding Private Ltd. Chen nai Plant  
PT.ADYAWINSA SEKISUI TECHNO MOLDING  
Sekisui Polymatech (Thailand) Co., Ltd.<sup>\*1</sup>  
PT. Polymatech Indonesia<sup>\*1</sup>  
Sekisui Polymatech (Shanghai) Co., Ltd.<sup>\*1</sup>

**Total: 33 business sites**

\*1 Scope of summation from September 2017.

## Business Sites that Have Received Third-Party Certification for Their Environment Management Systems

### Housing Company

Sekisui Chemical Co., Ltd. Tsukuba R&D Site★  
Hokkaido Sekisui Heim Industry Co., Ltd.  
Tohoku Sekisui Heim Industry Co., Ltd.  
Sekisui Heim Industry Co., Ltd.  
Kanto Site  
Tokyo Site  
Chubu Site  
Kinki Site  
Chushikoku Sekisui Heim Industry Co., Ltd.  
Kyushu Sekisui Heim Industry Co., Ltd.  
Sekisui Board Co., Ltd. Minakuchi Plant  
Sekisui Board Co., Ltd. Gunma Plant  
Sekisui-SCG Industry Co., Ltd.  
SCG-Sekisui Sales Co., Ltd.

### Urban Infrastructure & Environmental Products Company

Sekisui Chemical Co., Ltd. Shiga-Ritto Plant  
Sekisui Chemical Co., Ltd. Gunma Plant  
Sekisui Chemical Co., Ltd. Kyoto R & D Laboratories  
Chiba Sekisui Industry Co., Ltd.  
Sekisui Chemical Hokkaido Co., Ltd.  
Toto Sekisui Co., Ltd. Ota Plant  
Okayama Sekisui Industry Co., Ltd.  
Shikoku Sekisui Co., Ltd.  
Kyushu Sekisui Industry Co., Ltd.  
Nara Sekisui Co., Ltd.  
Hanyu Sekisui Co., Ltd.  
Yamanashi Sekisui Co., Ltd.  
Sekisui Home Techno Co., Ltd.  
Sekisui Hinomaru Co., Ltd. Tosu Plant  
Sekisui Hinomaru Co., Ltd. Kanto Plant  
Sekisui Seikei, Ltd. Chiba Plant  
Sekisui Seikei, Ltd. Kanto Plant  
Sekisui Seikei, Ltd. Hyogo Plant  
Sekisui Seikei, Ltd. Hyogo-Takino Plant  
Sekisui Seikei, Ltd. Izumo Plant  
Sekisui Polymer Innovations, LLC. Bloomsburg Plant  
Sekisui Polymer Innovations, LLC. Holland Plant  
Sekisui Esilon B.V.  
Sekisui Rib Loc Australia Pty. Ltd.  
Sekisui Refresh Co., Ltd.  
Sekisui Industrial Piping Co., Ltd.  
Sekisui (Wuxi) Plastics Technology Co., Ltd.  
Sekisui (Qingdao) Plastic Co., Ltd.  
Sekisui (Shanghai) Environmental Technology Co., Ltd.

### High Performance Plastics Company

Sekisui Chemical Co., Ltd. Musashi Plant  
Sekisui Chemical Co., Ltd. Shiga-Minakuchi Plant  
[Sekisui Fuller Company, Ltd. Shiga Plant]  
Sekisui Chemical Co., Ltd. Taga Plant  
Sekisui Chemical Co., Ltd. Minase Site  
Sekisui Techno Molding Co., Ltd. Nara Plant  
Sekisui Techno Molding Co., Ltd. Mie Plant  
Sekisui Techno Molding Co., Ltd. Aichi Plant  
Sekisui Fuller Co., Ltd. Hamamatsu Plant  
Sekisui Medical Co., Ltd. Iwate Plant  
Sekisui Medical Co., Ltd. Tsukuba Plant  
Sekisui Medical Co., Ltd. Drug Development Solutions Center ☆  
Sekisui Medical Co., Ltd. Ami Site  
Sekisui Nano Coat Technology Co., Ltd.  
Tokuyama Sekisui Industry Co., Ltd.  
Sekisui S-Lec B.V. Film Plant  
Sekisui S-Lec B.V. Resin Plant  
Sekisui-Alveo B.V.  
Sekisui Alveo Ltd.  
Sekisui Alveo BS G.m.b.H.  
Sekisui S-Lec America, LLC.  
Sekisui Voltek, LLC. Lawrence Plant  
Sekisui Voltek, LLC. Coldwater Plant  
Sekisui Specialty Chemicals America, LLC. Pasadena Plant  
Sekisui Specialty Chemicals America, LLC. Calvert City Plant  
Sekisui Diagnostics, LLC. San Diego  
Sekisui Diagnostics P.E.I. Inc.  
Sekisui Specialty Chemicals Europe, S.L.  
Sekisui S-Lec Mexico S.A. de C.V.  
Sekisui S-Lec (Thailand) Co., Ltd.  
Thai Sekisui Foam Co., Ltd.  
Sekisui Specialty Chemicals(Thailand) Co., Ltd.  
Sekisui Pilon Pty. Ltd.  
Sekisui Diagnostics (UK) Ltd.  
Youngbo Chemical Co., Ltd.  
Sekisui DLJM Molding Private Ltd. Greater Nodia Plant  
Youngbo HPP (Langfang) Co., Ltd.  
Sekisui High Performance Packaging (Langfang) Co., Ltd.  
Sekisui S-LEC (Suzhou) Co., Ltd.  
Sekisui Medical Technology (China) Ltd.

[ ]: Organizations in square parentheses are included in the scope of certification. Some sites not shown above may include related sections that have attained ISO 14001 certification.

☆ Eco Action 21; others ISO 14001

★ The Sekisui Chemical Co., Ltd. Tsukuba R&D Site and Development Center share a single certification

### Headquarters

Sekisui Chemical Co., Ltd. Development Center\*  
ENAX, Inc. Headquarters, Chubu office

Indicator	Calculation Method
Number of EMS-certified business sites	Number of business sites that received external EMS certification in each fiscal year External EMS certification: ISO 14001, Eco-Action 21, etc.
The proportion of all business sites within the Sekisui Chemical Group that have received external EMS certification	The proportion of all business sites within the Sekisui Chemical Group that have received external EMS certification = $\Sigma[\text{Number of employees at business sites that have received external EMS certification}] / \text{Consolidated number of employees: Number of employees on the final day of the relevant fiscal year}$

#### Number of Issues Noted by Environmental Auditors During Fiscal Year 2017

			Number of cases	Correction completed	Undergoing correction
Headquarters environmental auditing (14 business sites)		Issues of concern	44	26	18
		Issues to work on	129	50	79
		Proposals	12	8	4
		Total	185	84	101
Auditing by certification body	Renewal (19 business sites)	Nonconformity(major)	8	8	0
		Nonconformity (minor)	5	3	2
		Observations	93	44	49
		Total	106	55	51
	Surveillance (31 business sites)	Nonconformity (major)	0	0	0
		Nonconformity (minor)	24	15	9
		Observations	83	38	45
		Total	107	53	54
Internal auditing of business sites (47 business sites, 50 audits)		Nonconformity (major)	13	9	4
		Nonconformity (minor)	99	63	36
		Observations	404	289	115
		Total	516	361	155

Note: Categories of instructions for Headquarters environmental auditing:  
 Issues of concern: Matters recommended for swift improvement  
 Issues to work on: Matters recommended for planned improvement  
 Proposals: Matters to be considered for improvement, advice

## Environment-related Complaints, etc.

		Content	Response
Accident	Fire	Small, contained fires occurring during raw-materials processes	Installation of sprinklers and monitoring cameras
	Leaks	Flow of caustic soda into waterways	Closure of wastewater routes
Complaints	Noise	Noise from exhaust blowers	Installation of soundproof wall in exhaust hoods
	Others	Leaving of weeds growing across the boundary lines into neighboring companies' properties	Periodic weeding

In fiscal year 2017, there were two environment-related accidents and two environment-related complaints; we have implemented measures to prevent reoccurrence for each case.

# Environmental Education

**Fostering Human Resources Who Can Think About the Importance of Environmental Activities and Act on Their Own**

## Management Approach

### Educational Plans and System

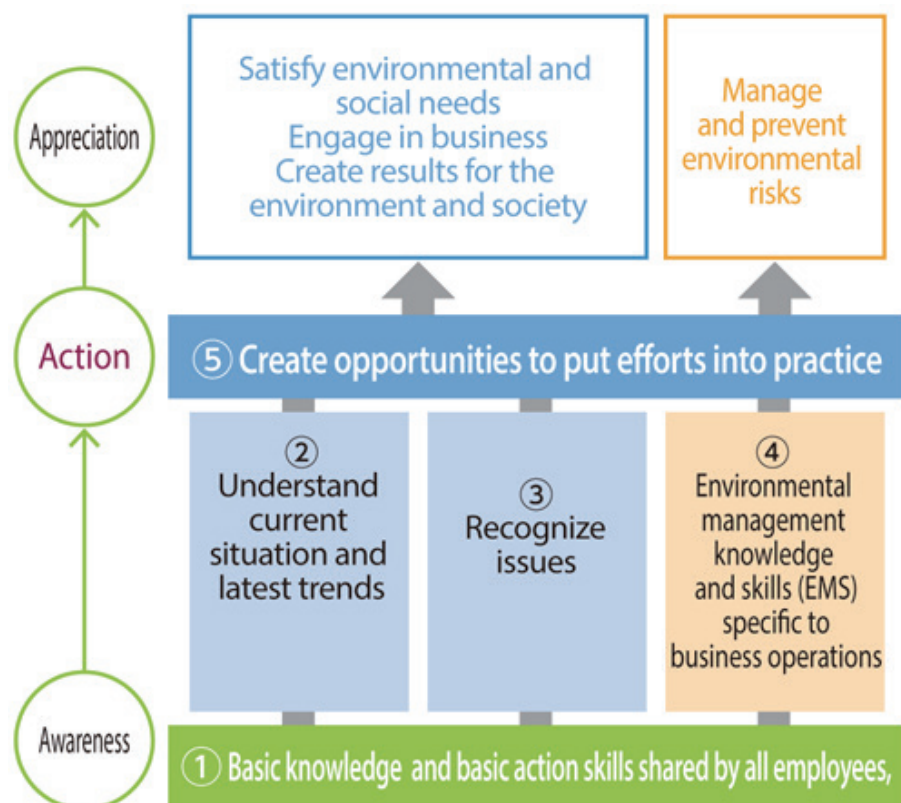
## The Creation of an Environmental Education System that Follows the Policies of Our Long-Term Vision

The Sekisui Chemical Group has created an education system to enable it to achieve the "ideal model of environmental human resources" in respect to employees, as drawn up as a means of achieving the group's Vision. Education based on this system began being conducted in 2014. Through their work, all employees consider on their own what actions they can take to contribute to the environment with the aim of creating "a world in biodiversity is conserved." The foundation for human resources who think and act in this way is build through environmental education.

### Conducting Education and Training

## Concept for Running Environmental Education and Training for the Long Term

In furtherance of achieving the ideal environmentally conscious human resources that the group has decided should exist by 2030, the core of the education program will be gradually transitioned from improving basic knowledge to creating hands-on opportunities.



## Medium-Term Plan

# Philosophy for Environmental Education in the Environmental Medium-term Plan (2017-2019)

## 1) A program to assist the transformation to “hands-on” action

Based on monitoring the levels of environmental knowledge and consciousness at the Company (organization) level throughout the period of the Environmental Medium-term Plan that was implemented through fiscal year 2016, differences based on job type and responsibilities were apparent, but there was almost no difference among regions. In the Environmental Medium-term Plan (2017-2019), the group will create tools to allow it to monitor individual-level levels of knowledge and degrees of participation so that studies of individual employees can serve as indicators and will create mechanisms that allow employees to engage in activities “hands-on.”

## 2) Creation of educational packages for mid-career hires

To have all Sekisui Chemical Group employees share the same understanding of the environment, the group will distribute various educational tools (booklets, DVDs, etc.) compiled into a set to newly joined group companies and employees joining the group as mid-career hires.

## 3) Others

The programs that proved effective among the various education programs instituted as part of the Environmental Medium-term Plan followed until the 2016 fiscal year will continue to be implemented in the current Environmental Medium-term Plan, with some revisions to their content.



## Environmental Education Program

	Educational program name	Category of education	FY2017 results		FY2018 plan		Covered job responsibilities, job types, etc.
			Japan	Overseas	Japan	Overseas	
1	Environment e-learning 1	②③⑤	✓		✓		Management
2	Environment e-learning 2	②③	✓		✓		All employees
3	Workshop Meeting 1	④	✓				Newly appointed people in charge of environmental affairs
4	Workshop Meeting 2	④⑤	✓	✓	✓	✓	People in charge of environmental affairs
5	EMS Content Distribution (DVD)	①④⑤			✓	✓	Production sites, research facilities
6	Training for the Revised ISO 14001 (skill improvements)	④⑤	✓				Production sites, research facilities
7	Training for Fostering Internal Environmental Auditors	④⑤			✓		Production sites, research facilities
8	CSR Training 1	①②	✓				New company employees
9	CSR Training 2	②③	✓				Newly appointed people in management positions
10	Environmental Human Resources Check	①⑤	✓		✓	△	All employees
11	Pamphlets on Environment-contributing Products	①②③			✓	△	All employees
12	Booklet for Publicizing the New Environmental Medium-term Plan (Vision Guidebook)	①②③	✓			✓	All employees

\* For Education Categories (1), (2), (3), (4), and (5), see the diagram for "Concept for Running Environmental Education and Training for the Long Term."



## Major Initiatives

### Creating indicators for environmental human resources

In the surveys on environmental consciousness conducted as part of the Environmental Medium-term Plan followed through fiscal year 2016, the level of knowledge was demonstrated to go up. However, there was a problem in that this could not be incorporated into an indicator of individual changes in behavior.


Thus, in fiscal year 2017, to “visualize” changes in behavior putting knowledge into practice and the change in the level of knowledge, an environmentally conscious human resources indicator was created to monitor employees’ current levels of environmental knowledge and the status of their behavior and to serve as a progress chart to encourage individuals to engage in self-study.

By having employees regularly perform “Environmental Human Resources Checks” on the system, they are able to check the degree to which they, themselves, are environmental human resources and to find issues that they should study. Because this check system also allows issues to be monitored at the business site, overall company, or other organizational level, it can be leveraged in PDCA cycles for environmental education.

#### (1) Environmental Human Resources Check Overview

1. Purpose	To monitor employees’ current levels of environmental knowledge and the status of their behavior and to serve as a progress chart to encourage individuals to engage in self-study
2. Target	All domestic Japanese employees of the Sekisui Chemical Group
3. Number of questions and content	15 questions About conditions in society (natural capital and the SDGs), company policies, and Sekisui Chemical’s environmental initiatives
4. Features of the questions	<ul style="list-style-type: none"> <li>•The following two questions have been established</li> <li>(1) Do they know the meanings of words and the purposes of activities?</li> <li>(2) Are they taking actions?</li> <li>•15 questions divided among six fields are tabulated, and points are shown for each field</li> </ul>
5. Implementation method	Conducted via an online site

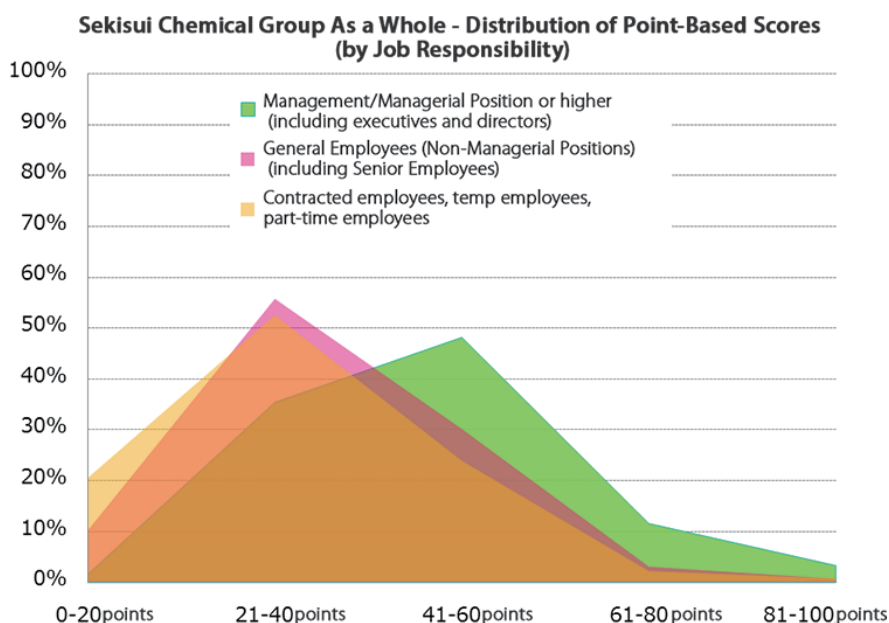
#### (2) Medium-Term Plan Target and Results

	Environmental Medium-term Plan target	Results (out of a perfect score of 100) 
FY2017	Benchmark monitoring	39 points* <sup>1</sup>
FY2018	+10 points (Compared to fiscal year 2017 results)	—
FY2019	+20 points (Compared to fiscal year 2017 results)* <sup>2</sup>	—

\*1 Result point values are the average of all respondents

\*2 Because we decided to start measuring human resources indicators in fiscal year 2017, the base year was changed to fiscal year 2017

## Distribution of Point Scores (by Job Responsibility)

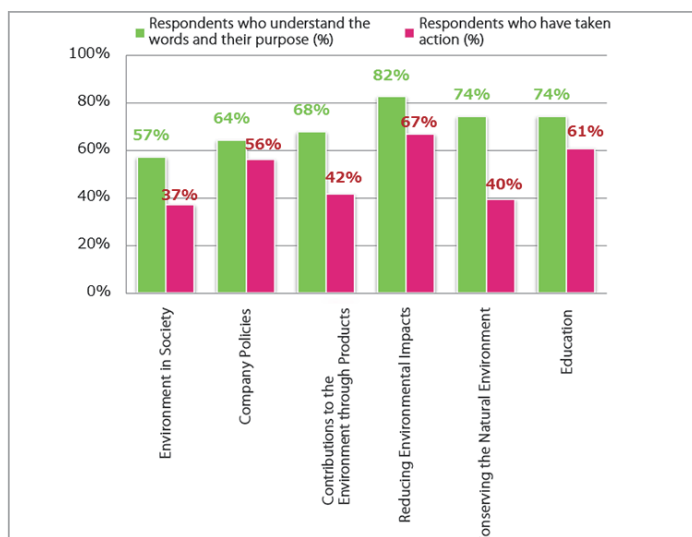


## Peaks of the Distributions of Numbers of People

Section chief or higher	41 to 60 points
General employees	21 to 40 points
Temporary employees, contracted employees	21 to 40 points

We found that those in management positions were distributed in a higher point-scoring range than employees in General employees and other Temporary employees and contracted employees, having greater knowledge of the environment and greater capabilities to act. Based on these findings, we were able to determine that those in management positions were leading the way for employees in general employees and those working on contract or temp bases. We will continue to institute environmental education targeting those in upper management positions so that corporate management and others in managerial-level positions can take the lead in promoting environmental activities.

## Status by Field



## Fields with High / Low Knowledge and Acting Capabilities

High	Reducing Environmental Impact
Low	Social Conditions

Although knowledge and the ability to act regarding reductions in greenhouse gases and waste and other means of decreasing the impact on the environment were found to be high-level, the results also suggested that knowledge and the ability to act in relation to that knowledge were at low levels in respect to societal trends relating to the environment, including the SDGs and natural capital.

Going forward, we will consider the content of the education we offer, putting an emphasis on publicizing what social trends relating to the environment there are and what actions connected to those trends are being taken.

## Difference Between Knowledge Capabilities and Acting Capabilities

Small	Company Policies
Large	Conserving the Natural Environment

The graph shown above suggests almost no difference in the levels of knowledge and the ability to act regarding environmental policies, such as the Environmental Medium-term Plan and the Long-Term Environmental Vision. However, the graph also shows a considerable gap between knowledge and behavior regarding conservation activities for the natural environment; employees "know what the objectives are, but have not taken action."

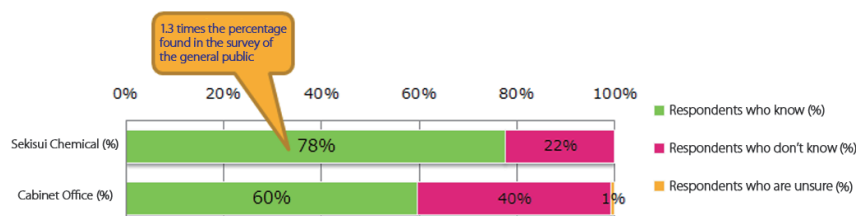
Going forward, we will promote unity between thought and action through consciousness-raising opportunities in which large numbers of employees can participate, such as "SEKISUI Environment Week."

### Reference: Comparison with the Cabinet Office's "Public Survey on Measures to Combat Global Warming"

In the "Social Conditions" portion of the Environmental Human Resources Check, the same questions are asked as those found in the Cabinet Office's "Public Survey on Measures to Combat Global Warming," and the results of the check were compared against those of the public survey.

#### <Question>

"Do you know of the 'Paris Agreement,' a new international framework for reducing greenhouse gases and other purposes that was adopted at the COP 21 international conference held in Paris, France?"



Source: Overview of the Cabinet Office's "Public Survey on Measures to Combat Global Warming" (2016)

Sekisui employees' knowledge scores relating to global warming were 1.3 times those found in the public survey.

The fiscal year 2017 Environmental Human Resources Check, was a system for checking the knowledge of employees based within Japan. Going forward, we plan to consider developing a system that can be rolled out globally after finding out the IT infrastructure situation in overseas business sites.

## Revision of the Environmental Education Booklet “Sekisui Environmental Sustainability Vision 2030 Vision Guidebook”

To make the long-term environmental vision the “Sekisui Environment Sustainability Vision 2030” the common goal for all the Sekisui Chemical Group and to make it an integral part of the experience of the Group's employees, a booklet has been compiled detailing the group's initiatives in the areas touched upon in the Vision of biodiversity and natural capital.

In tandem with the launch of the new Environmental Medium-term Plan in fiscal year 2017, the content prepared during the previous medium-term plan was reviewed, and an updated edition was created.

Based on Environmental Human Resources Checks, it can be shown that Sekisui Chemical Group employees lack knowledge relating natural capital and other “societal conditions.” Therefore, the revised edition has explanations with a focus on items related to that topic.

To increase understanding of the Vision Guidebook, e-learning with content based on the guidebook is also available on the group intranet.



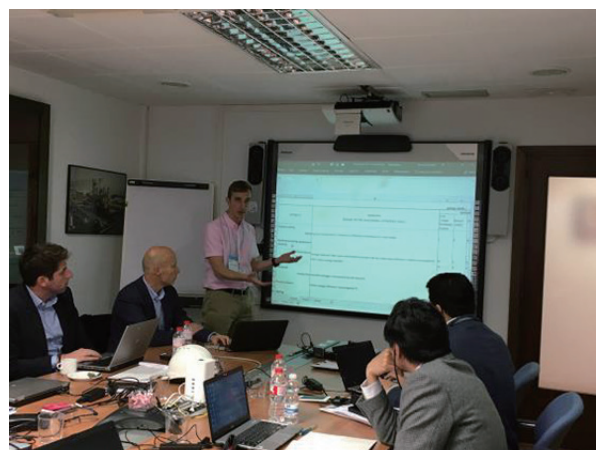
Vision Guidebook (Comprehension Volume)  
2nd Edition



Environment e-learning screen

## Workshop Meetings for People in Charge of Environmental Affairs

During fiscal year 2017, workshop meetings for people in charge of environmental affairs were held in four areas: North America, Japan, China, and Europe. In all areas, activities such as evaluating energy-saving policies in model business sites were conducted as group work under the theme of reducing greenhouse gases—a crucial item for implementation in the Environmental Medium-term Plan.



A scene at the European workshop meetings for people in charge of environmental affairs

# Environmental Accounting

We compile data on the cost and benefits of our environmental conservation activities.

## Management Approach

### Compilation Method

## The Sekisui Chemical Group Refers to Public Guidelines and Adds Its Own Concepts

To fulfill our reporting responsibilities as a company and promote efficient environmental management, we employ environmental accounting that is capable of identifying the cost and benefits of our environmental conservation activities. Calculation is conducted by referring to the Environmental Accounting Guidelines 2005 issued by the Japanese Ministry of the Environment, with the addition of the Sekisui Chemical Group's own concepts, such as external economic benefits (estimated effects).

## Performance Data

### [Scope of Environmental Accounting]

(1) Summation period: April 1, 2017 to March 31, 2018

(2) Scope of tabulation: 42 production sites + 5 research facilities + various departments in headquarters + indirect divisions of Companies + 15 housing sales companies

In fiscal year 2015, the scope of tabulation consisted of 45 production sites + 5 research facilities + various departments in headquarters + indirect divisions of Companies + 14 housing sales companies.

Deleted: Sekisui Chemical Co., Ltd. Tokyo Plant (plant closed), Sekisui Aqua Systems Co., Ltd. Shizuoka Plant (plant closed)

Because of the effects of the Kumamoto Earthquake, it was impossible to tabulate data for a housing sales company and Sekisui Heim Kyushu Co., Ltd. in fiscal year 2015.

In fiscal year 2016, the scope of tabulation consisted of 40 production sites + 5 research facilities + various departments in headquarters + indirect divisions of Companies + 15 housing sales companies.

Deleted: Four Sekisui Film production sites (outside the scope of consolidation), Sekisui Medical Co., Ltd. Amagasaki Plant (business transferred)

The business sites added to the scope of tabulation in 2017 are as follows:

Addition: Hanyu Sekisui Co., Ltd. Tohoku Office, Sekisui Medical Co., Ltd. Ami Office



### (3) Approach toward summation

- Depreciation amounts are the same as those for financial accounting.
- Investment amounts are based on budget approvals during the summation period.
- Expenditures and investments that contain other than environmental conservation activities are distributed pro-rata in 10% increments.

During fiscal year 2017, the number of business sites counted as production sites increased.

Concerning costs, upstream and downstream costs, management activity costs, and R&D costs rose, while social activity and other costs decreased, but total costs amounted to more than in the previous fiscal year.

Meanwhile, in terms of investment, there was increased investment in measures countering global warming and on waste material reductions, and investment in R&D increased; thus the total amount exceeded that of the previous fiscal year.

In terms of economic effects, profit on the sale of valuables increased, as did profits from the sale of mega-solar electricity. Additionally, the amount saved on costs from energy-saving activities decreased, while the amount of costs saved from waste material reduction activities and other efforts increased. The external economic effects from housing equipped with solar power-generation systems and so forth are growing steadily.

### Environmental Conservation Costs (Sekisui Chemical Group)

(Millions of yen)

Category	Items Description of main activities	FY2015		FY2016		FY2017	
		Costs	Investments	Costs	Investments	Costs	Investments
1) Costs within business areas	Prevention of air, water, and noise pollution, etc.	1,170	229	1,391	265	1,697	99
	Countermeasures against global warming (energy saving), etc.	442	383	383	706	427	1,312
	Waste reduction, recycling, disposal, etc.	4,203	119	5,370	80	4,967	2,030
2) Upstream/downstream costs	Cost increases due to URU, switching to packaging/packing methods involving reduced environmental impact, greener purchasing, etc.	243	0	144	6	218	0
3) Administrative costs	Environmental education, EMS maintenance, running costs for green action organization, information disclosure, etc.	2,069	1	1,687	5	2,072	0
4) Research & development costs	Research and development on environmental conservation	5,483	1,369	5,349	804	7,932	1,477
5) Social activities costs	Social contributions, etc.	337	1	291	0	277	0
6) Environmental damage costs	Nature restoration, etc.	30	0	27	0	29	32
Total		13,977	2,103	14,640	1,866	17,618	4,951
Total amount of R&D costs* and investment in the fiscal period (million yen)		31,693	23,949	34,169	20,220	36,974	18,838
Ratio of amount related to environmental conservation activities to total (%)		17.3	8.8	15.7	9.2	21.5	26.3

\* R&D costs are the total for all consolidated companies.

### Environmental Conservation Benefits (Sekisui Chemical Group)

Environmental conservation benefits								Environmental performance criteria: per unit of output; Total				Self-evaluation	
Description of effects		Item	Unit	FY2015	FY2016	FY2017	Effect (17-16)	Item	Unit	FY2016	FY2017		
Effects within business areas	Effects on invested resources	Amount of energy usage	(1)Electricity	TJ	1,203	1,124	1,116	-8	(1) Energy usage per unit of output (electricity + fuel)	GJ/ton	1.09	1.05	✓
			(2) Fuel	TJ	2,260	2,415	2,488	73					
	Effects on environmental impact and waste	(3) CO <sub>2</sub> emissions	Thousands tons	327.5	318.9	317.4	-1.5	—	—	—	—	×	
		(4)Volume of environmental pollutants discharged <sup>*</sup>	Tons	533.7	567.3	649.5	82.1	—	—	—	—	×	
		(5) Waste generated <sup>*2</sup>	Thousands tons	31.7	37.2	38.3	1.1	(2)Waste generated per unit of output	kg/ton	42.6	42.3	×	
		(6) Outsourced disposal <sup>*3</sup>	Thousands tons	0.02	0.00	0.31	0.31	(3)Outsourced disposal per unit of output	kg/ton	0.00	0.34	×	
Upstream/downstream effects	Effects related to products/services	CO <sub>2</sub> reduction by photovoltaic power generation, etc. (cumulative)	Thousands tons	394	425	452	27	—	—	—	—	✓	
Other benefits to environmental conservation	Others <sup>*6</sup>	Business sites attaining ISO 14001 and other certifications	New acquisitions	Sites	3	3	2	—	Business sites attaining ISO 14001 and other certifications <sup>*5</sup>	Total number of business sites	100	102	✓
			Renewals	Sites	15	12	19	—					
		Number of business sites achieving zero emissions <sup>*4</sup>	Sites	6	4	0	—	Number of business sites achieving zero emissions <sup>*6</sup>	Total number of business sites	162	162	✓	
		CO <sub>2</sub> reduction from use of megasolar facilities	Thousands tons	5.06	5.18	4.96	-0.22	—	—	—	—		

\*1 Class I Designated Chemical Substances specified by PRTR Law. \*2 Amount discharged + Amount disposed of at price + Amount incinerated within own premises.

\*3 Simple incineration + Landfill. \*4 Including business sites not subject to environmental accounting summation, such as overseas business sites.

\*5 A cumulative total number of sites reviewed for factors, such as consolidation and return of certifications for housing sales companies.

\*6 A business site affiliated to multiple companies is counted as one.

## Economic Benefits of Environmental Conservation Measures (Sekisui Chemical Group)

(Millions of yen)

Description of effects		FY2015	FY2016	FY2017	Remarks
Revenue	(1) Profit on sales of valuable resources	160	129	291	Profit on sales of valuable resources from promotion of waste segregation and recycling
	(2) Revenues from sale of electricity	365	379	384	Revenues from sale of electricity generated by megasolar facilities
Cost savings	(3) Savings from simplified packaging	4	0	4	
	(4) Cost savings through energy-saving activities	974	486	654	
	(5) Cost savings through waste-reduction activities, etc.	1,170	646	677	Including resource-saving activities
Subtotal (actual effects)		2,673	1,639	2,010	
(6) Contribution to environmental conservation activities*1		6,755	6,694	7,737	Contribution of environmental conservation activities to added value at business sites*2
(7) External economic effect		28,761	30,647	34,982	Monetary conversion of impact from photovoltaic generation systems and No-Dig pipe rehabilitation method
Subtotal (estimated effects)		35,516	37,341	42,719	
Total		38,189	38,980	44,728	

\*1 Excluding housing sales companies

\*2 (Added value from business sites) × {(Costs within business areas + Administrative costs)/(Total production costs excluding materials costs)}

## Environmental Conservation Costs (by Company)

(Millions of yen)

Items		Housing Company*1		Urban Infrastructure & Environmental Products Company		High Performance Plastics Company		Sekisui Chemical Group*2	
Category	Description of main activities	Costs	Investments	Costs	Investments	Costs	Investments	Costs	Investments
1) Costs within business areas	Prevention of air, water, and noise pollution, etc.	1,186	53	45	16	467	31	1,697	99
	Countermeasures against global warming (energy saving), etc.	106	148	167	848	144	317	427	1,312
	Waste reduction, recycling, disposal, etc.	4,356	10	255	6	355	2,014	4,967	2,030
2) Upstream/downstream costs	Cost increases due to URU, switching to packaging/packing methods involving reduced environmental impact, greener purchasing, etc.	191	0	12	0	15	0	218	0
3) Administrative costs	Environmental education, EMS maintenance, running costs for green action organization, information disclosure, etc.	544	0	313	0	775	0	2,072	0
4) Research & development costs	Research and development on environmental conservation	67	149	2,110	4	647	31	7,932	1,477
5) Social activities costs	Social contributions, etc.	182	0	31	0	18	0	277	0
6) Environmental damage costs	Nature restoration, etc.	0	0	0	0	29	32	29	32
Total		6,632	359	2,932	874	2,450	2,425	17,618	4,951
Total amount of R&D costs*3 and investment in the fiscal period (million yen)		4,626	3,675	6,063	5,046	18,933	7,909	36,974	18,838
Ratio of amount related to environmental conservation activities to total (%)		1.4	9.8	34.8	17.3	3.4	30.7	21.5	26.3

\*1 Including 42 business sites of housing sales companies. \*2 Total of three division companies and departments of headquarters. \*3 R&D costs are the total for all consolidated companies.

## Environmental Conservation Costs (by Environmental Conservation Measure)

(Millions of yen)

Items		Housing Company*1		Urban Infrastructure & Environmental Products Company		High Performance Plastics Company		Sekisui Chemical Group*2	
Category	Description of main activities	Costs	Investments	Costs	Investments	Costs	Investments	Costs	Investments
1. Prevention of global warming	Reduction of CO <sub>2</sub> emissions, etc.	97	100	171	844	142	233	419	1,177
2. Ozone layer protection	Reduction of chlorofluorocarbon emissions, etc.	6	47	1	1	9	76	17	124
3. Conservation of air quality	Prevention of air pollution by reducing polluting substances	386	11	34	10	166	12	586	33
4. Prevention of noise and vibration	Prevention of noise and vibration pollution	35	19	5	0	13	8	54	27
5. Conservation of water environment, soil environment, ground quality	Preservation of water quality, prevention of subsidence	187	2	17	4	330	43	534	49
6. Waste reduction and recycling	Reduction and treatment of waste, recycling, etc.	4,527	10	262	6	388	2,014	5,177	2,030
7. Reduction of chemical substances	Risk management of chemical substances, etc.	548	0	2	0	4	0	554	0
8. Conservation of natural environment	Nature conservation, etc.	91	0	82	0	39	0	245	0
9. Others	Others	755	169	2,358	9	1,360	39	10,032	1,510
Total		6,632	359	2,932	874	2,450	2,425	17,618	4,951

\*1 Including 42 business sites of housing sales companies.

\*2 Total of three division companies and departments of headquarters.

## Environmental Conservation Benefits (by Company)

Environmental conservation benefits					Housing Company*1			Urban Infrastructure & Environmental Products Company			High Performance Plastics Company			Sekisui Chemical Group*2		
Description of effects		Items		Unit	FY2016	FY2017	Effect (17-16)	FY2016	FY2017	Effect (17-16)	FY2016	FY2017	Effect (17-16)	FY2016	FY2017	Effect (17-16)
Effects within business areas	Effects on invested resources	Amount of energy usage	(1) Electricity	TJ	148	151	3	569	573	4	401	383	-18	1,124	1,116	-8
			(2) Fuel	TJ	120	131	11	95	94	-1	2,198	2,257	59	2,415	2,488	73
	Effects on environmental impact and waste	(3) CO <sub>2</sub> emissions		Thousand tons	28.0	27.7	-0.3	92.0	89.5	-2.5	197.9	198.7	0.8	318.9	317.4	-1.5
		(4) Volume of environmental pollutants discharged <sup>3)</sup>		Tons	1.7	1.5	-0.2	54.7	47.0	-7.7	511.0	601.0	90.0	567.3	649.5	82.1
		(5) Waste generated <sup>4)</sup>		Thousand tons	10.9	11.2	0.3	7.8	7.9	0.1	18.6	19.0	0.4	37.2	38.3	1.1
		(6) Outsourced disposal <sup>5)</sup>		Thousand tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18	0.00	0.31	0.31
Upstream/downstream effects	Effects related to products/service	CO <sub>2</sub> reduction by photovoltaic power generation, etc.		Thousand tons	425	452	27	—	—	—	—	—	—	425	452	27
Other benefits to environmental conservation	Others <sup>6)</sup>	Business sites attaining ISO 14001 and other certifications	New acquisitions	Sites	0	0	—	0	0	—	3	2	—	3	2	—
			Renewals	Sites	5	1	—	5	10	—	2	8	—	12	19	—
		Number of business sites achieving zero emissions <sup>7)</sup>		Sites	0	0	—	3	0	—	1	0	—	4	0	—
		CO <sub>2</sub> reduction from use of megasolar facilities		Thousand tons	3.19	3.11	-0.08	0.90	0.80	-0.11	1.08	1.05	-0.03	5.18	4.96	-0.22

\*1 Including 42 business sites of housing sales companies \*2 Total of three division companies and departments of headquarters. \*3 Class I Designated Chemical Substances specified by PRTR Law.

\*4 Amount discharged + Amount disposed of at price + Amount incinerated within own premises \*5 Simple incineration + Landfill

\*6 Including business sites not subject to environmental accounting summation, such as overseas business sites \*7 A business site affiliated to multiple companies is counted as one.

## Economic Benefits of Environmental Conservation Measures (by Company)

(Millions of yen)

Description of effects		Housing Company*1	Urban Infrastructure & Environmental Products Company	High Performance Plastics Company	Sekisui Chemical Group*2	Remarks
Revenue	(1) Profit on sales of valuable resources	16	193	78	291	Profit on sales of valuable resources from promotion of waste segregation and recycling
	(2) Revenues from sale of electricity	238	63	83	384	Revenues from sale of electricity generated by megasolar facilities
Cost savings	(3) Savings from simplified packaging	0	3	0	4	
	(4) Cost savings through energy-saving activities	9	66	578	654	
	(5) Cost savings through waste-reduction activities, etc.	47	72	558	677	Including resource-saving activities
Subtotal (actual effects)		310	398	1,298	2,010	
(6) Contribution to environmental conservation activities <sup>3)</sup>		2,716	1,735	3,285	7,737	Contribution of environmental conservation activities to added value at business sites <sup>4)</sup>
(7) External economic effect		24,991	9,991	—	34,982	Monetary conversion of impact from photovoltaic generation systems and No-Dig pipe rehabilitation method
Sub-total (estimated effects)		27,707	11,726	3,285	42,718	
Total		28,017	12,124	4,583	44,728	

\*1 Including 42 business sites of housing sales companies \*2 Total of three division companies and departments of headquarters. \*3 Excluding housing sales companies

\*4 (Added value from business sites) × {(Costs within business areas + Administrative costs)/(Total production costs excluding materials costs)}

Indicator	Calculation Method
Environmental Accounting	<p>Calculation based on referring to the Ministry of the Environment's "Environmental Accounting Guidelines 2005 Edition" and adding Sekisui's own concepts, such as external economic effects (estimated effects)</p> <p>Among the economic effects attendant with environmental conservation measures, the external economic effect consist of the effects of energy-savings from sales of housing equipped with solar power-generation systems and the effects of non-digging renovation methods for sewers, and so forth, converted to a monetary value</p>



# Usage of Environmental Capital

## Initiatives by the Sekisui Chemical Group to Reduce its Impact on the Environment

The Sekisui Chemical Group is involved in business that utilizes fossil fuels, lumber, and other resources of the earth (natural capital).

To balance the irreplaceable global environment with sustainable business, Sekisui's initiatives for "reducing the impact on the environment" are explained here.

### Dealing with climate change

Sekisui is engaged in reducing greenhouse gas emissions in all stages from the procurement of raw materials to development, manufacturing, transport, and use.

### Effective use of resources

Sekisui strives to thoroughly implement the "3 Rs" (reduce, reuse, and recycle) throughout entire lifecycles and to achieve zero emissions from its business sites.

### Conservation of water resources

Sekisui monitors the impact of water resources on business continuity and reflects its findings in its business plans.

### Managing chemical substances

Sekisui establishes its own targets and strives to reduce the amount of runoff of chemical substances and the amount transported among sites.

### Evaluation of the degree of effects on the environment

Sekisui runs systems that evaluate the environmental effects of products in all stages from product planning, development, and mass prototyping to marketing and initial distribution.

### Material governance

Sekisui releases information on the resources and energy used in its business activities (inputs) and on the impact on the environment from those activities (outputs).

# Climate Change

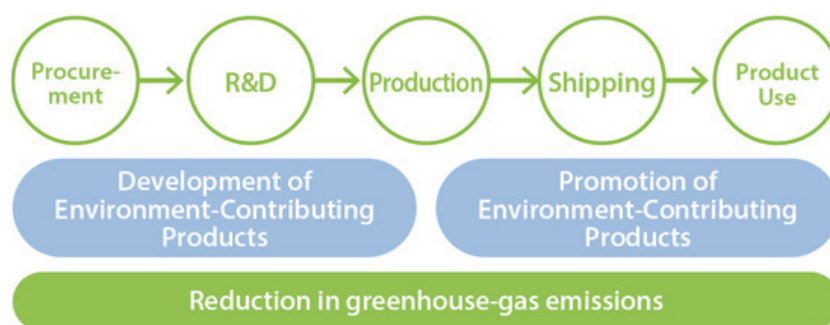
## Efforts to Reduce Greenhouse Gas Emissions throughout the Supply Chain

### Management Approach

#### Basic Concept

### Reducing Emissions Throughout the Entire Supply Chain

The Sekisui Chemical Group has formulated a medium-term greenhouse gas emission reduction plan to help ensure that the rise in the global temperature is limited to below 2°C, as called for by the Paris Agreement. Based on a scenario in accordance with the Science Based Targets (SBTs), we identify and disclose the risks and opportunities from the impact of climate change on business continuity under the scenario of keeping the rise in the global temperature under 2°C. Moreover, we reflect these factors into our business plans and emission reduction targets. Concerning emissions, Sekisui is engaged in reducing greenhouse gas emissions in all stages from the procurement of raw materials to development, manufacturing, transport, and use. We monitor these emissions throughout the entire supply chain, including not just our own business sites but also raw material suppliers and the use of our products after being sold, and publish our findings.



#### Combating Climate Change

### Steadily Reducing Greenhouse Gases in All Business Activities

Under the Environmental Medium-term Plan that we have been implementing since fiscal year 2017, we have widened the scope for setting targets for greenhouse gas emissions to extend beyond production to encompass all aspects of our business activities; we have set a reduction target of 6% reductions for emissions from business activities versus fiscal year 2013 levels by fiscal year 2019. Sekisui Chemical is also actively engaged in environment-contributing investments that contribute to reducing greenhouse gas emissions from its production divisions.

Looking ahead, we will continue reducing greenhouse gases at every stage of our business activities, with the COP 21 (Paris Agreement) objectives at the forefront of our decision-making.

## Climate Change and Our Business

### Risks and Opportunities Presented by Climate Change for Our Businesses

The Sekisui Chemical Group recognizes that global warming and other forms of climate change are a global problem for society. The Sekisui Environment Sustainability Vision 2030 created in fiscal 2013 aims to realize “a planet where biodiversity is preserved.” Our concept of “a planet where biodiversity is preserved” is a vision where the earth has achieved a state of having solved global-scale social issues, such as climate change, resource depletion and ecosystem degradation.

We also strive to understand the risks and opportunities that climate change presents to the operations of the Sekisui Chemical Group, in terms of their magnitude, scope of impact and other matters. For identified risks, the Sekisui Chemical Group examines measures to mitigate the risks, and for identified opportunities, it considers the creation of new businesses by developing products and services. Through this kind of management, we believe it is possible to remain a company that meets the demands of society through sustainable business development.

#### An Example of Risks and Opportunities Recognized by the Sekisui Chemical Group

<b>Business Risks from Climate Change</b>	<ul style="list-style-type: none"> <li>•Higher costs in procurement, production, facilities and distribution from regulations designed to prevent and lessen the effects of climate change</li> <li>•Costs to replace cooling equipment, vehicles and substances used in order to comply with changes in regulations for coolants</li> <li>•Higher costs for building facilities and systems in order to calculate the emission of substances such as CO<sub>2</sub> that cause climate change</li> <li>•New taxes, such as carbon tax, for restricting the greenhouse gas emissions and costs to acquire emission credits</li> <li>•Higher energy costs due to the greater use of renewable energy</li> <li>•Additional costs in manufacturing and R&amp;D from new standards or tougher standards for insulation and energy-saving functions of housing products</li> <li>•Changes in market needs alongside climate change (fluctuations in demand for smart houses, insulation, agricultural film and other Environment-contributing Products)</li> <li>•Costs to calculate and disclose environmental performance required by regulations, such as the energy-saving performance of products and disclosing our carbon footprint</li> <li>•Decline in relative cost competitiveness as a result of higher production costs from the tightening of environmental regulations in regions where production sites are located</li> <li>•Loss of advantages in the Company's Environment-contributing Products in regions lacking relevant environmental regulation</li> <li>•Decline in advantages of the Company's products due to weaker demand for high-insulation properties due to changes in average temperatures</li> <li>•Increase in energy costs in regions that have regulated targets for introducing renewable energy</li> <li>•A worsening in employment conditions if temperatures increase due to global warming (increased risk of heatstroke, etc.)</li> <li>•Inability to operate factories located in low-lying regions due to flooding and rising sea levels</li> </ul>
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## An Example of Risks and Opportunities Recognized by the Sekisui Chemical Group

Business Risks from Climate Change	<ul style="list-style-type: none"> <li>• Loss of business operations due to increase in employees unable to commute to work due to severe weather such as typhoons, heavy rainfall and strong winds</li> <li>• Temporary suspension of procurement and logistics due to severe weather such as typhoons, heavy rainfall and strong winds</li> <li>• Decline in number of available construction days at housing construction sites and waterworks infrastructure projects due to sharp increase in rainfall</li> </ul>
Business Opportunities from Climate Change	<ul style="list-style-type: none"> <li>• Expand world market for Environment-contributing Products as environmental awareness increases in emerging countries</li> <li>• Increase demand for Environment-contributing Technologies and Environment-contributing Products in tandem with changes in temperatures and rainfall and more frequent occurrence of natural disasters</li> <li>• Stronger demand for Environment-contributing Products as regulations and tax codes are established to prevent and mitigate climate change</li> <li>• Growth in Environment-contributing Products from stronger needs to reduce energy costs and greater awareness of energy conservation among consumers around the world</li> <li>• Increase in sales opportunities for the Company's products for which information can be provided via labeling that assesses the use of natural capital as a result of the introduction of environmental labeling system, such as for energy-saving performance</li> <li>• Competitive advantages from being able to produce at minimal cost even if tighter environmental regulations are made, thanks to ongoing efforts to reduce environmental load at production sites</li> <li>• Improvement in corporate image from environmental activities and availability of Environment-contributing Products</li> </ul>

Risks brought on by climate change can be broadly put into three categories: higher costs to address climate change, changes in market needs alongside climate change, and deterioration in plant operation and working conditions from an increase in temperatures and natural disasters. Meanwhile, the main opportunity presented by climate change is stronger demand for Environment-contributing Products.

Every effort is being made to avoid risk through effective management. The Sekisui Chemical Group also recognizes the importance of continuously carrying out the three missions stipulated under the Sekisui Environment Sustainability Vision 2030, namely expanding and creating markets for Environment-contributing Products, reducing environmental impact, and conserving the natural environment in order to steadfastly grasp opportunities.

## Higher Costs to Address Climate Change Can Be Met with Reductions in Environmental Impact

As an initiative to reduce environmental impact, the Sekisui Chemical Group aims to visualize its energy usage and reduce the volume used through its Manufacturing Development Innovation Center, which was established for the purpose of greatly increasing energy efficiency in production processes. We also created a system where employees can select an eco-car from the list of company-owned vehicles and conduct environmental impact assessments and energy conservation assessments when installing new equipment in our plants. Through these and other efforts, the Sekisui Chemical Group has put in place a structure that allows it to meet new environmental regulations around the world at minimal cost.

## Changes in Market Needs and Stronger Demand for Environmental Products Can Be Addressed by Improving Environment-contributing Products

We manage risks that arise from climate change and other global social issues by continuing to develop Environment-contributing Products and disclosing and distributing detailed data on outcomes, and this also allows us to precisely identify opportunities arising from strengthening demand.

In particular, we believe it is possible to magnify the impact of the products and services we create by quantifying as much as possible the size of their contribution to solving social issues, which leads to opportunities to create and transform markets in ways that help solve global issues and change the awareness of consumers.

## Deterioration in Operating and Working Conditions Can Be Addressed on a Case-by-Case Basis

If climate change becomes a grave problem and significantly increases the highest and lowest temperatures, it is possible that people in manufacturing and construction would be unable to work as much. Since climates vary by region, it may be possible to minimize the effects of climate change by proposing to do construction work and projects during the more favorable seasons in the region. Each company division and Group company has formulated its own BCP based on their unique situation as a means of avoiding as much as possible the risk of loss in operations and work availability due to natural disasters.

See page 305, "References," for a list of business risks and opportunities related to climate change.

## Major Initiatives

### Acquisition of SBT Certification

## Acquisition of Certification Under the SBT\* Initiative (a World-First in the Chemistry Industry) Relating to Greenhouse Gas Reduction Targets

To commit, before society, its stance of actively engaging in corporate efforts to resolve issues of climate change, the Sekisui Chemical Group publicly releases CSR reports and other materials relating to its targets. Additionally, in fiscal year 2017, the Group applied for certification under the SBT Initiative to demonstrate that its medium-term targets announced for its overall business and for its supply chains reach a scientifically grounded, ambitious level aimed at helping to achieve the Paris Agreement's 2°C target. The group then became the first in the chemical industry world-wide to receive this certification.

### <Certified targets>

SCOPE 1+2: Reduce greenhouse gas emissions by 26%, relative to fiscal year 2013, by 2030

SCOPE 3: Reduce greenhouse gas emissions by 27%, relative to fiscal year 2016, by 2030

The Group will continue to affirm its growing responsibility to play its role as an industry leader and will strive to engage in activities leading and imploring society as a whole to work on measures to combat climate change.

\* SBT: Short for Science Based Targets Called for by joint initiatives, including the UN Global Compact, in response to the adoption of the Paris Agreement. Through the SBT Initiative, greenhouse gas reduction targets established by companies are certified as science-based targets (SBTs) that contribute to long-term measures combating climate change.

### Environment-contributing Investments

## Environment-contributing Investment Framework Newly Created to Advance Measures for Combating Global Warming

It will first be necessary to steadily achieve the backcasting-based targets set forth in the Environmental Medium-term Plan that the Group has been implementing since fiscal year 2017 to achieve the Group's 2030 targets for reducing greenhouse gas emissions.

The Group is already implementing extremely high-level initiatives for reducing emissions at its production sites. To achieve its targets of wide-ranging reductions, the Group believes that bold capital expenditures, in addition to mere changes to its operations in production sites, will be essential. To promote capital expenditures that contribute to energy savings, the Group has set a new Environment-contributing Investment Framework, and has established internal systems that support production sites upgrade or replace equipment to reduce greenhouse gas emissions.

In fiscal year 2017, the effectiveness of these initiatives steadily emerged, as demonstrated, for instance, by our undertaking of capital expenditures that had been previously delayed because of unprofitableness. By upgrading older types of manufacturing equipment and utilities, switching lighting to LEDs, and making other investments, the Group is on track to reduce the greenhouse gas emissions from projects already ordered by 20,000 metric tons, and, with the further spending based on this support system, we aim to achieve total reductions of 40,000 metric tons.

## Supply Chain Initiatives (Scope 3)

### Reducing Greenhouse Gases at the Supply Chain Stage

In the case of Sekisui, we were able to determine that greenhouse gas emissions falling under SCOPE 3 are highest at the raw materials procurement and product usage stages. The reason that emissions are high in the raw materials procurement stage is understood to be due to the characteristics of our business as a chemicals manufacturer. Meanwhile, the emissions from the product-usage stage arise from the large volumes of greenhouse gases emitted as the result of energy consumed in the houses that we sell.

Concerning raw materials, going forward, we will revise our selection criteria for new materials at the time of their adoption and reduce the use of four resins known to be raw materials that result in high levels of emissions to reduce the amount of greenhouse gases that are emitted. Thus, we will act to include the entire supply chain, achieving reductions of 20%, relative to fiscal year 2016.

In terms of emissions at the stage of product usage, we will contribute to energy usage reductions from occupied housing by increasing the proportion of net-zero energy houses (ZEH) among the housing units that we sell, achieving 50% reductions, relative to fiscal year 2016, by fiscal year 2030.

## Renewable Energy Use

### Promoting Household Use of Solar Panels

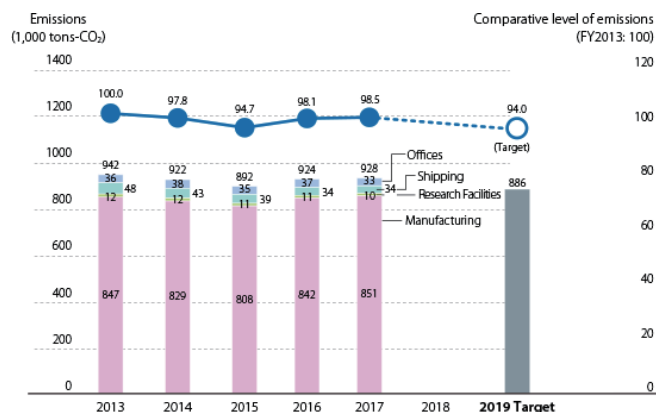
Sekisui Chemical has been promoting the use of renewable energy by installing solar power generators at our domestic and overseas production sites. In fiscal year 2017, solar-derived energy usage amounted to 1,173 MWh, which is equivalent to 0.17% of our total energy usage, including purchased electricity.

Sekisui will continue to monitor the proportion of renewable energy out of its total amount of electricity consumed, including purchased electricity, and to strive to increase that proportion to help achieve its Environmental Sustainability Vision 2030 targets.

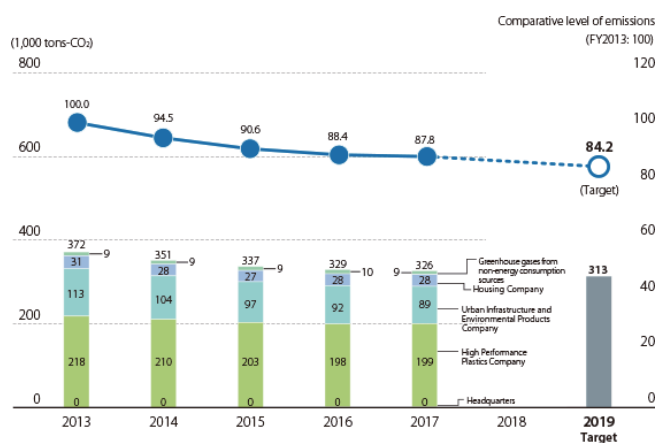
## Performance Data

Starting with the current Environmental Medium-term Plan (2017-2019) we have revised the CO<sub>2</sub> emissions coefficient and amount of heat generated per unit of output, resulting in revisions to figures for previous fiscal years.

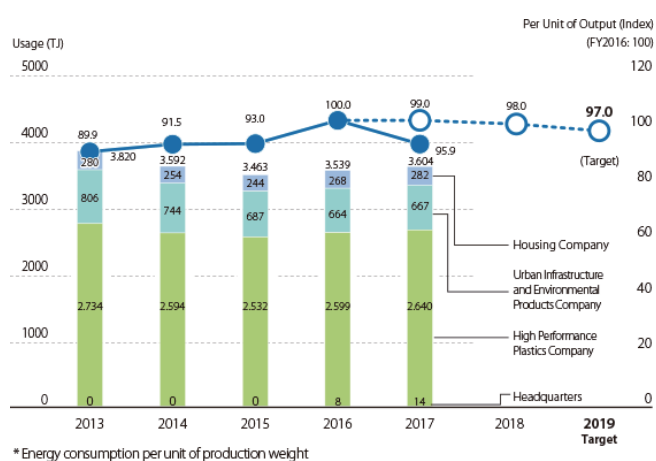
### Greenhouse Gas (GHG) Emissions That Arise from Business Activities



### Greenhouse Gas (GHG) Emissions During Manufacturing / Japan

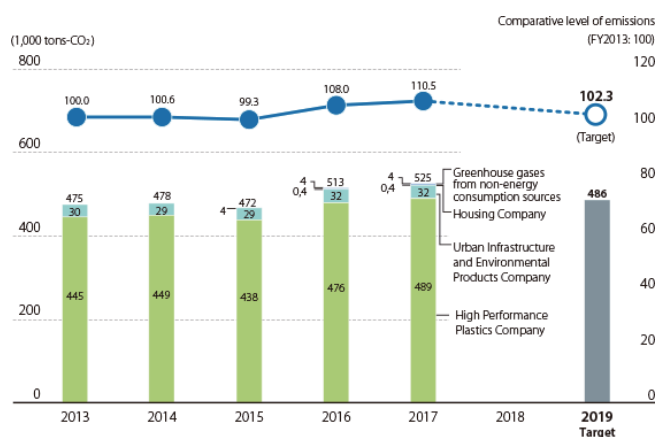


### Energy Usage and per Unit of Output\* (Index) During Manufacturing / Japan

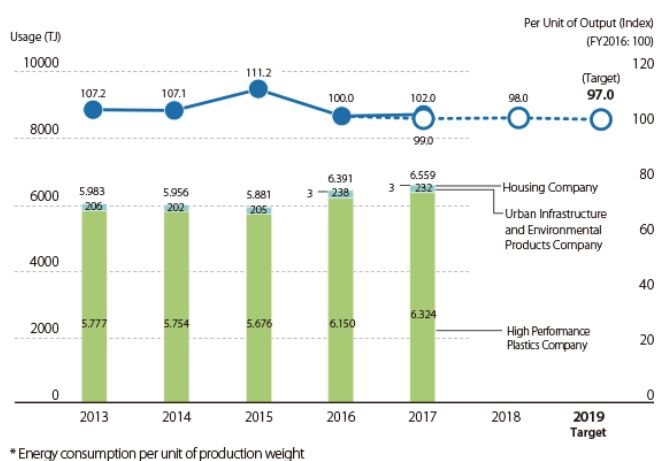


\* Energy consumption per unit of production weight

### Greenhouse Gas (GHG) Emissions During Manufacturing / Overseas



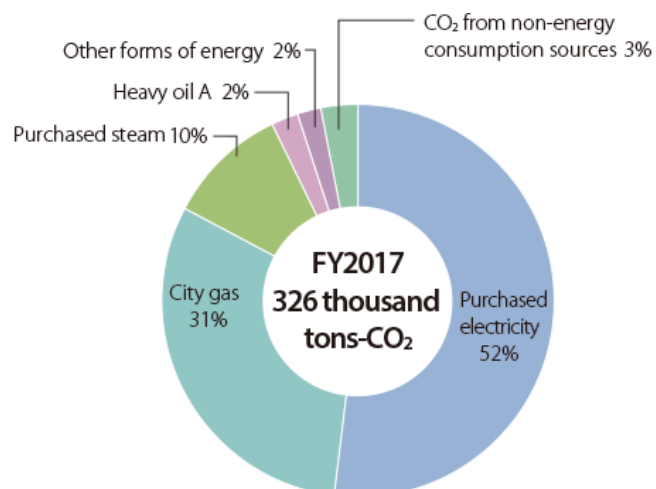
### Energy Usage and per Unit of Output\* (Index) During Manufacturing / Overseas



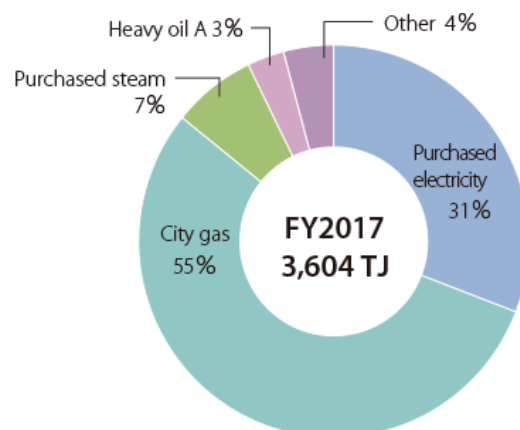
\* Energy consumption per unit of production weight



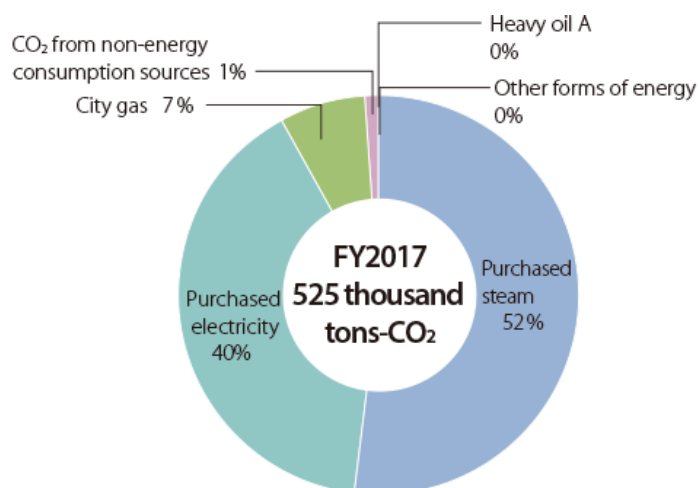
### Breakdown of Greenhouse Gas (GHG) Emissions During Manufacturing / Japan



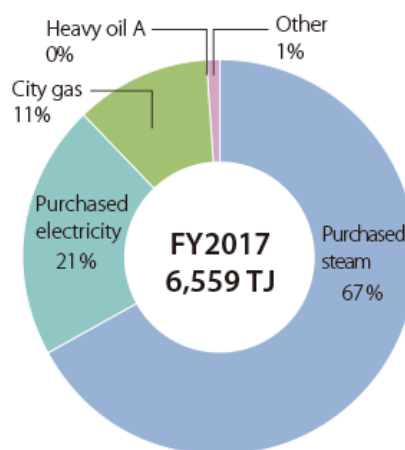
### Breakdown of Energy Usage During Manufacturing / Japan



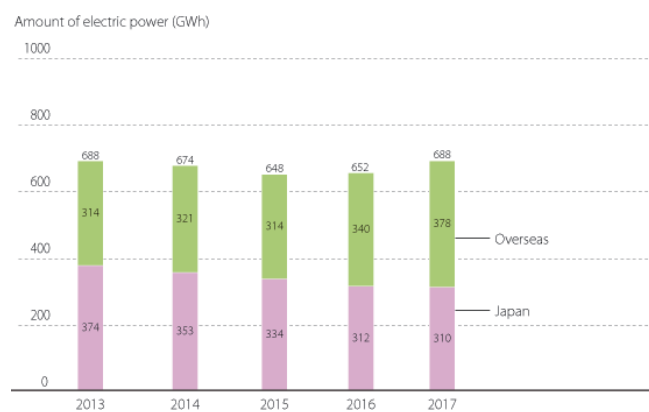
### Breakdown of Greenhouse Gas (GHG) Emissions During Manufacturing / Overseas



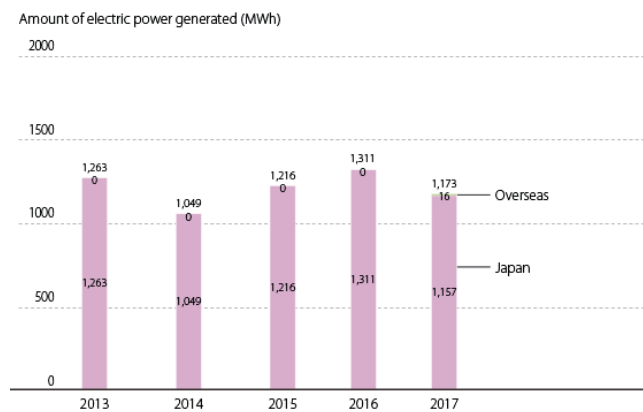
### Breakdown of Energy Usage During Manufacturing / Overseas



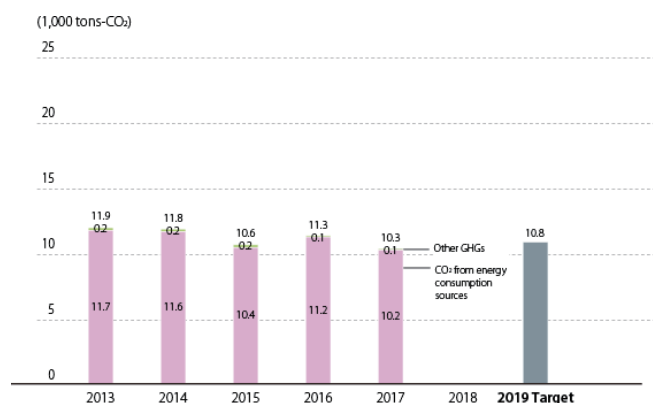
### Amount of Electricity Purchased During Manufacturing / Japan and Overseas



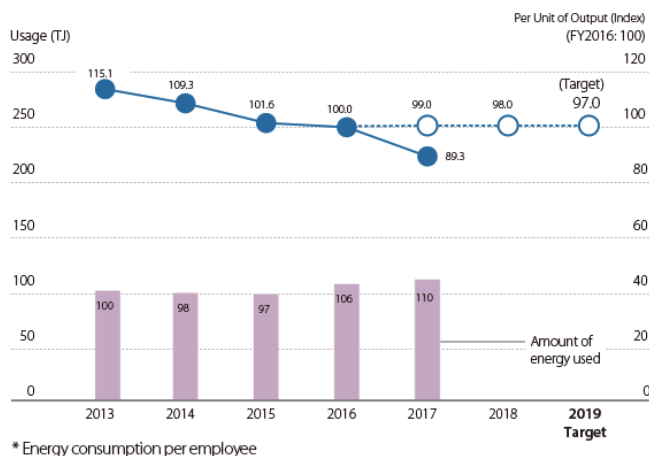
### Amount of Solar Power Generated for In-House Use During Manufacturing / Japan and Overseas



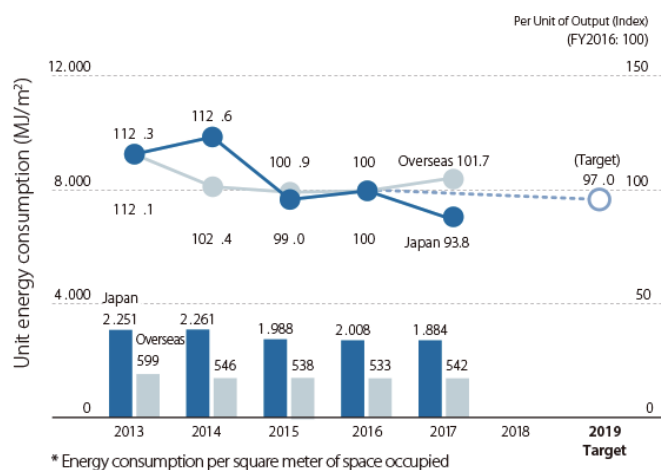
## GHG Emissions at Research Facilities



## Energy Usage and per Unit of Output\* (Index) at Research Facilities



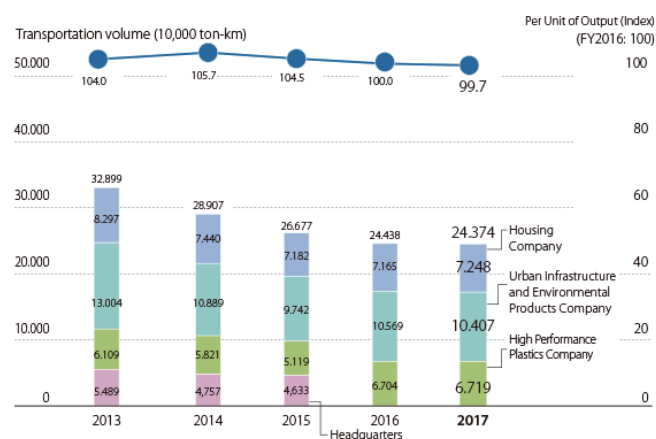
## Energy Usage and per Unit of Output\* (Index) at Offices



Note: For Japan, electricity and fuel for company cars are tabulated, while only electricity is tabulated for overseas.

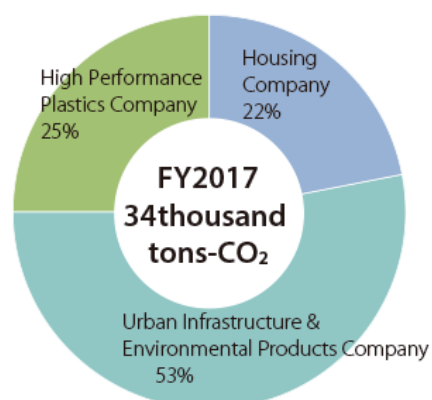
Indicator	Calculation Method
Greenhouse Gas Emissions	<p>GHG emissions = <math>\Sigma</math>[fuel usage, purchased electricity, purchased steam <math>\times</math> CO<sub>2</sub> emissions coefficient] + greenhouse gas emissions not arising from energy consumption</p> <p>Greenhouse gas emissions not arising from energy consumption = CO<sub>2</sub> emissions not arising from energy consumption* + <math>\Sigma</math>[emissions of non-CO<sub>2</sub> greenhouse gases <math>\times</math> global warming coefficient]</p> <p>*Includes CO<sub>2</sub> emissions from the burning of non-fuel matter based on the Act on Promotion of Global Warming Countermeasures, both inside Japan and overseas</p> <p>[CO<sub>2</sub> Emissions Coefficient]</p> <p>Purchased Electricity: In Japan, the coefficient provided in notices pursuant to the Act on Promotion of Global Warming Countermeasures is applied to the latest data at the start of each fiscal year</p> <p>Overseas, coefficients obtained from suppliers are applied to the latest data at the start of each fiscal year</p> <p>If a coefficient cannot be obtained in this manner, it is based on the GHG Protocol and EPA eGRID 2014</p> <p>City Gas and Purchased Steam: Coefficients obtained from suppliers are applied to the latest data at the start of each fiscal year</p> <p>If a coefficient cannot be obtained in this manner, it is based on the Act on Promotion of Global Warming Countermeasures</p> <p>Fuel Other than the Above: Based on the Act on Promotion of Global Warming Countermeasures</p> <p>Global warming coefficient: An emissions coefficient determined based on a system of greenhouse gas emission calculations, reports, and official disclosures</p>
Energy Usage	<p>Energy usage = <math>\Sigma</math>[amount of fuel used, amount of electricity purchased, amount of steam purchased <math>\times</math> amount of heat generated per unit]</p> <p>[Amount of Heat Generated per Unit]</p> <p>Purchased Electricity: 3.60 MJ/kWh</p> <p>Fuel, Purchased Steam: Based on the Act on the Rational Use of Energy</p>

## Transportation Volumes and Energy per Unit of Output\* (Index) During Transportation / Japan



\* Amount of energy used per fixed amount transported

## CO<sub>2</sub> Emissions During the Transport Stage / Japan

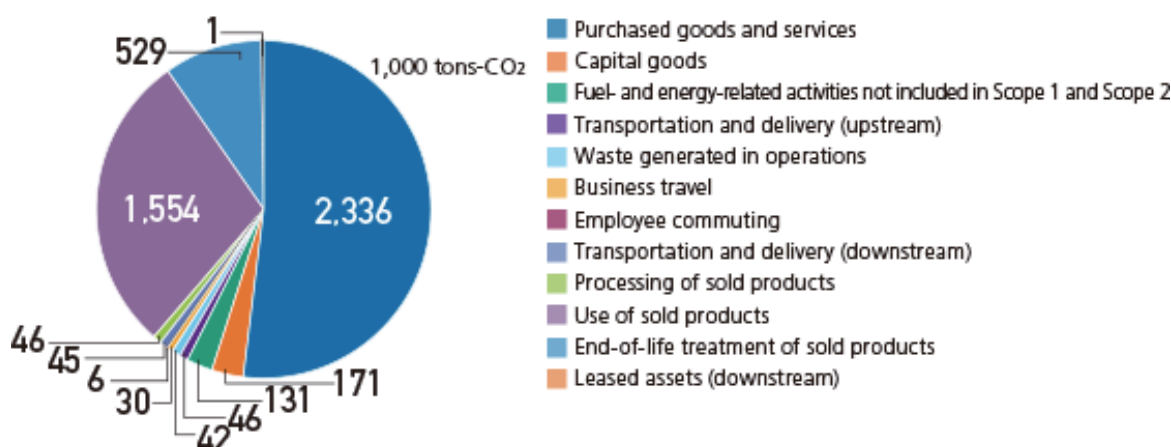


Indicator	Calculation Method
CO <sub>2</sub> Emissions During the Transport	<p>The calculation is the CO<sub>2</sub> emissions yielded by combining the fuel method (transport of housing units, etc.) and the metric ton-kilo method (other than transport of housing units, etc.)</p> $\text{CO}_2 \text{ emissions} = \sum[\text{fuel usage} \times \text{CO}_2 \text{ emissions coefficient}] + \sum[\text{amount transported (metric tons)} \times \text{distance transported (km)} \times \text{fuel usage per unit of output} \times \text{CO}_2 \text{ emissions coefficient}]$ <p>Fuel usage per unit of output is the value used in the reporting system for specified freight carriers under the Act on the Rational Use of Energy</p> <p>Domestic distribution (shipment of products) is covered</p>

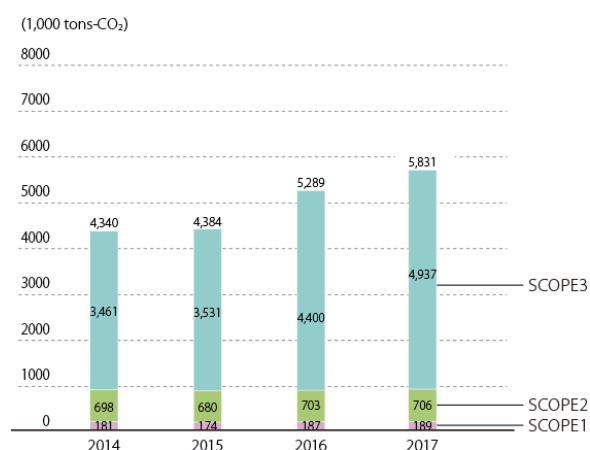
## Greenhouse Gas Emissions Throughout Supply Chain (Scope 3)

Category		Estimated emissions (1,000 tons-CO <sub>2</sub> )				
		FY2013	FY2014	FY2015	FY2016	FY2017
Upstream	Purchased goods and services	1,332	1,521	1,455	2,180	2,336
	Capital goods	23	31	17	37	171
	Fuel- and energy-related activities not included in Scope 1 and Scope 2	119	121	119	127	131
	Transportation and delivery (upstream)	20	24	24	37	46
	Waste generated in operations	47	45	45	46	42
	Business travel	32	30	29	26	30
	Employee commuting	5	5	5	5	6
Downstream	Transportation and delivery (downstream)	62	59	53	45	45
	Processing of sold products	44	42	41	43	46
	Use of sold products	1,295	1,353	1,528	1,542	1,554
	End-of-life treatment of sold products	236	227	216	310	529
	Leased assets (downstream)	1	1	1	1	1
Total (upstream/downstream)		3,216	3,461	3,531	4,400	4,937

Note: Since the 2016 fiscal year, the scope of tabulation of purchased products and services has been expanded; this resulted in the emissions increasing substantially from the previous fiscal year following review of the values for the 2016 fiscal year.



## Greenhouse Gas Emissions Throughout Supply Chain as a Whole (Classified by Scope)



Note: Since fiscal year 2016, the scope of tabulation of purchased products and services has been expanded in relation to SCOPE 3; this resulted in the emissions known increasing substantially from the previous fiscal year.

Indicator	Calculation Method	
Greenhouse Gas Emissions throughout Supply Chain	Purchased Products and Services	CO <sub>2</sub> emissions = $\Sigma[(\text{amount of major raw materials used as listed in Material Balance section of this report} + \text{estimated values for other raw materials}) \times \text{emission coefficient (IDEA v 2.2 (a GHG emissions database by the National Institute of Advanced Industrial Science and Technology and the Japan Environmental Management Association for Industry))}]$
	Capital Goods	CO <sub>2</sub> emissions = $\Sigma[(\text{amount of spending on capital expenditures authorized for the given fiscal year for buildings, structures, mechanical equipment, and transport vehicles}) \times \text{emissions coefficient (per unit emissions database for calculating organizational greenhouse gas emissions, etc., arising from supply chains (Ver. 2.0) (Ministry of the Environment and Ministry of the Economy, Trade and Industry))}]$
	Fuel and Energy-Related Activities Not Included in Scopes 1 and 2	CO <sub>2</sub> emissions = $\Sigma[(\text{fuel usage, amount of purchased electricity, and amount of purchased steam}) \times \text{emissions coefficient}]$ The emissions coefficients used are as follows. For fuel, IDEA v 2.1 (a GHG emissions database by the National Institute of Advanced Industrial Science and Technology and the Japan Environmental Management Association for Industry); for purchased electricity and steam, per unit emission database for calculating greenhouse gas emissions by organizations, etc., arising from supply chains (Ver. 2.0) (Ministry of the Environment and Ministry of the Economy, Trade and Industry). Applicable to production sites, laboratories, and offices both inside Japan and overseas
	Transport (Upstream)	CO <sub>2</sub> emissions = $\Sigma[\text{amount of major raw materials used as listed in the Material Balance section of this report} \times \text{transport distance} \times \text{emission coefficient (IDEA v 2.1 (a GHG emissions database by the National Institute of Advanced Industrial Science and Technology and the Japan Environmental Management Association for Industry))}]$ (Calculated assuming that the uniform transport distance was 200 km)
	Waste Material Generated as Part of Business	CO <sub>2</sub> emissions = $\Sigma[\text{amount of waste materials generated (by type)} \times \text{emission coefficient (IDEA v 2.1 (a GHG emissions database by the National Institute of Advanced Industrial Science and Technology and the Japan Environmental Management Association for Industry))}]$ Covers major production sites and research facilities in Japan and overseas
	Business Trips	CO <sub>2</sub> emissions = $\Sigma[\text{transportation costs by method of transport} \times \text{emissions coefficient (per unit emissions database for calculating organizational greenhouse gas emissions, etc., arising from supply chains (Ver. 2.0) (Ministry of the Environment and Ministry of the Economy, Trade and Industry))}]$ (Includes estimates of transportation costs for group companies) Covers group companies in Japan and overseas
	Commuting by Employees	CO <sub>2</sub> emissions = $\Sigma[\text{amount spent on commuting assistance} \times \text{emissions coefficient (per unit emissions database for calculating organizational greenhouse gas emissions, etc., arising from supply chains (Ver. 2.0) (Ministry of the Environment and Ministry of the Economy, Trade and Industry))}]$ (Calculated based on the assumption that all commuting is done by passenger train) (Group company commuting costs include estimates) Group companies in Japan and overseas all covered

Indicator	Calculation Method	
Greenhouse Gas Emissions throughout Supply Chain	Transport (Downstream)	<p>The calculation is the total amount of CO<sub>2</sub> emissions yielded by combining the fuel method (transport of housing units, etc.) and the metric ton-kilo method (other than transport of housing unit, etc.)</p> <p>CO<sub>2</sub> emissions = <math>\Sigma[\text{fuel usage} \times \text{CO}_2 \text{ emissions coefficient}] + \Sigma[\text{amount transported (metric tons)} \times \text{distance transported (km)} \times \text{fuel usage per unit of output} \times \text{CO}_2 \text{ emissions coefficient (value used in the reporting system for specified freight carriers under the Act on the Rational Use of Energy)}]</math> (Estimates used for overseas)</p> <p>Covers shipments of products by group companies in Japan and overseas</p>
	Processing of Sold Products	<p>CO<sub>2</sub> emissions = <math>\Sigma[\text{production volume of relevant products} \times \text{emission coefficient at the time of processing the relevant products (IDEA v 2.1 (a GHG emissions database by the National Institute of Advanced Industrial Science and Technology and the Japan Environmental Management Association for Industry))}]</math></p> <p>Covers products for the automotive industry by group companies in Japan and overseas</p>
	Usage of Sold Products	<p>CO<sub>2</sub> emissions = <math>\Sigma[\text{number of structures sold as housing during the relevant fiscal year} \times \text{amount of electricity purchased from power companies throughout a year} \times 60 \text{ years} \times \text{electricity-based emissions coefficient}]</math></p> <p>The effects of solar power-generation systems are included in the calculation</p> <p>The amount of electricity purchased from power companies throughout a year is based on the Sekisui Chemical Co., Ltd. press release (March 13, 2014) "A Survey of Electric Power Input-Output Balance of Actual Residences Equipped with Solar Power-Generation Systems (2013)." The electricity-based emissions coefficient employed is the emissions coefficient from the 2018 report produced by the Act on Promotion of Global Warming Countermeasures reporting system (alternate value), equal to 0.512 metric tons-CO<sub>2</sub>/MWh. The calculation is performed under the assumption that housing will be used for 60 years.</p> <p>Housing sold within Japan for the fiscal year relevant to the calculation is covered</p>
	Disposal of Sold Products	<p>CO<sub>2</sub> emissions = <math>\Sigma[\text{amount of major raw materials used in the products sold during the relevant fiscal year} \times \text{emission coefficient (IDEA v 2.1 (a GHG emissions database by the National Institute of Advanced Industrial Science and Technology and the Japan Environmental Management Association for Industry))}]</math></p> <p>The calculation assumes that products sold during a given fiscal year are disposed of during the same fiscal year</p>
	Leased Assets (Downstream)	<p>Calculated to cover construction related to the installation of machinery leased by Sekisui</p> <p>CO<sub>2</sub> emissions = <math>\Sigma[\text{relevant installation units} \times \text{emission coefficient (IDEA v 2.1 (a GHG emissions database by the National Institute of Advanced Industrial Science and Technology and the Japan Environmental Management Association for Industry))}]</math></p>

# Efficient Use of Resources

Working to Reduce Waste and Increase Recycling Throughout the Product Life Cycle

## Management Approach

### Basic Concept

### Pursuing the Three R's (Reduce, Reuse, and Recycle) Throughout the Product Life Cycle

The Sekisui Chemical Group strives to thoroughly implement the "3 Rs" (reduce, reuse, and recycle) throughout entire lifecycles. We also engage in Zero Waste Emissions Activities with the intention of reusing as resources all the waste we generate from our business activities.



### Environmental Medium-term Plan targets and Directions for the Future

### New Waste Reduction Initiatives

Under the environmental medium-term plan that began in fiscal 2017, the Sekisui Chemical Group has set a target for reducing the amount of waste generated per unit of output by 1% every year compared with the fiscal 2016 level. Changing our perspective on reducing waste by improving production efficiency, we are taking on the challenge of shifting our emphasis from simply selling waste materials as valuable materials to generating additional value using resin processing technologies developed to date.

Zero Waste Emissions Activities are being conducted in our overseas production sites. While domestic Group facilities have been certified under standards calling for zero direct landfill waste and no incineration without heat recovery in Japan, many sites overseas still bury waste.





## Zero Emissions

### Zero Emissions Achievement Criteria and Accreditation System of the Sekisui Chemical Group

- (1) Not engaging in any outside incineration without thermal utilization (thermal recycling), or landfill outside or inside of facilities (recycling ratio: 100%)
- (2) If the waste quantity is small and it is a type of waste that has never been recycled before, recycling methods and relevant contractors must be identified, and a service agreement must be executed.

We also have established uniform evaluation criteria known as the Zero Emissions Achievement Evaluation List. We have established a system designed to conduct internal checks and issue approvals for the status of observance of the evaluation criteria as well as legal compliance, rules and signage for waste segregation and storage, management of related facilities and waste reduction planning and management. The list obliges us to conduct inspection of outside contractors and to clarify treatment routes in order to enhance the management system through these activities.

## Recycling Construction Materials

### Promoting the Effective Use of Construction Materials to Fulfill Our Responsibilities as a Housing Manufacturer

Sekisui Chemical pursues the industry-wide recycling of construction waste produced when houses are demolished—regardless of whether such houses were built by itself or by a competitor—as part of initiatives under the Japan Prefabricated Construction Suppliers and Manufacturers Association's environmental action plan "Eco-Action 2020"

## Reducing Packaging Materials

### Using Less Product Packaging

The Sekisui Chemical Group has long been an environmentally-conscious company, and we are reducing packaging volumes, introducing reusable boxes, and eliminating packaging wherever possible, among other initiatives. Our proactive efforts to reduce packaging since the early 2000s have enabled us to achieve results. We will continue these efforts in the future, taking further steps to reduce packaging waste.

We sell a number of products that reduce environmental impact by making packaging reusable, such as folding containers, various plastic containers, and shrink film.

Shrink film is a material used for labeling and packaging that shrinks when heat is applied to it. We also offer various packaging products that shrink in low-temperatures, offer excellent tensile strength, and tightly hold the objects packed.

## Major Initiatives

## Developing Environment-contributing Products from Waste Materials

**Using Our Technologies Developed to Date, We Recycle Waste into Not Merely Saleable Materials but into Products, Making Them Much More Valuable**

The Housing Company has to date engaged in the recycling and selling of wood offcuts produced at our housing production sites as valuable products. In fiscal 2017, the Housing Company began selling newly commercialized woodchips and sawdust made from these wood offcuts. In addition, Sekisui Board Co., Ltd.—which produces modular house exterior walls—separates cement from end materials produced during the manufacturing process and sells it as recycled cement. Moreover, the Sekisui Chemical Group leverages its technologies developed so far to go beyond simply selling waste materials as valuable products to transform them into items that offer even greater value.

## Thermal Recycling Initiatives

**Using Chips from Wood Offcuts as Fuel for Boilers**

At its Chubu facility, Sekisui Heim Industry Co., Ltd. promotes the thermal recycling of waste materials produced during its manufacturing processes. Sekisui Heim Industry Co., Ltd. crushes wood offcuts generated during the production of wooden modular houses into chips and selling them as boiler fuel.

## Reduction of Waste Generated at Construction Sites

**Switching to Factory Production to Reduce Materials That End Up Unused on Site**

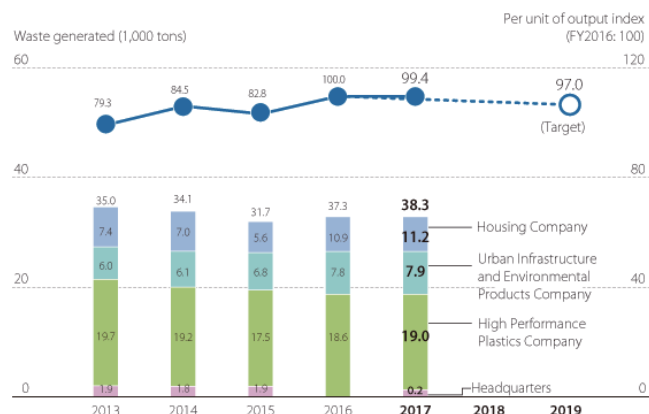
Modular houses are the main pillar of our housing business, and by doing as much as possible at the factory when prefabricating the modules, we are reducing the amount of construction work that has to be done on site. Thus, we are reducing waste from excess materials that end up unused at construction sites.

Performance Data

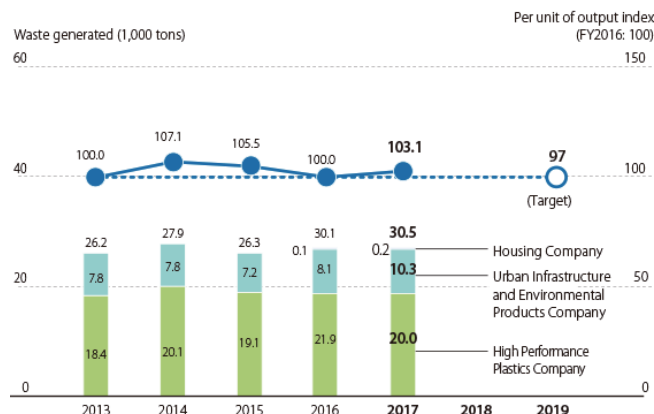
## Waste Generated by Production Sites

Some past figures have been revised due to improvements in precision.

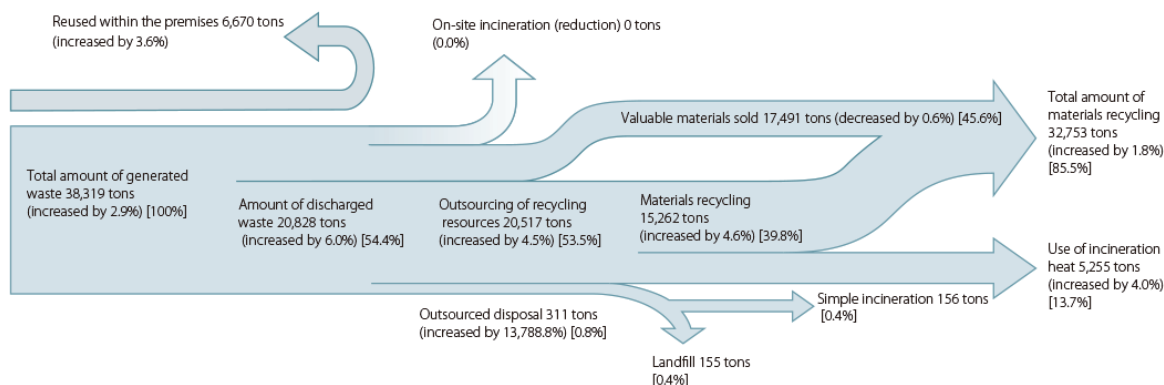
### Waste Generated by Production Sites and per Unit of Output (Index) / Japan



### Waste Generated by Production Sites and per Unit of Output (Index) / Overseas

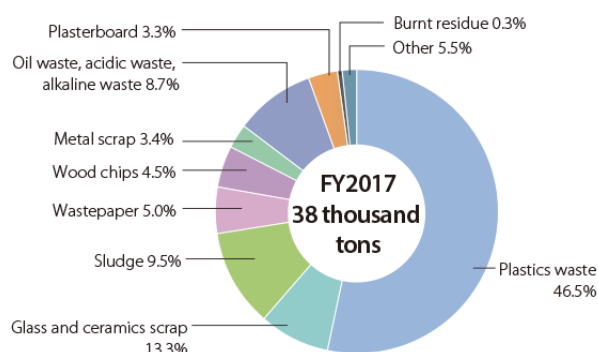


### Fiscal 2017 Annual Production Site Waste Generation and Disposal Conditions / Japan



Note: Change over previous year is in ( ) and proportion of total waste generation is in [ ].

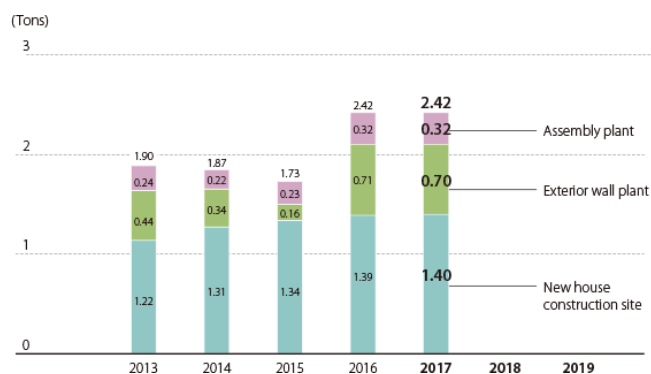
## Breakdown of Waste Generated at Production Sites / Japan



Index	Calculation method
Generated waste amount	<p>Amount of waste generated = Amount of waste disposal outsourced + Amount recycled (use of incineration heat + materials recycling + sold at a price) + Amount incinerated in the Company; the items below are excluded:</p> <p>waste generated by demolition of old houses of the clients, left-over materials at construction sites, disposal of facilities, OA equipment, etc., infectious waste generated during medical consultations / medical practices</p>

## Waste Generated on Construction Sites of New Housing

### Amount of Waste Generated on Construction Sites of New Housing (per Building) / Japan

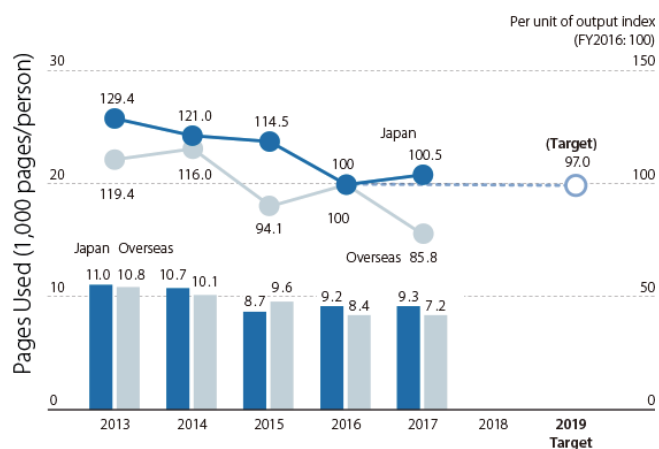


Note: Because of changes to the waste materials data collection method used by the Housing Company, we are revising the fiscal year 2016 benchmark

Index	Calculation method
Amount of waste generated during construction of new housing	<p>Amount of waste generated during construction of new housing = Amount of waste generated during construction of outer walls (at factory) + Amount of waste generated during assembly (at factory) + Amount of waste generated at construction site of new housing</p> <p>Amount of waste generated per building during construction of new housing = Amount of waste generated during construction of new housing / Number of buildings sold</p> <p>Target: housing business in Japan</p>

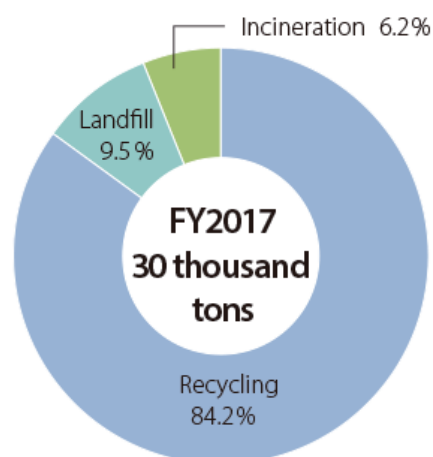
## Waste Related to Office Work

### Amount of Copy Paper Used at Offices per Unit of Output (Index)



## Waste Disposal Methods / Overseas

### Waste Disposal Methods at Production Sites



### Attainment of Zero Waste Emissions Activities Targets

Production sites	44 plants in Japan and 12 plants overseas, including those of affiliated companies, achieved the target
Research institutes	All research institutes achieved the target by fiscal 2012
Construction of new housing	All production sites achieved the target by fiscal 2003
Remodeling work	All production sites achieved the target by fiscal 2004
Corporate headquarters buildings in Osaka/Tokyo	Achieved the target by fiscal 2005
Demolition work	Specified construction materials for the 2017 fiscal year Recycling rate (of concrete, wood offcuts, etc.): 99%

Indicator	Calculation Method
Number of production sites that achieved zero emissions	Number of production sites that achieved zero emissions in that year

# Conservation of Water Resources

## Working to Preserve Water Resources as a Precious Natural Resource

### Management Approach

#### Basic Concept

### Identifying the Impact of Water Resources on Business Continuity and Reflecting this into Our BCP

The Sekisui Chemical Group is working to reach its targets—contributing to the return of natural capital through products, reducing environmental impacts, and engaging in environment-contributing activities—as envisioned by the Sekisui Environment Sustainability Vision 2030, which was formulated in 2014. To this end, the Group has formulated a Environmental Medium-term Plan, in which the following initiatives are considered key issues: reducing water use; identifying water-related risks, including impacts on supply chains and the natural environment; conducting environmental education targeting management and employees; and providing information to stakeholders.

In order to supply products for infrastructure for water supply, storage and drainage, the Sekisui Chemical Group recognizes that conveying the importance of safe water supply and water infrastructure to customers is critical for business sustainability. In addition, the Group also realizes that contributions to preserving water resources through its businesses will help achieve one of the 17 Sustainable Development Goals (SDGs): “access to safe drinking water and sanitation.” As for specific initiatives, we have determined the impact (risks and opportunities) of water resources on business continuity and have reflected this into our business and environmental plans. In addition, we conduct surveys of suppliers and procured materials that include water-related risks during procurement, recognizing that such risks pose difficulties for sustaining procurement from suppliers.

#### Assessment of Water-related Risks

### Conducting Water Risk Surveys at All Production Sites and Research Institutes

The Sekisui Chemical Group has conducted water risk surveys at all of its production sites and research institutes since fiscal year 2013 using a mapping tool for water-related risks (Aqueduct: Aqueduct Overall Water Risk map)\* based on the water-related information for every location where the Group operates. Regarding water intake, we assess future intake potential, check whether there are water outages, and monitor fluctuations in water quality. We also summarize responses from our own surveys of each of our production sites and research institutes. The surveys mainly concern wastewater drainage destinations, downstream usage of wastewater, water quality regulatory trends, and water quality measurements. The evaluation criteria of the questionnaire used in the surveys are used to collect information regarding water sources, supply restrictions, and more, and are designed to be capable of being used to predict future water shortages. They also include items regarding water quality, information on supply restrictions, costs, wastewater treatment, the water quality of wastewater, trends in regulations, changes in the numbers of businesses and population figures, the possibility of floods, and needs for water-related investments. We hold interviews at each production site or research institute deemed to have high water-related risks based on survey results.

Prior to undertaking large-scale developments (such as factory construction), new investment and M&A, we employ the Environmental Safety Check Sheet that is later used to examine capacity expenditures, convene a commission to examine capacity expenditures that include environmental considerations, and conduct other environmental assessments that include water risks.

In development of new products also, we implement design reviews based on the Environmental Impact Assessment List to evaluate the impact of our products on the environment.

\* A global map showing water-related risks / information tool developed by the World Resources Institute (WRI)

## Impact of Water-related Risks on Business

### Direct Impact on Operations

As production sites in Japan manufacturing synthetic resins drain their wastewater directly into rivers or the sea / ocean, even though the water quality of the wastewater complies with the present control levels, we understand that if any changes to, reinforcements of, etc. of the laws and regulations regarding water quality of drainage are implemented in the future, it may cause major impact on the continuity of our business activities.

For that reason, we check on a continuous basis the future trends in regulations at every area our business bases are located in, and, at the same time, to improve the water quality of drainage, implement Whole Effluent Toxicity (WET) tests assessing the effect of drainage on the ecological system. If any negative impact is identified with the WET tests, we investigate the causes and strive to eliminate them using the PDCA cycle to reduce the impact of water-related risks as much as possible.

## Risks Identified, Their Potential Impact on Operations, and Strategies for Mitigation

### Impact on Supply Chain

Manufacturers of steel materials used in the Housing Business and manufacturers of synthetic resins used in the Plastics Business are suppliers of primary materials of the Sekisui Chemical Group that consume large quantities of fresh water during manufacture. Although we do not directly encourage such suppliers to conform to environmental standards, with our Sekisui Environmental Sustainability Index we calculate as 'use of natural capital' the environmental impact of the pollutants contained in drainage generated during manufacture of primary materials and monitor it on a continual basis. At the same time, we monitor reduction of impact on water environment made possible through our business activities, expansion of products and services contributing to water environment, and other aspects, through which we contribute to the environment, calculating them as our returns to the natural capital. The goal is to reach the Sekisui Environmental Sustainability Index of returns to the natural capital of 100% or more by 2030.

### Contribution to Reduction of Water-related Risks Through Operations

The Sekisui Chemical Group develops a range of businesses related to water infrastructure, such as supply, storage, and drainage of water, contributing to the society not only by technologies and products that help to improve the quality of drainage, such as water treatment systems and drain pipes, but also by creating strong water infrastructure made to withstand natural disasters.

In 2017, we entered into a business partnership with TIEN PHONG PLASTIC JOINT STOCK COMPANY, one of the most prominent plastic pipe manufacturers in Vietnam, thus advancing into the infrastructure business in newly emerging nations. This and other initiatives were launched with a view to do our share to reduce water-related risks across the world. By popularizing the high-quality water infrastructure-related products of the Sekisui Chemical Group in newly emerging nations, and in particular by offering highly efficient joint products that reduce the likelihood of leaks and ensure the supply of sanitary water, as well as by preventing inflows of rainwater into sewage disposal plants, we are making our contribution to reducing water-related risks that often plague newly emerging nations.

We shall make full use of our production base in Vietnam in the future and strive to promote popularization of high-quality, reliable water infrastructure also in other countries of the ASEAN.

## Activity Policy and Reduction Targets

### Target an Annual 1% Reduction in Water Usage, Making Fiscal 2016 the Base Year

The Sekisui Chemical Group draws the water it needs to use in its business activities from public water systems, water systems for industrial use, underground reservoirs, and surrounding rivers. With the understanding that water is a precious natural resource shared by everyone in the community, we do our best to reduce the amount of water used, such as by reusing cooling water.

Under its Environmental Medium-term Plan, which began in fiscal 2017, the Sekisui Group targets a 1% annual reduction in water usage (intake volume), with fiscal 2016 serving as the base year. At the same time, the Group has set the goal for reducing the impact of wastewater chemical oxygen demand (COD) by 1% annually.

## Major Initiatives

### Reduce the Amount of Water Used

#### The Amount of Water Used Increased by 3.1%, Compared to the Base Fiscal Year

The amount of water used in fiscal year 2017 increased by 3.1%, relative to results in the base fiscal year of 2016. As a means to understand the impact of wastewater on nature, we have been conducting assessments\* on the impact of wastewater discharged from our production sites on living organisms since fiscal 2013. In fiscal 2017, we investigated the reasons behind the impacts identified by surveys conducted at our business facilities. As measures to counter water intake risks, we began conducting for the first time risk assessments focusing on the sustainable use of ground water at business sites that use pumped up ground water.

\* More details about our assessment of the impact of wastewater on biodiversity is provided on page 100 of "Conserving the Natural Environment."



## Ongoing Monitoring of Water Risks

### Continuously Assess Water Extracted from Production Sites and Wastewater Risk

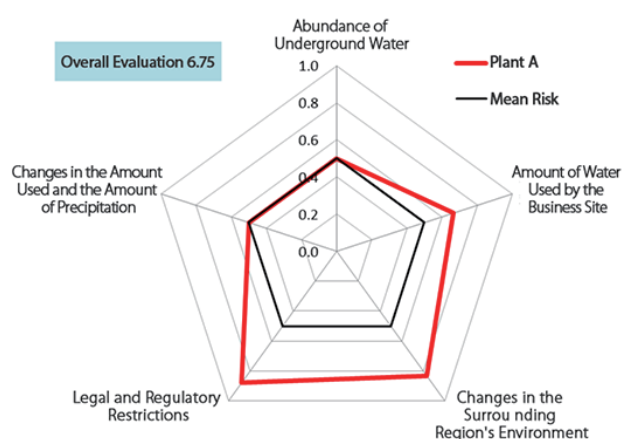
In fiscal years 2014 and 2015, we surveyed 98 production sites and R&D laboratories around the world to gain a firm understanding of our sources of water, destinations for wastewater, the current and future prospects of continuing to acquire water, and related matters. As a result, we now understand there are major differences in water supply volume and water quality by region, although the in-depth survey did not identify any water supply risks, such as potential increases in costs or restrictions on water sources that would be severe enough to adversely impact production activities. We also found out that there are many business sites that rely on ground water as their main water source. Of particular significance, 18 business sites, accounting for 35% of all business sites in Japan, use ground water or spring water (including industrial water in some cases), and 44% of the total amount of water intake for all domestic business sites depends on ground water or spring water.

Although ground water is a cheap and very effective source of water, due to unforeseen factors it may become impossible to use it in the future, and we perceive it as a risk to our business continuity.

That is why from fiscal 2017, we started to create a tool for quantitative assessment of ground water risk using our own original method and already launched risk surveys at two business sites to serve as a model for the rest. The assessment tool allows us to apprise the risks from three viewpoints, namely, susceptibility, concerns in the area, and future changes. The tool uses five evaluation criteria of abundance of ground water, amount of water used by the business site, environmental changes in the surrounding area, restrictions by laws and regulations, and changes of amounts used / precipitation; it consists of twelve assessment indices.

In fiscal 2018, we shall implement risk assessment at all business sites that use ground water in Japan ensuring that every effort is made to preserve water resources shared in each basin.

#### Example of Ground Water Risk Assessment



## Water Recycling

### Recycling Cooling Water Used for Plastic Moldings

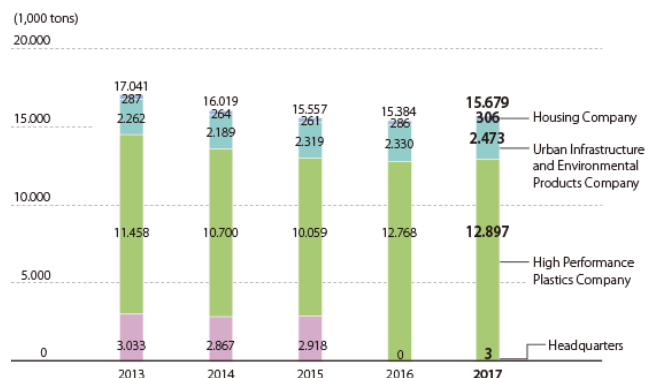
The Sekisui Chemical Group promotes the reuse of water in its production processes and the use of recycled water in order to reduce the amount of water it draws from water sources. At the production plants of Urban Infrastructure & Environmental Products Company and High Performance Plastics Company, large volumes of cooling water is recycled and reused in manufacturing processes. In fiscal 2017, at production sites in Japan and overseas, we used 105 million cubic meters of recycled water. This is equivalent to 5 times the amount of water drawn from all other sources.

The main water supply for Kurohama Lake—which has been designated as a natural conservation area in Saitama Prefecture—is wastewater from the Musashi Plant (located in Hasuda City) that has been purified in accordance with environmental standards.

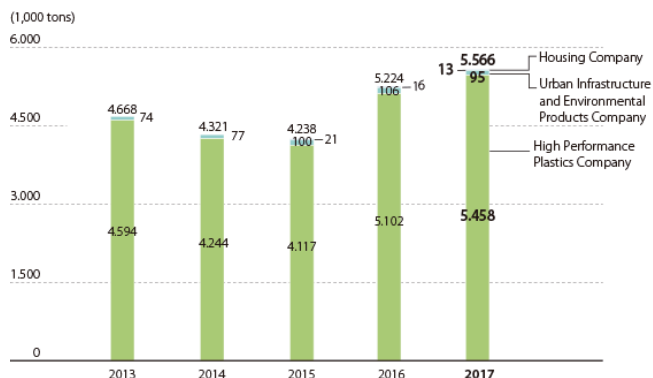
## Performance Data

Some past figures have been revised due to improvements in precision.

### Water Intake Volume at Production Sites / Japan



### Water Intake Volume at Production Sites / Overseas



### Water Use by Production Sites in Fiscal 2017

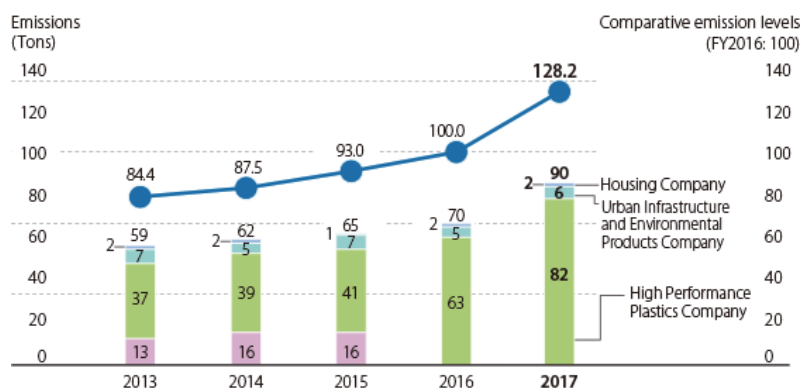
Region	Amount of Water Acquired by Source (thousands of m <sup>3</sup> /year)					Amount of Wastewater Released by Outlet (thousands of m <sup>3</sup> /year)				
	Public Water Systems	Water for Factory Use	Underground Water	Rainwater	Other	Rivers	Industrial Waterways	The Ocean	Sewers	Other
Japan	651	12,233	1,709	0	1,086	11,449	174	2,503	603	0
China	298	0	0	0	0	0	0	0	287	0
The Rest of Asia plus Oceania	199	853	94	0	71	24	2	0	823	45
Europe	1,837	46	0	0	0	0	0	0	1,874	0
North and Central America	215	1,954	0	0	0	0	0	0	111	1,419
Total	3,200	15,085	1,803	0	1,156	11,473	176	2,503	3,699	1,464

The "other" portion of acquired water consists primarily of water acquired directly from rivers.

The "other" portion of wastewater released consists primarily of processing in facilities in industrial parks.

Index	Calculation Method
Water intake volume	<p>Water intake volume = Amount of public water systems + Amount of water for factory use + Amount of underground water taken on site + Amount of rainwater + Other water intake*</p> <p>* Other water intake: Water taken directly from rivers, etc.</p>

### COD Emission Volume / Japan



Index	Calculation Method
COD emission volume	<p>Emission volume = <math>\sum</math>[COD concentration (annual average of measured value) x Drainage volume]</p>

# Chemical Substance Management

## Minimizing Environmental Impact Through Proper Control and Emission Reductions of Chemical Substances

### Management Approach

#### Basic Concept

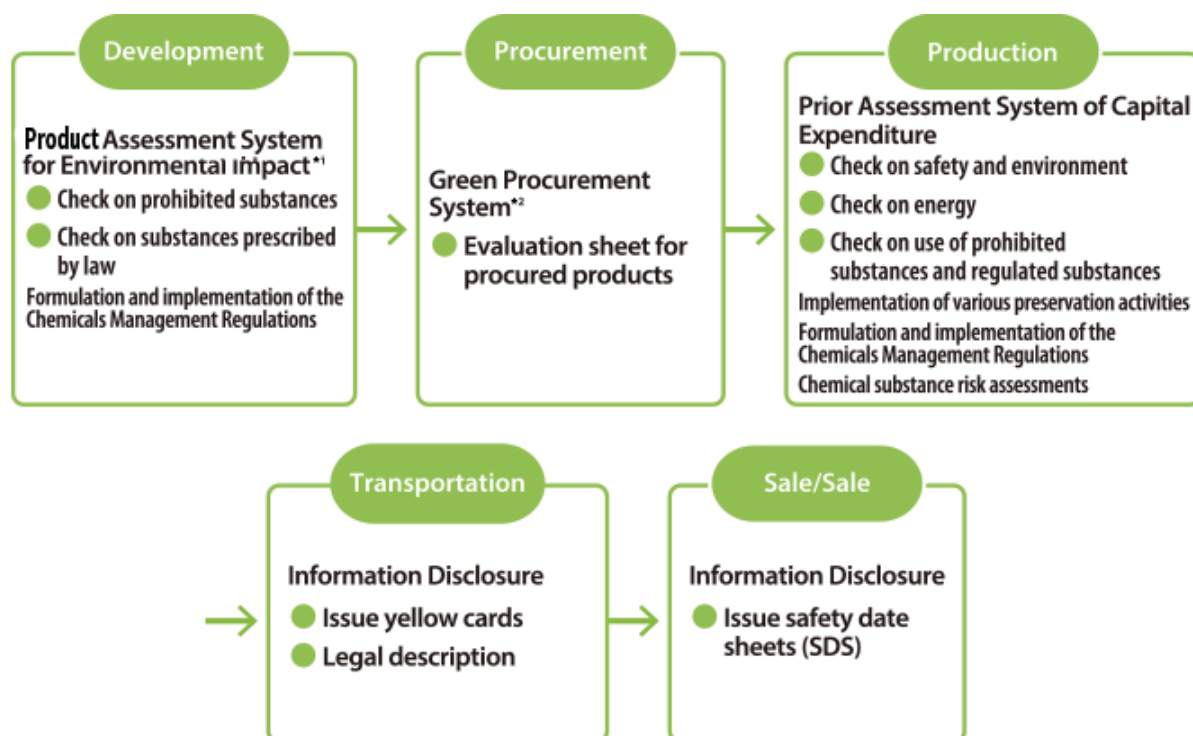
### Minimizing Environmental Impact Through Proper Control and Emission Reductions of Chemical Substances

While chemical substances make people's lives more convenient, they also could have harmful effects on the environment or on human beings. Therefore, we believe that consideration of product safety, occupational safety and health and environmental impact through proper management of chemical substances is an important responsibility of an enterprise.

Since fiscal 1999, the Sekisui Chemical Group has set and worked toward its own targets for reducing emissions and the transfer of chemical substances in addition to implementing efforts such as the Product Assessment System for Environmental Impact\*1. and the Green Procurement System\*2. Periodically we also review chemical substances, in accordance with the establishment and amendment of relevant laws and regulations.

\*1 Product Assessment System for Environmental Impact: A system for assessment of the environmental impact of product development all the way from raw material procurement through manufacture, use, disposal, transport and all other stages.

\*2 Green Procurement System: A system of giving priority to choosing raw materials, parts, etc. with lower levels of environmental impact when procuring them.



## Major Initiatives

### Controlling VOC Emissions

#### VOC Emissions Increased by 12.1% Compared with the Fiscal 2016 Level

Sekisui Chemical maintains the medium-term target of reducing VOC emissions by more than 3% compared with the fiscal 2016 level. In fiscal 2017, VOC emissions in Japan increased by 12.1% compared with fiscal 2016. Alternative fluorocarbons were fully phased out in fiscal 2008.

The reason for the greater emissions was a higher volume of production by the Adhesive Tape Manufacturing Department, which uses solvents

### Preventing Air and Water Pollution

#### Managing Gas Emissions and Wastewater in Accordance with Regulations

The Sekisui Chemical Group complies with the regulatory values under laws and ordinances for the various types of equipment it uses in connection with exhaust gases and water drainage. We also strive to control the discharge of pollutants through appropriate maintenance and management, including periodic inspections.

### Soil Surveys

#### Surveys of All Planned Business Sites Completed

We drew up plans to conduct a self-assessment of soil contamination at our business sites and conducted ongoing surveys. In fiscal 2011, we completed planned surveys of all business sites. Surveys have also been conducted since fiscal 2012 as and when required. In fiscal 2017, conditions did not require any assessments of soil contamination.

### Disposal and Storage of Devices Containing PCBs and Management of Equipment That Uses Fluorocarbons

#### Properly Storing and Disposing of Devices Containing PCBs in Line with Regulations

Transformers and condensers that contain PCBs are being disposed of steadily, where PCB treatment facilities are available. Machines and equipment in storage that contain PCBs are managed strictly and thoroughly, through means including locked storage and periodic inspection.

Steps are being taken to enhance awareness toward mandatory requirements regarding equipment that use fluorocarbons in accordance with Japan's Act on Rational Use and Proper Management of Fluorocarbons (Freon Emission Control Act) and to ensure thoroughgoing management including periodic inspection.

## Response in Emergencies

### Training to Respond to Unforeseen Events That Impact the Environment

To prevent and mitigate environmental pollution during an emergency, our employees at each business site are trained at least once a year in emergency procedures and communications for a variety of scenarios unique to each business site.

#### Training for Measures to Be Done / Notices to Be Made in Time of Emergency

Simulated emergency situation	No. of times drills performed
Leakage and outflow of oils	42
Atmospheric discharge of solvents	0
Fire	28
Earthquake	10
Emergency communication training	13
Comprehensive disaster drills	33
Responding to other equipment-related emergencies	14

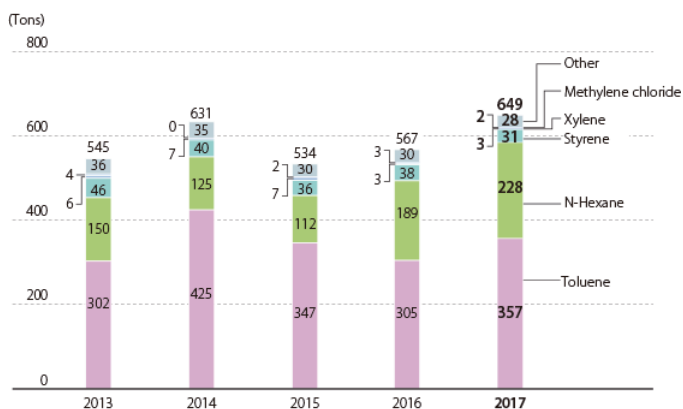
## Performance Data

### Aggregated Results Based on the PRTR Law (Substances Handled at the Business Sites Subject to Assessment with Volume of Handling of 1 Ton or More Are Aggregated)

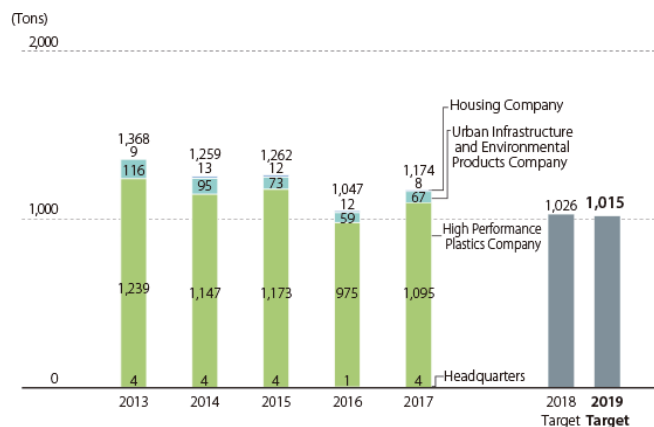
Substance	Govt. ordinance notification no.	Transaction volume	Emission volume				Transfer volume			Detoxification
			Atmospheric	Public water areas	In-house soil	In-house landfill	Sewage system	Transfer in waste disposal	Transfer in waste recycling	
Ethyl acrylate	[3]	1.1	0.051	0	0	0	0	0	0.17	0.86
Acrylic acid and aqueous salt solutions thereof	[4]	15.7	0	0	0	0	0	0	1.6	14
n-Butyl acrylate	[7]	233.7	0.30	0	0	0	0	0	2.3	231
Acrylonitrile	[9]	471.0	3.3	0	0	0	0	0	0.010	467
Acetaldehyde	[12]	302.2	0.22	0	0	0	0	0	0	302
Acetonitrile	[13]	112.6	9.0	0	0	0	0	0	104	0
2,2'-Azobisisobutyronitrile	[16]	4.2	0	0	0	0	0	0	0	4.2
Antimony and its compounds	[31]	11.6	0	0	0	0	0	0	1.2	0
Isobutyraldehyde	[35]	47.6	1.5	0	0	0	0	0	0	46
2-Ethylhexanoic acid	[51]	6,336.0	0	0	0	0	0	0	5.4	6,331
Ethylbenzene	[53]	2.4	2.4	0	0	0	0	0	0	0
ε-Caprolactam	[76]	44.2	0	0.014	0	0	0	0	0	44
Xylene	[80]	37.7	2.8	0	0	0	0	0	0.14	35
Vinyl chloride	[Special 94]	105,748.0	0.4	0.12	0	0	0	0	0	105,747
Chloroform	[127]	5.9	0.3	0	0	0	0	0	3.4	0.6
Vinyl acetate	[134]	50.6	4.6	0	0	0	0	0	3.1	43
Inorganic cyanide compounds (not including complex salts and cyanate)	[144]	13.6	0	0	0	0	0	0	0	14
Cyclohexylamine	[154]	7.7	0	0	0	0	0	0	0	7.3
Methylene chloride	[186]	191.2	2.5	0	0	0	0	0	0.36	188
Divinylbenzene	[202]	2.5	0	0	0	0	0	0	0	2.5
2,6-di-t-butyl-4-cresol	[207]	57.8	0	0	0	0	0	0	0	58
N,N-dimethylacetamide	[213]	3.6	0	0	0	0	1.8	0	1.9	0
N,N-dimethylformamide	[232]	1.1	0	0	0	0	0	0	0	1.1
Organic tin compounds	[239]	124.9	0	0	0	0	0	0	0.54	0
Styrene	[240]	1,288.4	31	0	0	0	0	0	0.010	521
Terephthalic acid	[270]	84.9	0	0	0	0	0	0	0	85
n-Dodecyl alcohol	[273]	21.4	0	0	0	0	0	0	0	21
1,2,4-Trimethylbenzene	[296]	1.5	1.5	0	0	0	0	0	0	0
Toluene	[300]	777.7	357	0	0	0	0	0	38	333
Lead compounds	[Special 305]	608.5	0	0.0005	0	0	0	0	2.7	0
Nickel compounds	[Special 309]	1.4	0	0	0	0	0	0	0.69	0
Phenol	[349]	24.3	0	0	0	0	0	0	0.047	21
Bis-(2-ethylhexyl) phthalate	[355]	134.6	0	0	0	0	0	0	2.1	0
n-Hexane	[392]	251.2	228	0	0	0	0	0	8.2	15
Poly (oxyethylene) = alkyl = ether (C = 12-15 and other blends)	[407]	40.9	0	0	0	0	0	0	0	38
Formaldehyde	[Special 411]	16.4	0.0094	0	0	0	0	0	0	16
Manganese and its compounds	[412]	5.9	0	0	0	0	0	0	5.9	0
Methacrylate	[415]	179.8	1.0	0	0	0	0	0	0.040	179
Methyl methacrylate	[420]	137.4	1.1	0	0	0	0	0	0	136
Methylnaphthalene	[438]	7.1	0.036	0	0	0	0	0	0	7.1
Methylenebis (4,1-phenylene) = diisocyanate	[448]	1,247.2	0	0	0	0	0	0	2.3	0
		118,655.3	648	0.13	0	0	1.8	0	183	114,909

Index	Calculation Method
Volume of chemical substances handled	Volume of handling of substances subject to regulation by the PRTR Law Production sites and research institutes in Japan are subject to assessment
Volume of emissions / transfer of chemical substances	Volume of emission / transfer of chemical substances subject to regulation by the PRTR Law Volume of emissions = Volume of emissions into the air + Volume of emissions into public waters + Volume of emissions into the soil on-site + Volume disposed by burial on-site Transfer volume = Volume transferred to sewers + Volume transferred as waste material Covers production sites and research facilities in Japan
Volume of chemical substances subjected to detoxication	Volume of chemical substances subject to regulation by the PRTR Law subjected to detoxication Amount detoxified = Amount consumed in reaction + Amount consumed through combustion, etc. Covers production sites and research facilities in Japan

#### Emission and Transfer Volume by Substance (PRTR Law) / Japan



#### Discharge of Volatile Organic Compounds (VOCs) into the Atmosphere / Japan

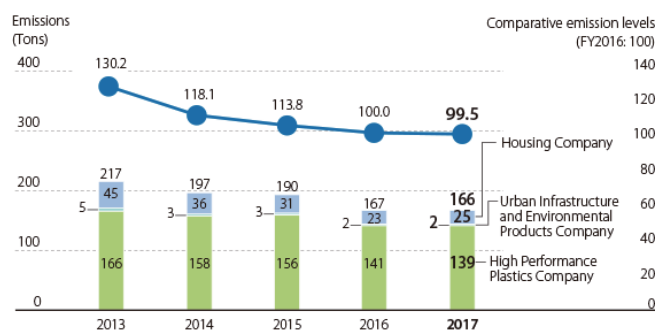


Index	Calculation Method
Volume of emission / transfer of chemical substances	Volume of emission / transfer of chemical substances subject to regulation by the PRTR Law Volume of emission = Volume of emission into the atmosphere + Volume of emission into the public waters + Volume of emission into the soil on site + Volume disposed of as landfill; Volume of transfer = Volume discharged into sewage systems + Volume discharged as waste elsewhere Production sites and research institutes in Japan are subject to assessment

Index	Calculation Method
VOC emissions	Volume of emission into the atmosphere of volatile organic compounds (VOC) among the substances subject to regulation by the PRTR Law and Japan Chemical Industry Association

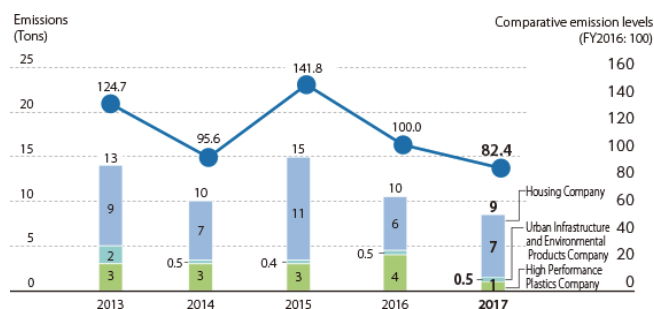


## NOx Emissions / Japan



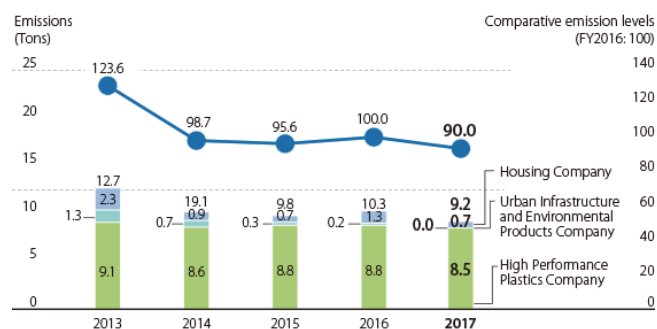
Index	Calculation Method
NOx emissions	NOx emissions = $\Sigma$ (Amount of exhaust gas airflow per year x NOx concentration x 46/22.4)

## SOx Emissions / Japan



Index	Calculation Method
SOx emissions	SOx emissions = $\Sigma$ (amount of SOx per year x 64/22.4)

## Soot and Dust Emissions / Japan



Some past figures have been revised due to improvements in precision.

Index	Calculation Method
Soot emissions	Soot emissions = $\Sigma$ (amount of exhaust gas airflow per year x soot concentration)

# Environmental Impact Assessment

## Understanding the Impact of Our Products and Services on the Global Environment

### Management Approach

#### Basic Concept

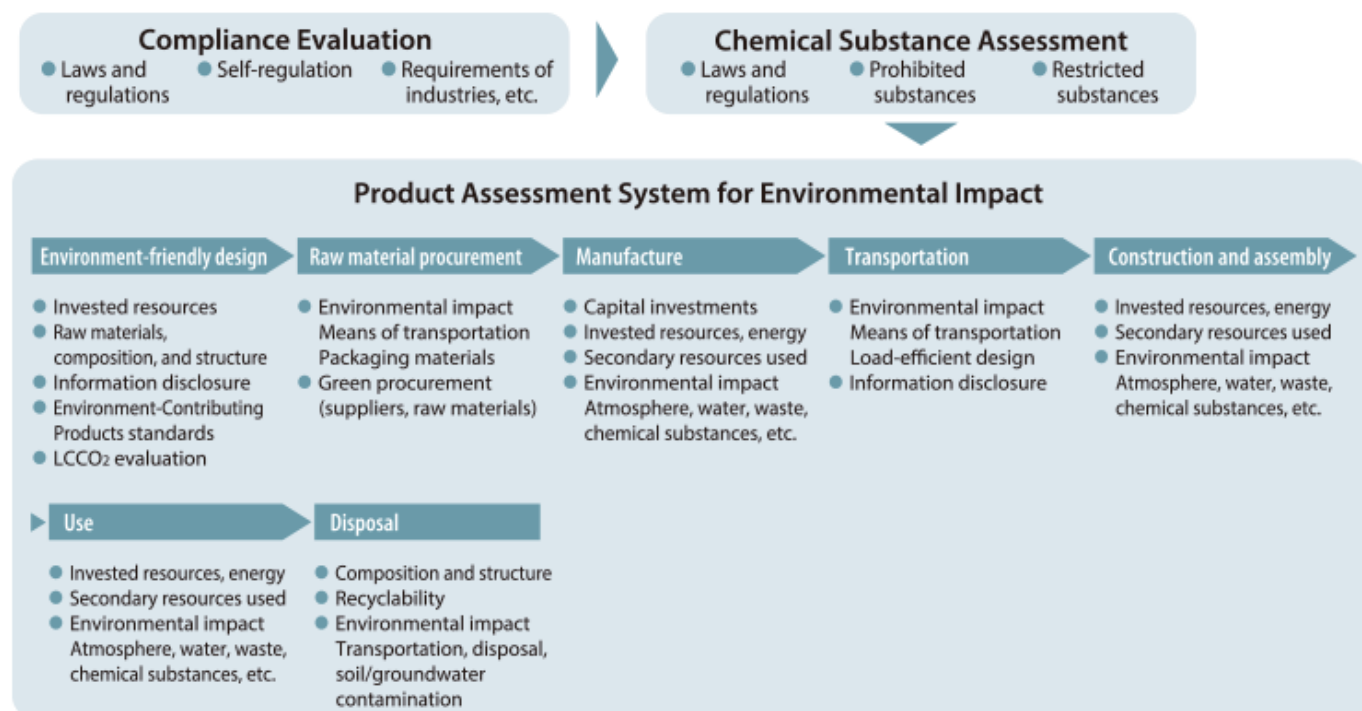
### Results of Environmental Impact Assessments for Each Product Reflected in Measures

The Sekisui Chemical Group assesses environmental impact at every stage of a product's lifecycle when product processes are developed or changed.

#### Assessment of environmental impact of products

Range: all stages of product life cycle

Targets: products and processes



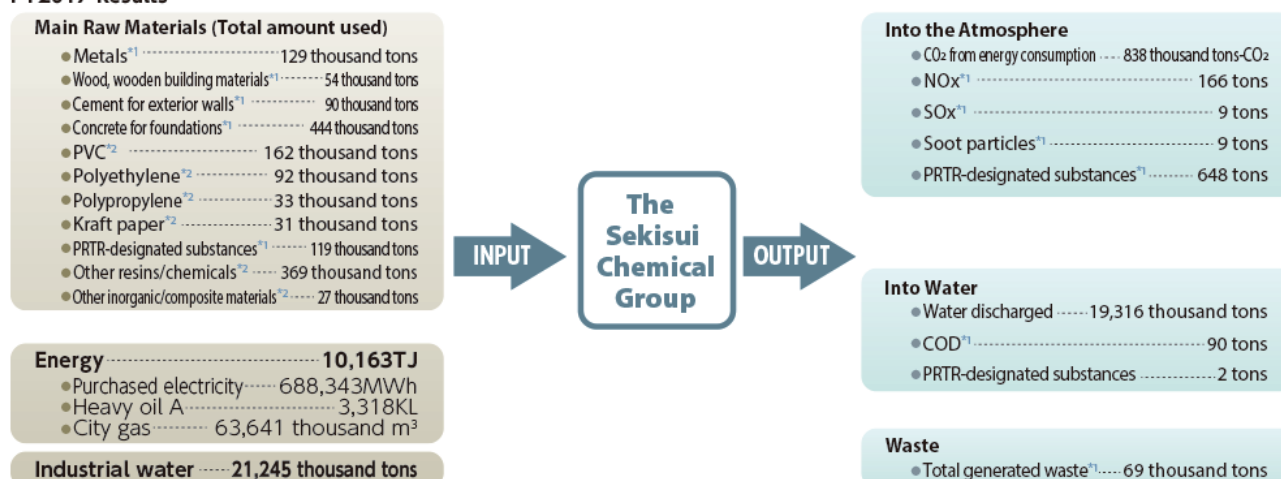
# Material Balance

## Performance data

Shows resources and energy used in business activities (input) and substances that constitute environmental impact (output) generated in connection with business activities.

### Material balance

#### FY2017 Results



<sup>\*1</sup> The scope of tabulation for environmental performance data in Japan has been set as only those domestic business sites listed as falling within that scope.

<sup>\*2</sup> The following overseas business sites have been excluded from the scope of tabulation for environmental performance data.

Sekisui-SCG Industry Co., Ltd.  
 Sekisui Specialty Chemicals(Thailand) Co., Ltd.  
 S and L Specialty Polymers Co., Ltd.  
 Youngbo HPP (Langfang) Co., Ltd.  
 Sekisui High Performance Packaging (Langfang) Co., Ltd.  
 Sekisui Medical Technology (China) Ltd.  
 Sekisui Xenotech, LLC.  
 Sekisui Diagnostics, LLC. San Diego  
 Sekisui Diagnostics (UK) Ltd.  
 Sekisui Diagnostics P.E.I. Inc.  
 Sekisui DLJM Molding Private Ltd. Greater Noida Plant  
 Sekisui DLJM Molding Private Ltd. Tapukara Plant  
 Sekisui DLJM Molding Private Ltd. Chennai Plant  
 PT.Adyawinsa Sekisui Techno Molding

# Contributing to Return of Natural Capital

## Co-existing with the Global Environment Through Business Activities and Environment-contributing Products

Toward the realization of earth with maintained biodiversity, the Sekisui Chemical Group is committed to returning more natural capital back to the planet than it uses through three initiatives: expand and create Environment-Contributing Products, reduce environmental impact\*, and conserve the natural environment.

\* See page 59 of "Usage of Environmental Capital" for more information.

### Environment-contributing Products

Environment-contributing Products are internally certified products that have demonstrated a high level of environmental contribution when used by customers.

### Conservation of Natural Environment

The Sekisui Chemical Group improves the quality of green spaces on its business sites in order to coexist in harmony with the local environment. To prevent negative effects on and ensure the safety of the water environment for aquatic life in the places where wastewater flows, the Group conducts assessments of impact of wastewater on aquatic life.

# Environment-contributing Products

Create and Expand Markets for Products That Display Significant Environmental Contribution Effectiveness During Customer Use

## Environment-contributing Product Certifications

### Certifications Based on Proprietary Criteria, and Third-party Evaluations of Validity

For the Environment-contributing Products of the Sekisui Chemical Group, the internal certification screening committee undertakes certifications based on criteria established in cooperation with internal committee members while receiving opinions and advice on the criteria, the stance they are based on, and the validity of results from the External Advisory Board.

## Evolution of Frameworks for Environment-contributing Products

### Beyond Just the Natural Environment, Expanding into Standards That Include Contributions to the Social Environment

We have shifted frameworks for Environment-contributing Products since fiscal 2017.

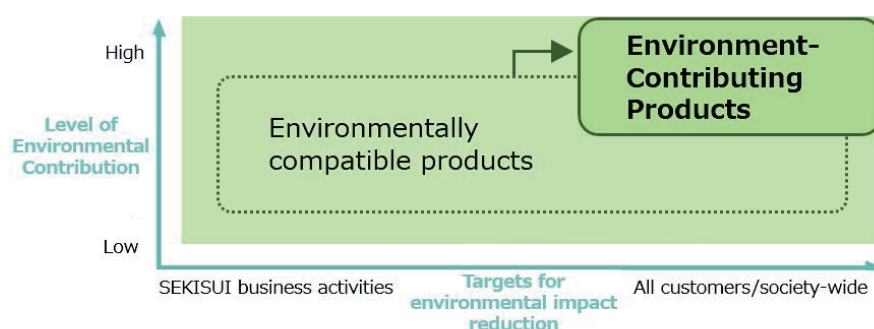
Since the system was first established in 2006, we have focused on products that contribute to solving issues on the Earth's natural environment and have worked to create and expand such frameworks. On the other hand, in terms of the Company's business, we also possess many products that contribute to solving matters that concern the social environment. Raising such contributions, we believe, is another mission of the Sekisui Chemical Group. This stance is embodied in the long-held Group vision of "improving the lives of the people of the world and the Earth's environment through its businesses."

Based on this stance, and to extend product contributions beyond the natural environment, we have also included such social environments as human capital and social capital in our efforts, in effect expanding the scope of our work across natural capital as a whole since fiscal 2017.

To this end, the Sekisui Chemical Group will begin first and foremost by expanding its contributions to "healthier and longer lives," "promoting the resiliency and spread of strong social infrastructure" and "safe living and strengthened disaster resistance."

The above issues are in accordance with the United Nations' Sustainable Development Goals (SDGs). Therefore, the Sekisui Chemical Group will strive to contribute to the realization of the SDGs through tackling these issues.

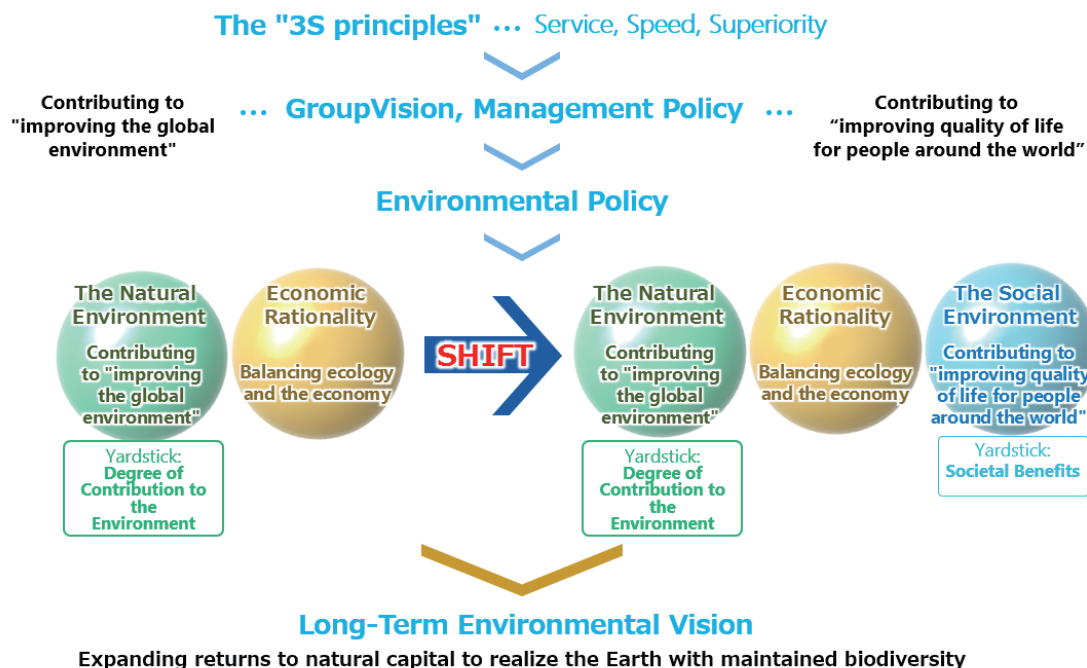
## Unwavering Stance



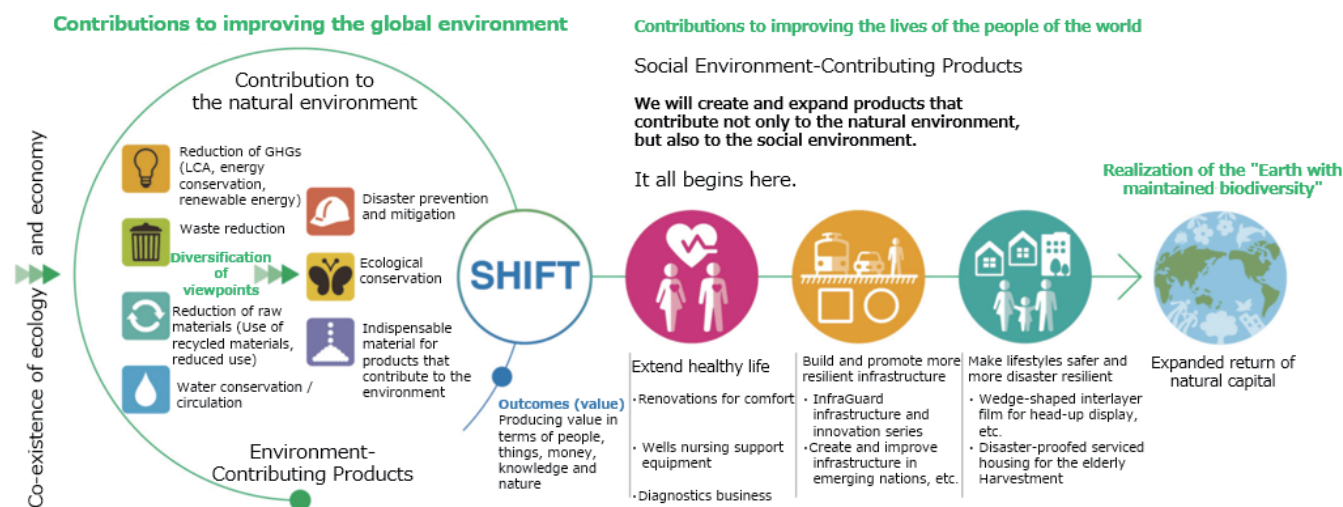
### Definition

- Products and business that demonstrably assist our customers and society to reduce their environmental impact.
- Environment-Contributing Products refer to products that achieve a certain level of environmental impact reduction in comparison to previous products and systems.

## SHIFT of Environment-contributing Products



## New Environment-contributing Products Perspectives



SDGs where contributions can be made



**SUSTAINABLE DEVELOPMENT GOALS**  
17 goals to change the world

This Agenda is a plan of action for people, planet and prosperity, establishing declarations and goals. These are the Sustainable Development Goals (SDGs), consisting of 17 goals and 169 targets.

## Environment-contributing Products PR

### External Promotional Activities

In fiscal 2017, Sekisui Chemical participated in the Eco Products 2017 exhibition, an environment-focused tradeshow. The Company showcased Environment-contributing Products and introduced the dual perspectives of contributing to both the natural environment and social environment, while providing explanations to booth visitors.

One of the items exhibited, the InfraGuard series, consists of structure-preservation plastic products that help non-destructively repair and extend the life of degraded concrete, steel, and other structures. These products help halt structural degradation and contribute to the essential strength and durability of structures through the reinforcement of sheets and resin injections, depending on the type of structure, positioning and condition. The InfraGuard series is thus a group of materials that aid in the reduction of waste material while contributing to more robust social infrastructure.

This series of products was also praised by the staff of embassies from developing countries, who found time in their busy schedules to visit the Eco Products tradeshow, as a way to repair structures that is both inexpensive and highly reliable, characteristics that are in demand in their own countries.

Additionally, there are the resin-based “MIGUSA floor tatami mats,” which are made with highly durable polypropylene and natural inorganic materials. These mats are highly durable and have a long product life, which helps to reduce waste. MIGUSA floor tatami mats do not attract mites or grow mold and are therefore effective in contributing to the social environment, including by extending users’ healthy lifespans. As a product that supports safe, secure, and comfortable lives and that possesses the charm of something that is characteristically Japanese, the mat was honored with the COOL JAPAN AWARD 2017.



Exhibition at Eco Products 2017



## External Advisory Board

### Considering Environmental Contributions of Products from External Perspectives

Since fiscal 2012, we have held an External Advisory Board as an opportunity to receive opinions and advice from renowned authorities from outside the Company, with regard to the standards and registration of Environment-contributing Products, positions to take in the future, and other comments.

In fiscal year 2017, Advisory Board meetings were held twice. At both meetings, we received advice regarding what stance to take on growing our contributions to social environment issues, the setting of certification standards, and other issues.

Based on the advice we received, we shared our position concerning what to do when explaining benefits to society among internal certification screening committee members. In fiscal year 2017, we registered twenty products and lines of businesses as products that contribute to the social environment as part of a new framework. We also registered four products and lines of business as products that contribute to the natural environment under the current framework.

At the conclusion of the meeting, we received various comments including the expectations that advisors held with regard to the future of the Sekisui Chemical Group's Environment-contributing Products. There were a range of perspectives offered, including "Rather than just responding, in a functional way, to changes in the market where the need to make some kind of contribution is on the rise, it is vital that you generate and distribute products with a philosophy or concept," and "Developing technologies that make ethanol from waste by utilizing the power of micro-organisms is the sort of thing that would show that the Sekisui Chemical Group's technology development is moving in a direction that is in line with the needs of society."



External Advisory Board (from the left)

- Minako Oishi, Nippon Association of Consumer Specialists (public corporation), Representative Director, Deputy Chairperson, Environmental Committee
- Juichi Shibusawa, President of the specified non-profit corporation "Network for Coexistence with Nature"
- Masatsugu Taniguchi, Representative of the Resource and Environment Strategic Planning Office
- Takehisa Kabeya, Japan Environmental Management Association for Industry, Deputy Director, Department of Regional and Industry Support
- Shoichi Saito, Nikkei Business Publications, Executive Director, ESG Forum

## Visualization of Environmental Contributions

### Environmental Assessment and Quantification of Environment-contributing Products

To clarify the amount of return to natural capital, the Sekisui Chemical Group endeavors to visualize the environmental contribution for each Environment-contributing Product. We calculate and quantify into a single indicator (damage costs) the various contribution vectors in the life cycle of Environment-contributing Products. We multiply the market impact, based on sales, by the environment contribution of each product to arrive at a quantifiable contribution by product, reflected in the Sekisui Environmental Sustainability Index.

In calculating the impact on the environment for each Environment-contributing Product until fiscal 2016, we broadly classified environmental issues into three areas that should be resolved in our aim to help realize a planet where biodiversity is preserved. However, by broadening the scope of Environment-contributing Products, we have since taken steps to integrate contributions across four areas adding the area of human health / social capital.

#### Previous Approach (Until Fiscal Year 2016)

- (1) Limiting global warming
- (2) Impacts on plants (reducing interference with growth)
- (3) Impacts on biodiversity (limiting the extinction of species)



#### From Fiscal Year 2017

- (1) Human health (includes the effects of global warming)
- (2) Social assets (includes the effects of global warming)
- (3) Impacts on plants (reducing interference with growth)
- (4) Impacts on biodiversity (limiting the extinction of species)

#### From Fiscal Year 2017

- (1) Human health (includes the effects of global warming)
- (2) Social assets (includes the effects of global warming)
- (3) Impacts on plants (reducing interference with growth)
- (4) Impacts on biodiversity (limiting the extinction of species)

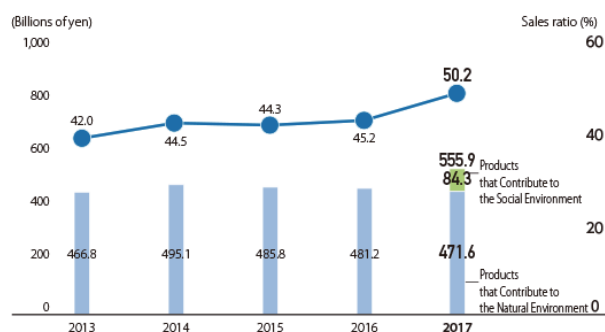
### How to Visualize Environmental Contribution

- (1) Determine technologies and products to be compared.
- (2) Gather quantifiable data related to environmental impact of each stage of a product's lifecycle (from raw materials to production, transport, use and disposal).
- (3) Apply a coefficient\* to calculate environmental impact for each factor affecting the environmental impact data obtained and consolidate the results.
- (4) Environmental contribution is the difference between the coefficient-derived value in 3. above and the original value.

\* Coefficient: Calculated using a customized version of MiLCA, a system developed by Japan Environmental Management Association for Industry using LIME2, an environmental impact assessment method created by Professor Norihiro Itsubo at Tokyo City University.

## Performance Data

### Net Sales / Proportion of Environment-contributing Products



### Revenue from Products That Contribute to the Environment Over Time

(Unit: Billions of yen)

	FY2013	FY2014	FY2015	FY2016	FY2017
Housing Company	306.8	305.8	280.6	290.9	317.6
Urban Infrastructure & Environmental Products Company	99.6	99.8	103.5	90.3	93.7
High Performance Plastics Company	59.1	88.1	99.8	99.4	142.2
Headquarters	1.2	1.4	1.8	0.6	2.4
Company-wide total	466.8	495.1	485.8	481.2	555.9

Index	Calculation Method
Net sales of Environment-contributing Products	Net sales of Environment-contributing Products = Consolidated sales across the Sekisui Chemical Group of products internally certified as Environment-contributing Products All businesses of the Group in and outside Japan are subject to assessment * See pages 94-95 for a definition of Environment-contributing Products and the way of thinking behind them.
Proportion in net sales of Environment-contributing Products	Proportion in net sales of Environment-contributing Products = Net sales of Environment-contributing Products / Consolidated sales All businesses of the Group in and outside Japan are subject to assessment * See pages 94-95 for a definition of Environment-contributing Products and the way of thinking behind them.

### Number of Environment-contributing Products Newly Registered

Number of Environment-contributing Products newly registered in FY2017	Number of registrations as of the end of March FY2018
24	142

# Conserving the Natural Environment

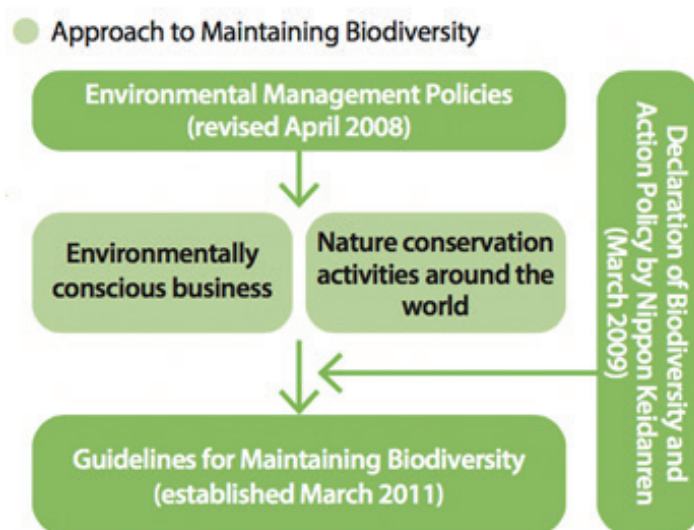
We Strive to Conserve Natural Environments and Biodiversity.

## Management Approach

### Basic Concept

### Lessening the Impact of Business Activities on Biodiversity

In April 2008, the Sekisui Chemical Group incorporated items relating to biodiversity into its Environmental Management Policy. In 2011, the Group established a set of guidelines. The Sekisui Chemical Group has striven to conserve the natural environment, including in terms of biodiversity, through both environmentally conscious business activities and actions to preserve the environment undertaken around the world.



### Initiatives Envisioned under Biodiversity Guidelines

1. Assessment and reduction of the impact of business activities on biodiversity	<ul style="list-style-type: none"> <li>Developing assessment methods and conducting assessments, reducing impact</li> <li>Promoting biodiversity-conscious purchasing</li> <li>Greening of business sites (promoting landscaping and biotope development)</li> </ul>
2. Development and promotion of related technologies and products	<ul style="list-style-type: none"> <li>Incorporating biodiversity assessments at the product development stage</li> </ul>
3. Raising employees' awareness	<ul style="list-style-type: none"> <li>Conducting nature conservation activities at all business sites</li> <li>Expanding Sekisui Nature Study Course and nature conservation activities</li> </ul>
4. Dialogue and cooperation with external stakeholders	<ul style="list-style-type: none"> <li>Supporting innovations inspired by nature, and holding periodic forums</li> <li>Supporting nonprofit and other organizations through Keidanren (Japan Business Federation)</li> </ul>
5. Transmittance of information	<ul style="list-style-type: none"> <li>Exhibiting at eco-products exhibitions and other events</li> <li>Providing information through CSR reports, site reports, and the Company's website</li> <li>Educating the next generation (Children's Nature Study Course, school visits)</li> </ul>

## Biodiversity Assessment

### Assessing the Environmental Impact and Confirming the Effect on Biodiversity

At the Sekisui Chemical Group, the Environmental Subcommittee of the Group, which is positioned under the CSR Committee, headed by the President, meets twice a year to deliberate on biodiversity with regard to the Group's business activities, and to assess their impact. As a specific method to assess impact on the environment, the Company uses the JBIB Land Use Score Card®\*<sup>1</sup>, a tool for evaluating the level of effort to preserve biodiversity with respect to land use, as well as WET\*<sup>2</sup>, which evaluates the impact on living organisms exerted by waste water.

With the Sekisui Chemical's large-scale land developments including the construction of one of its plants, or when new land is acquired as a result of an M&A or other activity, the Company conducts an environmental impact assessment with regard to the potential effect that the Company's business could have, including on the air, bodies of water, or soil. Within this environmental impact assessment, we also confirm the impact on biodiversity.

\*1 JBIB Land Use Score Card®: A tool used to assess the level of effort to preserve biodiversity, developed by the NPO Japan Business Initiative for Biodiversity.

\*2 WET(Whole Effluent Toxicity): A test method to assess the toxicity of wastewater in bio-response of fish, water fleas, and algae.

## Major Initiatives

## SEKISUI Environment Week

**Held to Help Develop Human Resources with Excellent Environmental Activity Promotional Skills**

For a fifth time, in fiscal 2017, a total of 25,277 employees participated in activities.

The activities were creatively devised to match each business site and included beautification around the areas, tree planting, energy-conservation in the offices and much more.

## Initiatives to Improve Green Space Quality

**Initiatives to Improve Green Space Quality at All Domestic Production Sites and Laboratories**

We are moving forward with efforts to improve green space quality at business sites with the aim of maintaining flora and fauna habitats, building ecosystem networks that connect regions and business sites and invigorate regional partnerships. Under the environmental medium-term plan (2017-2019), we aimed to improve our score on the JBIB Land Use Score Card® by 5 points compared with fiscal 2016. As a result of planting local seeds and saplings, activities to get rid of invasive alien plants, and other activities, we had improved our average score by 2.6 points (compared with fiscal 2016) in fiscal 2017.



ParkFauna and flora observation at greened areas of Taga Plant



### An Example of Our Initiatives to Improve Green Space Quality

## Creating Heim Forest, a Biotope with Its Roots Deep in the Local Area

In May, 2017, Kyushu Sekisui Heim Industry Co., Ltd. finished construction of a biotope (named "Heim Forest") the Company had been operating on its business site.

The company planted 27 kinds of seeds and sapling native to Tosu, the area the Company is located in, such as *Camellia japonica* and *Cornus kousa*, which all grow very well in the region, and created a biodiversity-sensitive, green tract of land inviting all kinds of living things of the surrounding area to live there. During the SEKISUI Environment Week held in fiscal 2017, as a part of the initiative, company employees attached tree name tags to trees in the area. Heim Forest is used by employees on weekdays as a space for relaxation and also by visitors to the factory during factory tours as a resting area. In the future, the Company intends to improve the quality of this green space further and perhaps even make it open to residents of Tosu and other neighboring areas.



Panoramic view of Heim Forest



Attaching tree name tags during the SEKISUI Environment Week



Serving as a space for relaxation for employees on weekdays

### WET Evaluation of Wastewater

## Investigation of Causes at Business Sites Where Impact Had Been Confirmed by Previous Surveys

The Sekisui Chemical Group strictly follows wastewater standards regulated by laws and ordinances and has set even tougher standards for the management of wastewater from its production sites. To prevent negative effects on and ensure the safety of the water environment for aquatic life in the places where wastewater flows, the Group has conducted WET assessments of wastewater and surveys of the habitat conditions in the rivers where wastewater is released since fiscal 2013.

Looking at past surveys, 96% of the water emitted into public water areas by the Sekisui Chemical Group production sites has been checked. In fiscal 2017, the Company conducted investigations into causes at business sites where past surveys have revealed an impact on living organisms.



River ecosystem survey



Examples of living creatures used in WET assessments (zebra fish)



## Performance Data

### Results from the JBIB Land Use Score Card®

	FY2017
JBIB Land Use Score Card®	Increase by 2.6 points

Index	Calculation method
Points of JBIB Land Use Score Card®	<p>JBIB Land Use Score Card® is a tool promoted by JBIB, which evaluates the level of effort to preserve biodiversity with respect to the land owned by the Company. It is a sheet for evaluation of every business site regarding the size and quality of its green space, management system, etc. on a scale from 0 to 100.</p> <p>We implement assessments of every business site for the fiscal year using the JBIB Land Use Score Card® and calculate the increase from the number of points it had in fiscal 2016. The index is the average value of the points increase of all business sites.</p>

### SEKISUI Environment Week Participation Rate

	FY2017
Participation rate in the SEKISUI Environment Week initiative	84.9%

Index	Calculation method
Proportion of participants in the SEKISUI Environment Week initiative	Total number of participants in the SEKISUI Environment Week initiative / total number of employees in the business sites participating in the initiative x100

## Business Sites (Owned, Leased or Managed) in or Adjacent to Protected Areas and in Unprotected Areas of Rich Biodiversity

### ■SEKISUI MEDICAL CO., LTD. Iwate Plant

Address: 4-115 Matsuo, Hachimantai City, Iwate prefecture

Surface / subsurface classification: surface

Location related to protected area: adjacent to Towada-Hachimantai National Park

Business type: manufacturing and production

Site area: 0.46km<sup>2</sup>

Value associated with biodiversity: protected area as defined in Japan's Natural Parks Act

## Habitats Protected or Restored Within Reporting Period

### ■Kyushu Sekisui Industry Co., Ltd.

Address: 225-1 Yanagishima, Chiyoda-cho, Kanzaki City, Saga prefecture

Scale, area: 6,600m<sup>2</sup>

Details on protection or restoration:creation of a biotope which replicates a natural habitat. Protected within the biotope is the gudgeon, an endangered species of fish, and other precious aquatic life indigenous to the local region.

## Numbers of IUCN Red List Species and National Conservation List Species with Habitats in Areas Affected by Operations, by Level of Extinction Risk

- i. Critically Endangered (CR) IA: 1 species
- ii. Endangered (EN) IB: 2 species
- iii. Vulnerable (VU) II: 7 species
- iv. Near Threatened (NT): 21 species
- v. Least Concern: 0 species

# Prominence in CS & Quality

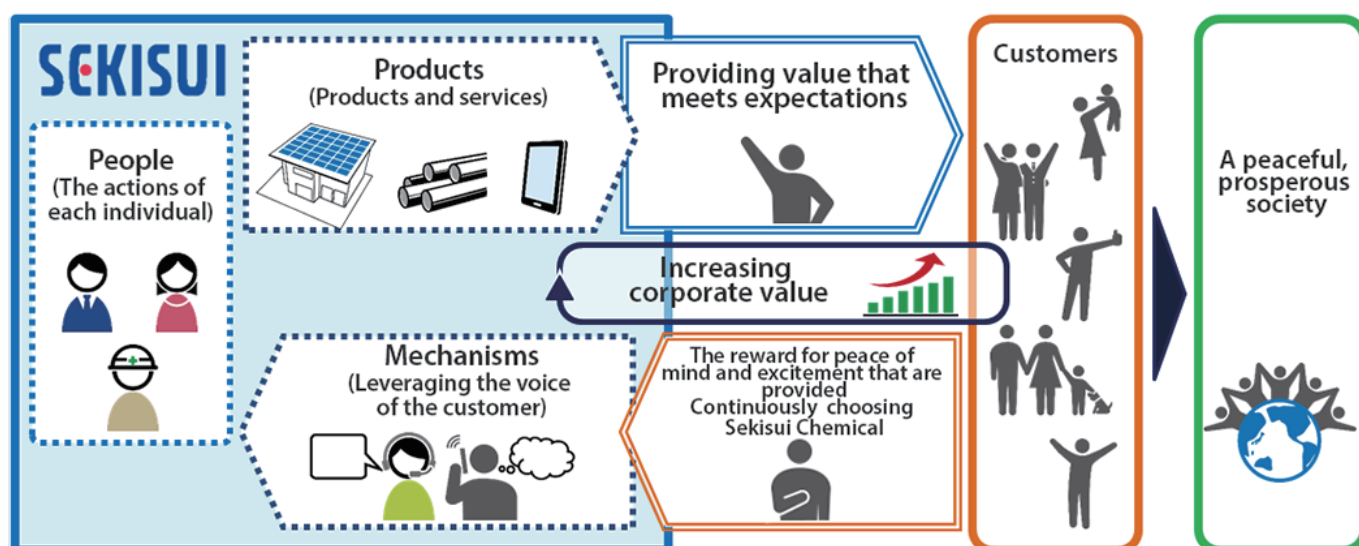
**Pursuing the Quality Always Specified by Customers by Maximizing the Quality of Human Resources, Systems, and Products**

## Management Approach

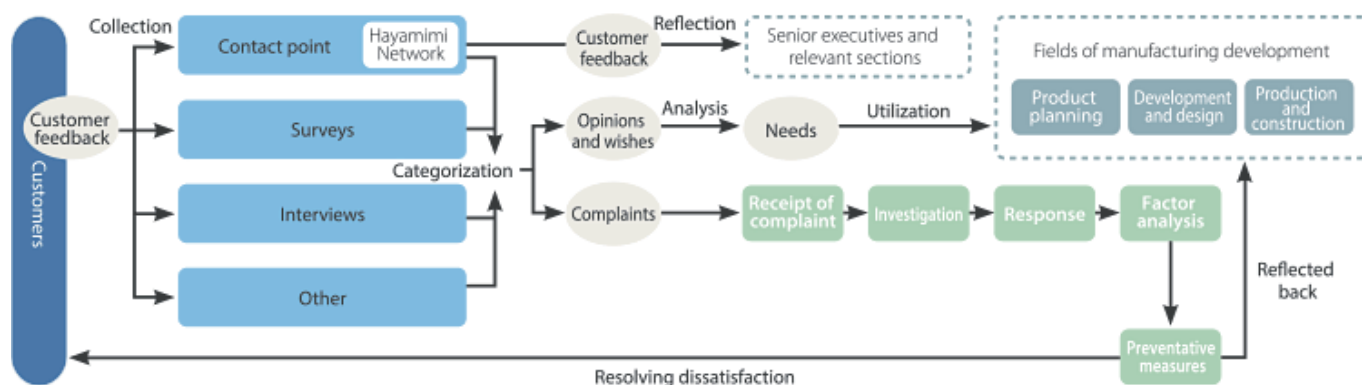
### Our Philosophy

Since 1999, the Sekisui Chemical Group has practiced customer satisfaction (CS) management. In 2004, we coined the phrase CS & Quality in the belief that customer satisfaction and quality are inseparable. We began CS & Quality Management to consistently deliver value to our customers so that they will always choose our products and services. Mindful of the fact that customer feedback is the wellspring of our manufacturing activities, we are actively honing the Quality of Our People, the Quality of Our Systems, and the Quality of Products and Services. In this manner, the Group is working in unison to consistently deliver the quality that is always specified by customers.

### The Sekisui Chemical Group's CS & Quality Management Circulation Diagram

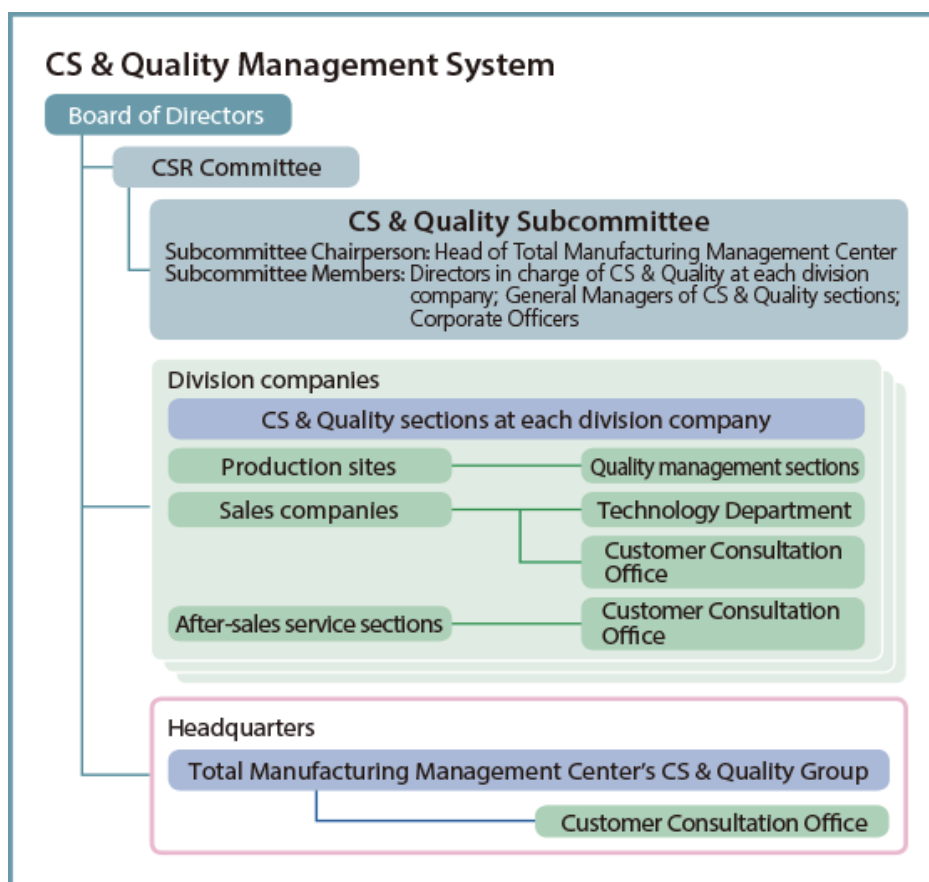


### Flow of Utilizing Customer Feedback in Management



## CS & Quality Management Promotion System

### CS & Quality Management Promotion System



### Creating Customer-oriented Products

## About the Follow-Up Activities for the Self-Declaration for Customer-Oriented Management

Sekisui Chemical is in favor of the Consumer Affairs Agency's initiatives for bringing about "Customer-Oriented Management" and made a "Self-Declaration for Customer-Oriented Management,"\* expressing Sekisui Chemical philosophy and plans for initiatives, in January 2017.

\* Companies declare on their own accord to engage in consumer-oriented management, take action based on their declarations and disclose the outcomes of their initiatives.

Mindful that customer opinions are a valuable resource for management, we are aggressively pursuing innovations in the Quality of Products and Services, the Quality of Our People, and the Quality of Our Systems, based on the motto "customer feedback is the wellspring of our manufacturing activities." We aim to contribute to the realization of a worry-free and abundant society by continuing to provide new value to our customers and society.

Below are five activities undertaken in FY2017 based on our "Self-declaration for Handling Consumers."

## 1. Ensuring Basic Qualities

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To ensure the reliability and safety of our products, which are the basis of "Product Quality," our mechanisms for quality auditing have been entirely rebuilt. The major change with the new auditing system is the introduction of "Sekisui Process Management Charts" (SPMCs).

## 2. Creating Attractive Qualities

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We created mechanisms to encourage concrete actions by employees to improve CS & quality. We have issued a CS & Quality Management Book compiling specific information and have distributed this text to group employees within Japan. In fiscal year 2017 we also held the fourth "Selection of Attractive Quality," where external experts evaluate products. Since fiscal year 2008, a total of 13 products have received awards.

## 3. Upgrading Technological Capabilities

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We held a conference on global-scale "group improvement activities." At the 52nd "Sekisui Chemical Group Improvement Activities Conference," 13 groups representing companies in Japan and from around the world gave presentations.

## 4. Enhancing Communications

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We published Vol. 2 of the booklet VOICE, which compiles views brought to Customer Consultation Offices, allowing us to discover otherwise overlooked views expressed by our customers. We also issued "STAR 55 News," which conveys positive examples of CS & quality to employees. This was the 36th publication of the newsletter since fiscal year 2006.

## 5. Providing Thorough Employee Education

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We started providing "telephone support training" in fiscal year 2008 with the aim of raising the level of telephone support. By the end of fiscal year 2017, a total of 1,888 employees had attended 191 sessions. During fiscal year 2017 we also launched "email training." We compiled "email guidelines" into a booklet and added these guidelines to the texts for new employees, making these guidelines part of the group's required business etiquette.

# Medium-term Plan

## The Sekisui Chemical Group Has Put in Place a CS & Quality Policy Under Its Medium-term Management Plan

### Management Approach

#### Medium-term Plan Implementation

### Start of Initiatives Under the CS & Quality Medium-term Plan (FY2017 to FY2019)

#### Roadmap for CS & Quality Control Initiatives

		FY2017	FY2018	FY2019
Appealing quality	Selection of appealing qualities	The Appealing Qualities Screening System selects and provides awards for products with appealing quality	<ul style="list-style-type: none"> <li>Publishing the Story of Appealing Quality, stories about the creation of appealing products</li> <li>Reconsidering the evaluation axis for the Appealing Quality Screening System</li> </ul>	Selecting and providing awards for products with appealing quality Revising the evaluation axis for the Appealing Quality Screening System
	Dissemination and confirmation of CS & Quality Management Policy	<ul style="list-style-type: none"> <li>Feedback results from Employee CS &amp; Quality Assessments</li> <li>Reconsidering assessment questions</li> </ul>	Dissemination of CS & Quality Management Policy Employee CS & Quality Assessment with revised questions	Feedback results from Employee CS & Quality Assessments
	Developing appeal in human resources	Company-wide CS & Quality training separated by skill level CS fundamental training (telephone service training, email training, study sessions to think about CS culture) (held from time to time)		
	Enhancing basic development capabilities	Deploying group-wide development guidelines Developer/reviewer (DR) training, improving DR quality, practical SQC training		
Fundamental quality	Enhancing basic manufacturing capabilities	Developing a process management chart for group-wide use Restructuring the quality auditing framework	SPMC group-wide development* Developing a group-wide quality auditing system	Defining a process management chart SPMC establishment* Conducting site leader training, quality control technical skill training, and day-to-day management assessments
	Improving quality overseas	Promoting visualization and monitoring of quality, conducting day-to-day management assessments, and promoting continuous improvement Conducting overseas quality control technical skill training and e-learning sessions		
	Fostering a CS & Quality culture	Publishing STAR 55 Bulletin, an internal newsletter introducing prominent activities for improving CS & Quality (published 3-4 times a year) Holding CS & Quality seminars to learn from prominent case studies in various industries (held 3-4 times a year)		

\* SPMC (short for Sekisui Process Management Chart)

### Major Initiatives

#### The Medium-term Plan (FY2017-2019) Progress

### Slight Increase in External Failure Costs Compared with the Final Fiscal Year of the Previous Medium-term Plan

In fiscal 2017, the first year of the medium-term plan, we had two major quality issues\*<sup>1</sup>. External failure costs\*<sup>2</sup> slightly increased compared with the final year of the previous medium-term plan. To achieve zero major quality issues in the future, we aim to improve Basic Qualities by ensuring thorough adherence to the Development Guidelines and Everyday Management Guidelines throughout the entire Group.

We also aim to continue to decrease external loss costs by rolling out across the entire group a more robust quality assurance system, management of changes and alterations to this system, and quality risk-reduction activities based on the prevention of defects.

\*<sup>1</sup> Major quality issues: Problems related to product and service quality that could cause significant damage to customers, society, or the Sekisui Chemical Group if not thoroughly resolved on an urgent basis.

\*<sup>2</sup> External failure costs: Costs arising from responding to product-related complaints.

## Enhance Basic Manufacturing Capabilities

## Rebuilding of Quality Audit Mechanisms

In accordance with the “CS & Quality Management Activity Roadmap,” we set out to rebuild our auditing mechanisms in fiscal year 2017. This initiative was done in response to the updates in the 2015 edition of the ISO 9001 standard; because quality confirmation based on daily controls were scheduled to start in fiscal year 2018, each company checked and revised its quality-management systems throughout fiscal year 2017. The major change was the introduction of the Sekisui Chemical Group’s tailor-made “Sekisui Process Management Chart” (SPMC), which is used to conduct process management using charts and whose purpose is to improve internal auditing. Through the utilization of the SPMC, we aim to efficiently perform quality control throughout the entire supply chain, including suppliers and cooperating companies. During fiscal year 2017, initiatives for promoting understanding and widespread use of the SPMC on the manufacturing shop floors at each company.

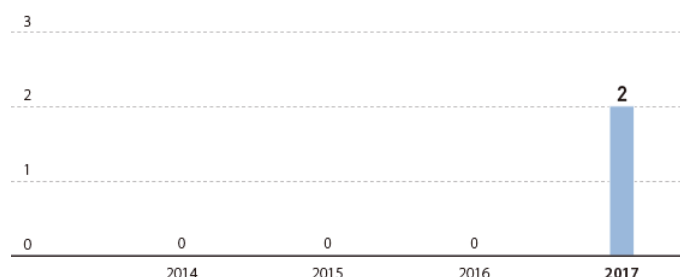




## Performance Data

### Data Concerning Major Quality

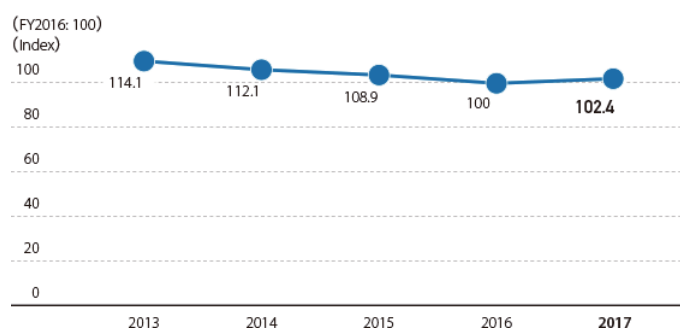
#### Number of Major Quality Issues



Indicator	Calculation Method
Major Quality Issues	<p>These refer to product and service quality issues determined by the Division Company president, based on evaluations and judgments by the quality assurance manager, which could cause significant damage to customers, society, or Sekisui Chemical Group and lead to the loss of society's trust in the Group if not thoroughly resolved on an urgent basis including:</p> <ol style="list-style-type: none"> <li>1) Problems that could have a serious impact on (or cause severe damage to) society, such as product recalls</li> <li>2) All serious problems involving human safety and those acknowledged by the Division Company to be serious problems involving the safety of property</li> <li>3) Compliance-related problems concerning the quality of products or services (e.g., those involving compliance with relevant laws and regulations)</li> <li>4) Problems that could inflict serious financial damage on customers</li> </ol>

### Data Concerning External Failure Costs

#### External Failure Costs



Indicator	Calculation Method
External failure costs	Costs for Responding to Complaints about Products

# Creating Attractive Products and Services

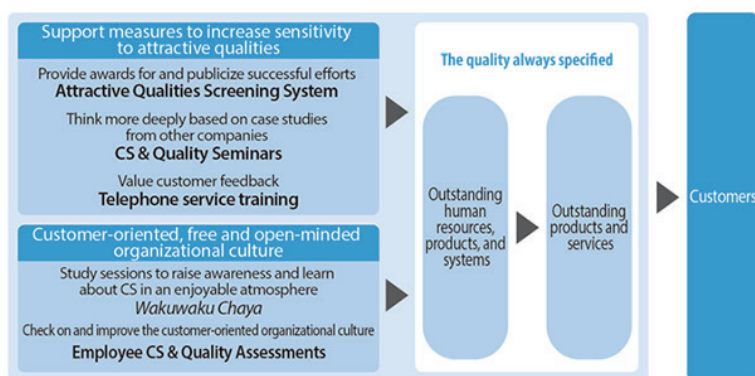
Advancing the Development of Human Resources, Systems, and a Culture Enabling the Creation of Attractive Qualities

## Management Approach

### Basic Concept

### We Consider Customer Feedback as the Beginning of Our Manufacturing

With the catchphrase “we consider customer feedback as the beginning of our manufacturing,” the Sekisui Chemical Group is working on building a customer-oriented, free and open-minded organizational culture to create Attractive Qualities that customers will continue to ask for by name.



## Major Initiatives

### Instilling CS & Quality Management

### Building a Mechanism That Will Encourage Concrete Action by Employees to Enhance CS & Quality

As a part of efforts to instill CS & Quality management under the CS & Quality Management Activity Roadmap, the Group reconsidered the questions included in Employee CS & Quality Assessments. Based on the understanding that efforts to promote awareness toward the words and concept had for the most part come to an end by fiscal 2016, the nature and content of questions were revised to encourage concrete action by each and every employee. The Sekisui Chemical Group published a CS & Quality Management booklet summarizing the information required to support concrete action. This booklet has been distributed to Group employees in Japan. A translation is currently underway for distribution to overseas employees in the future.

Measures were implemented to collate the results of Employee CS & Quality Assessments conducted in fiscal 2016. Steps were also taken to promote the sharing of pertinent information including issues and salient points with front-line managers at each business section and to make the most of assessment results at each plant floor.



## Measures to Create Attractive Qualities

### Providing Products and Services While Enhancing CS Sensitivity

The Sekisui Chemical Group strives to improve the CS sensitivity of individual employees and to build an organizational culture focused on CS, to continue creating Attractive Qualities.

#### Wakuwaku Chaya Study Groups for CS Culture

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Study Groups for CS Culture began as a measure to improve awareness of CS when we realized there was not enough communication across organizational borders in Employee CS & Quality Assessments that were conducted in fiscal 2012. Employees steer their own study groups about how best to improve CS culture and have nicknamed the groups Wakuwaku Chaya. The Sekisui Chemical Group believes that having an organization where employees are able to enjoy and fully engage in work is a shortcut to enhancing its CS culture. Our study groups for CS culture are not meetings or debates, but opportunities for employees to engage in discussions among themselves. In these study sessions, all participants view documentaries about how other companies have promoted CS activities and share their thoughts and feelings with one another about CS. The participants declare action targets during the sessions and take back to their workplaces the knowledge they gained from this dialogue with their peers. Departments that have continued to hold these study groups have witnessed a natural improvement in their CS culture. Energies remain directed toward further advancing Study Groups for CS Culture not only as a forum to reflect on dialogue that promotes mutual understanding, but also as the means to deliberate on future aspirations and scenarios and to enhance employee satisfaction by sharing forward-looking visions.

## CS & Quality Seminar

CS & Quality Seminars invite people from a variety of fields outside the Company to give lectures with the intention of improving awareness of CS & Quality. The lectures are split into Attractive Qualities themes about creating attractive quality and Basic Qualities themes to strengthen core quality. A total of 49 seminars have been held from the inception of the program in 2001 through the end of fiscal 2017. Authorities on a variety of themes relating to CS & Quality are invited to speak at each seminar. Among a host of topics, seminars cover instances where efforts aimed at motivating and satisfying employees have led to improved customer services and satisfaction. Seminars are also an opportunity to learn about the planning and development involved in producing hit and long-selling products and a forum through which to exchange views in quality management. Learning from case studies of progressive customer services stories from around the world, employees are able to not only increase their awareness of CS & Quality, but also gain opportunities to pick up the knowledge and wisdom needed to create Attractive Qualities. In this regard, the CS & Quality Seminar is indeed a very interesting event. In fiscal 2017, a total of 327 people participated in four seminars held at Sekisui Chemical's Tokyo Headquarters.



●Date of seminar: July 3, 2017  
 Guest speaker:  
 Seiichi Nakazawa,  
 Shikoku Kanzai  
 Theme: "Creating an Organization Where Even Gossip is Positive in Nature"



●Date of seminar: September 4, 2017  
 Guest speaker:  
 Takumi Matsui,  
 Matsui Service Consulting  
 Theme: "From Theory to Practical CS That Drives Business Growth —The True Significance of CS Activities—"



●Date of meeting: March 20, 2018  
 Guest speaker:  
 Toshiya Terasawa,  
 Live Lecturer® Practical Workshop  
 Theme: "Teaching Techniques and Live Methods for Public Speaking — One Secret to Lighting a Fire in the Hearts of Listeners—"

## Telephone Service Training / E-Mail Training

We have been conducting telephone service training, intended to improve the level of telephone service, continuously since fiscal 2008. Initially, the telephone service was geared toward the individual purchasing a new home. As such, the target of our training focused on the Housing Company. In fiscal 2011, this was extended to all division companies and then to all Group companies. By the end of fiscal 2017, telephone service training sessions had been held on an aggregate total of 19 times and attended by more than 1,888 employees.

Telephone service training is given to new employees, sales staff and customer service personnel who respond to inquiries by individual and corporate customers. As a new development, we are also providing telephone service training to employees in plant manufacturing divisions with the aim of improving telephone communications internally and externally. We are currently implementing training programs to improve the level of service in e-mail communications and to enhance the telephone answering skills of staff.

In fiscal year 2017, we launched "email training" as an extension of our telephone support training. Employees of the Customer Consultation Office serve as instructors and give visiting lectures on matters including business email etiquette, offering support on how to write in ways that do not confuse customers or leave them with unpleasant impressions.

Additionally, "Email Guidelines," compiling the materials used in the training into booklet form, were uploaded to the Company intranet as well as added to the existing texts distributed to new Sekisui Chemical Group employees. Thus, the new guidelines are considered to be part of the required business etiquette expected of new employees.



### Systems That Evaluate and Improve Attractive Qualities from the Viewpoint of Society

#### Attractive Qualities Screening System for Evaluations by Outside Experts

The Sekisui Chemical Group has set up the Attractive Qualities Screening System for evaluating its Attractive Quality products from an external third-party viewpoint, in order to accelerate the creation of attractive qualities. This system has been utilized once every three years since fiscal 2008 and was used for the fourth time in fiscal 2017. Under this screening system, a cumulative total of 13 products have been selected for awards up to fiscal 2017, based on an evaluation of their value proposition for customers and society, in addition to their contributions to sales and profits. In order to notify Sekisui Chemical Group employees about what concepts and perspectives were used to commercialize award-winning products, the Company's intranet features The Story of Attractive Qualities, which reveals the secrets behind the development of these products through interviews with those involved. This initiative has made Sekisui Chemical Group employees more motivated to take on the challenge of developing new products despite the various hurdles they may face by providing helpful hints and raising awareness of development initiatives.

#### Award-winning Products in Fiscal 2017 (Two Products)

- "Smart Power Station '100% Edition'" 100% energy self-sufficient housing
- "Kucho Hyper CH" high-performance polyethylene tube for air conditioner piping

## Systems to Confirm the Degree of Penetration of CS & Quality Management Initiatives

### Expanding Employee CS & Quality Assessments to Overseas Business Sites

Starting in fiscal 2012, the Sekisui Chemical Group conducts a CS & Quality Assessment (survey) program once every two years for employees in Japan, intended to ascertain the degree to which CS & Quality Management has spread throughout the organization, identify any related issues by measuring employees' awareness of CS & Quality and related activities, and reflecting this information in the code of conduct. More specifically, the survey identifies issues for creating the groundwork for CS & Quality culture, such as by measuring the degree that management's philosophy and policies have spread throughout the organization, and communications up and down the ranks, across organizations and among members. Thereafter, based on the final report, new action objectives are set for each organizational unit with the aim of gradually fostering a culture of CS & Quality within the Sekisui Chemical Group. Since fiscal 2015, we have expanded this system to include some overseas business sites. In fiscal 2017, CS & Quality assessments are being conducted at six organizations.

## Systems That Use Customer Feedback to Increase CS & Quality

### Improve the Responsiveness of Customer Consultation Office

The staff of the Customer Consultation Office responds to questions, concerns, opinions, requests, and other inquiries from customers. To provide support that satisfies customers without requiring them to be directed to call the departments responsible for the matters concerned, all employees of the Customer Consultation Office learn about our products and technologies and strive to offer, as much as possible, responses to inquiries at a one-stop shop. Thanks to this initiative, we have received praise from customers concerning calls relating to opinions and requests. In fiscal year 2017, there were 13 such times when praise was received from customers.

### Publication of VOICE That Summarizes Customer Feedback

The Sekisui Chemical Group's Customer Consultation Office receive over 10,000 inquiries and comments every year. The Sekisui Chemical Group directly answers each inquiry and analyzes the factors that motivated the customer to make the inquiry in the first place, in order to discover the hidden needs of customers. Many of these customer inquiries contain requests and ideas for making improvements, such as changing product specifications and increasing the range of variations. By feeding back these customer opinions in the development and production divisions of each internal company, we are able to improve CS & Quality by revising specifications and enhancing catalog mark-ups from the users' perspective.

As a new initiative starting in fiscal 2015, the Group has published VOICE, which is a summary of the inquiries received by Customer Consultation Office. This booklet is published with the aim of reflecting customer feedback in management activities, cultivating and instilling a culture of CS & Quality in all employees, and promoting understanding of these issues in Group-wide businesses in a manner that transcends particular operational areas. The Sekisui Chemical Group aims to improve three qualities (people, frameworks, products and services) based on feedback from customers.





## Results of the Customer Satisfaction Survey

### Conducting a CS Survey

The Sekisui Chemical Group's Housing Company conducts a CS survey to measure the level of customer satisfaction. Customer feedback gleaned from these surveys is broadly shared throughout the Company and used to improve product development capabilities and the quality of the Group's services. Details of any customer dissatisfaction are closely assessed. Steps are then taken to make the necessary improvements and to further increase the satisfaction of customers.

Building on these activities, the Housing Company has been working diligently to consistently enhance the satisfaction of its customers. In fiscal 2017, the level of customer satisfaction reached a record-high 76.6%. Looking ahead, we will continue to take seriously the comments of customers and strive to improve our quality and services.

## Framework for Employee Activities to Improve CS & Quality

### STAR 55 Bulletin Highlights Good Examples of CS & Quality for Group Employees

In 2002, its 55th anniversary, the Sekisui Chemical Group implemented STAR 55 as a program to promote CS throughout the Company. In 2006, we issued the first STAR 55 Bulletin, a newsletter that focuses on CS & Quality with a collection of excellent case studies for CS & Quality for Group employees, with the aim of raising awareness of CS & Quality management. We have continued to publish STAR 55 Bulletin since fiscal 2006, issuing it a total of 36 times by the end of fiscal 2017. The name STAR 55 Bulletin embodies the concept where each employee of the Sekisui Chemical Group is a key player in fostering the Group's spirit and culture by modifying their behavior to gain customer trust.



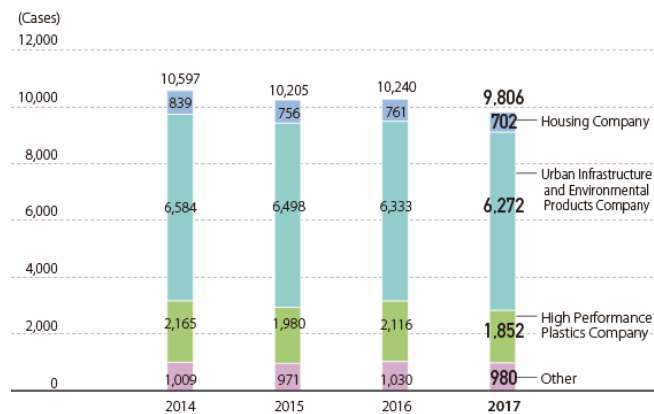
- \* Origin of the name: STAR 55 Bulletin
- S = Sekisui,
- T = Trust,
- A = Action,
- R = Revolution,
- STAR = Leader,
- 55 = 55th anniversary since founding.



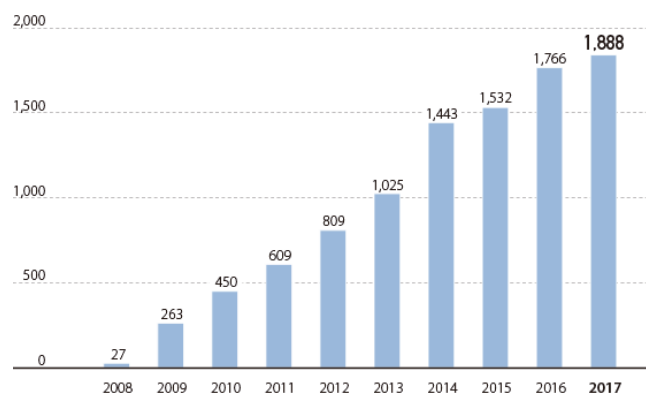
## Performance Data

### Data Relating to Telephone Support Training

Number of Incoming Calls, etc., from Customers



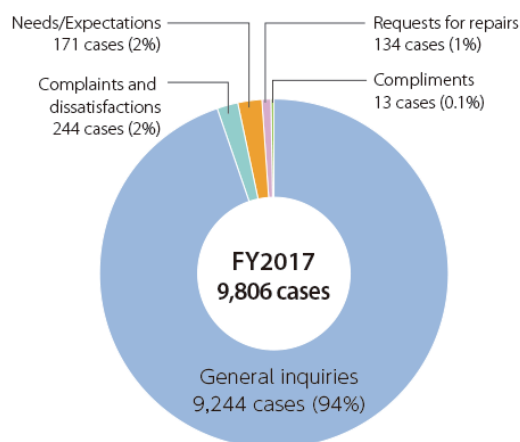
Telephone Support Training (total number of participants)



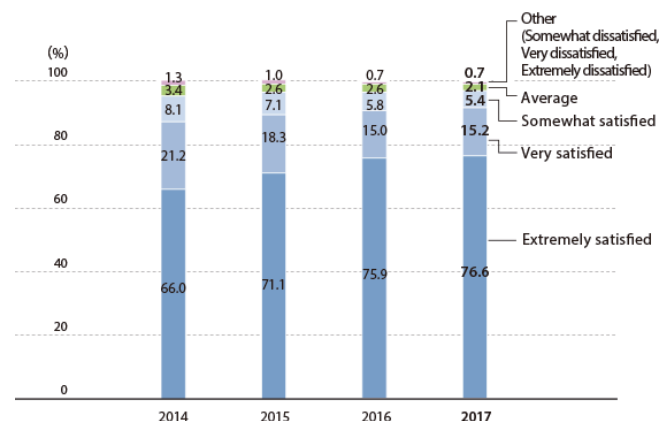
Indicator	Calculation Method
Number of incoming calls, etc.	Number of inquiries by telephone, email, letters, faxes, and other means

## Data Relating to Improving the Supporting Capability of the Customer Consultation Office

### Breakdown of incoming calls (Sekisui Chemical)



### CS Questionnaire 7-Step Evaluation (Housing Company)



Indicator	Calculation Method
Breakdown of incoming calls	<p>The subjects of incoming calls are recorded on “Insider Net” and categorized as follows:</p> <ul style="list-style-type: none"> <li>•General inquiries: questions about Sekisui Chemical Group product specifications, how to use products, construction methods, stores selling the products, and related matters</li> <li>•Incidents during which customers expressed their dissatisfaction or lodged rebukes concerning Sekisui Chemical Group products or support</li> <li>•Requests for repairs: Requests for repairs of Sekisui Chemical Group products and calls relating to the repairs hotline</li> <li>•Praise: Calls during which praise was received for satisfaction with the Sekisui Chemical Group's products or support</li> <li>•Needs and expectations: What customers require of Sekisui Chemical Group products and services (product improvements and new products, etc.), and inquiries relating to business activities, or comments on what is expected of Sekisui Chemical Group</li> </ul> <p>Note: “Insider Net”: A Sekisui Chemical Group intranet site on which incoming calls to the Customer Consultation Office are released in real-time.</p>

# Improving Quality

## Pursuing the “Three Zeros” in Accidents, Waste and Complaints

### Management Approach

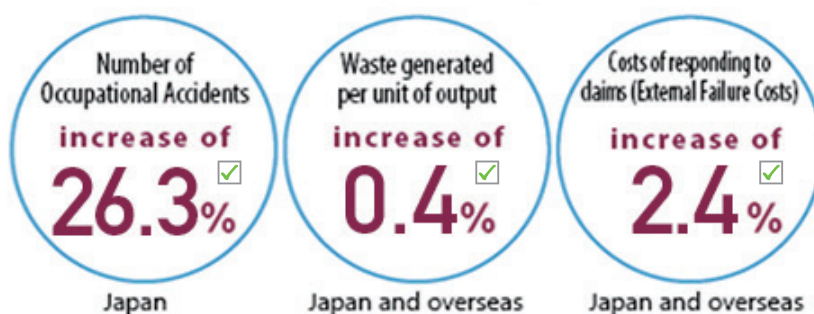
#### Basic Concept

#### On-site Manufacturing Supports Quality

Recognizing that it is the fields of manufacturing development that support quality, since fiscal 2006 the Sekisui Chemical Group has focused its efforts on innovation in production. Based on its belief that quality defects lead to higher costs arising from handling complaints or increased waste, we are trying to reduce costs by targeting the “three zeros” of accidents, waste, and complaints.



#### Accidents, waste, and complaints compared to fiscal 2016

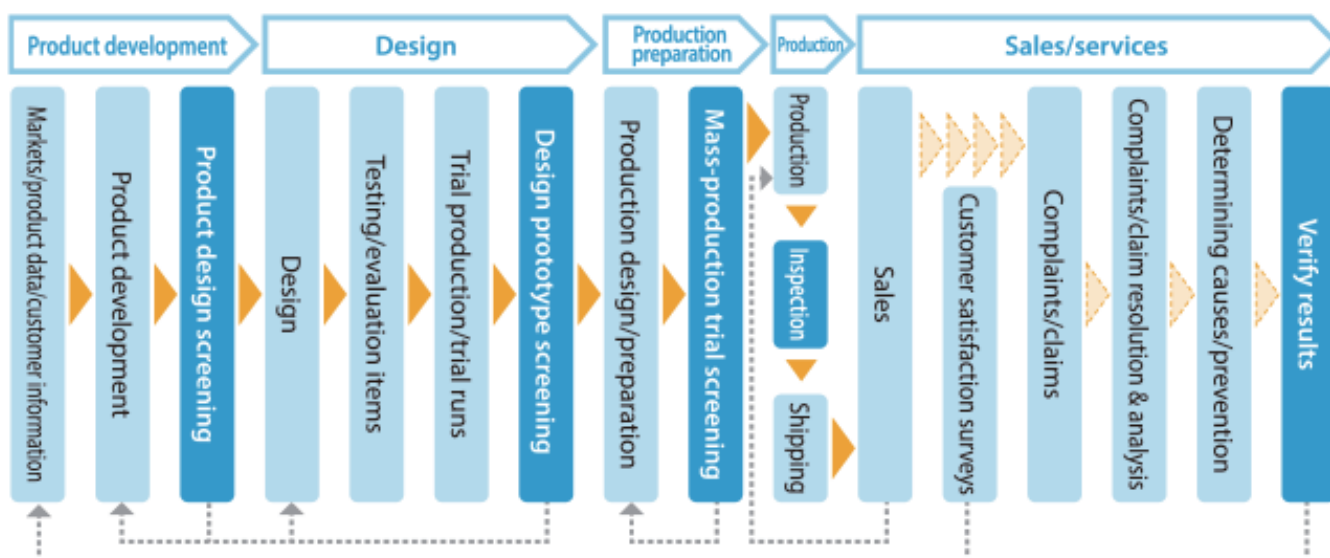


## Quality Management

### Systems in Each Section Reflect Business Characteristics

The Sekisui Chemical Group has developed quality control systems covering every process from production to product use by customers. Each section has developed a quality assurance system, and in each process, we promote standards-based controls on a daily basis. In developing products and making improvements to quality, we conduct screening from a variety of perspectives, such as those of quality assurance and safety.

#### Quality assurance system



## Formulating Three Quality Guidelines

### Maintaining Uniform Quality Control from Development to Sales

Undertaking uniform quality control throughout the value chain—from development, manufacturing, and sales—the Sekisui Chemical Group is working to improve the level of its quality control by formulating and issuing three guidelines: Development Guidelines for Strengthening Quality Assurance, Guidelines for Daily Management Activities, and Contract / Specification Guidelines.

Development Guidelines are aimed at preventing Basic Quality-related problems from occurring by predicting quality risks that can arise after commercialization. Guidelines for Daily Management Activities are a collection of basic guides to management on a daily basis that must be undertaken in manufacturing and post-development processes. Contract / Specification Guidelines were added in fiscal 2015 with the aim of reducing expanded compensation\* risks related to product sales.

\* Expanded compensation: Customers compensation in the case of product defects that extend beyond returns and exchanges to include compensation for processing / construction / items made with these products, and other related damage.



## Product Safety

### Compliance with Laws and Internal Rules for Product Safety

When a legal violation related to product safety becomes known internally or is pointed out from external sources, the Sekisui Chemical Group rapidly discloses information about the incident and moves quickly to discover the cause and prevent a reoccurrence. This is also true if internal rules and standards for product safety have not been followed.

In fiscal 2017, there were no cases where we violated laws or internal rules related to product safety.

## Products Information Disclosure and Labeling

### Compliance with Laws and Internal Rules Relating to Product Information Disclosure

The Sekisui Chemical Group complies strictly with laws and internal rules relating to the disclosure of product quality and safety.

In 2017, there were no cases where we violated laws or internal rules related to the disclosure of product quality and safety.

## Major Initiatives

### Review of the Quality Assurance System

#### Over 70% of Business Sites Have Transitioned to the Revised ISO 9001 Standard

During fiscal year 2015, ISO 9001 underwent a full-scale revision, and in response, each Company and each group company has been revising its quality management systems (QMSs) since fiscal year 2016. As of the end of fiscal year 2017, over 70% of total business sites had migrated their quality management systems to the revised ISO 9001 standard.

## Design and Development Seminars

### Development Risk Prevention Seminar and DR\* Reviewer Training Seminar

Continuing from fiscal 2013, we held the Development Risk Prevention Seminar aimed at acquiring effective prevention methods as well as the DR Reviewer Training Seminar to improve the skills of people who conduct DRs. Both seminars are based on the topic of preventing quality problems before they arise.

In fiscal 2017, we held meetings to consider specific examples where risks were prevented before they occurred at four locations: the Tsukuba Site of the Housing Company; the Minakuchi Plant of the High Performance Plastics Company, the Ritto Plant and the Gunma Plant of the Urban Infrastructure & Environmental Products Company. We reconfirmed the importance of predicting and identifying risks to quality by focusing on points of change with existing products. We plan to hold these seminars again in fiscal 2018.

\* DR: Design Review



DR Reviewer Training Seminar



Development Risk Prevention Seminar

## CS & Quality Seminar

### CS & Quality Seminar: Basic Qualities Edition Held during Quality Month

Since fiscal 2011 the CS & Quality Seminar: Basic Qualities Edition has been held during Quality Month every November with the goal of raising the level of Basic Qualities throughout the entire Sekisui Chemical Group.

In fiscal 2017, Dr. Satoko Tsuru, Specially Appointed Professor, Healthcare Social System Engineering Laboratory, School of Engineering, the University of Tokyo was invited to speak on the theme of service quality in the manufacturing industry focusing on the objectives and standardization of service excellence. Many of the people who attended the lecture commented favorably on the insight gained of the global trend toward service standardization led by Germany as well as activities in Japan. Others were impressed by the easy-to-understand examples of elderly housing with healthcare and supportive services.



CS & Quality Seminar

## Steady Penetration of Manufacturing Education and Training

### Rebuilding Our Manufacturing Education System

Since fiscal 2013, the Sekisui Chemical Group has been rebuilding its employee grade-based training system for managers in production departments in order to spread knowledge of manufacturing throughout all levels, and to pass down the expertise of veteran technicians to younger employees. We offer 15 courses in the three fields of technical skills, human skills and conceptual skills. A cumulative total of 2,768 employees had participated in courses up to fiscal 2017.

## QC Certification

### Acquisition of QC Certification\*

The Sekisui Chemical Group also employs QC Certification effectively to measure levels of quality knowledge, and as of the end of fiscal 2017, over 4,200 members of the Company had attained QC Certification.

\* QC Certification: A certification system conducted by the Japanese Standards Association and the Union of Japanese Scientists and Engineers and certified by the Japanese Society for Quality Control.

Note: Figures show the total number of employees who have acquired QC Certification levels 1 through 3



## Group KAIZEN Activities on a Global Scale

### Holding the Group KAIZEN Activities Award / Presentation Meeting Annually

Group KAIZEN Activities\* are an initiative in which employees in each workplace form small groups to address various topics such as improvements in quality and productivity and increasing operational efficiency, and to take on various subjects through policy management. These activities have a track record of more than 50 years. They are underway at numerous business sites in Japan and around the world, centered on production companies. Once a year in January, presentations are made by the representative group in each area - Japan, North America / Mexico, China, Europe, and Asia / Oceania - to share information and foster mutual improvement.

In the 52nd Sekisui Chemical Group KAIZEN Activities Presentation Meeting held in January 2018, a total of 13 groups (nine from Japan and four from other countries) made presentations. As a result, the sense of representing the Company as a whole was stronger than ever before. 15 companies made requests in advance to view the proceedings of the Sekisui Chemical Group KAIZEN Activities Presentation Meeting in real-time, and the event was broadcast to their offices as requested. This meeting has become a valuable opportunity to deepen our employee's understanding of improvement activities, which was underscored by participants' statements such as, "I was able to hear more details about the content presented," and "I had a chance to exchange information and opinions with those working at other business sites and companies."

\* Group KAIZEN Activities: Activities that began in 1966 as Quality Control (QC) groups and later evolved into small group activities before taking the form they have today

Award name	Site	Group
Gold Prize	Shiga Minakuchi Plant, Sekisui Chemical Co., Ltd.	Metaboslim
Silver Prize	Kyushu Sekisui Industry Co., Ltd.	Harada Electric Team
Bronze Prize	Tokuyama Sekisui Co., Ltd.	SBS



Representatives who Participated in the KAIZEN Activities Presentation Meeting

## Efforts to Reduce Energy Consumption

### Improving Production Process Quality by Reducing Energy Use

With the intention of creating products with superior quality at a proper price (reduce loss-related costs), the Sekisui Chemical Group is promoting energy innovation activities as a part of its production processes in order to improve quality in line with its mission of helping customers achieve their green procurement standards. Energy innovation activities extend not only to each of the Group's site in Japan, but also overseas.

In addition to reducing energy consumption compared with prevailing levels, we are also rethinking the basic way that energy should be used in the future. Aiming to consume the least amount of energy necessary, we are reassessing each production process at the design stage to cut projected energy loss.

In fiscal 2017, energy innovation measures that equate to 2.3% of the CO<sub>2</sub> emissions generated by the Sekisui Chemical Group's operations were undertaken.

## Response to the Updated ISO 9001 Standard

### Implemented Training in Response to the 2015 Update of the ISO 9001 Standard

The 2015 edition of the ISO 9001 standard is characterized by its adoption of processes and approaches that incorporate ways of thinking based on PDCA cycles and risks. To engage in quality assurance in compliance with the changes to the standard, training sessions explaining the 2015 edition of ISO 9001, primarily targeting internal auditors, were held at a total of 19 business sites within Japan.

#### Training Content and Details

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- 1) Commentary and explanation of the key points of the update
  - (1) Enhanced requirements
    - Process approach and top management leadership / change control
  - (2) Additional requirements
    - Approach based on organizational conditions and risks / performance evaluation and improvement / knowledge of human error measures and organization
- 2) Commentary on case studies of SEKISUI Process Management Chart (SPMC) application methods that meet the requirements of ISO 9001, 2015 version and that serve as a practical management tool that is consistent with actual business activities

## Performance Data

### Business Sites That Have Received Third-party Certification for Their Quality Management Systems

#### Housing Company

Sekisui Chemical Co., Ltd. Housing Company (integrated certification)  
Housing Product Research & Development Department  
Technology Departments  
Hokkaido Sekisui Heim Industry Co., Ltd.  
Tohoku Sekisui Heim Industry Co., Ltd.  
Sekisui Heim Industry Co., Ltd.  
Tokyo Site  
Kanto Site  
Chubu Site  
Kinki Site  
Chushikoku Sekisui Heim Industry Co., Ltd.  
Kyushu Sekisui Heim Industry Co., Ltd.  
Sekisui Global Trading Co., Ltd.  
Sekisui Heim Supply Co., Ltd. Technology Department  
Sekisui Board Co., Ltd.

#### Headquarters

Sekisui Chemical Co., Ltd. R&D Center, LB Project  
ENAX, Inc.

#### Urban Infrastructure and Environmental Products Company

Sekisui Chemical Co., Ltd. Gunma Plant  
Sekisui Chemical Co., Ltd. Shiga-Ritto Plant  
Sekisui Aqua Systems Co., Ltd. Plant Engineering Division/Water Supply & Drainage Division  
Sekisui Aqua Systems Co., Ltd. Water Supply & Drainage Division  
Sekisui Home Techno Co., Ltd.  
Hanyu Sekisui Co., Ltd.  
Sekisui Seikei, Ltd.  
Yamanashi Sekisui Co., Ltd.  
Sekisui Chemical Hokkaido Co., Ltd.  
Toto Sekisui Co., Ltd. Headquarters, Ota Plant  
Chiba Sekisui Industry Co., Ltd.  
Okayama Sekisui Industry Co., Ltd.  
Shikoku Sekisui Co., Ltd.  
Kyushu Sekisui Industry Co., Ltd.  
Sekisui Pipe Renewal B.V.  
Sekisui Polymer Innovations, LLC. Bloomsburg Plant  
Sekisui Polymer Innovations, LLC. Holland Plant  
Sekisui Rib Loc Australia Pty. Ltd.  
Sekisui Eslon B.V.  
Sekisui Refresh Co., Ltd.  
Sekisui (Shanghai) Environmental Technology Co., Ltd.  
Sekisui (Wuxi) Plastics Technology Co., Ltd.  
Sekisui (Qingdao) Plastic Co., Ltd.  
Sekisui Industrial Piping Co., Ltd.

#### High Performance Plastics Company

Sekisui Chemical Co., Ltd. Musashi Plant  
Sekisui Chemical Co., Ltd. Shiga-Minakuchi Plant  
Sekisui Chemical Co., Ltd. Taga Plant  
Sekisui Chemical Co., Ltd. Tsukuba Site / IM Project  
Sekisui Techno Molding Co., Ltd. Aichi Plant  
Sekisui Techno Molding Co., Ltd. Nara Plant  
Sekisui Techno Molding Co., Ltd. Mie Plant  
Sekisui Polymatech Co., Ltd.  
Sekisui Nano Coat Technology Co., Ltd.  
Tokuyama Sekisui Industry Co., Ltd.,  
Sekisui Fuller Company, Ltd. (integrated certification)  
Hamamatsu Plant  
Shiga Plant  
Tokyo Office  
Osaka Office  
Sekisui Medical Co., Ltd. Headquarters  
Sekisui Material Solutions Co., Ltd.  
Sekisui High Performance Packaging (Langfang) Co., Ltd.  
Sekisui Voltek, LLC. Lawrence Plant  
Sekisui Voltek, LLC. Coldwater Plant  
Sekisui Alveo (integrated certification)  
Sekisui Alveo A.G.  
Sekisui Alveo G.m.b.H.  
Sekisui Alveo (Benelux) B.V.  
Sekisui-Alveo S.A.  
Sekisui Alveo S.r.L.  
Sekisui Alveo BS G.m.b.H.  
Sekisui Alveo Ltd.  
Sekisui-Alveo B.V.  
Youngbo Chemical Co., Ltd.  
Thai Sekisui Foam Co., Ltd.  
Sekisui Pilon Plastics Pty. Ltd.  
Sekisui S-Lec America, LLC.  
Sekisui S-Lec B.V.  
Sekisui S-Lec (Suzhou)  
Sekisui S-Lec (Thailand) Co., Ltd.  
Sekisui S-Lec Mexico S.A. de C.V.  
Sekisui Diagnostics, LLC.  
Sekisui Diagnostics, LLC. San Diego  
Sekisui Diagnostics P.E.I. Inc.  
Sekisui Diagnostics (UK) Ltd.  
Sekisui Specialty Chemicals America, LLC. Calvert City Plant  
Sekisui Specialty Chemicals America, LLC. Pasadena Plant  
Sekisui Specialty Chemicals America, LLC. Dallas HQ  
Sekisui Specialty Chemicals Europe, S.L. Tarragona Plant  
Sekisui Medical Technology (China) Ltd.  
Sekisui Polymatech (Shanghai) Co., Ltd.  
Sekisui Polymatech (Thailand) Co., Ltd.  
PT. SEKISUI Polymatech Indonesia  
S and L Specialty Polymers Co., Ltd.  
Sekisui DLJM Molding Pvt. Ltd. Chennai  
Sekisui DLJM Molding Pvt. Ltd. Gr. Noida  
Sekisui DLJM Molding Pvt. Ltd. Tapukara

### Other Data

	FY2016	FY2017
Number of participants in the Development Risk Prevention Seminar	302	418
Number of participants in the DR Reviewer Training Seminar	166	259
Participants in employee grade-based training system for managers in production departments	2,252	2,768

	FY2016	FY2017
Number of people with QC Certification	4,103	4,228

# Prominence in Human Resources

**Actively Supporting Individual Prominence and Self-realization While Contributing to Society through Business Activities**

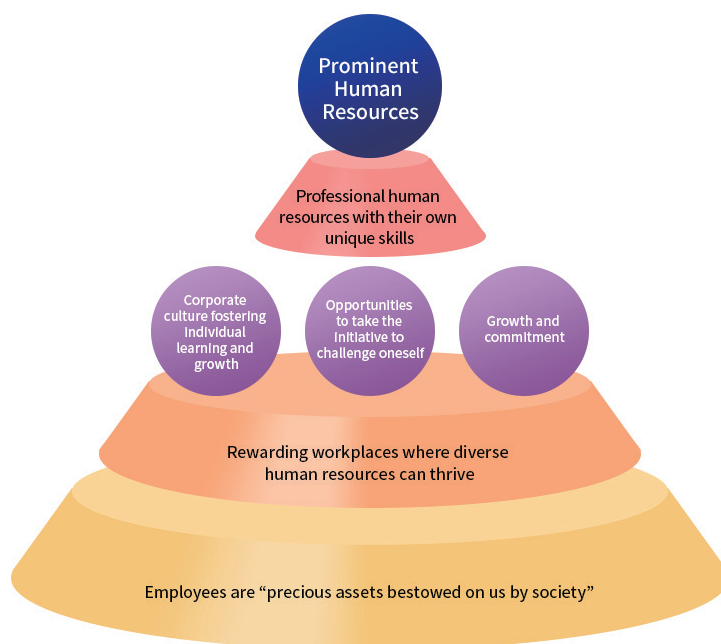
## Management Approach

### Our Philosophy

Based on our belief that "employees are precious assets bestowed on us by society," we, the Sekisui Chemical Group, are committed to developing an environment where employees can work enthusiastically. We also offer various opportunities through which we help individual employees enhance their "specialties" while achieving personal growth.

We also firmly believe that we have a responsibility towards the society to uphold human rights of every individual, respect employees' diversity, personality, and individuality, create diverse work places meeting the needs of the countries and regions we operate in, and allow diverse ways for people to work and be at ease at their work place.

This fundamental way of thinking regarding human resources is shared throughout the entire Group, and we are striving to ensure that our work places enable diverse personnel to play an active role, fulfilling for each and every person.



# Diversity Management

**Fostering a Corporate Culture Where Diverse Human Resources Can Work with Enthusiasm and Make Unique Contributions**

## Top message

### Our Commitment to Diversity Management

#### I Am Convinced That Diversity Management Is Vital to Our Future as a Group

The Sekisui Chemical Group benefits from the diversity of its businesses and its employees. We believe sustained growth of the Company cannot be assured without an honest and open commitment to our various stakeholders. We view diversity as something that is indispensable to the management of our company moving forward.



#### A Commitment to Diversity Management

The Sekisui Chemical Group has been able to overcome many difficulties and challenges in the external environment over the past several years, including those brought on by the collapse of Lehman Brothers and the subsequent financial crisis, the Great East Japan Earthquake, the debt crisis in Europe, and the hike in the consumption tax in Japan. Our perseverance contributed to the Company during the period covered by the previous medium-term business plan recording the highest level of profit since its founding. We have continued to renew past profit highs since, though we note that sustained growth moving forward is not likely to be easy.

I became Sekisui Chemical's 10th president in March 2015 and have since been entrusted with the continued evolution of the Group.

The Sekisui Chemical Group has become increasingly large over the years, and we believe it imperative to continue evolving with all due speed while making continuous improvements to build a more attracting and tougher group that can keep up with the demands of the times. We must strive further to create a structure that, like a ship, can ride out even the toughest of storms in the operating environments. I believe creating such a structure is my greatest responsibility.

I also recognize my duty to design a concrete and detailed growth plan for the next decade.

## Focused on the Frontiers Ahead

We are working together with employees and senior executives around the world during the last year in our current medium-term business plan. I believe that if we can finish the current medium-term business plan on a high note, the frontiers ahead could prove even wider for the Company .

My goal is the creation of a foundation for new growth while boldly advancing reforms as we move toward the next medium-term business plan.

## Three Requirements for Sustainable Growth

As I have noted several times since assuming the president's office, there are three areas in which we must take the initiative to ensure sustainable growth.

The first of these is strengthening our earnings power. We target an operating profit margin of at least 10% and are therefore focused on improving efficiency in management and promoting selection and concentration in our businesses.

The second of these is innovation. Our goal is to produce new and world changing products, technologies, and businesses. One of our core concepts in this area is the creation of additional Environment-contributing Products, which to date have been a cornerstone for the Company's growth. We also intend to promote collaboration within the group and with outside parties to create next-generation businesses.

The third initiative focuses on the development of new frontiers. Our goal is to capture demand around the world, and using the prominence of the Sekisui Chemical Group, we will strive to develop new frontiers in the seemingly limitless global market.

## Diversity in the Human Resources That Support Our Businesses

We believe we will achieve these three goals through the promotion of diversity management.

The Sekisui Chemical Group is developing an unusually diverse range of businesses, from housing to social infrastructure materials such as water supply and sewage pipes, to electronics, automotive and transportation products, residential infrastructure materials, and life science-related products.

Across this wide range of businesses is an equally diverse group of employees with a variety of work experiences and individual characteristics. Without regard to a person's gender, nationality, age, or disability, we encourage each of our employees to maximize his or her distinctive capabilities, as we believe this contributes to a flourishing in innovation, without which we cannot achieve the larger goals we have set for the Group.

We believe the advancement of diversity management is indispensable toward achieving our goals.

## Making the Most of Each Employee's Distinctive Characteristics

So how best do we start?

One of the first things we need to do is change how we work. When I was in charge of the housing business, I worked just like every other corporate warrior. However, working without regard to whether it is day or night is no longer compatible with the norms of modern-day society. So, with a limited number of hours, the important questions now are how to improve productivity on the job while balancing one's own time with work, and how to best enrich one's life at work.

Our business, alongside our customers and working people everywhere, continues to diversify. I believe we can only truly succeed by benefiting from diverse range of people and the fostering of each of their individual characteristics and capabilities.

We believe all Sekisui Chemical employees can contribute to innovations by making full use of their distinctive capabilities in each of their positions. Moreover, with the gradual accumulation of these contributions, the Sekisui Chemical Group can truly become an organization valued by society and maintain its presence for at least the next 100 years.

With this belief in mind, we will continue to promote diversity management.

## Focusing on Every Sekisui Chemical Group Employee

The diversity management efforts of the Sekisui Chemical Group are aimed at every employee in the organization. As an example, we believe a company in which only men are the leading decisions makers is a company that will not be able to respond effectively to development opportunities that may present themselves in the days ahead. Moreover, we believe strides in the global market cannot occur without the active participation of people of varying nationalities. It is indeed our goal to create new innovations through the promotion of diversity.

## Starting by Promoting the Empowerment of Women

Diversity management can come in many forms depending on the organization within the group. We believe empowerment of women, who represent the most familiar form of diversity, is not yet at a sufficient level. As an example, of the approximately 20,000 domestic employees, there are about 4,000 managers, and only recently has the number of women in management positions exceeded 100. This number is simply too small. We have accordingly decided to direct our diversity management efforts first at empowering women.

Over the last few years, our goal has been to increase the number of women in management positions to 200 and I have directed my own energies toward this goal. There are many women at Sekisui Chemical with strong abilities and we will focus our efforts on giving these workers the opportunities they deserve, rather than focusing on promoting workers simply because they are women. We must not be afraid to move forward due to a lack of precedent. Anyone can fail after accepting new and difficult challenges, but I believe people can grow from the experience and as a result overcome similar challenges in the future. Our goal is to provide the same opportunities to women that we have given to men.



## Making a Real Change in our Way of Thinking

It will take time before the results of these changes are felt in the organization and we believe it therefore necessary to continue to gather examples of success.

We believe middle management is one area in which changes to our way of thinking have been relatively slow in coming. However, we are committed to making improvements in this area. We believe it is vital for each of the group's organizations to craft a clear message from top-level management and focus their efforts on changing the way in which its employees work, the structure of the organization, and the way employees think about this issue.

Accordingly, we think it is important to place those who can motivate individuals in their work in management positions, including positions where they can make the workplace a more comfortable place to work and one in which each employee can make the most of their individual capabilities. To be sure, changing the way of thinking of an entire company, as well as its culture, will take some time, though we believe this is an effort worth continued emphasis. If we maintain our efforts, we expect this way of thinking to become commonplace within no more than ten years.

## Working with the Person Right in Front of You

Changing an entire system for the better is a major task, though we believe gradual improvements can be made if leaders in each workplace focus their efforts on how to best motivate their subordinates while establishing connections with those closest to them

We look for the emergence of a number of women in the organization aiming to refine their abilities and move higher in the Company. We believe it is vital to establish a system allowing this, and to continuously monitor the effectiveness of such a system.

Returning to our ship analogy, we believe a vessel cannot proceed at speed in rough weather unless it has created a structure in which this kind of thinking is considered fundamental and a matter of course.

## Focused on Maintaining a Strong Corporate Presence for at Least 100 Years.

We believe it would be difficult for Sekisui Chemical Group to maintain its presence over the next hundred years under the current corporate structure and way of working. It is incumbent on leadership to promote the growth and success of the diverse group of individuals in subordinate groups.

It is also our hope that each employee will take advantages of changes in their work place to demonstrate their unique capabilities and further develop themselves as individuals.

I intend to work at the forefront to create an environment where individuals can develop their capabilities to the fullest possible extent.

December, 2015  
President & CEO, Teiji Koge

## **| The Sekisui Chemical Group's Diversity Management Policy**

Not only perceiving diversity by differences understood from outward appearance-such as gender, age and nationality-the Sekisui Chemical Group will also focus on differences that include careers, values and personality while understanding, recognizing and utilizing the differences between each and every employee as strengths.

### **Diversity Management Policy**

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Diversity is essential to maintain our strong corporate presence for 100 years and beyond. We understand and recognize that every employee's orientation to work and life, and their personal strengths are different and thus we use this to our advantage. Through employee dialogue, we will strengthen our organizational culture by providing employment, opportunities for development and an enhanced work environment to support growth.

# Building a Diverse Organizational Structure

**Every Effort Is Being Made to Build an Organizational Culture in Which All Employees Are Able to Work Dynamically and Make the Most of Their Unique Characteristics and Talents**

## Management Approach

### Organization-wide Initiatives

#### Promoting Awareness and Application of Diversity Management

Sekisui Chemical's organizational culture is based on actively taking advantage of each and every employee's orientation and their distinctive characteristics. To this end, activities are divided into two categories: "promotion" and "implementation."

### Diversity Management Promotional Structure

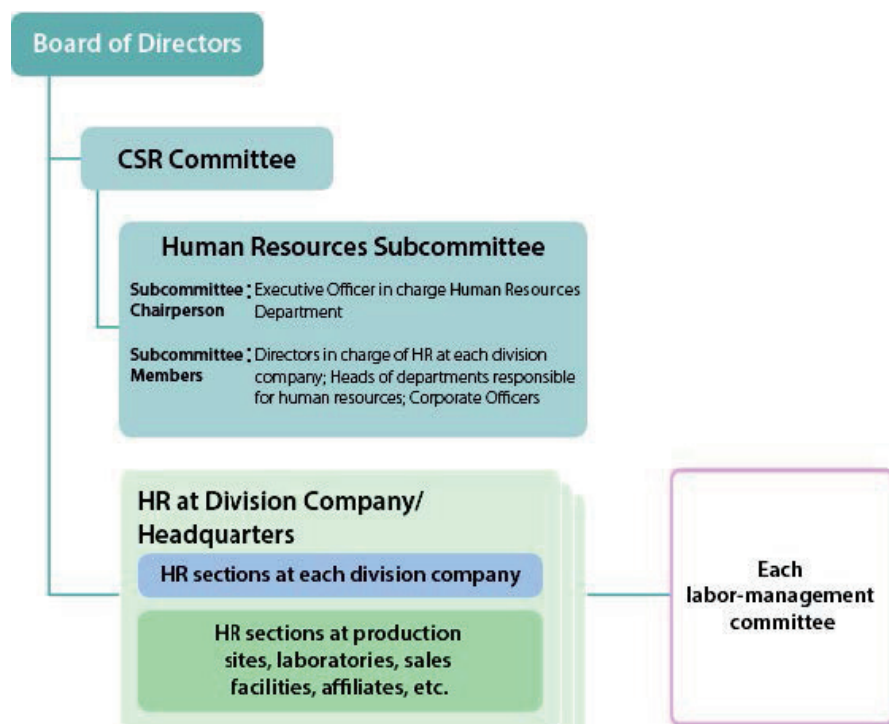
#### We are Putting in Place a Structure That Promotes Diversity Management Across the Entire Group.

#### CSR Committee, Human Resources Committee

The CSR Committee deliberates on CSR measures generally. This includes matters relating to diversity management. Chaired by the president, the CSR Committee is comprised of such senior executives as the presidents of division companies as well as employee representatives including female employees and the head of the Labor Union. Matters that require resolution are also reported to the Board of Directors.

In addition to deliberating on Group-wide diversity management issues, the Human Resources Committee puts in place and monitors measures aimed at securing and developing the personnel necessary for diversity management. Chaired by the managing executive officer and head of the Human Resources Department, the Human Resources Committee is comprised of executive officers and the heads of human resources departments selected from each division company.

## Human Resources Management Promotion System



## Project to Develop a Workplace in Which All Employees Can Excel

The Sekisui Chemical Group has appointed a manager to oversee the promotion of a project to develop a workplace in which all employees can excel at each of its 159 domestic bases. Each manager is working to ensure the smooth implementation of diversity management measures at each location.

## Promotion

### Diversity Management Policy Formulation

In November 2015, the Sekisui Chemical Group formulated its Diversity Management Policy following deliberations at meetings of the Board of Directors and Policy Committee.

### Distributed the "D-Book"

As a means for promoting diversity management, Sekisui Chemical drafted the "D-Book" in fiscal 2015 and "D-Book 2" in fiscal 2017, both of which have been distributed to all domestic Group employees.

Kicking off our diversity management policies, D-Book features an overview of management's commitment, stance, and details on initiatives.

D-Book 2 showcases initiatives and case studies undertaken since fiscal 2015 and describes work-style reforms that will commence in earnest starting in fiscal 2018.



### Conducts Frontier Leader Workshops & Leadership Workshops

Sekisui Chemical conducted top-down explanations with the aim of promoting its Diversity Management Policy. To begin, we provided explanations of the meaning behind diversity management promotion through Frontier Leader Workshops targeting 200 senior managers (Frontier Leaders) in December 2015.

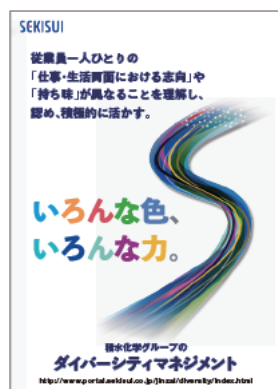
Subsequently, we held workshops to raise awareness of the meaning behind diversity management promotion for 1,800 department managers, who in turn conveyed this information to employees at each department.



## Diversity Management Poster Creation & Distribution

With the aim of fostering understanding and awareness of our diversity management initiatives, we created a slogan and logo that puts a face to our Sekisui Chemical Group's Diversity Management Policy.

After promotion managers and supervisors decided on a logo and slogan "Project to Develop a Workplace in which All Employees Can Excel," both of these were featured in a poster that was distributed to every workplace.



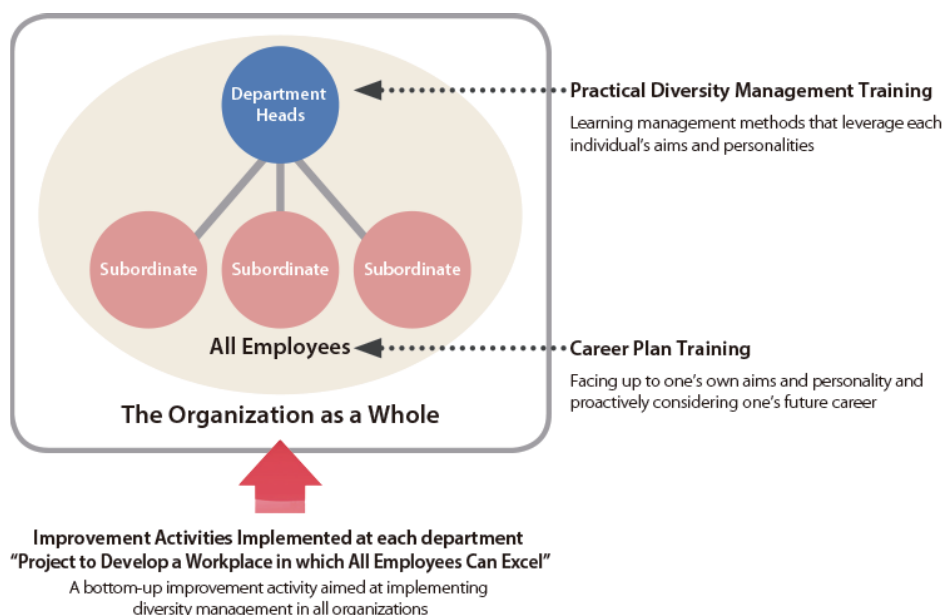
Slogan: Diverse Colors, Diverse Strengths

Featuring the capital letter S for Sekisui, the logo features intersecting lines with varying colors and widths to express the coordination of diversity as well as illustrates forward-looking activities that will enable all employees to shine.

### Implementation

## Initiatives to Build an Organizational Culture

Implementing Initiatives from Three Perspectives: Organization-wide, Department Managers, All Employees



## Project to Develop a Workplace in Which All Employees Can Excel

The Project to Develop a Workplace in which All Employees Can Excel began in December 2016 as improvement activities implemented at each department.

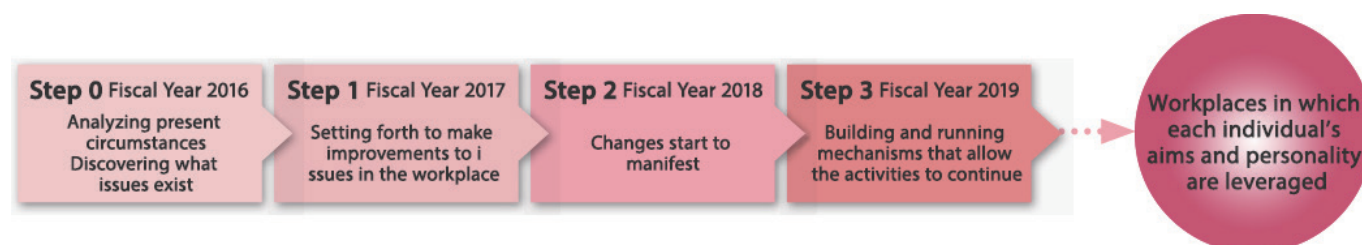
The purpose of the Project to Develop a Workplace in which All Employees Can Excel is to create ideal workplaces where diversity management is realized. Targeting 159 domestic Group organizations, the project involves assigning a promotion manager and supervisor at each department, recognizing that each department has different issues. Improvement activities are carried out spearheaded by these promotion managers and supervisors.

Kicking off project activities in fiscal 2016, we created ideal images for each department along with formulating proposals to analyze the status quo, identify issues, and set improvement plans.

From fiscal 2017, the project got underway by implementing measures to help solve issues at each department, while efforts were made to identify issues at 152 organizations within the Group.

We aim to realize these improvements by fiscal 2019.

### ● How Project to Develop a Workplace in Which All Employees Can Excel Works



## Educational Programs on Diversity Management Implementation

In working toward the realization of diversity management, since it is important for department managers, who play a key role, to understand, recognize and utilize the fact that attitudes to work and life and distinctive characteristics differ from one team member to another, we are implementing educational programs on diversity management that are geared toward the managers of all groups and sections from domestic Group companies. At these educational programs, participants are learning the way that business leaders ought to act as well as communications and management styles that discover new possibilities and which they are putting into practice every day at their actual workplaces.





## Career Plan Training by Age

All employees are called to take it upon themselves to proactively display their distinctive characteristics, learn, and grow in order to realize diversity management.

To this end, faced with their own attitudes toward work and life and distinctive characteristics, the Company is conducting career plan training by age (young employees and employees aged in their 30s, 40s, and 50s) to give employees an opportunity to consider their future careers for themselves. From fiscal 2016, career plan training is being extended to cover all domestic Group employees. We are conducting training to draft career plans.

### Performance Data

## Educational Programs on Diversity Management Implementation

	FY2016	FY2017
Number of participants in programs	1,168	1,723

## Career Plan Training by Age

	FY2016	FY2017
Number of participants at career plan training	1,276	1,429

## Project to Develop a Workplace in Which All Employees Can Excel

	FY2017
Number of organizations engaged in activities	159 organizations

# Allowing Diverse Human Resources to Excel

## Allowing Diverse Human Resources to Excel (Depending on the Individual Career Orientation)

### Management Approach

#### Basic Concept

### Striving to Provide Opportunities for Personnel Training According to Individual Career Orientation

As an overall company activity, we strive to ensure that the Group can move forward on two pillars - training of business leaders, who will someday shoulder management, and efficient staff that will be able to maintain our manufacturing processes.

We also offer all kinds of support to people, who "voluntarily take on new challenges," providing systems and opportunities to help individual employees grow.

### Major Initiatives

## Developing Business Leaders

### 1) Developing Business Leaders from an Early Stage

We have developed a consistent training system covering all stages from new hires to management positions, in order to systematically train business leaders to power the Sekisui Chemical Group into the future.

Based on the concept that the foundations of growth are the experience gained through everyday business activities and learning from such experience, we have developed a training system that links these two elements together. Through this system we will enhance each individual's mastery of the skills required of business leaders, by running through the cycle of growth through experience, from when a new hire joins the Company through to management.

### 2) Developing Employees to Fill Senior Management Position Going Forward

With an eye toward management positions throughout the Group, Sekisui Chemical has established the Saijuku School. This internal training and development tool is designed to help enhance the scope and depth of future business leaders going forward.

Employees participating in the Saijuku School review a wide range of case studies while attending lectures. In addition to the skills required to put forward management strategies, the Saijuku School provides details of important business theories and philosophies. This in turn provides participants with the broad perspective necessary to engage in global business development and to further hone the abilities to think and act. Working to instill a broad mindset that encompasses the Group as a whole, employees are encouraged to take the initiative in their own development and to establish action plans geared toward reform.

### 3) Innovation School (Fostering of Business Leaders by Newly Appointed Operating Officers)

The Innovation School has been held since fiscal 2003 to "change the Company and change each individual's behavior" and with the aim of having operating officers themselves directly train the Sekisui Chemical Group's next-generation business leader candidates. Up to and including fiscal 2016, a total of 981 next-generation business leader candidates had taken part.

In fiscal 2017, with operating officers up to their second year in office acting as headmasters, we again trained young, highly motivated employees, irrespective of their Group company or business domain, as candidates to become next-generation business leaders across the whole Group.

In addition to talking directly with senior management and learning as potential business leaders while engaging in discussions at great length, the Innovation School offers an excellent opportunity for the candidates to broaden their horizons through interaction with parties from both inside and outside the Company.

#### ■ Training Human Resources to Support the Workplace

The human resources who will support the foundations of management in practical terms in the workplace must undergo self-growth as highly capable practitioners accumulating experience over the long term and acquiring highly specialized knowledge and skills. Based on this concept, the Sekisui Chemical Group hires human resources who will support the workplace as permanent, full-time employees, creates an environment in which they can demonstrate their abilities with peace of mind over the long term, and deploys the Meister System to strengthen their abilities in the workplace.

In the future as well, we will promote measures to strengthen training abilities in the workplace on a Group-wide basis.

#### ■ Follow-up Training for New, Mid-career Hires

With the aim of, for example, acquiring knowledge from outside the Company and enhancing its business potential, Sekisui Chemical is increasingly active in mid-career appointments (the hiring of experienced personnel). Having joined the Company, there are few examples of a lack of understanding with regard to the workplace culture or in-house systems on the part of the mid-career hires themselves proving to be an obstacle to the process of having them display their skills at an early stage. Providing new, mid-career employees (those hired based on their previous experience) with the opportunity to learn the basic knowledge (including the Company's unique history, culture, policies and systems), the Sekisui Chemical Group draws on the high levels of competence and specialized skills they have accumulated up until their previous positions and implements follow-up training for new, mid-career hires as an environment improvement so they demonstrate those attributes and participate actively at an early stage.

#### ■ Group Internal Job Posting

The Sekisui Chemical Group supports its employees' willingness to take on challenges and their career plans by providing opportunities to thrive within the Group through posting job openings internally.

Through Group internal job postings, any qualified employee can apply for jobs posted to the intranet, without the approval of their superiors.

## Support System for Diverse Career Paths

The Company has in place a system that enables partner employees who—after having reviewed their careers and written self-assessments—are involved in the career planning-based course conversion system or are working in pre-specified workplaces or areas of business operations, can choose to switch to becoming permanent, full-time employees.

### Performance Data

## Results from Main Recruitment-type Training Programs

Name of Training Program	Numbers of attendees in FY2015	Numbers of attendees in FY2016	Numbers of attendees in FY2017
The Saijuku School	34	33	37
Innovation School	70	72	58

## Follow-up Training for New, Mid-career Employees

	FY2016	FY2017
Number of training participants	45	87

## Results of Intra-Group Job Postings

	FY2016	FY2017	Cumulative total since FY2000
Number of recruitment cases	44	46	431
Number of employees recruited	149	130	1,078
Number of applicants	83	98	1,733
Number of employees transferred	12	18	343

## Career Path Support System

(Number of people)

		FY2017
Course conversion system	Men	14
	Women	2
Permanent, full-time employee conversion system	Men	5
	Women	11

## Allowing Diverse Human Resources to Excel (Gender)

### Management Approach

#### Organization-wide Initiatives

### As a First Step in Diversity Management

As a first step, we began initiatives designed to promote the success of those with whom we have the closest working relationships, women. For women to truly thrive, they are divided into two stages of consolidation / success and the nurturing of management candidates. Under the CSR Medium-term Plan launched in fiscal 2017, we are aiming to become “an organization where women can truly thrive” and set specific numerical targets for women’s hiring ratios and the number of women in management positions. These targets are regarded as one of the goals for directors, officers and executives.

### ■ CSR Medium-term Plan (Fiscal 2017 to Fiscal 2019) Targets

Ratio of women to total hires: 35%

Number of women in management positions: 200 (Sekisui Chemical non-consolidated: 50; Consolidated Group companies in Japan: 150), Ratio of women in management positions: 4.4%

Ratio of permanent, full-time female employees: 15% (Sekisui Chemical non-consolidated)

## Recognition of Sexual Minorities, Including LGBT

In its human resources and human rights policy, the Sekisui Chemical Group states that all forms of discrimination are prohibited. Under its diversity management policy, the orientation to work and life of each and every employee involves understanding and recognizing differences. To make proactive use of those differences, we thus promote activities based on concepts of inclusion with regard to sexual minorities such as the LGBT community.

## Major Initiatives

### Retention and Empowerment of Young Female Employees

#### New Female Hire Assignment Support Seminars

Geared toward those who manage new female recruits, a New Female Hire Assignment Support Seminar is conducted before and after the new female hires have been assigned. The seminars are devised to get new hires established and thriving at an early stage by increasing awareness from the point of view of those attending the seminars.

### Retention and Empowerment of Young Female Employees

#### Female Subordinate Management Seminar

Geared toward those in management positions overseeing female staff members who are up to their fourth year since joining the Company, this training program provides day-to-day guidance and opportunities to learn the attributes of training methods.

### Fostering Women's Candidacy for Management Positions

#### Career Development Program for Women

Targeting women employees who hope to be appointed to management positions and their direct supervisors, the Company is conducting a Career Development Program for Women. This educational program has been put in place with the aim of fostering awareness and gaining the achievements appropriate for management positions. We have been deploying this program as essential training across the entire Group since fiscal 2016.

### External Evaluations

#### Recognition as a Nadeshiko Brand

Having evaluated the Company's efforts to implement diversity management initiatives (including women's empowerment) since fiscal 2015, the Ministry of Economy, Trade and Industry (METI) as well as Tokyo Stock Exchange, Inc. (TSE) recognized the Company as a Nadeshiko brand in fiscal 2017. Following on from fiscal 2016, this was the second consecutive fiscal year the Company has achieved recognition in this way.

Note: The Nadeshiko Brand is a project that has been undertaken jointly by METI and the TSE since fiscal 2012.

Aimed at introducing certain TSE-listed enterprises that are outstanding in terms of encouraging the empowerment of women in the workplace as attractive stocks to investors who put emphasis on improving corporate value in the mid- and long-term, the project is thus promoting investment in such enterprises and accelerating efforts encouraging women's success in the workplace.



## Balanced Support for Child Rearing and Nursing Care

### Supporting Flexible Workstyles in Tune with Life Events

The Sekisui Chemical Group introduces a variety of systems designed to enable employees to work flexibly in tune with life events and lifestyles.

In addition to system upgrades that go beyond those stipulated under law, the childcare support system is covered in a guidebook, which summarizes the necessary information to support a flexible workstyle from pregnancy to childcare leave, and working mother know-how is posted on the Company intranet. To encourage male employees to participate in childcare, the first five working days of childcare leave are paid, and we are advancing system acquisition for male employees whose children have just been born and their superiors.

#### Performance data

### Number of Women in Management Positions and Percentage of Women Hires

#### Number of Women Directors and Managers

	FY2017
Number of women directors	2 (Sekisui Chemical Group)
Number of women in management positions	138 (Sekisui Chemical Group in Japan)

#### Percentage of Women Hires

	Entered in FY2015	Entered in FY2016	Entered in FY2017
Percentage of women hires (%)	27	31	30

### New Female Hire Assignment Support Seminar

	FY2016	FY2017
Number of seminar attendees	114	105

### Female Subordinate Management Seminar

	FY2016	FY2017
Number of training attendees	144	234



## Career Development Program for Women

		FY2016	FY2017
Number of program attendees	Women	90	58
	Superiors	77	44

## Main Systems Allowing Various Workstyles and Their Use

(Number of people)

Name of system	Main content		FY2015	FY2016	FY2017
Childcare leave	Can be taken until the end of the month in which the child reaches three years of age. (The statutory end date is until the child reaches 18 months of age.)	Women	18	22	30
		Men	12	14	20
		Total	30	36	50
Shortened working hours for childcare	Can be extended until the child starts fourth grade. (The statutory end date is until the child reaches three years of age.)	Women	30	30	34
		Men	0	0	0
		Total	30	30	34
Use of flexible working hours	Times of starting and finishing work may be moved earlier or later by up to 60 minutes until the child reaches junior high school age.	Women	3	6	8
		Men	0	1	6
		Total	3	7	14
Nursing care leave	Up to a total of 93 days for each individual eligible for care (Up to a maximum of one year for the first individual eligible for care)	Women	1	0	1
		Men	0	2	3
		Total	1	2	4
Shortened working hours for nursing care	Two days per week or 4.5 hours per day for a maximum of three years for each individual eligible for care	Women	0	0	0
		Men	0	1	2
		Total	0	1	2
Family leave	Three days of special care leave per year granted until the child or grandchild starts high school.	Women	40	43	48
		Men	73	77	101
		Total	113	120	149

Employees whose babies were newborns in FY2017	Women	14
	Men	101
	Total	115
Employees who took childcare leave in FY2017	Women	11
	Men	17
	Total	28
Ratio of those who took childcare leave in FY2017 (excludes those who are taking maternity leave) (%)	Women	100
	Men	16.8
Employees who returned to work after childcare leave in FY2017	Women	12
	Men	19
	Total	31
Ratio of those who returned to work after childcare leave in FY2017 (%)	Women	100
	Men	100
Retention rate after one year of those who returned to work after having taken childcare leave in FY2016 (%)	Women	100
	Men	100

## Allowing Diverse Human Resources to Excel (People with Disabilities)

### Management Approach

#### Efforts to Employ People with Disabilities

### Putting in Place an Invigorating and Comfortable Workplace Environment That Is Conducive to the Hiring and Retention of Employees

We believe it important not only to hire people with disabilities, but to create an environment where those with disabilities can easily work. Recognizing that the creation of such an environment leads to a comfortable workplace, we conducted brainstorming sessions for people with disabilities on a joint Group basis, focusing not only on just employment targets, but on the importance of improving the working environment. In fiscal 2017, we sponsored workplace improvement and operational review workshops, with a focus on creating an organization conducive to the active participation of those with disabilities.

## Major Initiatives

## External Evaluations

**Kofu Sekisui Sangyo "New Diversity Management Selection 100" Winner**

Group company Kofu Sekisui Sangyo Co., Ltd. employs 16 people with disabilities, including eight who are classed as having severe disabilities. These employees are assigned to departments where they can make the most of their special qualities.

The company has also prepared operating manuals filled with instructional photos, set up displays and labels that are both easy to see and follow, and put in place a framework in which all employees can carry out their duties without error. These initiatives not only encompass employees with disabilities, but also all general staff.

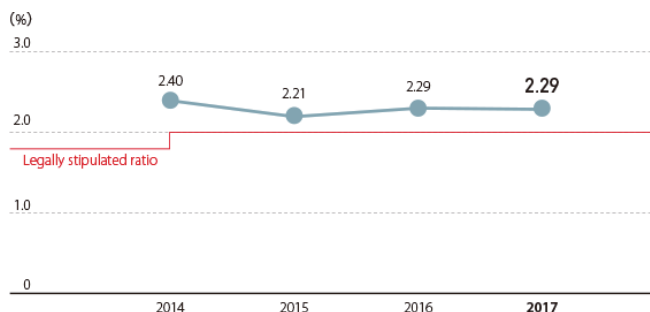
The efforts by Kofu Sekisui Sangyo have further helped to improve business activities through increased productivity and a reduction in claims. In fiscal 2016, in recognition of these measures, the Company received a "New Diversity Management Selection 100" award certificate from Japan's Minister of Economy, Trade and Industry.



So that they are easily understood, effective use is made of color photos and diagrams on work instruction manuals and equipment displays, devices that make it difficult for mistakes to be made.

## Performance Data

### Employment Ratio of People with Disabilities (Sekisui Chemical) \*Including Special Provision Subsidiary (as of March 2018)



Indicator	Calculation method
Employment ratio of people with disabilities	$(\text{Number of regular workers who have physical or mental disabilities} \div \text{Number of regular workers}) \times 100$

### Brainstorming Sessions on Employment of People with Disabilities

Number of Participating Companies	46 companies
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### Allowing Diverse Human Resources to Excel (Age)

## Management Approach

#### Retaining and Utilizing Young Employees

#### Training Manager (Brother/Sister) Program

Sekisui Chemical has established a training manager (brother/sister) program aimed at enabling new employees to smoothly adapt to their assigned workplaces and quickly hit the ground running.

The role of training managers goes beyond job-related instruction to play a role in providing guidance on how adult members of society should conduct themselves while following up on new employees' state of mind. The program also encourages training managers to leverage their experience guiding junior employees to gain a new perspective and thereby grow themselves.

## Promote the Active Participation of Seniors

### Enhance Initiatives Aimed at Enabling Active Roles for Employees Aged 65

In fiscal 1993, Sekisui Chemical introduced a reemployment system for employees who had reached mandatory retirement age. Since fiscal 2006 this program has been expanded to Group companies as well. A new program of training for employees aged 57 was introduced as an opportunity to think about their careers after retirement. This was the start of a new effort to enable motivated employees to remain in active employment through age 65. In October 2015, Sekisui Chemical revised its Senior Expert System, a system for reemploying elderly retirees in order to foster greater employee motivation.

We have finished putting in place systems for employees to continue working through to the age of 65 at all Group companies, ensuring that 100% of the employees that elect to do so can remain employed or be reemployed.

#### Major Initiatives

### Career Plan Training by Age (Sekisui Chemical Group)

All employees are called to take it upon themselves to proactively display their distinctive characteristics, learn, and grow in order to realize diversity management.

To this end, faced with their orientation to work and life and distinctive characteristics, the Company is conducting career plan training by age (young employees and employees aged in their 30s, 40s, and 50s) to give employees an opportunity to consider their future careers for themselves.

From fiscal 2016, career plan training is being extended to cover all domestic Group employees. We are conducting training to draft career plans.

#### ●Career Plan Training for Young Employees: Key Phrase “Self-leadership”

This program marks the starting line for employees' careers. Career plan training teaches young employees ways to become the people they aspire to be by gradually cultivating values important to oneself and the ability to make independent career-oriented decisions. Employees will start to ask themselves what needs to be done while harmonizing their aspirations with the tasks (expectations) at hand.

#### ●Career Plan Training for Employees in Their 30s: Key Phrase Self-establishment

In general, career possibilities significantly open up for employees in their 30s. Looking back at one's work experience to date while facing one's orientation to work and life and distinctive characteristics help to clarify those factors upon which one's career hinges on. These employees create and take a step toward the future vision of their careers and lives while searching for approaches to work that suit them best.

## ●Career Plan Training for Employees in Their 40s: Key Phrase Market Value

Employees in their 40s are reaching the second half of their careers underpinned by the experience they have accumulated to date. This program enables employees in this age group to further hone their careers by reexamining their careers and lives while verifying and evaluating the level of professionalism they possess in specialized areas. Through this program, employees should be able to create a more detailed life plan going forward while taking into consideration changing social conditions.

## ●Career Plan Training for Employees in Their 50s: Key Phrase Continuing to Work Even After Retirement

Playing a central role in the organization, employees in their 50s are starting to hit their stride. Through this program, such employees consider how to best plan their lives and careers not only with the Company but after retirement. Employees reaffirm what they need to pass along to younger employees as a means of assessing their own values and direction along with putting into perspective their career to date.

### Performance Data

### | Number of Elderly Employees Reemployed and Reemployment Rate (Sekisui Chemical)

	FY2015	FY2016	FY2017
Number of elderly employees reemployed	104	65	21
Reemployment rate(%)	82.5	83.3	63.6

Note: The reemployment rate for applicants is 100%.

Indicator	Calculation method
Reemployment of elderly employees	$(\text{Number of reemployed elderly employees} \div \text{number who have reached mandatory retirement age}) \times 100$ <p>(Number who have reached mandatory retirement age includes those who do not wish to be reemployed)</p>

### | Career Plan Training by Age

	Young employees	In their 30s	40s	50s	57	Total number of participants
Number of participants in FY2017	107	311	360	535	116	1,429

## Allowing Diverse Human Resources to Excel (Global)

### Management Approach

#### Basic Concept

### Fostering Personnel Based on Conditions in Each Area

In the Medium-term Management Plan (SHIFT 2019-Fusion-), HR (Human Resources) is listed as one of the basic strategies to achieve a “new phase of growth.” Amid accelerating global business development, it is essential to make active use of diverse human resources supporting each business and to revitalize the organization in order for each company of the Sekisui Chemical Group to maintain autonomous growth. To adapt to the different business characteristics, history, management styles, lifestyle habits, as well as the various laws and regulations of each country and region, the Sekisui Chemical Group is focusing on training human resources capable of demonstrating their abilities in their respective countries and regions.



### Major Initiatives

#### Developing Personnel Who Can Succeed on the Global Stage

### Fostering Personnel with International Experience to Ensure Sustainable Growth

As our business categories expand, the proportion of foreign sales and overseas personnel are increasing year by year. We believe that to develop as a Group, we need each and every employee of the Group working in various countries across the globe to develop themselves through their work, to learn to create and provide products and services matching the needs of each country.

This way of thinking lies at the base of our efforts to develop training programs for our human resources, programs that are firmly rooted in each area we operate in, enabling every employee to maximize his or her distinctive capabilities at their place of work. In 2017, following the U.S. and Europe, we established regional headquarters in China and several regions of the ASEAN, giving them substantial freedom to decide personnel-related matters. In addition to engagement surveys, training programs, and other initiatives organized on the Group-wide basis irrespective of regional differences, we also develop a wide range of personnel policies based on the specifics of each area including training programs, personnel systems, personnel recruitment systems or recruitment activities.



## Integration and Training of Personnel Across Regional Boundaries

In fiscal 2017, to reinforce the ties of cooperation across regions regarding tasks of human resource development, we held the first Global HR Conference of managers in charge of personnel affairs of various countries including 28 overseas subsidiaries of the Group. The conference was a great success as participants put to good use the opportunity to engage in active discussions overcoming the language barriers and the differences of country of origin and addressed a wide range of issues such as how to help diverse human resources to excel, how to strengthen management base, and how to solve the problems shared by Group companies across the world. In addition to construction of a global HR network, the ideas of the participants are already being reflected in a number of personnel policies that shall pave the way for further growth, including those supporting better understanding of management philosophies of the Group in overseas subsidiaries, increasing educational opportunities across regions, and working on creation of a new infrastructure system.

## Hiring Foreign Nationals

The Sekisui Chemical Group is actively hiring foreign nationals in accordance with the globalization of the Group's businesses. In addition to hiring students who have been studying in Japan, the Company launched overseas recruitment activities in fiscal 2015. In particular, the Company focuses on engineers in India and office-based positions in Ireland and the UK. We intend to accelerate globalization by expanding the area in which we recruit new employees, acquiring the best candidates from around the world, and working with a global perspective.

### Global Talent Employee System

## Developing Personnel to Be Immediately Effective Overseas

The Group has established a Global Talent Employee System dedicated to nurturing of global human resources that can succeed on the global stage, and about 1,700 employees of the Group working in Japan have registered with it. The participants are provided with cultural training programs and professional education necessary for working overseas, and we are currently promoting measures to create opportunities for them to actually go to other countries and gain work experience there.

### Global Trainee Program

## Providing Opportunities to Succeed Overseas

The Group offers a Global Trainee Program supporting employees wishing to gain work experience overseas. Employees working in sales, accounting, product development, and some other areas with a certain achievement level are eligible to participate in the program allowing them to apply for posts at the overseas companies affiliated with the Group. In fiscal year 2017, we organized our Overseas Engineers Dispatch Program aiming at training engineers with globally competitive high-level expertise as well as Short-term Overseas Dispatch Training Program that teaches the participants to cultivate their own abilities and behavioral patterns that are required to succeed in global business. The Group shall continue expanding the programs allowing more and more employees working in various countries to gain experience in business overseas.

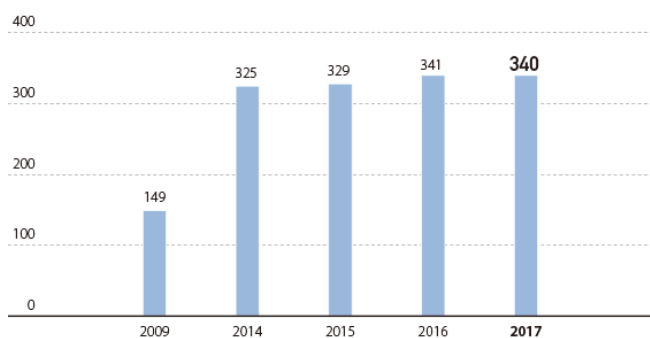
## Performance Data

### Breakdown of Number of Employees (Sekisui Chemical Group)

(Number of people)

Number of employees		26,080
Breakdown by Region		
	Japan	18,935
	North America, South & Central America	1,482
	Europe	961
	Asia/Pacific (including China)	4,702

### Number of Japanese Global Talent Employees



Indicator	Calculation method
Global talent employees	Japanese employees with overseas assignment experience

### Number of Participants in the Global Trainee Program

	FY2017
Number of participants	10

# Basis for Fostering Personnel

## Management Approach

### Basic Concept

### Improving Group-wide Human Resources Capabilities


As it strives to empower Group human resources to achieve sustainable growth, the Sekisui Chemical Group is advancing a variety of efforts to secure and train human resources.

### Medium-term Plan


### Specific Targets Set, Various Measures Being Enacted

Under the CSR Medium-term Plan (fiscal 2017 to fiscal2019), through even further advancements for diversity and the promotion of initiatives for work style innovation, we are endeavoring to build an organizational culture in which all employees can work dynamically.

### Human Resources

Key Measures		Medium-term Targets	FY2017 Targets	FY2017 Results 
Promote diversity	1) Empower women	① Raise the ratio of women to total hires to 35% ② Raise the number of women in management positions to 200	① Maintain the ratio of women to total hires at 30–39% ② Raise the number of women in management positions to 145	① Maintained the ratio of women to total hires at 30% ② The number of women in management positions: 138
	2) Develop global talent employees	Raise the number of participants in the Global Trainee Program to 20	Raise the number of participants in the Global Trainee Program to 10	The number of participants in the Global Trainee Program: 10

## Pledge to Society

Key Measures		Medium-term Targets	FY2017 Targets	FY2017 Results 
Working Environment	1. Manage and control prolonged working hours (in excess of 2,000 hours annually)	Reduce the number of Group companies where employees work more than 2,000 hours on an annual basis by 30% (vs. FY2016)*	Reduce the number of Group companies where employees work more than 2,000 hours on an annual basis by 20% (vs. FY2016)	Reduced the number of Group companies where employees work more than 2,000 hours on an annual basis by 2% (vs. FY2016)
	2. Promote health management	Raise the number of Group companies certified as an Excellent Enterprise of Health and Productivity Management . White 500 by Japan's Ministry of Economy, Trade and Industry to 21	Raise the number of Group companies certified as an Excellent Enterprise of Health and Productivity Management . White 500 by Japan's Ministry of Economy, Trade and Industry to four	Raised the number of Group companies certified as an Excellent Enterprise of Health and Productivity Management . White 500 by Japan's Ministry of Economy, Trade and Industry to five

\* The medium-term target was revised, because it required more time than anticipated to formulate a policy and publicize the activities.

## Major Initiatives

### Training Systems to Support Our Businesses

#### Promoting the Growth of Each Employee

The Sekisui Chemical Group is operating a training system with various programs tailor-made to match various career plans with stages differentiated by level and skill. As our business categories are extensive and we employ a divisional company system whereby each department is given substantial authority to make its own decisions, the Group operates its system of development of human resources at the level of each company and subsidiary of the Group, based on the philosophy and programs that serve as the fundament.

At the same time, some programs such as initial training of new employees, level-specific training by qualification grade, career planning training, or business leaders' training are developed across the Group to promote improvements in power of human resources in the Group as a whole.

### Consolidation of Labor Conditions

#### Measures to Improve Compensation and Labor Conditions

With the aim of securing and developing personnel throughout the Sekisui Chemical Group that goes beyond company and individual Group company frameworks, we will continually work to upgrade various systems and improve labor conditions based on the results of our analysis of labor conditions at domestic Group companies. We also conduct investigations of not only compensation levels but also the working hours, use of paid leave, and flexible work styles - aspects that are linked to reform of the very way we work - with the intent of optimizing conditions across the entire Group.

## Labor-management Relations

### Labor-management Cooperation and Communication

The Sekisui Chemical Group strives to understand and respects the positions of labor unions. We believe that through close communications between labor and management we can resolve our common problems based on a shared objective of advancing the Company.

In Japan, in fiscal 2017, there were 16 independent labor unions with 4,886 employees in the All-Sekisui Chemical Labor Union Federation, while Sekisui Chemical Labor Union, which is the core organization in the Federation, had 2,380 members (as the Group employs a union shop system, rate of membership is 100% (of employees eligible to become union members))

## Benefits

### Providing Adequate Benefits Regardless of Gender, and Welfare Benefits to Non-full-time Employees, Including Health Insurance and Childcare Leave

At Sekisui Chemical, base salaries are the same for each gender, and proper benefits are provided regardless of gender.

Sekisui Chemical also has systems in place that provide welfare benefits to contracted employees, such as contract employees, including healthcare (i.e., health checkups), compensation for disabilities and illnesses that arise at work, and childcare leave. Only indefinite-term employees are eligible to join the Company's life insurance, defined-benefit retirement plans, and shareholding programs.

### Periodic Evaluation of Individual Performance and Career Development

At Sekisui Chemical, we are working to build a system for human resources that enables people to thrive, regardless of age or attributes. Our source of growth is found in those tasks we perform on an everyday basis. Indicating the specific actions an employee needs to take and the abilities needed to execute tasks in order to achieve a sustained level of consistently optimal results, there is the Sekisui Self-Accountability & Competency Sheet (SSAC Sheet).

The Sekisui Chemical Group bases all of its business activities on its corporate philosophy called the "3S Principles" aiming to achieve satisfaction of its stakeholders. Based on these 3S Principles, the SSAC Sheet lists the roles and responsibilities of our employees in execution of their business duties as well as concrete behavior required by the Group from employees in each course, at each qualification level.

Under the Group's evaluation system, employees are assessed not only by their business results but also by the process that led them to the results and the personal growth they achieved through accomplishment of the tasks (increase of task-execution abilities). The SSAC Sheet serves as a standard for this evaluation.

Superiors and subordinates are provided with regular opportunities to discuss the individual goal setting and assessment. All permanent, full-time employees irrespective of their job description or level are target to this initiative.

## Employee Awareness Surveys (Engagement)

To constantly monitor whether work is fulfilling for the employees, to find aspects that can be improved, and devise required measures at each organization, the Sekisui Chemical Group regularly conducts employee opinion polls (engagement surveys) of all the workers of the Group.

The term "engagement" refers to the feeling of individual workers that they are the key players, to the pride and enthusiasm they feel regarding their work, the determination to do one's best and not give up until the results surpass everyone's expectations  $\div$  willingness to contribute to the organization, sense of fulfillment.

With the employee opinion poll conducted in 2016, we analyzed the state of engagement and factors that improve it. As a result of the analysis, we came to the conclusion that the most effective way to improve employees' engagement is to work with two factors, namely, diversity (understanding, recognizing and utilizing the fact that distinctive characteristics differ from one employee to another) and productive work environment (support of productivity growth in business processes)

### Performance Data

## Average Hours per FTE of Training and Development in FY2017 (Sekisui Chemical)

	FY2017
Average hours per FTE of training and development	9.87 hours

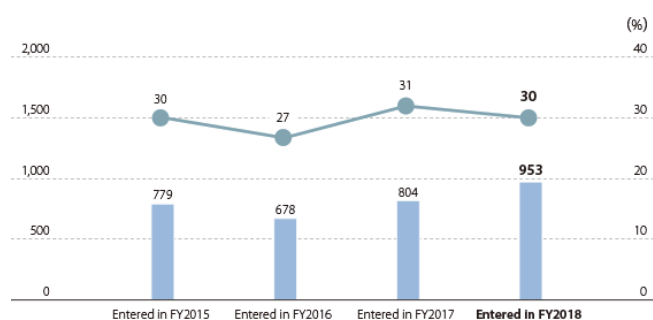
Note: Educational programs held at Sekisui Chemical's Human Resources Department at Headquarters

## Training Programs Common to Entire Company to Improve Group-wide Human Resources Capabilities

(Number of people)

New employee induction training	944
Employee rank-based training system	267
Training for newly appointed managers	972

## Number of New-graduate Hires / Percentage of Women Among New-Graduate Hires (the Sekisui Chemical Group in Japan)



## Employee Turnover Rate in First Three Years of Employment (Sekisui Chemical)

	Entered in FY2013	Entered in FY2014	Entered in FY2015
Employee turnover rate in first three years of employment (%)	10.7	7.4	8.0

Indicator	Calculation method
Employee turnover rate in first three years of employment (%)	Employee turnover rate in first three years of employment for each fiscal year



## Data on Employees

### Performance Data

#### All Consolidated Subsidiaries in Japan

		FY2014	FY2015	FY2016
Employees	Men (number of people)	15,556	15,472	15,601
	Women (number of people)	4,252	4,288	4,379
	Ratio of women (%)	21.5	21.7	21.9
New graduates hired	Men (number of people)	462	453	395
	Women (number of people)	136	176	145
	Ratio of women (%)	22.7	28.0	26.9
Managerial positions (section chiefs)	Men (number of people)	2,794	2,763	2,831
	Women (number of people)	66	84	89
	Ratio of women (%)	2.3	3.0	3.0
Managerial positions (department managers and above)	Men (number of people)	1,531	1,512	1,508
	Women (number of people)	13	18	22
	Ratio of women (%)	0.8	1.2	1.4
Managerial positions	Men (number of people)	4,325	4,275	4,339
	Women (number of people)	79	102	111
	Ratio of women (%)	1.8	2.3	2.5
Management personnel (frontier leaders)	Men (number of people)	201	203	165
	Women (number of people)	2	1	3
	Ratio of women (%)	1.0	0.5	1.8
Employees newly appointed to managerial positions	Men (number of people)	213	160	181
	Women (number of people)	8	15	7
	Ratio of women (%)	3.6	8.6	3.7

Note: Data for fiscal year 2017 is calculated based on current statistics as of July 2018.

## Sekisui Chemical

		FY2015	FY2016	FY2017
Employees * <sup>1</sup>	Men (number of people)	3,233	3,239	3,290
	Women (number of people)	445	490	533
	Ratio of women (%)	12.1	13.1	13.9
Permanent, full-time employees * <sup>2</sup>	Men (number of people)	2,991	2,955	3,005
	Women (number of people)	403	441	483
	Ratio of women (%)	11.9	13.0	13.8
Average years of continuous employment * <sup>2</sup>	Men (number of people)	19.9	18.1	17.7
	Women (number of people)	15.4	14.3	13.7
New graduates hired * <sup>3</sup>	Men (number of people)	74	77	90
	Women (number of people)	39	35	39
	Ratio of women (%)	34.5	31.3	30.2
Employees hired mid-career * <sup>3</sup>	Men (number of people)	40	39	70
	Women (number of people)	3	5	6
	Ratio of women (%)	7.0	11.4	7.9
Managerial positions (section chiefs)	Men (number of people)	697	696	689
	Women (number of people)	21	24	27
	Ratio of women (%)	2.9	3.3	3.8
Managerial positions (department managers and above)	Men (number of people)	602	597	612
	Women (number of people)	11	11	14
	Ratio of women (%)	1.8	1.8	2.2
Managerial positions	Men (number of people)	1,299	1,293	1,301
	Women (number of people)	32	35	41
	Ratio of women (%)	2.4	2.6	3.1
Employees newly appointed to managerial positions	Men (number of people)	46	46	53
	Women (number of people)	5	1	6
	Ratio of women (%)	9.8	2.1	10.2

\*1 Workers with direct employment relationships with the Group (including permanent, full-time employees and non-regular employees as well as workers on loan from the Group to other companies but excluding workers on loan from other companies to the Group)

\*2 Employees with no determined period of employment (including workers on loan from the Group to other companies but excluding workers on loan from other companies to the Group)

\*3 Number of employees, who joined the Group from April to March of the following year

### Age Composition of Permanent, Full-time Employees\* in Fiscal Year 2017 (Sekisui Chemical)

		Less than 30 years old	30 to 39 years old	40 to 49 years old	50 to 59 years old	60 and above
Number of permanent, full-time employees* by age	Men	400	516	1,162	910	17
	Women	144	93	140	103	3

\* Employees with no determined period of employment (including workers on loan from the Group to other companies but excluding workers on loan from other companies to the Group)

### Number of People, who Left Employment in Fiscal Year 2017\*<sup>1</sup> (Sekisui Chemical)

	Men	Women
Number of people, who left employment* <sup>2</sup>	32	12

\*<sup>1</sup> Excluding those, who retired after reaching the mandatory retirement age and those, who moved to another company of the Group

\*<sup>2</sup> Employees with no determined period of employment (including workers on loan from the Group to other companies but excluding workers on loan from other companies to the Group)

# Pledge to Society

**The Sekisui Chemical Group Is Engaged in Initiatives Relating to Safety, Compliance and Respect for Human Rights, and the Working Environment**

## Management Approach

### Basic Concept

### **The Sekisui Chemical Group Will Fulfill Its “Pledge to Society” as Part of Its Responsibilities as a Company While Engaged in its Business Processes**

The Sekisui Chemical Group believes that it has responsibilities that it must fulfill on behalf of society as it engages in business as a company. The Sekisui Chemical Group considers these responsibilities to be its “Pledge to Society” and is engaged as part of business processes in initiatives relating to safety, compliance and respect for human rights, and the working environment.

In terms of safety, the Sekisui Chemical Group is engaged in creating safe workplaces that offer peace-of-mind to employees and local communities. In terms of compliance and respect for human rights, the group is involved in initiatives aimed at implementing compliance management and avoiding involvement in violations of human rights to promote fair, good-faith corporate behavior. In terms of the working environment, the group strives to create workplaces and systems that are healthy and give employees a sense of purpose through their work.

# Working Environments

## Management Approach

### I Inaugural Year of Work Style Reform

In order to accelerate the pace of diversity management, the Sekisui Chemical Group has positioned 2018 as its inaugural year of promoting work style reform. After first putting in place a "Statement of Work Style Reform," the Group has initiated three reform activities. In addition to correcting long working hours by improving productivity, energies are being directed toward the creation of an invigorating and rewarding workplace.

### I Sekisui Chemical Group's Statement of Work Style Reform

To empower every employee to demonstrate their personal strengths, we will transform our current work style, which requires long hours to achieve results, into a productive work style that maximizes results in a limited time. To improve productivity, the Company will introduce various management resources and enable Group-wide employees and managers to unite their knowledge and experiences. By increasing job satisfaction through the improvement of quality of work and returning the results of reform to employees, we allow diverse human resources to excel.

### I Three Reforms

Improving productivity is essential to maximizing results in a limited time. With this in mind, the Sekisui Chemical Group will push forward the three "Business," "HR system," and "Work environment" reforms. Both management and employees will take up the challenge of promoting reform in line with the specific issues of each business.

#### <Three Reforms>

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Work reforms: Identify the environment to be changed regardless of existing customs, and reform the work structure

HR system reforms: Reform the HR system to improve the growth and performance of each and every employee, and expand employment support

Work environment reforms: Reform the work environment by investing so that diverse employees can work in the optimal environment

### I Work Style Reform Achievement Targets

As work style reform is launched, we have set targets through to fiscal 2020, in which we take up the challenge of building a workplace culture that (1) Realizes total hours worked per year to be less than 2,000 hours (2) Allow employees to take at least 120 days off (3) Maintains a paid leave take-up rate of at least 50%.

## Investment in Work Style Reform

Substantial capital investment and the introduction of systems are essential to continuously realizing the effects of business and work environment reforms. With this in mind, the Sekisui Chemical Group will invest 10 billion yen over the next two years in an effort to reduce working hours Group-wide.

### Regulation of Long Working Hours

#### Work Hour Shortening Committee

To create working environments that let each and every employee work to their fullest, the Sekisui Chemical Group engages in ongoing labor-management discussions about ways to shorten work hours, to encourage employees to utilize paid days off, and to introduce flexible work styles.

As part of the work style reform activities undertaken by Sekisui Chemical in fiscal year 2017, labor and management engaged in a series of discussions with the aim of determining how different workplaces can introduce reforms that are in tune with each working environment. Based on deliberations by the Work Hour Shortening Committee, Sekisui Chemical introduced a telecommuting system in July 2017. To date, 20 employees have participated in this system. With a view to expanding use of this system, steps are being taken to foster an appropriate workplace culture. This has resulted in initiatives, such as creating an environment that will permit raising awareness within labor unions and actively promoting use of the system.

### Notifications of Major HR-Related Changes

#### Major Changes with Significant Effects on Employees Are Implemented After Labor-Management Meetings

Based on the proposals submitted to the labor union and feedback received from each of the union branches, Sekisui Chemical has decided to move forward with HR system revisions and large-scale organizational reforms which will entail major changes and have significant effects on employees.

The labor agreement specifies that when employees belonging to the labor union are to be seconded or transferred, the labor union is notified at least one month prior to the change and the applicable employee's willingness to accept their new position is confirmed prior to assignment.

### Provision of a health improvement system

#### We Are Working to Promote Health Management to Improve Our Employees' Health.

The Sekisui Chemical Group strives to improve its employees' physical and mental health based on the idea that employees are valuable resources entrusted to the group by society. The group also aims to incorporate concepts from health management to bolster organizational capabilities, improve the work environment, and increase productivity.

## Initiative 1. Organizational Structure

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In 2015, in cooperation with the health insurance association, the Group put people responsible for, and others in charge of, health management at 222 business sites, covering the entire Group. In addition, industrial physicians and industrial nursing professionals have been assigned to head offices and major factories.

Further, in 2017, the Health Promotion Office was established in Sekisui Chemical headquarters to promote better health within the entire Group. In 2017, to assist the people responsible for, and those in charge of carrying out, health management to improve workers' health at business sites, explanatory sessions on the Group's health management policies were held in 21 venues throughout Japan. These sessions were attended by 189 individuals from 151 companies, including affiliates.

## Initiative 2. Compliance with Laws and Regulations

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To comply with health and safety-related laws and regulations, we conduct surveys of the health and safety management status at all business sites on an annual basis. By monitoring the implementation and improvement rates found in these surveys, we have contributed to reliable compliance.

## Initiative 3. Identification and Resolution of Health Issues

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Physical: We have published "Guidelines for Determining Work-Fitness for High Risk Employees" to help implement adequate health management for those who are found to be at high risk of health issues based on analyses of health checkup data. In cooperation with the health insurance association, we are also preventing conditions from becoming more severe for those employees who are at risk of lifestyle-related diseases.

Mental: We have produced good results from conducting stress management training sessions by telephone, with emphases on newly appointed managerial staff, overseas assignees, and mid-career hires, who undergo considerable changes in the environments in which they find themselves and are expected to actively engage in their new roles within short periods.

## Initiative 4. Initiatives Geared Toward Work Style Reform

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Since 2016, stress checks have been performed for all Sekisui Chemical Group employees every June. The purpose of these stress checks is to help employees understand their individual stress levels and prevent mental distress, as well as to create workplaces that facilitate work through the improvement of work environments by aggregating and analyzing individual stress values in each department (organizational checkups). Because of efforts to share the purpose and importance placed on these stress tests and to recommend that employees undergo the tests, the rate of undergoing the tests went up by around 10% in fiscal year 2017.

## Initiative 5. Population Approaches (Initiatives Without Limits on the Intended Targets)

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We have made it so that those who wish to may receive counseling or attend group education, such as listening-focused academy programs, run by in-house industrial counselors and external clinical psychologists.



## Major Initiatives

### Stress Check

The Sekisui Chemical Group strives to maximally leverage the stress checks that are provided for in law. Therefore, the Group performs these stress checks on all its employees, including those working at business sites with fewer than 50 employees. In fiscal year 2017, the Group made it a requirement to attend workshops on interpreting results in order to learn how to properly interpret population analyses; 98% of all business sites throughout the group participated.

Furthermore, as part of making population analyses mandatory, the Health Promotion Office partnered with Division Company HR departments to provide assistance to two companies with high overall health risks to create a model for offering assistance with improving the working environment at high-risk workplaces. The office also provided assistance to two companies, creating model business sites for the creation of “vibrant workplaces.”

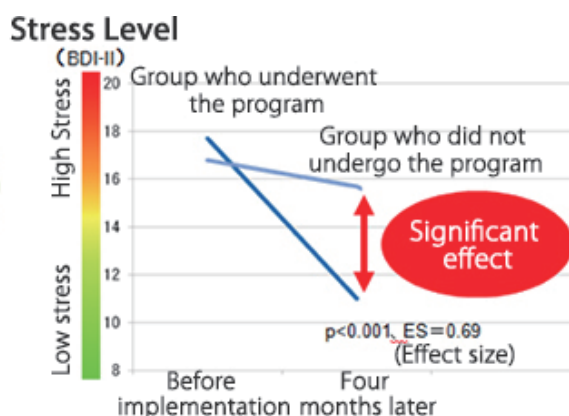


Workshop on Accurately Interpreting  
Population Analyses

## Stress Management Training

To allow employees to control their levels of stress on their own, the Group offers telephone-based stress management training ("Mindbics") for newly appointed managerial staff, overseas assignees, and mid-career hires, who undergo considerable changes in the environments in which they find themselves and are expected to actively engage in their new roles within short periods. This training is based on cognitive-behavioral therapy, whose high degree of effectiveness has been proven. The use of telephone-based training allows employees to enroll in the sessions from home and while away on business trips and otherwise reduces the burden on enrollees and facilitates their participation in the training sessions even when they are busy. Each year, around 400 employees participate in the sessions, which are considered required training at the Sekisui Chemical Group.

### Features of the Training Program



● Journal article published  
Furukawa et al., *PLoS ONE*, 7(4),4), e0035300(2012)

● Presentation at symposiums  
European Association for Behavioural and Cognitive Therapies, Japanese Association for Cognitive Therapy



Telephone-Based Stress-Management Training that Can Be Held Even in Far-Flung Locations

## External Evaluations

### Recognized as a 2018 Certified Health and Productivity Management Organization

Sekisui Chemical was recognized for its company-wide efforts to resolve issues relating to the health of its employees and was certified<sup>\*3</sup> as a Health and Productivity Management Organization by both the Ministry of Economy, Trade and Industry and the Nippon Kenko Kaigi<sup>\*2</sup>, which runs the Health and Productivity Management Organization Recognition Program<sup>\*1</sup>, for the second year in a row. Five Sekisui Chemical Group companies<sup>\*4</sup> actively engaged in health management also received this certification for their efforts.



\*1 The "Health and Productivity Management Organization Recognition Program" awards large companies, small- and medium-sized business, and other corporations that practice health management especially well through initiatives tailored to local health issues and initiatives for improving health promoted by the Nippon Kenko Kaigi.

\*2 The Nippon Kenko Kaigi is an operation organized to allow effective action to be taken based on comprehensive support from government for expanding the healthy lifespans and offering adequate medical treatment to all people in Japan, undertaken in partnership with private-sector organizations and in a country with a declining birth rate and a rapidly aging population.

\*3 Sekisui Chemical was recognized in the large enterprise category ("White 500").

\*4

Companies receiving certification	Name of company certified together with the Company described on the left <input checked="" type="checkbox"/>
Sekisui Chemical Co., Ltd.	Tokyo Sekisuiheim Co., Ltd.
	Tokyo Sekisui Famis Co., Ltd.
	Sekisui Medical Co., Ltd.
	Ritto Sekisui Industry Co., Ltd.
	Kyushu Sekisui Industry Co., Ltd.

From the list of corporations certified as 2018 Health and Productivity Management Organizations in the Large Enterprises ("White 500") category

## Performance Data

### | Amount of Overtime Work (Sekisui Chemical)

	FY2015	FY2016	FY2017
Monthly average per employee (hours)	17.5	19.2	19.9

### | Paid Vacation Day Utilization Rate (Sekisui Chemical)

	FY2015	FY2016	FY2017
Average per employee (%) (Excluding managers)	46.4	45.9	51.1

### | Average Number of Paid Vacation Days Taken

	FY2015	FY2016	FY2017
Average per employee (days) (Excluding managers)	8.8	8.7	9.6

### | Stress-Check Implementation Rate

	FY2016	FY2017
Implementation Rate (%)	72.0	81.9

Note: Scope: Companies that are members of the Sekisui Health Insurance Association (including some affiliates)

# Safety

## Targeting Zero Occupational Accidents Through Risk Reduction by All Personnel, from Top Management to the Plant-floor Frontlines

### Management Approach

#### Basic Concept

### Each and Every Employee Has the Ability to Identify Dangerous Situations

At the core of safety, it is important that each and every employee has the ability to identify dangerous situations and take appropriate steps to protect themselves and fellow employees. Even if equipment can be made completely safe, it is necessary to recognize that work and actions taken by individuals can have hidden risks. For this reason, we are making concerted efforts at safety education and raising sensitivity to risks, while following rules and creating a protective corporate culture.

At the same time, constructing a work environment in which employees can work with safety and security is our responsibility as a company and one of the most important priorities for management. The Sekisui Chemical Group is implementing total safety activities (i.e. zero occupational injuries, zero equipment-related accidents, zero commuting-related accidents, and zero long-term sick leave) based on five themes\*.

\* Five themes:

(1) Intrinsic safety of equipment; (2) safety management using OHSMS; (3) safety education of employees; (4) risk prevention through risk detection activities and other initiatives; and (5) auditing of health, safety, and accident prevention.



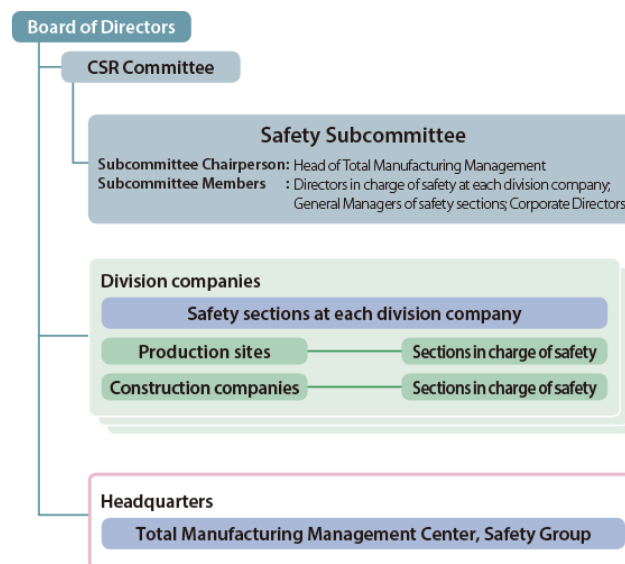
### Activity Policy and Promotion System

## We Thoroughly Implement a Safety Policy That Includes Partner Companies Outside the Group

In the case of the various efforts related to occupational health and safety, an activity policy is formulated by the Safety Committee established under the CSR Committee. These actual activities are promoted by the Total Manufacturing Management Center Safety Group.

We have formulated the Sekisui Chemical Group Safety Policy, which forms our basic philosophy on occupational safety and is shared by all employees within the Group. We also collect a range of data on occupational health and safety such as disaster rates and, with regard to incidents that have occurred on Sekisui Chemical Group's own business premises, include the data for those that occurred at partner companies outside the Group.

### Safety-Promotion System



### Occupational Safety Committee Held

## Management and Labor Work Together to Assess, Research and Propose Solutions for Occupational Safety

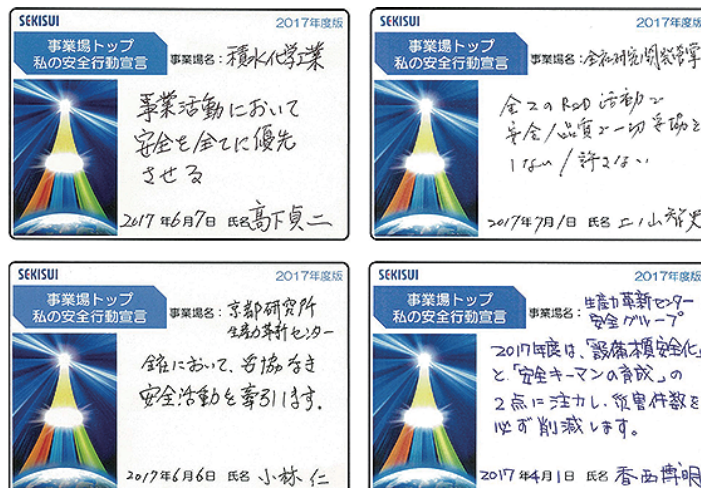
The Occupational Safety Committee at each business site of the Sekisui Chemical Group holds a meeting every month, as mandated by law. In addition, the Central Occupational Safety Committee, consisting of members from corporate headquarters and labor unions, meets once a year. The Central Occupational Safety Committee is a labor and management organization that was created on the basis of collective agreements to assess, research and make strategic proposals related to occupational health and safety. Every employee can potentially become a member of the Central Occupational Safety Committee.

Based on the outcome of the Occupational Safety Committee's deliberations, the Sekisui Chemical Group aims to strictly comply with laws and regulations, including the Industrial Safety and Health Act, ensure the safety and health of employees at work, and create a comfortable work environment. The Central Occupational Safety Committee and the Occupational Safety Committees at each business site assess workplace environments and safety devices, draw up and implement solutions to workplace problems, and decide rules with regard to various topics related to occupational safety and health.

## Example in Safety Activities

### Leaders from Each Division Declared Their Commitment to Safe Business Practices

Based on the recognition that it is of the utmost importance for the top managers at business sites to exercise leadership and take the initiative in safety activities, leaders from each division, including the president, declare their commitment to safe business practices, and their personally written declarations are published on the intranet for employees to see.



A safety declaration posted on the intranet

## Safety Audits

### Second-party OHSMS Certification at 37 Business Sites

Japanese workplaces are implementing OHSMS (Occupational Health and Safety Management Systems) second-party certification, and as of March 2018, 37 workplaces of 77.1% of Japanese workplaces that were targeted have acquired certification. Incorporating head office evaluations from 2013 into the periodic self-audit evaluations that have been implemented since FY2010 will enable multi-aspect verifications of the evaluation results, and improve the level of the Group overall. Sekisui OHSMS operates as in-house certification, and as the skills of internal auditors is being questioned, efforts are also being made towards their training.

## Occupational Safety Assessments

### Implementation of Preliminary Safety Assessments When Launching a New Business

Article 14 of the Group's Safety Management Rules stipulates that a comprehensive preliminary occupational safety assessment must be undertaken by the business general manager concerned when launching a new business. Based on this stipulation, the relevant divisional company that is looking to launch a new business implements an assessment.



## Major Initiatives

### Development of Human Resources to Take the Initiative in Safety Activities

#### Encouraging the Gaining of Qualifications to Become Key Persons in Charge of Safety Activities

We are training HR who can act with a high safety awareness that they can show to their subordinates. In FY2017, we set up two new qualifications for key personnel who lead safety activities. The first, "safety leader," is an in-house evaluation of the capacity for work safety, and is a qualification in which highly-regarded people identify risks subjectively in their own workplaces. 12 people were chosen in its first fiscal year, 2017. The second is a qualification called "safety sub-assessor," which is issued by the Japan Certification Corporation, and its holders play a role in promoting the introduction of essential safety mainly in equipment. In FY2017, encouragement for acquiring these qualifications Group-wide saw 43 "safety sub-assessors" appointed.

### High-risk Natural Disaster Countermeasures

#### Identifying Disasters to Be Prevented for Each Site and Promoting Effective Countermeasures

We have established getting caught or entangled in machinery at a production facility; falling off equipment or falling over at a business site; and a fire or explosion in a chemical process as scenarios on which the Sekisui Chemical Group should place particular focus on prevention. The Company conducts "heads-up Training\*" where chemical processes are centered on production.

\* Heads-up Training: The common name for training to hone the judgment of all employees in case they encounter trouble.

### Review of Equipment Safety Standards

#### Reviewing Equipment Safety Standards in Conjunction with Providing Explanations to Equipment Manufacturers

To prevent serious occupational injuries, we consider it essential to install safe equipment that is unlikely to cause accidents even if the operator takes immediate action. We also promote reviews of our equipment safety design standards with regard to equipment safety.

In fiscal 2017, in addition to preparing and issuing Equipment Design Safety Guidelines, which summarize the safety design standards necessary for equipment to be delivered to the Sekisui Chemical Group and to be fully compliant, we provided opportunities to explain the standards to machine and equipment manufacturers, thereby deepening their understanding of the standards' content.

### Early Detection of Risks

#### Training to Improve the Ability to Identify Risks

In an effort to maintain a culture that gives safety top priority, we are working to encourage plant floor supervisors and workers in particular to train their eyes to better identify risks on their own initiative. To enhance each employee's ability to identify risks, we began offering educational programs centered on patrolling plant floors from fiscal 2016.

In fiscal year 2017, programs were held at the Sekisui Fuller Co., Ltd. Hamamatsu Plant, the Toto Sekisui Co., Ltd. Ota Plant, and Kyushu Sekisui Heim Industry Co., Ltd., with 67 actors responsible for, or in charge of, safety management in Sekisui Chemical Group participating.

## Measures to Prevent Fires and Explosions

### Initiated Emergency Audits, to Which Outside Experts Are Invited

To prevent fires and explosions that, once they occur, have a major impact on the surrounding environment and on business continuity, in addition to the safety audits performed thus far, we implement emergency response audits, to which we invite outside disaster experts. We verify the storage and handling status of hazardous materials as well as the recovery system used following a disaster, including a natural disaster, thereby promoting improvements by detecting the risk posed by disasters at an early stage.

Type of audit	Target / aim of audit
Safety audit	<p>Mainly audits workplace accident prevention measures</p> <ul style="list-style-type: none"> <li>• Document review Checking of conditions relating to health and safety management activities</li> <li>• On-site inspections Confirmation of the safety of people's work, their working environments, the surfaces on which they walk, and so forth</li> </ul> <p>Note: At business sites that themselves implement safety audits only, auditing is performed nearly identically as previously, including "facilities audits" and "disaster-preparedness audits," as outlined below.</p>
Facilities audit	<p>Mainly audits facilities-triggered accident prevention measures</p> <ul style="list-style-type: none"> <li>• Essential safety measure compliance status Includes accident-prevention measures at the facility design and installation stages</li> <li>• Process examinations of facilities management departments Facilities installation management, construction management, maintenance management</li> </ul>
Disaster-preparedness audit	<p>Primarily consists of audits for accident-prevention measures relating to business continuity</p> <ul style="list-style-type: none"> <li>• Checking of storage and handling conditions of dangerous articles and designated flammable materials</li> <li>• Checking of fire-fighting equipment maintenance status</li> <li>• Measures for responding to earthquakes and other natural disasters</li> </ul>

## Emergency Response Measures

### For the Purpose of Fine Tuning Unexpected Situation Response Skills in the Event of a Disaster

At the Sekisui Chemical Group, we conduct “heads-up training” to fortify the decision-making abilities of all our employees in the event that they encounter an emergency situation. More specifically, emergency crews are given scenarios where equipment designed to prevent danger fails and challenges the trainees to ask questions to solve the problem on the spot. This training improves the skills needed to respond to unexpected situations in the event of a natural disaster by passing down to younger employees the on-site safety know-how accumulated over many years by senior employees. Through this training, we were able to improve equipment countermeasures and revise work operating manuals. The training acts to verify the effectiveness of procedures taken during emergency situations and presents opportunities for employees to engage in evacuation drills and disaster prevention drills. This training has been applied on various occasions, including to handle problems, and in evacuation and emergency drills.

In fiscal year 2017, a total of 324 people participated in the training sessions that were held a total of 49 times in 22 departments at 11 business sites.

## Deployment of Basic Safety Principles

### Preparation of Basic Safety Principles Poster

We are working to prevent work-related injuries caused by machines and equipment by making the equipment itself intrinsically safer while also preventing occupational accidents caused by worker operations. Based on the lessons learned from past occupational accidents that actually occurred on Group business sites, the “Six Basic Safety Principles,” which summarize compliance matters and matters prohibited during operations for each operational process, were established in fiscal 2017. In order to promptly disseminate these principles within the Company, we created and distributed to each workplace a poster that showed them in an easy to understand, illustrated format.

## Overseas Business Site Safety Audits

### Visualizing the Status of Safety Management Activities at Overseas Business Sites

At our overseas production sites, which operate under the varying laws and regulations as well as differing awareness of safety issues in each country, the Sekisui Chemical Group has, since fiscal 2013, been deploying safety management rules as a global standard and strictly adheres to these rules in order to achieve the same level of safety at all its business sites. Having commenced safety audits based on global standards in earnest in fiscal 2014, in fiscal 2017 we implemented audits at 13 business sites to confirm that the safety management activities of each business site are being promoted appropriately. We are also holding regional safety brainstorming sessions in North America and China to share regional safety management activity issues and discuss countermeasures. In the years ahead, we will continue to provide effective support in accordance with the corporate and national cultures of each region.

### Safety Conference and Safety Awards

## Presidential Award Given to the Business Site with the Best Safety Record for the Fiscal Year

The Sekisui Chemical Group Safety Conference is usually held to coincide with National Safety Week in July of each year. In fiscal 2017, Chairman Naofumi Negishi and President Teiji Koge were among the total of 239 people, who also included other directors, business heads from domestic production business sites and laboratories, construction companies as well those in charge of safety, etc. who attended the conference on July 13.

During the conference, the fiscal 2016 presidential award was given to the business site with the best safety record for the fiscal year.

### Safety Management Along Supply Chains

## Sharing Safety Policies While Providing Training Opportunities

Based on the idea of securing the safety of employees from partner companies involved in the on-site construction of housing, the Housing Company organizes the Sekisui Heim Cooperation Association with its partner companies and holds periodic meetings while utilizing other methods to share the Group's safety policy. We also provide a variety of training opportunities related to occupational safety, such as safety education sessions.

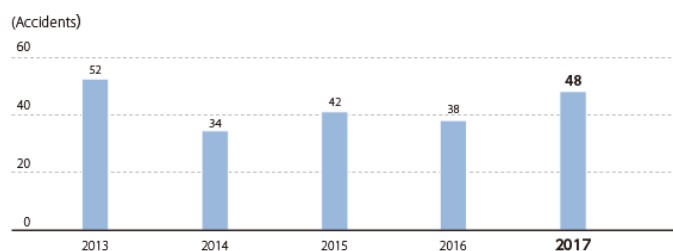
## Performance Data

### Safety Performance

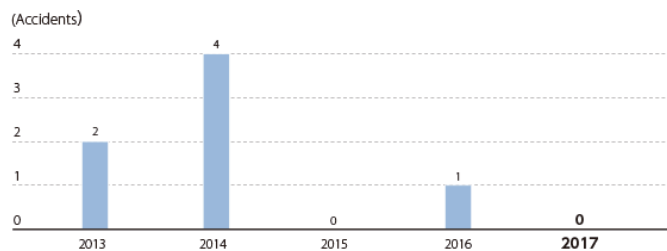
#### Japan

Aggregate scope: 44 production sites and 5 research centers in Japan

##### Number of Occupational Accidents



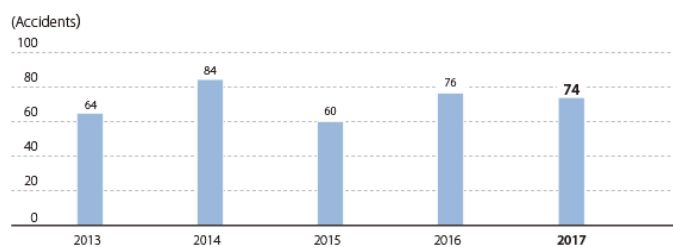
##### Number of Facilities Accidents



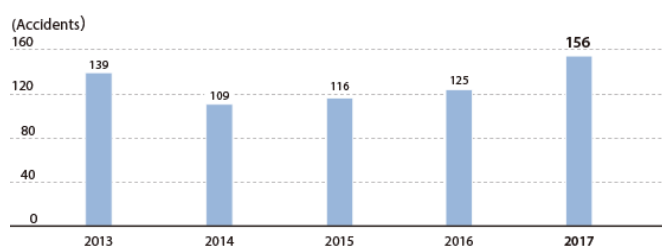
Indicator	Calculation Method
Number of occupational accidents	The number of occupational accidents (both those resulting in lost time and those not) occurring during a given fiscal year (April through the following March)

Indicator	Calculation Method
Number of Facilities Accidents	<p>The number of incidents of malfunctioning (fires, leaks, etc.) of facilities that fulfill at least one of the following criteria (Sekisui Chemical Group criteria), from (1) to (3), occurring during a given fiscal year (April through the following March)</p> <p>(1) Human harm: An accident causing at least 30 days' lost work</p> <p>(2) Material harm: 10,000,000 yen or greater</p> <p>(3) Opportunity loss: 20,000,000 yen or greater</p>

## Number of Long-term Sick Leave



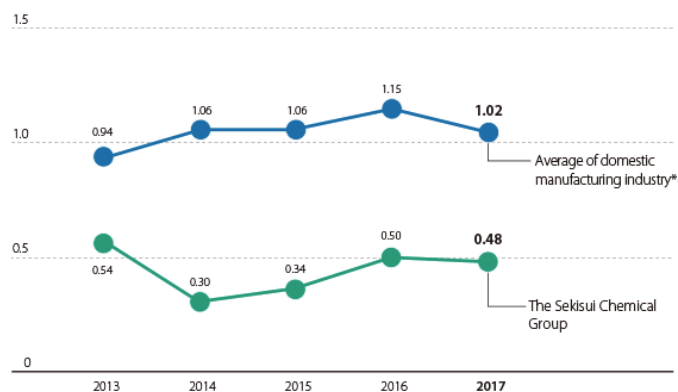
## Number of Commuting Accidents



Indicator	Calculation Method
Number of Long-Term Sick Leave	Describes leave of 30 days or more consecutively for sickness or injury occurring in a Japanese production site or research center during the given fiscal year (April to the following March), and which is newly-occurring. Recurrences within 6 months of the start of work attendance are not counted. However, absences caused by industrial accidents are not classified as long-term sick leave.

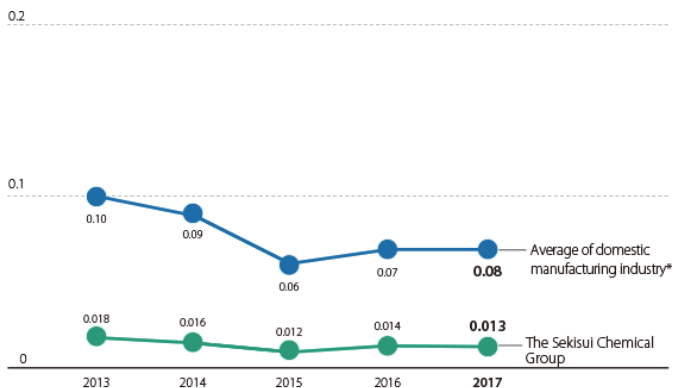
Indicator	Calculation Method
Number of commuting accidents	The number of accidents occurring during commutes to Japanese production sites and research center during a given fiscal year (April to the following March); includes injury to others, injury to the commuter, him or herself, damage to the commuter's own vehicle, and physical damage occurring while operating an automobile or other vehicle

## Frequency Rate Over Time



\* Source of information for Japanese manufacturing industry: Ministry of Health, Labour and Welfare, Survey on Occupational Accidents

## Severity Rate Over Time



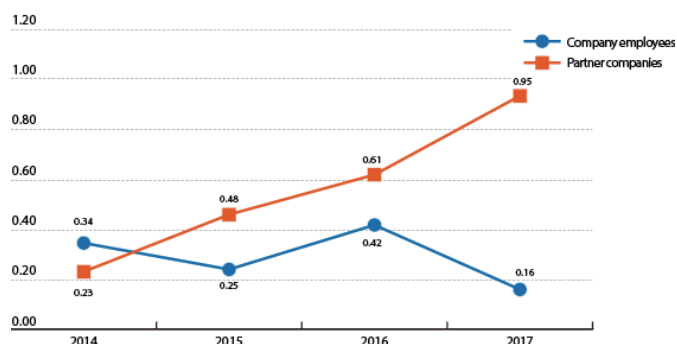
\* Source of information for Japanese manufacturing industry: Ministry of Health, Labour and Welfare, Survey on Occupational Accidents

Indicator	Calculation Method
Frequency rate	<p>The total number of injuries, illness and fatalities in occupational accidents with lost time per 1,000,000 hours of total time worked during a given fiscal year (April through the following March)</p> <p>Formula for calculation: (Number of injuries, illness and fatalities in occupational accidents with lost time / total number of man-hours worked) × 1,000,000</p>

Indicator	Calculation Method
Severity rate	<p>The total number of days of work lost per 1,000 hours of total time worked during a given fiscal year (April through the following March)</p> <p>Formula for calculation: (Number of days of work lost / total number of man-hours worked) × 1,000</p>

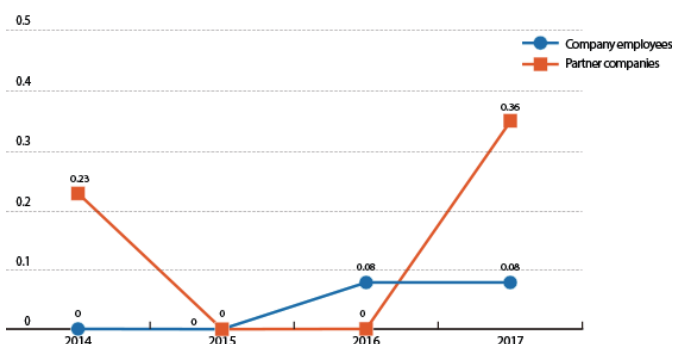


### Lost Time Injury Frequency Rate (LTIFR)



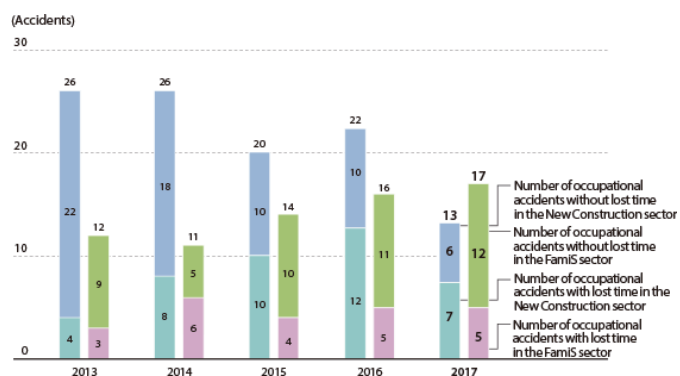
Indicator	Calculation Method
Lost Time Injury Frequency Rate	(Number of accidents causing sick leave / total number of man-hours worked) × 1,000,000

### Occupational Illness Frequency Rate (OIFR)



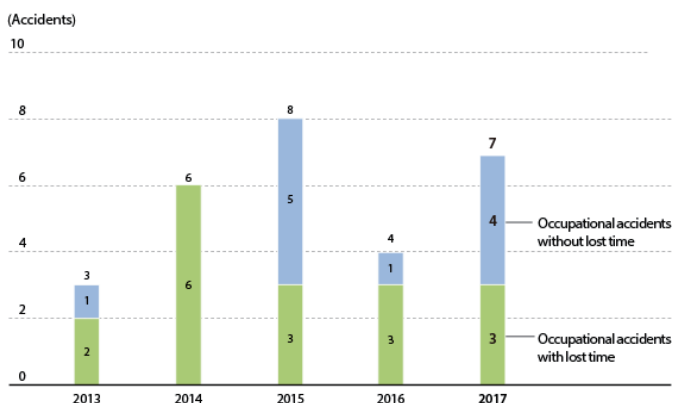
Indicator	Calculation Method
Occupational Illness Frequency Rate	(Occupational illnesses / total number of man-hours worked) × 1,000,000 Occupational illnesses as defined by the Ministry of Health, Labour and Welfare, including heat stroke, lower back pain, and intoxication by chemical substances

### Safety Performance in the Housing Company's Construction Sites



Indicator	Calculation Method
Safety performance in the Housing Company's construction sites	The number of occupational accidents (both those resulting in lost time and those not) occurring in construction sites under the jurisdiction of the Housing Company during a given fiscal year (April through the following March)

### Safety Performance in the Urban Infrastructure & Environmental Products Company and Other Construction Sites



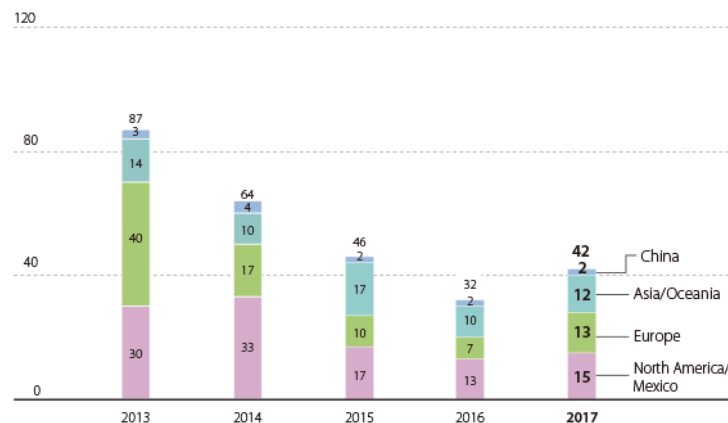
Indicator	Calculation Method
Safety performance in the Urban Infrastructure & Environmental Products Company and other construction sites	The number of occupational accidents (both those resulting in lost time and those not) occurring in construction sites under the jurisdiction of the Urban Infrastructure & Environmental Products Company or the Sekisui Chemical company headquarters during a given fiscal year (April through the following March)

## Overseas

Aggregate scope: 46 production sites and 1 research center overseas

### Number of Occupational Accidents

(Accidents)



Indicator	Calculation Method
Occurrence of occupational accidents at overseas production sites and research centers	The number of occupational accidents (both requiring and not requiring time off from work) occurring at overseas production sites and research centers during a given fiscal year (April through the following March)

## Health and Safety / Accident Prevention Costs

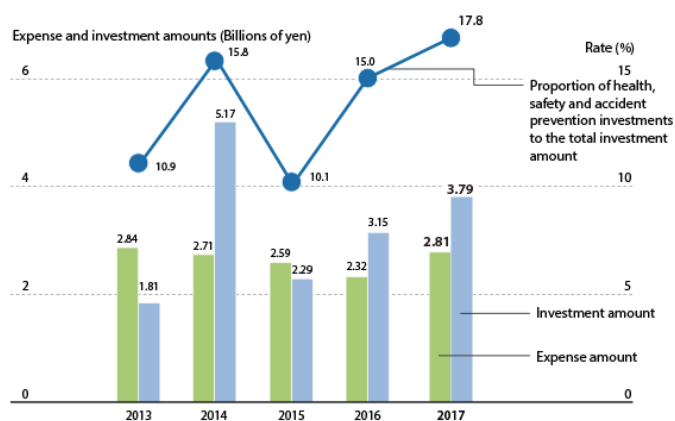
**Aggregate Scope: 42 Domestic Japanese Production Sites and 5 Research Facilities, Headquarters, Back Offices of Division Companies**

### Health and Safety / Accident Prevention Costs

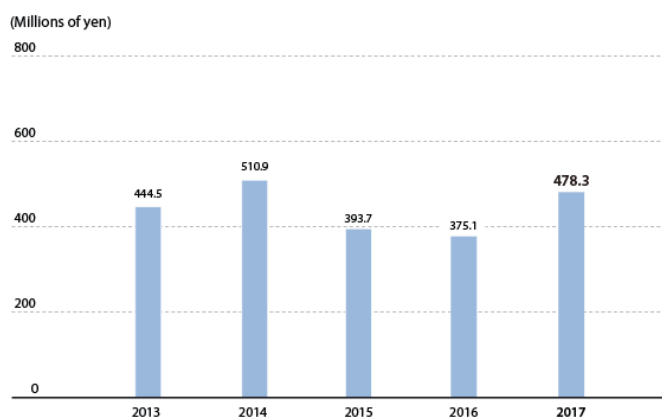
(Millions of yen)

Classification	Item Details	The Sekisui Chemical Group	
		Expense amount	Investment amount
1) Costs within business site areas	Health and safety measures, rescue and protective equipment, measurement of work environment, health management, workers' accident compensation insurance, etc.	931	3,790
2) Administrative costs	Establishment and implementation of OHSMS, safety education, personnel costs, etc.	1,870	—
3) Other	Safety awards, etc.	5	—
<b>Total</b>		<b>2,806</b>	<b>3,790</b>

## Costs and Investments Over Time



## Loss Costs Over Time



Indicator	Calculation Method
Amount invested	The amount invested in health and safety and accident prevention-related measures authorized during a given fiscal year (April through the following March)

Indicator	Calculation Method
Loss costs	The costs of responding to, and the labor costs incurred due to, occupational accidents, facilities accidents, commuting accidents, and long-term sick leave due to illness occurring within a given fiscal year (April through the following March)

# Compliance and Respect for Human Rights

## Giving Consideration to Human Rights on a Global Scale, Strengthening Compliance Management

### Management Approach

#### Our Approach to Compliance

### Compliance Depends on the Good Intentions of Each Employee

The Sekisui Chemical Group carries out compliance management based on fundamental principles, including contributing to society, being a trusted company, and adherence to both the letter and spirit of the law, and principles that are spelled out in its Compliance Declaration announced in 2003. Based on the spirit of the Company Philosophy and our Corporate Code of Ethics, our compliance initiatives are in tune with the ethics and social norms valued by society as we strictly adhere to laws, regulations and internal rules.

Our business and compliance activities support the corporate value of the Sekisui Chemical Group, and compliance is the basis of all management activities. We aim to remain a company in which each individual employee can be proud of our good intentions. To this end, we strive to improve awareness of compliance throughout the Sekisui Chemical Group in order to remain in the trust of society.



#### Prevent Compliance Issues

### Prevent Major Compliance Issues

In the CSR Medium-term Plan, which we started to implement in fiscal 2017, we carried over "zero incidents of major compliance issues" as a KPI target from the previous medium-term plan. From fiscal 2015 onward, Sekisui Chemical has continually achieved zero incidents of corruption and fraud. In fiscal 2017 as well, no major compliance issues arose.

We will continue strengthening our management of compliance and work to prevent compliance issues before they occur.

## Growing Awareness Toward Compliance

### Compliance Manuals and Compliance Cards Distributed

The Sekisui Chemical Group has created and distributed the Compliance Manual, in which are described the matters with which each Group employee should comply, and also created a pocket version called the Compliance Card in order to instill awareness of compliance in each and every employee. The Compliance Manual includes information on topics such as the prohibitions on corruption and bribery, respect for human rights and the prohibition of discrimination, data management and protection, compliance with antitrust legislation, prohibitions on insider trading, conservation of the global environment and compliance with labor-related laws and regulations, and the internal whistleblowing system; it publicizes, and promotes thorough adherence with, these requirements among all employees. In addition to the existing Compliance Manual, we have created a Global Compliance Manual covering regulations around the world. To allow all overseas Group employees to understand this manual, we have created Chinese and Thai editions, as well as an English edition, and are proceeding with translating the manual into more local languages.



The Company's  
Compliance Manual



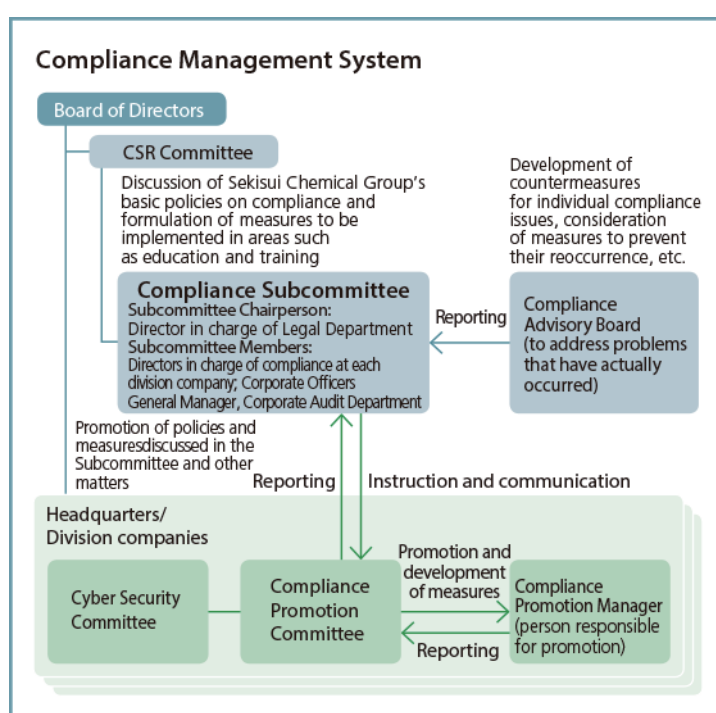
The conveniently sized  
Compliance Card

## Putting Compliance Management Efforts into Practice

### Building an Effective Compliance Promotion System

We are building a realistic and effective compliance promotion system to ensure that compliance management is fully put into practice. In addition to having established a Compliance Subcommittee—which reports to the CSR Committee and is chaired by the executive officer who heads the Legal Department—as an organization to oversee Group compliance and to put forward policies and implementation measures, we are also establishing compliance promotion subcommittees at headquarters and at each divisional company, appointing persons responsible for putting compliance promotion into practice and implementing and deploying each measure. In the unlikely event that an important compliance issue arises, we will hold a Compliance Advisory Board meeting to address any problems that have actually occurred and examine measures to prevent a recurrence.

#### Compliance Management Promotion System



## Compliance Training

### Ongoing Provision of Opportunities to Learn About Compliance

As part of our efforts associated with putting compliance management into practice, we also focus on employee compliance education. We continuously provide opportunities for all Group employees to learn about the importance of compliance, such as by conducting e-learning sessions specific to compliance quarterly. These e-learning programs include information about compliance as training for new employees and as rank-specific training.

## Upgrade of the Whistle-blowing Program

### We Are Promoting Knowledge of S.C.A.N.'s Existence and Its Effective Operation

In 2002, the Sekisui Chemical Group developed the Sekisui Compliance Assist Network (S.C.A.N.) intra-company whistle-blowing system, which is the mechanism that has been made available for use by all Sekisui Chemical Group employees and its business partners.

Operated under the supervision of the executive officer in charge of the legal department, S.C.A.N. enables direct reporting not only to the executive officer in charge of the Legal Department but also to an outside law firm. In addition to serving as a reporting system, S.C.A.N. also plays a role as a point of contact for consultations, such as whether a specific act would be classed as a compliance violation.

In order to create an organizational culture that maintains full awareness of compliance, the system also prescribes the protection of the whistleblower and stipulates that information on the person who provided the information be kept secret from everyone other than at the point of contact and the prohibition of any prejudicial treatment toward that person.

## Responses to External Notifications

In accordance with the establishment of the Corporate Governance Code, we reconfigured the internal reporting system in fiscal year 2015 as part of the strengthening of governance functions at each Sekisui Chemical Group company and newly put in place points of contact for consultations from, and whistleblowing by, suppliers.

This consultation / notification point of contact is intended for use by the executive officers and employees of business partners in Japan who are continuously conducting business transactions with Sekisui Chemical Group companies. We occasionally accept requests for consultations and receive reports via a form made available on Group company websites and, while conducting consultations with business partners, proceed to confirm the facts and take corrective action concerning any alleged "law-violating conduct." The content of consultations and reports is shared only among the minimum number of people necessary to resolve the "law-violating conduct" concerned, and all parties that need to be involved are obliged to keep that content confidential.

## Prevention of Bribery and Corruption

### Guidelines in Place, Educational Programs Conducted for High-risk Divisions

A signatory to and an approver of the UN Global Compact, which stipulates anti-corruption efforts under its voluntary action principles, the Sekisui Chemical Group is promoting efforts to prevent acts of bribery and corruption in that spirit.

As part of our internal regulations, we have put in place rules to prevent bribery and corruption and are promoting their introduction at all Sekisui Chemical Group companies. We have also formulated anti-bribery guidelines, which summarize matters concerning bribery and corruption, that employees should observe when doing business in Japan, the United States and China. We have worked to make these regulations and guidelines known via the intranet, so that Group employees can check them at any time.

## Main Measures Relating to Bribery and Corruption

In our efforts to prevent the breaking of any laws, we identify high risk cases regarding corruption and bribery, and put countermeasures in place. For example, when a government official is to be entertained or presented with a gift, a form must be submitted in advance to obtain approval from management. In the event that we appoint an agent or consultant in connection with business transactions, including those involving public officials from other countries, we stipulate that this can only be undertaken once we have confirmed that payments of remuneration to that agent or consultant could not be classed as bribes, that there are no reasonable grounds to suspect that payments could constitute bribes and only after a predetermined settlement procedure has been followed.

## Identification of High-risk Divisions and Employee Training

Having identified sales departments and the Purchasing Department as the business divisions at particularly high risk of bribery and corruption, we encourage them to learn about regulations and guidelines, such as by conducting training specific to countering graft and corruption, and to make full use of the relevant forms, among other measures. Following on from training conducted for certain departments within Japan, in fiscal year 2015, 13 training sessions targeting employees at overseas business sites were held in fiscal year 2017, with 135 employees participating.

## Cases of Violations in Fiscal 2017

No cases of major violations of the laws governing bribery and corruption occurred in fiscal 2017.

### Protection of Intellectual Property

## Protecting Our Intellectual Property and Respecting the Intellectual Property Rights of Others

The Company regards intellectual property (IP) that has resulted from its R&D activities to be an important management resource underpinning the Sekisui Chemical Group's growth and profitability as well as efforts toward the maximization of corporate value.

For that reason, the Sekisui Chemical Group endeavors to properly use IP and protect its own rights. Among various measures, we quickly file patent applications for inventions made in manufacturing and development. We also take appropriate measures to prevent and avoid infringing the IP rights of others. We conduct educational programs to fit the level and needs of participants, from the acquisition of basic knowledge to programs covering the building of IP strategies.

Under the basic policy of securing business competitive strength by obtaining strong patents, headquarters and IP divisions of each divisional company are central to the IP strategy, which is based on a consistent system that ranges from the development of basic policies common to headquarters and each divisional company to the acquisition and management of patents and the utilization of rights.



## Reasonable Evaluations with Regard to R&D

### Assigning a Fair Value to Valuable Inventions

Headquarters and each business division have R&D sections that work to increase the speed of technological development and create outstanding technologies. The Invention Grand Prize has been established as one part of efforts to ensure researchers and engineers receive the evaluations and recognition they deserve. The Invention Grand Prize establishes monetary rewards for inventors recognized as having made major contributions to profits.

## Respect for Human Rights

### Deepening Understanding of Human Rights, Implementing Business Activities That Respect Human Rights

Along with its suppliers, the Sekisui Chemical Group engages in business activities that respect human rights as part of its obligation to all stakeholders. All Group employees are provided with a copy of the Company's Compliance Manual. We have set strict standards for respecting human rights, prohibiting discrimination, preventing harassment, and protecting personal information. We conduct training and e-learning sessions for employees about the prevention of all forms of harassment. We work diligently to raise the understanding and awareness of such issues among all of our employees.

## Assessing the Human Rights Situation at Our Suppliers

### Caring About Human Rights Issues Across the Entire Supply Chain

Through CSR procurement with our suppliers, we make sure our business partners respect human rights. In order for our suppliers to understand the Group's procurement policy, including respect for human rights, we have produced English and Chinese translated versions as well as the Japanese version and are promoting the process of making procurement policies available in a variety of languages, such as by posting them in Japanese and English on our websites.

With regard to suppliers that do not meet the prescribed standards, a request is made to ensure that the necessary steps are taken to resolve any issues. The Sekisui Chemical Group works together with suppliers in the implementation of appropriate measures. We are making progress with the development of mechanisms, designed specifically for our overseas business partners and suppliers, to encourage improvements via our regional management companies.

## Major Initiatives

### Compliance Reinforcement Month

#### Learning About the Importance of Compliance from Actual Violation Case Studies

In fiscal 2014, we decided that October of each year would be Compliance Reinforcement Month, to give all employees the opportunity to reflect on their compliance awareness and actions.

In fiscal 2017, under the banner of "actual compliance violation case studies," a range of initiatives were carried out in Japan based on actual past cases of compliance violations that had occurred inside and outside the Company. We also expanded the area in which Compliance Reinforcement Month is implemented overseas, which resulted in Group companies in North America and China launching Compliance Reinforcement Month initiatives.

#### Initiatives Taken During Compliance Reinforcement Month (FY2017)

1. Disseminated the President's Top Message
2. Covered actual compliance violation case studies in Group newsletters. Also reported the start of Compliance Reinforcement Month in the United States and China
3. Implemented all types of compliance training / Held an open-style legal seminar in which employees participated of their own accord (7 locations, 10 times in total)
4. Conducted e-learning / Implemented e-learning on the Company intranet (questions centered on actual compliance violation case studies)
5. Initiated the Compliance Implementation Report by frontier leaders
6. Conducted compliance awareness surveys

#### Other compliance training

1. Implemented education programs conducted by visiting staff at business sites where there had been several violations of compliance laws
2. Provided educational opportunities at business sites in Japan where the opportunities were deemed insufficient

### Upgrade of Legal Affairs Structure

#### Reinforcement of Global Legal Affairs Structure

The Sekisui Chemical Group has been reinforcing its legal affairs structure by developing and deploying legal personnel, strengthening collaboration among legal departments and enhancing legal functions.

In fiscal 2017, employees responsible for legal affairs at Sekisui Europe B.V. and Sekisui Southeast Asia Co., Ltd., our regional management companies in Europe and Thailand, respectively, took up new posts and commenced, for example, contract screening and the expansion of the internal reporting system.

### Marketing Communications

#### Legal Compliance with Regard to Advertising and Labeling

When conducting business activities, the Sekisui Chemical Group strictly adheres to laws and regulations while engaging in good-faith marketing activities. In fiscal 2017, there were no serious violations of laws, regulations or internal rules to report within the context of marketing communications related to advertising and product labeling.

## Responses to Past Legal Violations

From 2004 to 2006, Sekisui Chemical determined the sale price of its PVC pipes and joints in cooperation with other companies, and in February 2009, was ordered by the Fair Trade Commission to take measures to abolish this and to pay surcharges.

Certification of the facts in this order differ from Sekisui Chemical's interpretation, so from April 2009 onwards, we asked for it to be expunged through referees and litigation rescinding the decision, but in January 2018 we withdrew our appeal, and accepted the verdict through a certification of the facts at the Fair Trade Commission.

We take this result seriously, and will not only thoroughly prevent recurrence, but also become involved in strictly observing compliance.

### Initiatives Geared Toward Suppliers

## Conducting CSR Procurement Surveys

Guided by its procurement policy, the Sekisui Chemical Group has been conducting surveys as a part of the process to select new suppliers in Japan since 2007. Through these surveys, the Company works to ascertain the stance of each supplier toward human rights and environmental protection as well as the status of each supplier's CSR activities. In fiscal 2017, we formulated and put into effect CSR Status Survey Guidelines for Suppliers, which are geared toward the raw materials procurement departments at each divisional company.

As a result of the CSR procurement survey conducted in fiscal 2017, we assessed conditions at the major suppliers of all the divisional companies in Japan and the major suppliers of the Group companies in China (211 companies in Japan, 17 companies in China). We confirmed that no major human rights infringements, including child labor and forced labor, occurred at our major suppliers.

### Initiatives Geared Toward Employees

## Implementing Human Rights Training and Education

The Sekisui Chemical Group conducts training and educational programs focusing on the theme of human rights for its employees. In this manner, the Group is endeavoring to engage in management that takes into consideration concerns regarding human rights.

We incorporate content that raises awareness about human rights issues, such as forced labor, child labor, harassment, etc., in particular in training carried out at career milestones, such as when joining the Company or upon promotion.

In addition, training programs that aim to prevent all forms of harassment are held every year. In fiscal 2017, 201 employees participated in these programs.

## Addressing the Issue of Conflict Minerals

### "Conflict Minerals Survey Guidelines" Put into Effect

Sekisui Chemical is concerned about the conflict mineral problem, namely the mineral resources controlled by armed forces in the Democratic Republic of Congo and neighboring countries that commit human rights violations and destroy the environment. We conduct surveys on the use of conflict minerals at companies throughout our supply chain from a CSR management perspective.

We put our "Conflict Minerals Survey Guidelines" into effect in April 2017. These guidelines were newly formulated for each Group division\*<sup>1</sup> responsible for receiving survey requests for conflict minerals from suppliers and for conducting the surveys.

In fiscal year 2017, we conducted 308 conflict mineral surveys at Sekisui Chemical's Urban Infrastructure & Environmental Products Company, High Performance Plastics Company and the group companies of each. We confirmed that, out of those companies surveyed, 238 do not use 3TG\*<sup>2</sup> and 51 source from countries other than the DRC and neighboring countries\*<sup>3</sup>. While there were 19 cases where minerals were sourced from DRC, each case is confirmed that it is from CFS-certified facilities\*<sup>4</sup>. Meanwhile, there were no cases in which the smelter was unknown.

\*1 For the quality control department of each divisional company factory and the quality control departments of affiliated companies or affiliated company factories

\*2 3TG: Columbite-Tantalite stone (tantalum), tin stone (tin), iron manganese stone (tungsten) and gold or their derivatives

\*3 Republic of Congo and neighboring countries: Refers to Democratic Republic of Congo (DRC) and the nine countries (Angola, Burundi, Central African Republic, Republic of Congo, Rwanda, South Sudan, Tanzania, Uganda, and Zambia) bordering the DRC

\*4 CFS stands for "conflict-free smelter."

Certification is granted through a program based on conflict-mineral surveys created by the Conflict-Free Sourcing Initiative (CFSI), an organization that deals with issues relating to conflict minerals.

The Initiative's investigations not only audit smelters and refineries but also check whether conflict minerals being used to fund armed groups are included in transactions further down the supply chain.

We confirm that manufacturing sites have been certified through this program using conflict-mineral surveys.

## Addressing the Procurement of Timber Materials

### Established "Timber Procurement Survey Guidelines," Implementation Started in the 2018 Fiscal Year

Timber Procurement Survey Guidelines for the procurement departments of each company were established in 2017. Implementation of the guidelines began in April 2018.

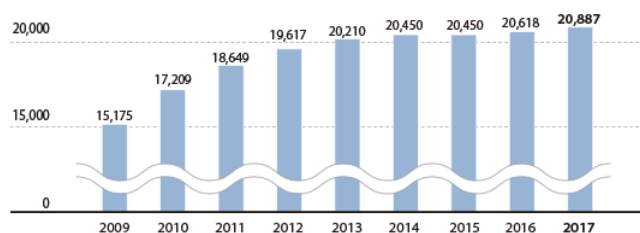
In order to contribute to the eradication of deforestation as well as the sustainable use of timber resources, every effort is made to ensure that the timber used in products is logged in accordance with statutory and regulatory requirements (SFC etc.).

## Performance Data

### Employees Using the e-learning System Over Time

#### Employees Using the e-learning System Over Time

(No. of participants)  
25,000



Note: Average values for four sessions conducted in each year. However, the third and fourth sessions were underway during fiscal year 2017 when this chart was created, so the average value for sessions one and two is provided for that year.

### List of Results Relating to Compliance Training

#### Fiscal Year 2017 List of Results Relating to Compliance Training

Training	Training content	Trainees	Attendance
Regular training	Training for new employees	New employees of Sekisui Chemical and the Sekisui Chemical Group	191
	Training for new managers	New managers of Sekisui Chemical and the Sekisui Chemical Group	244
Training for specific employee ranks	Newly appointed senior management training	Sekisui Chemical and Group companies	48
	Newly appointed assistant manager training	Sekisui Chemical and Group companies	184
	Training for those responsible for management	Sekisui Chemical Group companies	15
	Training for new managers	Sekisui Chemical Group companies	20
	Newly appointed operating officer training	Sekisui Chemical	6
	Affiliated company full-time directors training	Sekisui Chemical Group companies	34
Area-specific training	Compliance training	Sekisui Chemical and Group companies	2128
	Harassment prevention training	Sekisui Chemical and Group companies	171
	Labor management training	Sekisui Chemical Group companies	648
	Safe driving course	Sekisui Chemical Group companies	102
	Act against Delay in Payment of Subcontract Proceed, etc. to Subcontractors training	Sekisui Chemical and Group companies	222
	Copyright training	Sekisui Chemical Group companies	19
	Unfair Competition Prevention Act training	Sekisui Chemical Group companies	7

Training	Training content	Trainees	Attendance
Area-specific training	Information management training	Sekisui Chemical Group companies	464
	R&D ethics committee training	Sekisui Chemical Group companies	111
	Training in Act against Unjustifiable Premiums and Misleading Representations	Sekisui Chemical Group companies	60
	Promotion code training	Sekisui Chemical Group companies	247
	Act on the Protection of Personal Information training	Sekisui Chemical Group companies	19
	Export controls training	Sekisui Chemical and Group companies	141
Global training	Training for personnel posted overseas	Employees engaged in work related to overseas business	11
	Compliance training	Sekisui Chemical and Group companies	80
	Anti-harassment training	Sekisui Chemical and Group companies	30
Open seminars	Antimonopoly law and anti-bribery and corruption prevention	Sekisui Chemical and Group companies	135
	Legal affairs seminar	Sekisui Chemical and Group companies	1040

## Number of Whistleblowing Cases and Consultations

### Fiscal Year 2017 Number of Whistleblowing Cases and Consultations

Reports/consultations	Number of cases
Power harassment	28
Working conditions	17
Sexual harassment	6
Workplace environmental concerns	5
Misuse of expenses	1
Sales methods related	0
Misrepresentation of work performance	2
Incidents with business partners	1
Others	11
Total number of complaints	71

# Stakeholder Engagement

## Improving Corporate Value Through Strengthening Dialogue with Stakeholders

### Management Approach

#### Basic Concept

#### Promoting Constructive Dialogue with Stakeholders

To build relationships of trust with its five stakeholders—customers, shareholders, employees, business partners as well as local communities and the environment—the Sekisui Chemical Group considers that it is important to strengthen corporate value through constructive dialogue.

Positioning its stakeholders as partners in improving corporate value, having constructive dialogue with them, assessing their expectations and requests as well as resolving society-wide issues together with them, leads to great opportunities for the Sekisui Chemical Group.

We will create a relationship of mutual prosperity with our stakeholders while continuing to promote sustainable growth.

#### Dialogue with Stakeholders

#### Reflecting Stakeholder Opinions in Corporate Activities via Various Methods of Communication

Continuing on from the previous fiscal year, we instigated dialogues with various stakeholders through an array of venues, including the FY2017 (345th) Customer and Top (CAT) meeting (which saw 2,418 attendees), where the top management of our housing real estate sales company directly heard feedback from customers; meetings with investors and investigative organizations; with business partners at the Heim Mutual Prosperity Meeting and on other occasions; and at the eco products expo, in which we participate annually.

With regard to employees, forums were established for top management, including the president, to have direct dialogue with employees. At the same time, we gathered employee opinions and requests for CSR activities through CSR report survey questionnaires. In addition to these opinions and requests from inside the Company, we also collected opinions and requests from outside the Company toward public information, including the CSR Report, and utilized them for the promotion of CSR management and the creation of CSR reports.

The CSR Management Office, which falls under the purview of the Director of the Business Strategy Department, is responsible for promoting dialogue with all stakeholders. The assessments and opinions of all stakeholders are reported to the CSR Committee, which is chaired by the Company president and is composed of directors, and the Company strives to adequately reflect these views in its activities.

There were no major concerns voiced by stakeholders through any of the engagements in fiscal 2017.

## Main Responsibilities, Communication Channels, and Communication Methods

Stakeholders	The Sekisui Chemical Group's Commitment	Contact	Communication Methods and Tools
Customers	We take the voices of our customers seriously, offer prominent products and services and strive to build a long-term relationship of trust with our customers.	<ul style="list-style-type: none"> <li>•Departments in Charge of CSR</li> <li>•Departments in Charge of Quality Control</li> <li>•Sales Department</li> </ul>	Customer Consultation Office (handles inquiries), customer satisfaction surveys, everyday sales activities, web page, exhibition spaces / expos / events
Shareholders	To meet the expectations of all our valued shareholders, we strive for highly efficient use of capital, fair ethical disclosure of information, adequate returns from profit, and increasing corporate value through sustainable growth.	<ul style="list-style-type: none"> <li>•Departments in Charge of Public Relations and IR</li> </ul>	General shareholders' meetings, communications with shareholders, explanatory meetings on the closing of accounts, annual reports, responding to surveys from socially responsible investors
Employees	We foster among our employees a spirit of taking on new challenges and are actively creating workplaces where every employee can stand out, a diverse array of talent is on display, and people feel that their work is worthwhile.	<ul style="list-style-type: none"> <li>•Departments in Charge of CSR</li> <li>•Departments in Charge of Legal Affairs</li> <li>•Departments in Charge of Public Relations</li> <li>•Departments in Charge of Safety</li> <li>•Departments in Charge of Human Resources</li> </ul>	Individual meetings, counseling, internal whistle-blowing system, employee satisfaction surveys, employee questionnaires, dialogues with management, intranet and internal newsletter, labor-management meetings
Suppliers	When procuring materials, we follow the fundamentals of being open, fair, compliant with the law, engaged in relationships of mutual trust, and environmentally conscious. We aim to achieve coexistence and shared prosperity by building more robust partnerships with our suppliers and engaging in fair trade. We are also engaged in promoting CSR Management based on cooperation with our suppliers.	<ul style="list-style-type: none"> <li>•Departments in Charge of Legal Affairs</li> <li>•Departments in Charge of CSR</li> <li>•Departments in Charge of Purchasing</li> </ul>	Everyday purchasing activities, explanatory meetings with suppliers, CSR procurement questionnaires, website



Stakeholders	The Sekisui Chemical Group's Commitment	Contact	Communication Methods and Tools
Local communities	We emphasize a perspective that encompasses contributions to the development of communities through our business, coexistence with communities, and environmental conservation. We think about how to make measures that are tailored to the needs of each community and practice business in ways that engender trust.	<ul style="list-style-type: none"> <li>•Departments in Charge of CSR</li> <li>•Factories and Offices</li> <li>•Departments in Charge of Public Relations</li> </ul>	Volunteering by employees, support for learning (dispatching of instructors, factory tours, etc.), news releases
Global environment	We are engaged in creating and expanding the market for Environment-contributing Products, reducing our environmental footprint, and conserving the natural environment—all with the aim of achieving “a world in which biodiversity is conserved.”	<ul style="list-style-type: none"> <li>•Departments in Charge of CSR</li> <li>•Factories and Offices</li> <li>•Departments in Charge of Sales</li> <li>•Departments in Charge of Purchasing</li> </ul>	Volunteering by employees, dialogues with NPOs and NGOs, everyday sales operations, everyday purchasing activities

## Major Initiatives

### Dialogues with Employees

#### Management and Employees Hold “Vision Caravan 2017” Direct Communication Sessions

Believing that dialogue between management and employees is essential in resolving the problems faced by the Company as well as work-related issues, the Sekisui Chemical Group has been providing opportunities for employees to have direct communication with top management since fiscal 2002.

In fiscal 2017, “Vision Caravan 2017” was held as a venue for direct communication between senior executives and employees. At domestic and the four regional (North America, Europe, China and ASEAN) overseas Group companies, the president and other directors visited each location themselves, introduced the history and mission of the Sekisui Chemical Group and explained the Medium-term Management Plan that began in fiscal 2017. For employees of overseas Group companies, fiscal 2017 was their first year to have direct communication with the president.

A theme that was delved in to an even greater extent at Vision Caravan 2017, which targeted domestic Japanese Group employees, was societal issues in Japan. At the event, there was an active exchange of views concerning “work-style innovation,” a subject that was also highlighted in the Medium-Term Management Plan. The opinions offered by employees will be reflected in specific work-style innovation efforts going forward.

### Dialogue with Investors


#### Continuing to Engage in Direct Communication in an Effort to Enhance Understanding

Interest in ESG investment, by which investments are actively made in companies that engage in CSR activities, has been mounting recently. At the same time, ratings agencies are increasingly undertaking surveys. As its business domains are so diverse, the Sekisui Chemical Group believes it important to give explanations individually and carefully to ensure that the Group's overall business characteristics and CSR initiatives are sufficiently and correctly understood.

We list “active engagement between investors and management” as one of the crucial tasks in which we are engaged in our medium-term CSR plan. To assess how our corporate value and sustainable growth are reflected in how we appear from an outside perspective, we have set a medium-term target of holding over 200 dialogues and are continuously engaged in direct dialogues with ESG investment assessment and ranking institutions, particularly in Europe, as well as with financial institutions and investors in Japan and throughout the world. During the 2017 fiscal year, we held 88 engagements.

With the investor and ESG investment assessment as well as SRI ratings agencies very much in mind, Sekisui Chemical discloses detailed information on its website.

#### Active Engagement Between Investors and Management

	FY2017 Results 
Number of engagements	88

Note: The number of engagements represents the number of times company presidents and executives in charge of specific areas had dialogues with investors.

## Spreading Awareness of CSR Through Communication

### Enhancing Communication Tools with Employees

We use various communication tools to deepen understanding among employees of the Sekisui Chemical Group's CSR initiatives.

We have produced "Our CSR," which explains the Sekisui Chemical Group's CSR concepts, in seven languages (Japanese, English, Chinese, German, Spanish Dutch and Thai) and, to mark the 70th anniversary, a commemorative magazine (in Japanese and English) that summarizes the 70-year history and prominences of the Sekisui Chemical Group. The anniversary magazine has been distributed to all Group companies in Japan and overseas. We also distribute the CSR navigator email newsletter to employees to keep them up to date with the latest CSR topics at the Sekisui Chemical Group.

In fiscal 2017, an explanation page providing information about the important themes of the Sekisui Chemical Group's CSR was posted in the in-house newsletter distributed to all domestic employees of the Sekisui Chemical Group.

In addition to having reached the stage at which employees are able to freely download them via the intranet, these kinds of communications and CSR-related materials are also distributed to all target employees, regardless of whether they are regular or non-regular staff, on an as needed basis, for example when new employees join the Company or when implementing CSR-related educational programs.

## Distribute Value to Stakeholders:

### Calculating Economic Value Distribution Based on GRI Standards

The Sekisui Chemical Group calculates distribution status for each stakeholder based on its financial statements, using GRI and other accounting standards as a reference. We will accelerate CSR management by quantifying, visualizing and assessing the business and social value brought about by engagement with our stakeholders.

(Unit: Millions of yen)

Stakeholders	Method of Calculating Amounts	FY2015	FY2016	FY2017
Shareholders	Dividends	14,299	16,063	19,064
Suppliers	Cost of Sales, Selling Costs / General Administrative Costs (Excluding Personnel Costs)	814,883	778,623	811,642
Employees	Labor costs, Salaries and allowances as part of sales costs and general administrative costs, Provisions for bonuses, Provisions for retirement pay	191,611	190,676	196,554
Local communities	Donations	148	186	150
Global environment	Environmental conservation costs	16,080	16,506	22,569
Government and administrative bodies	Corporate taxes, local taxes, business taxes	15,007	23,396	23,393
Creditors	Interest paid as part of costs apart from sales	1,147	610	533

# External Evaluation

## Major External Evaluations Conducted During Fiscal Year 2017

### CSR in General

Earned selection to the "World" and "Asia-Pacific" categories of the DJSI

Earned sustainability rating of "Bronze Class" by Robeco SAM

Earned selection to the FTSE4Good Index series

Earned selection to the FTSE Blossom Japan Index

Earned selection to the MSCI Global Sustainability Indexes

Earned selection to Ethibel PIONEER and Ethibel EXCELLENCE

Earned selection to the Morningstar Socially Responsible Investment Index

Ranked 58th in Toyo Keizai CSR Ranking

Selected for 55th place in the "2018 Global 100 Most Sustainable Corporations in the World" index

MEMBER OF

**Dow Jones  
Sustainability Indices**

In Collaboration with RobecoSAM



**ROBECOSAM**  
Sustainability Award  
Bronze Class 2018



**FTSE4Good**

<http://www.ftse.com/products/indices/FTSE4Good>



**FTSE Blossom  
Japan**

<http://www.ftse.com/products/indices/blossom-japan-jp>



"Sekisui Chemical Co. Ltd. has been reconfirmed for inclusion in the Ethibel PIONEER and Ethibel EXCELLENCE Investment Registers since 09/12/2016.

This selection by Forum ETHIBEL ([www.forumethibel.org](http://www.forumethibel.org)) indicates that the company can be qualified as a sector leader in terms of Corporate Social Responsibility (CSR)."



(2018/3/9)



**GLOBAL100**

<http://www.corporateknights.com/reports/global-100/>

## Environment

Ranked 37th in Nikkei's "Environmental Management Ranking"

Won the Minister for Agriculture, Forestry and Fisheries Award in the "6th Contest for Corporate Activities on Biodiversity"

## Human Resources

Selected as the fiscal 2017 "Nadeshiko Brand" by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange

Recognized as a "2018 Certified Health and Productivity Management Organization" by the Ministry of Economy, Trade and Industry and the Nippon Kenko Kaigi

Kofu Sekisui Sangyo Co., Ltd.: Received the Ministry of Economy, Trade and Industry's New Diversity Management Selection 100 in fiscal 2016

Earned selection to the Ministry of Economy, Trade and Industry's Diversity Management Selection 100 for fiscal 2013



# Governance / Internal Control

**The Sekisui Chemical Group Has Put in Place Its Own Corporate Governance System That Reflects Its Division Company Structure**

## Management Approach

### Basic Philosophy

#### Basic Philosophy and Framework for Corporate Governance

Our Group's basic philosophy regarding corporate governance consists of striving for sustainable growth and increasing corporate value over the medium and long terms. To help achieve these goals, we are increasing the transparency and fairness of our management and pursuing swift decision-making and will do so while continuing to meet—through the creation of value for society that is part of our Corporate Philosophy—the needs of five kinds of stakeholders: customers, shareholders, employees, suppliers, and local communities and the global environment.

Note: See page 313 of "References" for more information about corporate governance.

### Major Organizations

#### Organizations in Which the Sekisui Chemical Group Participates

- The Japanese Society for Quality Control
- Japan Chemical Industry Association.
- Kansai Chemical Industry Association.
- Japan Prefabricated Construction Suppliers and Manufacturers Association
- Japan Business Federation
- Kansai Economic Federation
- The Osaka Chamber of Commerce and Industry
- Japan Federation of Housing Organizations
- The Machinami Foundation
- The Real Estate Companies Association of Japan
- Wooden Home Builders Association of Japan
- The Provision of Quality Housing Stock Association (SumStock)
- KIDS DESIGN ASSOCIATION
- Japan Sewage Pipe Renewal Method Association

### Donations

#### Donations Relating to Governmental Policies

Donations (made by Sekisui Chemical alone) to industry bodies and political groups for fiscal years 2014 through 2017 are as follows:

(Thousands of yen)

FY2014	FY2015	FY2016	FY2017
18,681	18,936	19,050	22,909

## Status of Voting Rights

### Stock Shares Issued:

Current as of March 31, 2018

Category	Number of shares	Number of voting rights (votes)	Details
Non-voting shares	—	—	—
Shares with restrictions on voting rights (Treasury stock, etc.)	—	—	—
Non-voting shares (Other)	—	—	—
Shares with complete voting rights (Treasury stock, etc.)	Ordinary shares 27,813,500	—	Number of shares of unit stock without any limitation on the content of rights serving as the standard for the Company: 100 shares
Shares with complete voting rights (Other)	Ordinary shares 472,480,900	4,724,809	As above
Shares less than one unit	Ordinary shares 212,885	—	—
Total number of shares issued	500,507,285	—	—
Total number of voting rights among shareholders	—	4,724,809	—

Note: The row for "Shares with complete voting rights (Other)" includes the following shares (voting rights).

Executive compensation BIP Trust 344,000 shares (3,440 voting rights)

Stock grants ESOP Trust 302,000 shares (3,020 voting rights)

## About the Age-Group Composition of Corporate Officers

### Age-Group Composition of Officers in FY2017 (Sekisui Chemical)

		Under 30	30–39	40–49	50–59	60 or older
Number of Officers by Age	Men	0	0	0	2	8
	Women	0	0	0	0	0



# Risk Management

**We Are Increasing Risk Sensitivity and Improving the Quality of Our Activities Through Further Strengthening of Our Risk-Management Structures**

## Management Approach

### Basic Philosophy

### A System That Can Be Brought to Bear on Ever-changing Risks and Crises

Here at the Sekisui Chemical Group, we are working to build a risk management structure that unifies “risk management,” which aims to prevent risks from occurring in the first place, and “crisis management,” which responds to serious risks that have manifested. Through this unification of concepts we aim to create a system that can be brought to bear on ever-changing risks and crises.



### Management Structure

### Explicitly State Risk Management Policies in Writing and Share Them with All Company Employees

In the Sekisui Chemical Group's risk management structure, the head of the HR department, who is also a Director and Managing Executive Officer, holds ultimate responsibility, and the Risk Management Group of the HR Department at headquarters handles day-to-day risk-management operations.

We are striving to publicize and thoroughly install among the directors, executive officers, and employees of Sekisui Chemical and its group companies the “Sekisui Chemical Group Risk Management Guidelines,” which were established based on the revised “Basic Philosophy on Internal Corporate Governance Systems” of April 2014, to identify significant risks and to prevent them from manifesting by centrally and comprehensively collecting and evaluating information about risks. In the event that a significant risk does become manifest, an Emergency Response Headquarters will be established based on the the “Sekisui Chemical Group Crisis Management Guidelines,” creating a framework capable of swiftly and appropriately handling the situation.

In preparation for such rare contingencies, a code of conduct regarding this framework, to be referred to by all employees, has also been shared with all group employees via the group intranet and other means.

## Bolstering Risk Management (Prevention) Structures

### Increasing Risk-sensitivity Using PDCA Cycles

It is extremely difficult to accurately monitor for risks that could foreseeably occur at some point in the future, as our corporate activities become more complex. We at the Sekisui Chemical Group believe that increasing risk sensitivity among employees is essential to handling such risks, and the group continuously runs PDCA cycles in line with the international standard for risk management ISO 31000.

These activities launched during fiscal year 2011 among 27 organizations, primarily business units within the Company. The number of organizations engaged in these actions has increased each year, reaching 165 in total, including those in Japanese and overseas affiliates, in fiscal year 2017. These organizations collectively account for around 93% of consolidated revenue, and the group is working to improve the effectiveness of these actions through inter-organizational cooperation and linkages among specialist divisions.

## Identifying Risks

### Listing of Risks for Which the Group Should Be Prepared, Including ESG Risks

To make clear which risks the group as a whole should prepare itself for, the scope of anticipated risks has been identified comprehensively, going beyond ESG risks alone, and these risks have been compiled into the "Sekisui Chemical Group Risk List"

## ●Major ESG Risks Faced by the Sekisui Chemical Group

- Environmental risks (soil and air pollution / leaks of harmful substances / tightening of environmental regulations, etc.)
- Societal risks (worsening of relations with local communities / rumor-based reputational harm/spread of communicable diseases / breakdowns of functions provided by public bodies, etc.)
- Legal risks (unethical or criminal behavior / violations of the Monopolies Act or fraudulent transactions / unauthorized overwriting of data / behavior constituting harassment / sudden changes to laws or regimes / infringements on intellectual property rights, etc.)
- Quality-related risks (responsibility for manufactured goods / product recalls / mistakes during construction, etc.)
- Human resources / labor risks (labor practices that violate the law / discrimination / changes to the composition of employees, etc.)
- Safety risks (employee health and safety / workplace accidents / the safety of employees stationed or traveling abroad, etc.)
- Financial risks (various risks relating to finances, accounting, and taxes)
- Information-management risks (information leaks / destruction or loss of electronic data, etc.)
- Management decision- and business design-based risks (unclear vision and management policies / defects in work processes / product-related incidents, etc.)
- Affiliated company and supplier risks (scandals at affiliated companies / disasters or accidents affecting affiliated companies, etc.)

## Bolstering the Crisis-Management System

### The Operating of the Crisis-Management System

Based on its experience during the Great East Japan Earthquake, the Sekisui Chemical Group carried out a full-scale overhaul of its crisis management system in fiscal year 2011 and has been refining that system ever since.

Specifically, the group, among other initiatives, has been conducting drills (at least twice yearly) based on the Emergency Response Headquarters Procedures Manual, annual education (for all employees) using the Emergency Situation Initial Response Procedures Manual, and organizing disaster-preparedness systems based on disaster-preparedness checklists in all offices (around 800 within Japan).

As of January 2012 the rate of sufficiency regarding disaster-preparedness systems, in reference to the Cabinet Office's "Table of Self-Evaluation Items," averaged 41% among all offices. Because of instituting concrete measures, however, the group has, since fiscal year 2015, reached a point where it has been able to maintain an average rate of over 90%.

項目番号	項目内容	評価状況
1	緊急事態発生時の対応手順が明確に定められているか	○
2	緊急事態発生時の連絡体制が明確に定められているか	○
3	緊急事態発生時の役割分担が明確に定められているか	○
4	緊急事態発生時の避難誘導が明確に定められているか	○
5	緊急事態発生時の応急救護が明確に定められているか	○
6	緊急事態発生時の火災対応が明確に定められているか	○
7	緊急事態発生時の地震対応が明確に定められているか	○
8	緊急事態発生時の台風・大雨対応が明確に定められているか	○
9	緊急事態発生時の感染症対応が明確に定められているか	○
10	緊急事態発生時の化学物質・有害物質対応が明確に定められているか	○
11	緊急事態発生時の放射線対応が明確に定められているか	○
12	緊急事態発生時の自然災害対応が明確に定められているか	○
13	緊急事態発生時の交通手段が明確に定められているか	○
14	緊急事態発生時の食料・飲料の確保が明確に定められているか	○
15	緊急事態発生時の寝具の確保が明確に定められているか	○
16	緊急事態発生時の衣類の確保が明確に定められているか	○
17	緊急事態発生時の衛生用品の確保が明確に定められているか	○
18	緊急事態発生時の医療用品の確保が明確に定められているか	○
19	緊急事態発生時の情報収集手段が明確に定められているか	○
20	緊急事態発生時の情報発信手段が明確に定められているか	○
21	緊急事態発生時の情報共有手段が明確に定められているか	○
22	緊急事態発生時の情報記録手段が明確に定められているか	○
23	緊急事態発生時の情報分析手段が明確に定められているか	○
24	緊急事態発生時の情報活用手段が明確に定められているか	○
25	緊急事態発生時の情報セキュリティが明確に定められているか	○
26	緊急事態発生時の情報バックアップが明確に定められているか	○
27	緊急事態発生時の情報復旧手段が明確に定められているか	○
28	緊急事態発生時の情報監視手段が明確に定められているか	○
29	緊急事態発生時の情報報告手段が明確に定められているか	○
30	緊急事態発生時の情報相談手段が明確に定められているか	○
31	緊急事態発生時の情報提供手段が明確に定められているか	○
32	緊急事態発生時の情報連携手段が明確に定められているか	○
33	緊急事態発生時の情報連携手段が明確に定められているか	○

The disaster-preparedness checklist, which consists of 33 items

## Business Continuity Planning (BCP)

### Basic Philosophy Toward BCP

BCP is the very essence of business strategy. Therefore, the Sekisui Chemical Group, whose adoption of a Company system has made the range of the business in which it engages broad, has decided on a basic posture of having those in charge of each line of business (the heads of business units, the presidents of business companies, etc.) determine the necessity of BCP individually, based on the particulars of the business in which they are engaged. Because of this, the group has created a support system, such as by establishing "Guidelines for Formulating BCP (BCM)" and drawing up a checklist for performing this formulation. Each person in charge of a line of business is recommended to formulate business-continuity plans and to implement business continuity management (BCM) based on these guidelines and on ISO 22301, a standard for methods of implementing BCM.

## Crisis Management Systems Overseas

### A Support System Centered on Overseas Crisis-Management Organizations

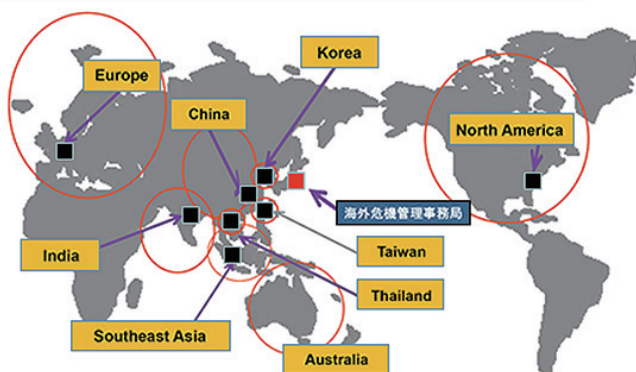
Based on its corporate regulations "Overseas Safety Management Regulations," the Sekisui Chemical Group has formed a pyramid-shaped overseas crisis management organization with an officer in charge of overseas crisis management at the peak. (The officer in charge of overseas crisis management is answered to by [the head of the] Overseas Crisis-Management Office, to which the regional heads answer, and to who in turn the heads of locations answer.) It is primarily through this organization that the group supports employees traveling abroad, those stationed abroad, and locally based employees, using such means as sharing crisis management-related information, issuing advisories in a timely manner, instructing employees about travel restrictions, and implementing other emergency-response measures.

As the number of group locations increases with each passing year, crisis-management manuals have been organized at each factory, office, or other business location based on support provided by the Overseas Crisis-Management Office, and these manuals are revised periodically and whenever deemed necessary.

Regarding risks particular to overseas sites, including civil unrest, terrorism, and infectious diseases, the group has organized a support system based on signing contracts with crisis-management companies, such as those that provide security assistance and medical assistance.

Additionally, the group conducts training sessions for employees seconded overseas before they are dispatched abroad, provides pre-trip e-learning for employees sent on business trips, and explains its overseas crisis management system to its employees; it also issues warnings about risks overseas.

In recent years, in particular, business trips and secondments to frontier regions have become more common, and thus the group has stepped up its partnerships with Japanese diplomatic missions abroad and has created and distributed region-specific crisis management handbooks detailing the types of risks and levels of danger for each region, 20 in total.



## Major Initiatives

### Improving the Effectiveness of Risk Management Activities

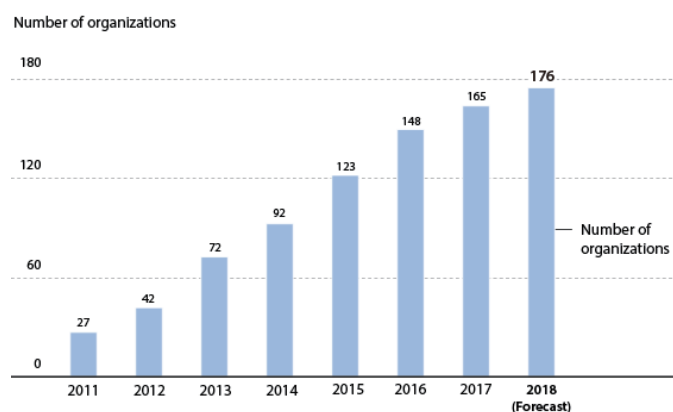
#### Conducting Risk Management Training Sessions for Risk Managers

With the aim of improving the effectiveness of risk management activities, the group conducted risk management training sessions for the risk managers of the risk-management activities organization in fiscal year 2017. There were a total of 14 of these risk management training sessions conducted throughout the year, and there was a 93% participation rate among the risk managers targeted.

## Performance Data

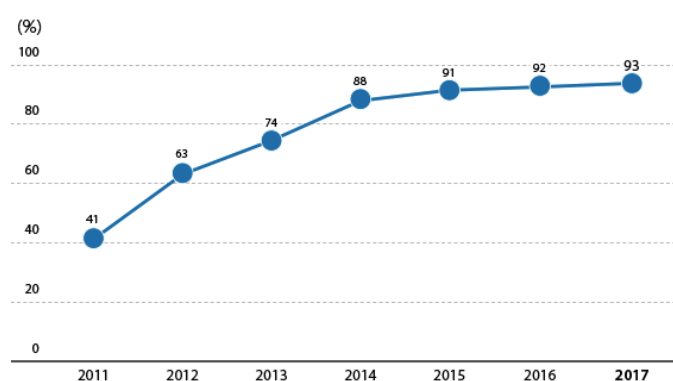
### Data on the Number of Organizations Engaged in Risk-Management Activities

#### Number of Organizations Engaged in Risk-Management Activities



### Data Relating to the Sufficiency Rate for Disaster-Preparedness Systems

#### Disaster-Preparedness Sufficiency Rate (Average for Japanese Business Sites) Over Time



# Cyber Security

## Maintaining an Effective Management System to Address Various Information-related Risks

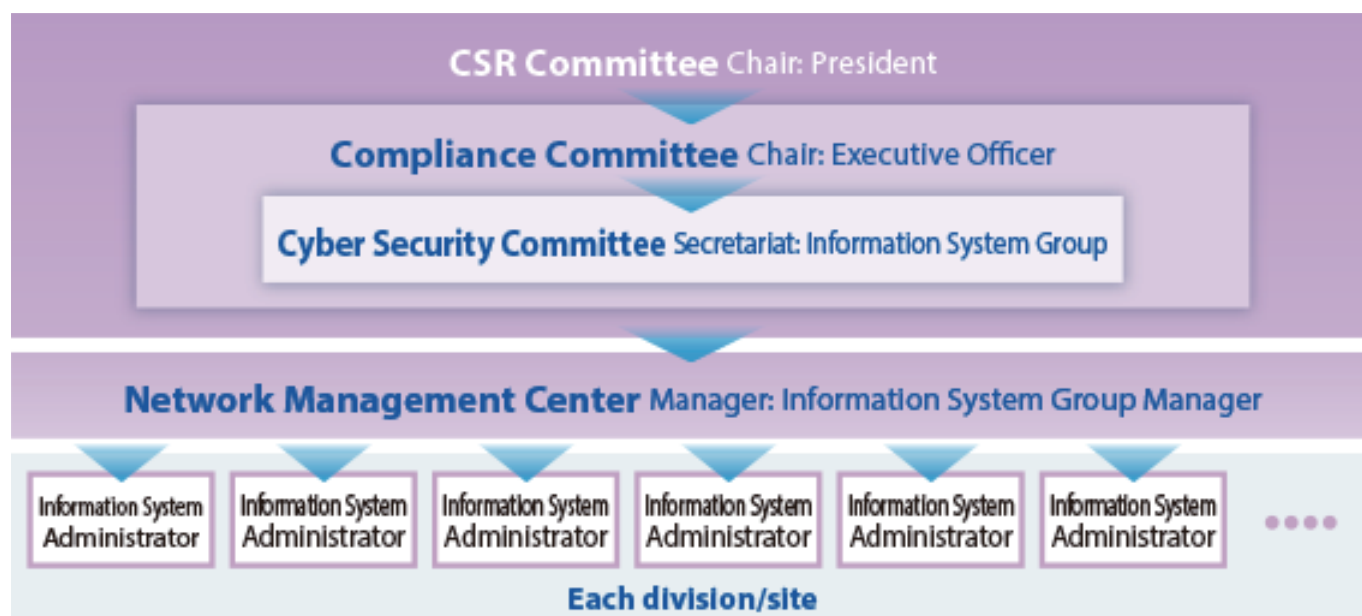
### Management Approach

#### Cyber Management System

### Building a Cyber Management System with Personnel Responsible Assigned to Each Business Site

Headed by the CSR Committee, which is chaired by the president, the Network Management Center that has been established under the Cyber Security Committee has set up a monitoring system, carries out the monitoring and recording of information and, having also posted at least one cyber system administrator at each business site, has established a comprehensive Group-wide cyber management system. Even in the case of organizational changes or cyber system administrator reassignments, the Company is constantly aware of the presence or absence of the cyber system administrators at each of its business sites through its registry management system.

#### Cyber Security Organizational Chart



#### Roles of Cyber System Administrators

- (1) Cyber security measures in general including those relating to anti-viruses
- (2) Management and stable operation of information systems, personal computers, software, etc.
- (3) General network-related management
- (4) Giving of guidance on proper use of cyber systems to employees at each company / department
- (5) Acting as points of contact for, and responding to, other general matters relating to cyber systems

## Measures to Address Information Leakage Risks

### Implementing Every Measure Possible from Both System and Human Aspects

The Company takes every measure possible, from both system and human aspects, in order to maintain the security of customer (including personal) and internal (including confidential) information. For external threats, the Network Management Center serves as the hub, constantly identifying new threats, such as newly reported viruses and targeted e-mails. In addition to promptly implementing appropriate measures, the Center works on prevention by conducting employee training and auditing by e-learning.

The Company also holds an Information Security Committee meeting once every two months to evaluate risk countermeasures and reports on information security-related activities at every meeting.

#### Key System-related (Tangible) Measures

- (1) Establish firewalls to completely separate external networks from internal intranet and control networks
- (2) Monitor and record data through network management centers
- (3) Employ the latest security measures for employee computers and update software
- (4) Enhance email systems through in-house production and prohibit the use of personal devices in business

#### Key Human-related (Intangible) Measures

- (1) Conduct security audits as needed at business sites in Japan and overseas
- (2) Adopt entry / exit ID authentication and secondary (photographic, etc.) verification when entering major domestic offices
- (3) Conduct regular e-learning programs (those who do not attain a pass grade will be unable to access the Internet  
→ Japan only)

## Measures to Address Natural Disaster-related Risks

### Duplication and Dispersing of Systems, as well as Earthquake Resistance and Seismic Isolation Measures

We have confirmed that earthquake resistance, seismic isolation and other measures have been applied to contracted data centers so that business operations can be continued even in the event that backbone systems are damaged by a major earthquake or other disaster. In addition, by dispersing data centers among multiple locations, we have established a system that will not cause work to be disrupted even if a particular data center becomes unavailable. By taking steps to completely duplicate mission-critical systems, the Company is working to shorten the lead-time needed up to the completion of repairs and recovery of business operations.

## Protecting Personal Information

Sekisui Chemical has formulated its Personal Information Policy, which is available on the Company's website. Based on this policy, the Company complies with legal regulations and norms regarding personal information while working to appropriately protect personal information through the creation of voluntary rules and systems.

## Major Initiatives

### Strategies Aimed at Countering Cyberattacks

#### Nationwide Training on Information Management

In order to effectively counter the kinds of cyberattacks against companies that have become increasingly common in recent years, Sekisui Chemical conducted training sessions on information management in collaboration with the Information Systems Group and the Legal Department. Training consisted of a video presentation on cyberattacks and information on how to prepare for these kinds of attacks in everyday activities.

During fiscal year 2017, a total of 10 corporate compliance training sessions were conducted at business sites throughout Japan and were attended by 464 Employees.



# Respect for International Norms

**The Sekisui Chemical Group Respects International Norms and Standards Regarding CSR, Including the Universal Declaration of Human Rights, the ILO's International Labor Standards, and the United Nations' Global Compact.**

## Management Approach

### Declaration of Support for International Standards and Norms

### **Sekisui Chemical Signed the United Nations Global Compact**

The Sekisui Chemical Group respects international norms and standards regarding CSR, including the Universal Declaration of Human Rights, ISO 26000, the OECD's Guidelines for Multinational Enterprises, the ILO's International Labor Standards, and the United Nations' Guiding Principles on Business and Human Rights (Ruggie Framework). In March 2009, Sekisui Chemical signed the United Nations Global Compact\*.

In compiling and issuing its CSR Report, Sekisui Chemical conforms to the "Core" options of the internationally recognized Global Reporting Initiative (GRI) standards.

**WE SUPPORT**



\* United Nations Global Compact: A voluntary program in which top management of firms around the world pledge to comply with 10 principles on subjects such as human rights, labor standards, the environment, and anti-corruption efforts within the scopes of influence of their firms and participate in building a global framework for realizing sustainable growth.

# Social Contribution Activities

**Proactively Working to Contribute to the Society as a Company in Tune with Local Communities**

## Management Approach

### Our Philosophy

### Proactively Supporting Interaction Between Employees and Society

The Sekisui Chemical Group, which develops businesses globally, considers one of its important roles as a corporate citizen to be the resolving of issues facing local communities by means of its business activities.

In addition to contributing to society through our business activities, we also propose social contribution activities that make use of our corporate characteristics and assets in a variety of local community-related areas and, in aiming to grow in step with those local communities, position those activities primarily in the fields of the environment, the next generation, and the local communities themselves.

In the environment field of our social contribution activities, we put into practice the three initiatives—expand and create environment-contributing products; reduce environmental impact; and conserve the natural environment—stipulated in Sekisui Environment Sustainability Vision 2030 and believe that this will lead to contributions to the sustainable society which is the aim of the SDGs.

In the field of the next generation, we conduct career training that makes full use of the characteristics of our businesses and are working so that children acquire the knowledge, techniques and concepts that will lead to them living independently as members of society.

In the field of local communities, we are aiming for the sustainable society detailed under the SDGs and, in addition to deepening our understanding of the issues society has faced in recent years, we are developing volunteer activities that will lead to the finding of solutions to those issues.

To make these ideals reality, we believe that it is essential for all employees to be actively involved with local communities and have established an accumulating sabbatical system with the goal of encouraging volunteering, paid for some of the costs required when employees themselves have chosen to participate in activities that contribute to society, and have otherwise created mechanisms that allow greater numbers of employees to participate in activities that contribute to society.

Employees of the Sekisui Chemical Group engage themselves with local communities, cooperate with one another, and are working to improve the way in which people live to make it sustainable in the future within three areas of activities. We believe that these activities will help to achieve the “creation of a sustainable society” called for in the SDGs.



## Major Initiatives

### Environment

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Tree-planting activities in the state of Michigan, USA  
 Forest Preservation Activities by our Housing Company  
 Conservation of Local Biodiversity  
 Environmental Education for the Next Generation “Children’s Nature Academies”

### Next Generation

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Houses and the environment learning program  
 Chemistry Classroom Project  
 Adhesives Classroom  
 Science and Engineering Classroom  
 Innovation Inspired by Nature Research Support Program

### Local Communities

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Contributions to Local Communities by Factories, Including Tours for Social Studies Classes  
 Activities to improve civic order in regions  
 Installation of a water pump in an Indian village struggling to secure safe drinking water  
 Donation of hand-made notebooks to Thai children  
 TABLE FOR TWO  
 BOOK MAGIC  
 Heart+Action

## Performance Data

### Major Activities Contributing to the Environment Conducted or Participated in During Fiscal Year 2017

	Business site involved in the activities	Program
Activities at business sites in Japan	Hokkaido Sekisui Heim Industry Co., Ltd.	Life observation event at the on-premises biotope
	Tohoku Sekisui Heim Industry Co., Ltd.	Minamizao beech tree-planting activities
	Sekisui Heim Industry Co., Ltd. Tokyo Office	Greenery Trust Kurohamanuma-Area Meeting (Children's Nature Observation)
	Sekisui Chemical Co., Ltd. Musashi Plant	
	Sekisui Heim Industry Co., Ltd. Kanto Office	Sekisui Children's Nature Academy (Aquatic Insect Observation and Water Quality Survey)
	Sekisui Heim Industry Co., Ltd. Chubu Office	Ometahama environmental conservation activities with the local children's association (sand-drift prevention)
	Kyushu Sekisui Heim Industry Co., Ltd.	Tidal life observation event with the local children's association
	Hokkaido Sekisui Heim Co., Ltd.	Forest conservation activities at Mt. Shirahata
	Sekisui Heim Tohoku Co., Ltd.	Revitalization of Tohoku-region coastal forests / Growing Quercus serrata seedlings with children
	Tokyo Sekisui Heim Co. Ltd.	Conservation of mountain ecosystem around Tama Zoological Garden
	Sekisui Heim Tokai Co., Ltd.	Volunteering for the Mt. Fuji environment (eradicating specified invasive species)
	Sekisui Heim Kinki Co., Ltd.	Conservation of human settlement-adjacent mountain ecosystem in Kaseyama (city of Kizugawa)
	Sekisui Heim Chubu Co., Ltd.	Conservation of human settlement-adjacent mountain ecosystems in the Higashiyama neighborhood of Nagoya
	Sekisui Heim Chuushikoku Co., Ltd.	Forest conservation activities in the city of Akaiwa
	Sekisui Heim Kyushu Co., Ltd.	Forest conservation activities involving Sinomenium acutum around rice paddies in the city of Ukiha
	CHIBA SEKISUI INDUSTRY CO., LTD.	"Moist Forest" mountain ecosystem-building project
	SHIKOKU SEKISUI CO., LTD.	Eradication of invasive grasses in the Shinmachi River
	Hanyu Sekisui Co., Ltd.	Waterwheel plant conservation activities in Hozoji pond

	Business site involved in the activities	Program
Activities at business sites in Japan	SEKISUI SEIKEI, LTD. Kanto Plant	Conservation activities with an NPO at the Watarase Reservoir
	SEKISUI SEIKEI, LTD. Hyogo Plant	Tojo River cleanup
	SEKISUI SEIKEI, LTD. Izumo Plant	Izumo Children's Nature Academy (flora and fauna observation event)
	SEKISUI NANO COAT TECHNOLOGY, CO., LTD.	"Ho-no-Kuni Everyone's Forest" conservation activities in the Toyo River headwaters
	TOKUYAMA SEKISUI CO., LTD.	"Sekisui Forest" forest management activities
	Sekisui Chemical Co., Ltd. Shiga-Ritto Plant	Yurikago Rice Paddy Project
	Sekisui Chemical Co., Ltd. Gunma Plant	Gunma Children's Nature Academy (winter nature observation event)
	Sekisui Chemical Co., Ltd. R&D Institute	Minase Children's Nature Academy (wildfowl observation and nest box making)
	Sekisui Chemical Co., Ltd. Tsukuba Office	Tree-planting in the Kasumigaura headwaters in the Mt Tsukuba foothills
	Joint endeavor by Kansai-area business sites	Kyoto "Sen-no-Mori" woodland conservation activities
	Sekisui Chemical Co., Ltd. Tokyo Headquarters	Participation in the Tokyo Bay Cleanup Campaign
	Sekisui Chemical Co., Ltd. Osaka Headquarters	Yodo River Niwakubo river pond conservation activities

	Business site involved in the activities	Program
Activities at overseas business sites	SEKISUI CHEMICAL(THAILAND) CO.,LTD SEKISUI SPECIALTY CHEMICALS (THAILAND) CO., LTD. SEKISUI S-LEC (THAILAND) CO., LTD. THAI SEKISUI FOAM CO., LTD. S AND L SPECIALTY POLYMERS CO., LTD. SEKISUI SYSTEMBATH INDUSTRY(THAILAND) CO., LTD. SEKISUI PLANT (THAILAND) CO., LTD. SEKISUI SOUTHEAST ASIA CO., LTD.	Chonburi mangrove tree-planting activities (Thailand)
	SEKISUI MEDICAL TECHNOLOGY (CHINA) LTD. SEKISUI (DALIAN) HOUSING TECHNOLOGY CO., LTD. SEKISUI HIGH PERFORMANCE PACKAGING (LANGFANG) CO., LTD SEKISUI (SHANGHAI) INTERNATIONAL TRADING CO., LTD. SEKISUI CHEMICAL (CHINA) CO., LTD. Youngbo HPP Co., Ltd.	Tree-planting activities in Beijing (China)
	SEKISUI POLYMER INNOVATIONS, LLC.	Beach-cleaning activities (USA)
	SEKISUI SPECIALTY CHEMICALS MEXICO, S.DER.L.DE C.V.	Tree-planting activities (Mexico)
	SEKISUI SPECIALTY CHEMICALS EUROPE S.L.	Tree-planting activities (Spain)
	SEKISUI DIAGNOSTICS (UK) LIMITED	Tree-planting activities (UK)
	SEKISUI DLJM MOLDING PRIVATE LTD.	Tree-planting activities (India)
	SEKISUI PILON PTY.LTD.	Coast and promenade cleanup activities (Australia)
	Youngbo Chemical Co., Ltd.	Beautification of streets and rivers surrounding the office (South Korea)
	SEKISUI MEDICAL TECHNOLOGY (SUZHOU) LTD.	Environmental beautification activities in the area surround the Suzhou factory (China)

## Major Activities Contributing to Society During Fiscal Year 2017 ("Next-Generation" and "Local Communities")

Program	Fiscal Year 2017 Performance				Performance to Date			
Heart+Action	Number of sessions	3	Number of participants	56	Cumulative number of sessions	54	Cumulative number of participants	942
TABLE FOR TWO	Number of business sites participating	12	Number of meals given as food aid to newly emerging economies	28,204	Number of business sites participating	12	Number of meals given as food aid to newly emerging economies	182,182
							Monetary amount for food aid for the Tohoku region *	649,910 yen
TABLE FOR TWO Vending Machines for Disaster Preparedness	Number of business sites participating	1	Number of meals given as food aid to newly emerging economies	5,588	Number of business sites participating	1	Number of meals given as food aid to newly emerging economies	20,191
"Housing and Environment" Learning Program	Number of schools participating	17	Number of student participants	1,840	Cumulative number of schools participating	139	Cumulative number of student participants	Approx. 16,600
Chemistry Classrooms	Number of sessions	29	Number of student participants	2,532	Cumulative number of sessions	226	Cumulative number of student participants	26,024
BOOK MAGIC	Number of sessions	6	Amount donated	68,490 yen	Cumulative number of sessions	115	Amount donated	1,026,534 yen

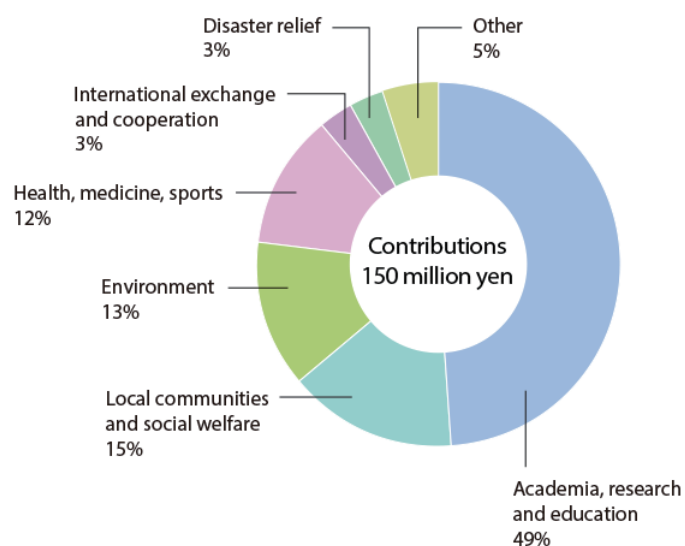
\* Food aid for the Tohoku region was given between April 2013 and December 2014

## Details of Donation Activities (Sekisui Chemical Group)

(Unit: thousands of yen)

Type of Donation	Total Amount
Donations	150,003
Employee volunteers	216,832
Donations of goods	3,483
Administrative costs	12,538

## Breakdown of Cash Donations ☒



# Environment

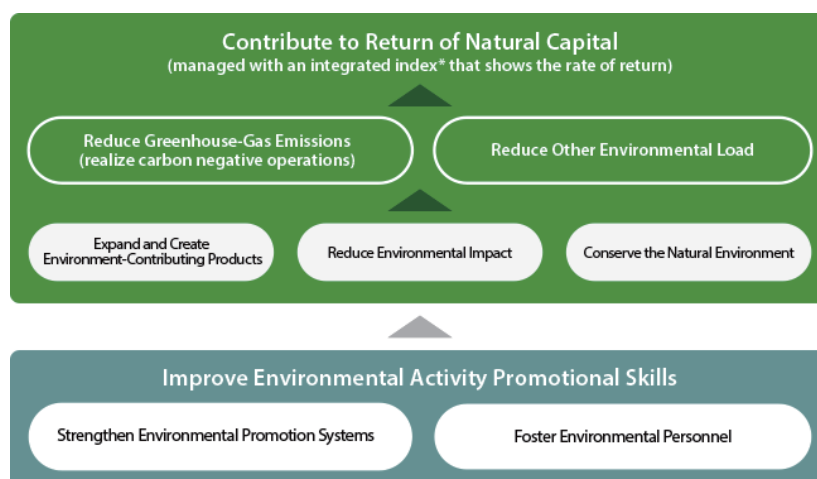
**Developing Personnel Who Engage in Environmental Activities as a Part of Efforts to Conserve the Natural Environment in Various Regions Around the World**

## Management Approach

### Basic Concept

### Promoting Conservation of the Natural Environment

The Sekisui Chemical Group promotes environmental conservation to achieve the “world in which biodiversity is conserved” called for in “Sekisui Environment Sustainability Vision 2030.” Based on this policy, employees are now engaged in activities for conserving the natural environment around the world. These activities for conserving the natural environment by employees are considered by the group to be an effective means of achieving the vision, bolstering the organizations required to conduct the activities, and fostering human resources adept at engaging in environment-related activities. Since fiscal year 2013, the group has held “SEKISUI Environment Weeks,” which are meant to be attended by all employees at all business sites, has helped to raise the activities spearheaded by business sites to whole new levels, where they are conducted in partnership with local communities, and has otherwise expanded the range of activities engaged in.





## Major Initiatives

### Initiatives of the Sekisui Chemical Group

#### Tree Planting Activities in Michigan, U.S.A.

In Coldwater, Michigan, the site of the factory for Sekisui Voltek, LLC (Voltek), regional development has increased the numbers of factories, offices, housing units, and other man-made structures, which has resulted in a problem of shrinking green spaces within the community. To improve this situation, the city's body for the provision of public services, the Coldwater Board of Public Utilities (CBPU) has decided to create new green spaces near industrial parks with the goal of beautifying the local community. Voltek is on board with this initiative, and in fiscal year 2017, 25 employees, along with staff from the CBPU, planted a total of 13 trees: six dogwoods, six crabapples, and one pine tree. Voltek will continue to contribute to the local community through environmental activities.



Tree-Planting Activities by Voltek Company Employees

## Forest Preservation Activities by our Local Housing Companies

### Woodland Conservation Activities at Kaseyama, Kizugawa

The Sekisui Heim Group is engaged in regional woodland conservation activities in seven areas across Japan, from Hokkaido to Kyushu.

In the Kinki region, the Sekisui Heim Kinki Group has been working in collaboration with Kizugawa City and local civic organizations in bamboo grove conservation activities since 2014 as part of its effort to preserve woodlands in the city-owned Kaseyama area of Kizugawa City. The group participated in two conservation and maintenance activities in fiscal 2017, one in spring and one in autumn.

The May 11 project in spring involved 43 new employees and focused on thinning the bamboo grove. Participants also took on the challenge of creating a bench using the bamboo. After the project was completed, participants talked about the state of the woodlands and its function. The experience presented a good opportunity to think about the importance of familiar natural environments.

Participants were reminded by the activity that their daily lives and company activities were supported by the natural environment around them and noted that they would like to be involved in other activities in the future as members of the community.





## Sekisui Heim Company Activities



Hokkaido Sekisui Heim Group  
Mt. Shirahata conservation activities  
(Sapporo City)



Sekisui Heim Tohoku Group  
Restoration of coastal forests in Miyagi  
Prefecture (Town of Yamamoto)



Tokyo Sekisui Heim Group  
Conservation of human settlement-adjacent  
mountain ecosystems in the Tama Region  
(Hino City)



Sekisui Heim Chubu Group  
Conservation of human settlement-adjacent  
mountain ecosystems in the Higashiyama  
neighborhood (Nagoya City)



Sekisui Heim Chushikoku Group  
Woodland conservation activities in  
city-owned forests (Akaiwa City)



Sekisui Heim Kyushu Group  
Conservation of rice paddy-adjacent  
mountain ecosystems (Ukiha City)



### Conservation of Local Biodiversity

## Activities to Eliminate Lanceleaf Tickseed from the Base of Mt. Fuji

In partnership with the NPO, FUJISAN CLUB, Sekisui Heim Tokai Co., Ltd. carries out activities to eliminate the lanceleaf tickseed plant that grows extensively along the national highways at the base of Mt. Fuji. This activity began in June 2013, when Mt. Fuji was registered as a UNESCO World Heritage site.

In fiscal 2017, Sekisui Heim Tokai employees and their family members participated in the lanceleaf tickseed elimination activity that was conducted on June 7. Prior to the start of the activity, they received an explanation about the alien plant from a FUJISAN CLUB manager and learned that these elimination activities help preserve biodiversity around Mt. Fuji. During the course of the day's activity, they were able to remove enough lanceleaf tickseed to fill 14 garbage bags.

In the years ahead, while receiving guidance from FUJISAN CLUB, we would like to continue to contribute to the local community, even in such a small way, through environmental conservation activities as a company that is embedded in the area.



## Environmental Education for the Next Generation "Children's Nature Academies"

### Conservation Activities on the Omotehama Coast / Prevention of Sand Drift

Since 2003, the Sekisui Heim Industry's Chubu office in the city of Toyohashi has worked with a group of local children to increase their understanding of the flora and fauna they are most likely to encounter and the natural environment and has been holding "Children's Nature Academies" to ensure that the importance of these subjects is passed down to the next generation of children.

In November of fiscal 2017, under the instruction of an NPO, we built and installed sand fences (fences that prevent sand from blowing away from sandy beaches) using bamboo on Omotehama Beach, located on the Pacific Ocean side of Atsumi Peninsula. Omotehama Beach is known as a site where loggerhead turtles, an endangered species, come ashore to lay their eggs. We learned from the NPO, however, that recently these sandy beaches have been receding and the number of loggerhead turtles that come ashore has decreased. In order to help preserve coastal ecosystems, including those of loggerhead turtles, we will continue to learn along with children and hope to protect local environments through our conservation activities.



A member of the NPO speaks on  
loggerhead turtles



Making sand fences on the  
beach



Finished!

# Next Generation

Fostering the Next Generation Through Programs Based on the Characteristics of Our Businesses.

## Management Approach

### Basic Concept

**Helping to Build Local Communities in Which Children Can Develop and Healthily Grow into Adulthood.**

Targeting communities where the children who will form the next generation can develop and healthily grow into adulthood, we provide educational programs for elementary, middle and high school students that leverage our business activities. Including field trip lessons, for example Science classes, given by Company employees as well as support and assistance for research based on innovations inspired by nature, the Company conducts a wide range of activities.



## Major Initiatives

### Initiatives of the Housing Company

## Houses and the Environment Learning Program

At the Housing Company, we have run a “houses and environment” learning program since fiscal year 2007 in which employees make use of their knowledge to teach about homes and the environment at schools. This is a new type of class where Sekisui Chemical Group employees work alongside teachers. The classes are carefully designed to let the students experience the building of environmentally friendly homes using models while thinking about the layouts and other aspects of the homes through group discussions; and the students learn about the role that homes play in our lives and about the impact that our lives have on the environment. In fiscal year 2017, classes were offered at 17 junior high schools and high schools in the Kanto, Kansai, Chubu, and Kyushu areas. One of the students who took the class said, “When I build a house of my own in the future, I want it to be a house that prioritizes the environment and safety first, even over design or ease of use.” Another student said, “I was interested in construction work, and now I am even more interested after taking this class.” These were just two of the remarks we heard from those who took the classes. A teachers said, “The students were very interested in this assignment because they could use kits to build model homes, following on from a previous class that also used visual materials. I believe this is precisely the active learning that is being promoted by the Ministry of Education.” A total of 1,840 students participated in the classes in fiscal year 2017.



Children assembling model housing kits

**High Performance Plastics Company Initiatives****Chemistry Classroom Project**

Since fiscal year 2008, the High Performance Plastics Company has been holding “Children's Experiment Classrooms” for elementary school students and “Drop-In Chemistry Classes” for middle-school students. Volunteer staff members from the Minase office develop the lesson programs with teachers from schools and strive to provide “easy-to-understand lessons linked to teachers’ lesson plans” that are interesting without being unconnected to the schools’ curricula. During fiscal year 2017, a total of 2,532 elementary and middle school students got to experience the fun and utility of chemistry.

In response to a request from Higashikurume Tyuou Junior High School, the Company launched a new initiative, providing an experimental class for the school’s extracurricular science club. Students with a strong interest in science thus got to enjoy participating in chemistry experiments using real laboratory instruments.

The company plans to continue these activities to allow even more children to become interested in, and fascinated by, the field of chemistry.



In-class explanations by employees of the Sekisui Chemical Co., Ltd. High Performance Plastics Company



## High Performance Plastics Company Initiatives

### Holding of Adhesives Classroom

As an initiative aimed at supporting next-generation education leveraging its business, Sekisui Fuller Co., Ltd., in co-operation with City Hall in Hamamatsu—where its Hamamatsu plant is located—and the city's "Collaboration Centers," started holding "adhesives classrooms" for elementary school students in fiscal year 2017.

With the aim of getting children interested in science and technology and building things through learning the principles of adhesives, the classes were themed around getting the children to think, "Wow! I didn't know adhesives were used for that!" The way adhesives work was explained using vocabulary easy for the children to understand, breaking the explanation of adhesives down into the three stages of flowing, seeping into the things to which they are applied, and hardening and using onomatopoeia to represent each stage. The children were also impressed by experiments in which they learned the principles of adhesives using familiar objects, such as candies, gel nail decorations, and candles.

During fiscal year 2017, a total of 4 classes were held, attended by 79 elementary school students and their guardians. The company plans to enhance the lesson content even more to bring smiles to the faces of the children who participate.



Employees from Sekisui Fuller Co., Ltd. providing explanations to children

## High Performance Plastics Company Initiatives

### Science and Engineering Classroom

Since fiscal year 2013, Sekisui Medical Co., Ltd. has held “Science Classrooms” with the theme of “how digestion and nutrient absorption work and health” for eighth-grade middle school students in the city of Ryugasaki, Ibaraki Prefecture, where the Company's reagent plant and research facility are located. During the five-year period through 2017, a total of 1,376 students attended these Science Classrooms.

The company started developing a program titled “The Blueprints of Life: Exploring the Secrets of DNA” aimed at ninth-grade middle school students. In fiscal year 2016 a test class was conducted with 232 students from the same middle school as the previous educational initiative, with the full launch of the completed program, this time attended by 229 students, happening again at the same school in fiscal year 2017.

In the “digestion and nutrient absorption” program, students gain an understanding of, for example, how starches are broken down into glucose by digestive enzymes and that glucose is then absorbed through the small intestine using models and experiments. In the “exploring the secrets of DNA” program, the students extract actual DNA from broccoli—the extracted nucleic acids visible to the naked eye—and learn about the importance of research into DNA and genetics and how it relates to society at large.

The reagents that Sekisui Medical Co., Ltd. researches, develops, and manufactures are bound to society through their use in medicine. The junior high school students thus saw how such societal contributions are direct extensions of the science classes they take at school. The company plans to continue these activities.



Students performing experiments while being advised by employees from Sekisui Medical Co., Ltd.

# Innovations Inspired by Nature Research Support Program

**Fostering the Next Generation Through Programs Based on the Characteristics of Our Businesses.**

To aid the utilization of scientific knowledge learned from nature and the workings of nature in invention, the Sekisui Chemical Group has been running the "Sekisui Chemical Innovations Inspired by Nature Research Support Program" since fiscal year 2002 as a program in commemoration of the 55th year since Sekisui Chemical's founding.

In fiscal year 2017, there were 294 applications, with assistance granted for seven "manufacturing" themes and seven "fundamental research" themes, for a total of 14 grants.

Examples of innovations inspired by nature research

Research findings relating to themes granted support as part of the "Learning-from-Nature Invention Research Support Program" were published in preliminary form in the online edition of the British science journal Nature Communications. (Affiliations and positions are those at the time of receiving awards)

## FY2014 Support Themes

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Masayuki Endo (Associate Professor, Kyoto University)

"Creation of an artificial signal transduction system inspired by the cellular receptors"

Kyoto University press release

Article posted to Nature Communications website (released August 27, 2015)

## FY2013 Support Themes

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Shu Seki (Professor, Osaka University)

"Protein Nanowires with Ultra-High Aspect Ratio Produced by Single Particle Induced Chemical Reactions"

Osaka University press release

Example of Innovations Inspired by Nature Research "Fabrication of enzyme-degradable and size-controlled protein nanowires using single particle nano-fabrication technique"

Article posted on Nature Communications (released April 28, 2014)

## FY2017 Support Themes

### Manufacturing Theme

Name	Affiliated institution Position (Affiliations, positions, and so forth are those at the time of receiving the grant award)	Grant-Receiving Research Theme
Akihiro Yabuki	Professor, Graduate School of Engineering, Hiroshima University	Development of self-healing corrosion protective coatings inspired by underground storage organs of crops
Mitsuru Shindo	Professor, Institute for Materials Chemistry and Engineering, Kyushu University	Vine Weed Control Based on Gravitropism Inhibition Inspired by Plants
Atsushi Hosoi	Associate Professor, School of Fundamental Science and Engineering, Faculty of Science and Engineering, Waseda University	Development of direct bonding technology for aluminum alloys with 3D nanostructure surface and carbon fiber reinforced thermoplastic composites
Shino Miura	Assistant Professor, Graduate School of Urban Innovation, Yokohama National University	Human-centered Public Space Design Inspired by Biodiversity and Symbiosis
Shigeru Yamago	Professor, Institute for Chemical Research, Kyoto University	Development of High-valued Polymer Materials by Multidisciplinary Control of Radical Polymerization Inspired by the Function of Enzymes
Kensuke Osada	Associate Professor, Graduate School of Engineering, The University of Tokyo	Development of polymeric micelle gene vector inspired by viral structure and function
Hemma Philamore	Senior Lecturer, Graduate School of Engineering, Kyoto University	Ultra-low power, jellyfish-inspired robot mechanisms for energy self-sufficiency

## Fundamental Research Theme

Name	Affiliated institution Position (Affiliations, positions, and so forth are those at the time of receiving the grant award)	Grant-Receiving Research Theme
Hidekazu Yoshida	Document-Analyzing Professor, Nagoya University Museum	Self-sealing methodology development of flow-path fractures by learning from naturally formed spherical carbonate concretions
Hiroataka Koga	Specially-appointed Assistant Professor, The Institute of Scientific and Industrial Research, Osaka University	Wood-based Catalytic Reactor for CO2 Conversion
Keiji Konishi	Professor, Graduate School of Engineering, College of Engineering, Osaka Prefecture University	Robustness of traveling excitable wave segments stabilized by feedback control
Daisuke Kurabayashi	Professor, School of Engineering, Tokyo Institute of Technology	Navigation of Robot Swarm in 3D Space by using Locally Connected Phase Oscillators
Tagawa Miho	Associate Professor, Institute of Materials and Systems for Sustainability, Nagoya University	Bio-inspired materials design: DNA-programmable nanoparticle assembly for the rational design of high-quality colloidal crystals
Yo Tanaka	Unit Leader, Laboratory for Integrated Biodevice, Quantitative Biology Center, RIKEN	Novel power generation system inspired from electric fish
Yuichi Tsukada	Professor, INAMORI Frontier Research Center, Kyushu University	Molecular basis of reprogramming in mammalian cells

## The recipients of the Fiscal Year 2017 Innovation Inspired by Nature Research Support Program





## Holding of the Innovations Inspired by Nature Forum

To be a group that, even 100 years from now, continues to consist of prominent, sustainable companies, the Sekisui Chemical Group aims to contribute to the bedrock of its company management, natural capital, by returning what it has taken from nature through “creating and expanding a range of Environment-contributing Products,” “reducing the group’s environmental impact,” and “conserving the natural environment.”

The Innovation Inspired by Nature Forum is held to report the results of the Innovation Inspired by Nature Research Support Program, which gives grants to research that utilizes foundational science knowledge learned from nature and the functioning of nature in innovation, as well as to promote research exchanges among the involved researchers, the graduate students who will be the researchers of tomorrow, and others.

At the fiscal year 2017 Innovation Inspired by Nature Forum, there were lectures based on examples of innovation inspired by nature and presentation sessions for posters created by fiscal year 2016 research grant recipients and others.

### Innovations Inspired by Nature Forum 2017



### Lectures

#### On the appeal of “Innovations Inspired by Nature”



Professor Emeritus, Tokyo Institute of Technology  
Junji Watanabe

#### The development of environmentally friendly housing materials inspired by nature



Director of the Office of Analysis and Evaluation, LIXIL Corporation  
Norifumi Isu

#### The development of 500-Series bullet trains that contribute to the environment and are inspired by nature

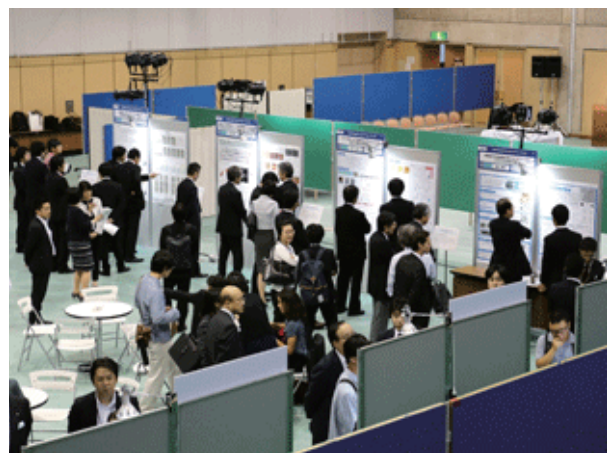
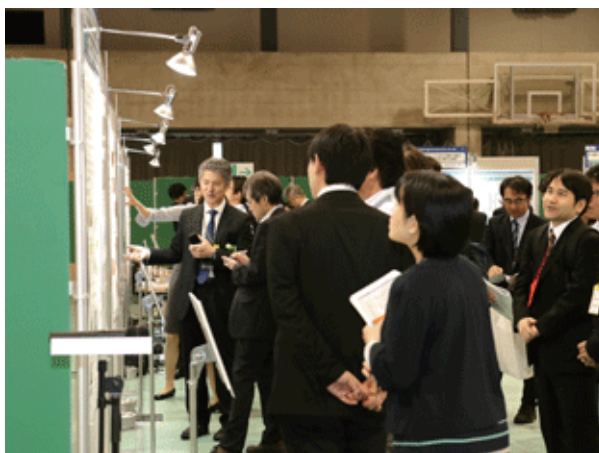
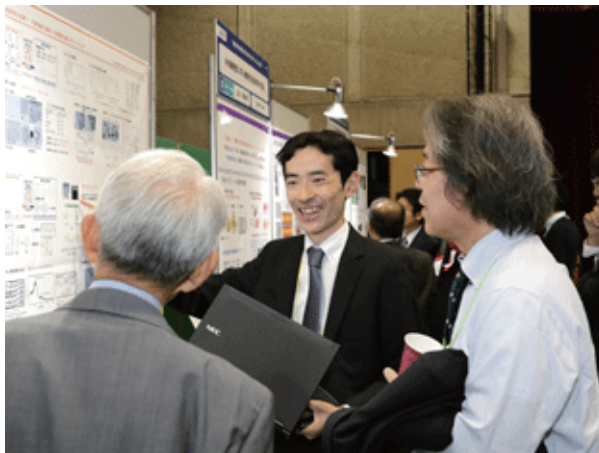


Former Director of the Technical Development Office, West Japan Railway Company  
Eiji Nakatsu

## Poster Presentation Sessions and Research Exchanges

A valuable opportunity to come into contact with the forefront of “innovations inspired by nature”

- Presentations on grant-receiving research themes (fiscal year 2016 grant-receiving themes, etc.)
- Presentations on Sekisui Chemical's products and R&D that contribute to the environment





# Local Communities

As a Company, We Aim to Engage with the Local Communities Which We Are a Part of.

## Management Approach

### Basic Concept

## Contributing to the Creation of a Sustainable Society as a Corporate Citizen

As a member of the local communities in which it operates, the Sekisui Chemical Group proactively deploys social contribution activities and thereby hopes to contribute to the creation of a sustainable society. The Group engages in social contribution activities to help solve issues faced by local communities, such as creating safe and secure cities in collaboration with local communities and support programs that assist developing countries.

## Major Initiatives

### Housing Company Initiatives

## Contributions to Local Communities by Factories, Including Tours for Social Studies Classes

Kyushu Sekisui Heim Industry Co., Ltd., located in Saga Prefecture, aims to help bring joy to its customers and regularly conducts activities rooted in the local community to that end.

In recent years, the numbers of people choosing to find employment within Saga Prefecture have been low, and companies in the prefecture face an ever-worsening situation in terms of labor shortages and difficulties securing talent. This has become an issue to resolve if the region is to be revitalized. In response to these issues in the region, the Company has partnered with government and has been accepting students, primarily in elementary and middle school, for programs in which they tour factories as part of a series social studies field trips with the aim of conveying to the local community what manufacturing companies there are locally and the joys of manufacturing. The company had conducted factory tours previously, with around 200 factory visitors in fiscal year 2015. With the subsequent considerable expansion of the number of visitors allowed to tour the factory, this number rose to around 1,750 in fiscal year 2017.

The company will continue to increase its collaboration with the local community so as to make its contribution to it.



Learning about “creating things” through  
factory tours

## Initiatives of the Housing Company

### Activities to Improve Civic Order in Regions

The Housing Company believes that it is essential that it contribute to resolving societal problems, such as by offering housing that is robustly built to survive natural disasters and decked out in ways that help prevent crime, and working on urban-development initiatives that allow residents to leave in peace, as well as on initiatives to deter crime. The Housing Company is thus engaged in activities that contribute to society in cooperation with prefectural police forces throughout Japan.

The main action pursued is to create agreements for support and cooperation between Sekisui Heim sales companies throughout the country and local police forces. The Housing Company also participates in various events, distributes goods themed around crime prevention and traffic safety, and donates to groups that offer assistance to victims of crimes.

Specifically, the Company distributes educational flyers intended, for example, to prevent people from falling prey to money-wiring fraud, leverages its display home units as police-sanctioned temporary shelters for children who encounter danger, donates "emergency whistles" (Emergency Calls) to police stations to distribute to mountain climbers, engages in activities about the town to raise awareness about traffic safety, and is involved in various other initiatives, all tailored to the unique circumstances in each local community.

The company has created a pamphlet describing these activities and makes use of it as a communication tool both within the Company and for the general public.



Sekisui Heim Chushikoku Co., Ltd., Hiroshima Office  
Fans to raise awareness of bank transfer fraud



Sekisui Heim Shin-Etsu Co., Ltd. and Sekisui Fami  
S Shinetsu Co., Ltd.  
Raising awareness of traffic safety on roads



Company Name-Emblazoned Emergency Whistles from Hokkaido Sekisui Heim Co., Ltd.



Hokkaido Sekisui Heim Co., Ltd donates 200 emergency whistles emblazoned with the company name



Pamphlet describing the Housing Company's CSR activities (Issued in April 2018)



### Initiatives of the Sekisui Chemical Group

## Installing Water Pumps at Indian Villages with Safe Drinking Water Issues

Our Indian business unit, SEKISUI DLJM MOLDING PRIVATE LTD (DLJM), contributes to society primarily in three areas: health, education, and daily life. In fiscal year 2017, DLJM installed water pumps in two villages located close to its business sites. Access to safe drinking water is difficult in these villages.

This initiative initially involved conducting multiple surveys of nearby villages and then determining where water pumps needed to be installed to help as many people as possible with drinking water issues by applying a SWOT (strengths, weaknesses, opportunities, threats) analysis. In addition, DLJM's COO took the initiative in speaking with numerous social workers to determine which villages needed water pumps, resulting in the decision to install a total of four water pumps at the villages of Fazailpur and Chandrawal. Each pump is capable of supplying around 500 people with drinking water.

Prior to installation, DLJM made an effort to communicate with every resident of both villages about optimal locations to install these pumps. DLJM did its utmost to reflect the feedback of villagers who actually use water pumps, by emphasizing the opinions of women who use them most frequently to carry out household chores and having villagers determine for themselves the final pump locations. Since installation, DLJM has continued to engage with villagers while maintaining the pumps.



Maintaining safe drinking water by installing water pumps



Human resources and discussions for determining where to install the water pump

## Initiatives of the Sekisui Chemical Group

### Donating Handmade Notepads to Children in Thailand

In rural agricultural villages in Thailand, many children are too poor to afford stationery, making it difficult for them to pursue their studies. To provide assistance to these children, SEKISUI CHEMICAL (THAILAND) CO., LTD. (SCT) took part in the "Paper Ranger" initiative promoted by the NPO Foundation for Thailand Rural Reconstruction Movement under Royal Patronage (TRRM) in fiscal year 2017. SCT employees made notebooks from recyclable used copy paper that were then delivered to these children.

Each employee took part in making 70 notebooks (24 pages each) from recyclable used copy paper collected at SCT's business sites that were bound together with an illustrated cover page. These homemade notebooks were donated to children belonging to ethnic minorities with little access to education and families affected by natural disasters. Looking ahead, SCT will continue to engage in activities that contribute to local communities.



Notebooks complete with illustrated cover pages



SCT employees making notebooks by hand

## Initiatives of the Sekisui Chemical Group

### TABLE FOR TWO

As a social contribution activity that allows easy participation by individual employees, the Sekisui Chemical Group has continued to implement the TABLE FOR TWO\* (TFT) initiative since FY2008, a program in which 20 yen is added to the cost of a meal in employee cafeterias, with this amount donated to support the provision of lunches to children in developing countries. Furthermore, TFT was expanded, from April 2013 to December 2014, to "TABLE FOR TWO+Tohoku," in order to support the provision of food to roughly the equivalent of 650,000 yen to victims of the Great East Japan Earthquake in the Tohoku region.

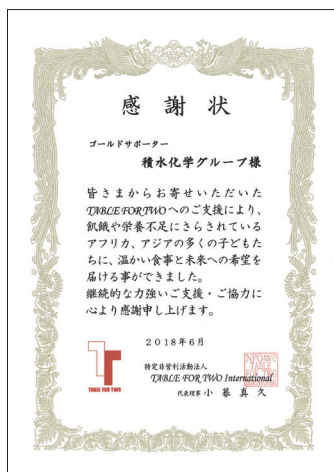
In fiscal 2017, 12 locations participated in the program, including the Sekisui Chemical headquarters in Tokyo and Osaka, the Gunma Plant, the Musashi Plant, the Tsukuba Office, the Shiga-Minakuchi Plant, the Kyoto Research and Development Laboratories, the Research and Development Institute, Kinki Sekisui Heim, Co., Ltd., Kyushu Sekisui Heim Industry, Co., Ltd., Sekisui Board, Co., Ltd., and the Ota Plant of Toto Sekisui Co., Ltd. In fiscal 2017, approximately 560,000 yen was donated for food assistance to countries in Asia and Africa, bringing the total amount donated since the program began to more than roughly 4.1 million yen.

#### \* TABLE FOR TWO

A social contribution activity implemented through everyday meals by the specified nonprofit corporation, TABLE FOR TWO International. The program not only feeds hungry children in developing countries by providing them with school lunches, but it also contributes to boosting attendance at schools, and improving academic performance and physical fitness. TABLE FOR TWO+Tohoku was enacted from 2013 to 2014 to provide food support to not only children in developing countries, but also to those impacted by the Great East Japan Earthquake. Meal support activities for Asia and Africa were launched in January 2015

## Letter of Appreciation Received from the Specified Nonprofit Corporation TABLE FOR TWO International Recognizing Sekisui Chemical Group as a “Gold Supporter”

Once again in the 2017 fiscal year, Sekisui Chemical Group received a letter of appreciation from the specified non-profit corporation TABLE FOR TWO International recognizing us as a “Gold Supporter” for our TFT activities. We will continue carrying out these activities in the future, supporting a stable food supply for children in developing countries.



Letter of appreciation from TABLE FOR TWO  
International

### Initiatives of the Sekisui Chemical Group

## Installation of TABLE FOR TWO Vending Machines

In order to enable as many employees as possible to participate in the TABLE FOR TWO (TFT) initiative, the Sekisui Chemical Group installed the first vending machine linked to the TFT program at its Osaka Headquarters in July 2013. For each TFT-linked product purchased through this vending machine, 10 yen is donated to help fund meals and catering to schools in developing countries. Donations collected totaled around 60,000 yen in fiscal 2017.

## Initiatives of the Sekisui Chemical Group

### BOOK MAGIC

As a social contribution activity that allows easy participation by individual employees, the Sekisui Chemical Group has been implementing BOOK MAGIC\* since September 2009. Through this program, money made from selling un-needed books and CDs is used to help fund education support programs through JEN, an NPO, in various countries throughout the world.



Poster to raise awareness about BOOK  
MAGIC (created by JEN)

#### \* BOOK MAGIC

A recycle and donate program hosted jointly by the specified nonprofit corporation, JEN, and BOOKOFF CORPORATION, LTD. Books, DVDs and CDs that people have finished reading, watching or listening to are sold instead of being thrown away, and the money is donated to JEN to help provide educational support (school support program) in regions scarred by natural disasters or wars.



## Initiatives of the Sekisui Chemical Group

### Heart+Action

As social contribution activities that allow easy participation by individual employees, the Sekisui Chemical Group has been implementing programs such as TABLE FOR TWO and BOOK MAGIC.

In fiscal 2012, we further expanded these programs by promoting a new initiative known as Heart+Action. This program is based on activities involving international cooperation to help children and infants living in developing countries and those who are suffering from pediatric cancer. People only need about an hour to take part in the one of the many programs. Feedback received from participants included comments such as "It was easy to take part in" and "I'm glad to have been able to contribute to society through such a simple activity."

### Overview of Each Program

#### Send a Picture Book

An activity involving international cooperation in which stickers are stuck on Japanese picture books with translations of the text in languages of countries or regions where almost no children's books are published. They are then delivered to children through Education Sponsorship in Asia, a specified non-profit corporation.



Stickers being affixed to Japanese picture books

#### Sort the Coins

An activity in which coins of foreign currencies collected in donation boxes set up at international airports are sorted into the main countries of origin and used to help improve living standards in developing countries and in restoration efforts after the Great East Japan Earthquake through the authorized NPO, Japan Habitat Association.



Coins of various countries being sorted

### Send the Sounds

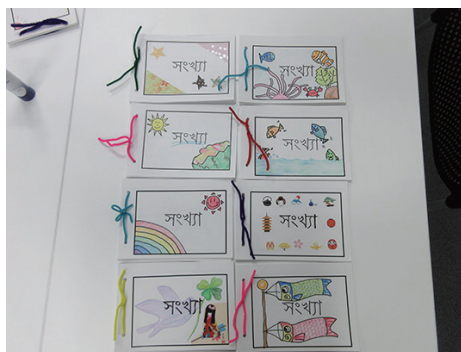
Through the NPO The Lifestyle Research Institute of Forests, we give African calimba musical instruments that are made out of thinned out trees from forests in Japan to young children suffering from pediatric cancer.



Making a calimba with the SEKISUI logo carved into it

### Send a Textbook

Participating in international cooperative activities by creating handmade teaching materials in the Bengali numbers and having them delivered to the children of Bangladesh through the NPO ESA (Education Sponsorship in Asia).



A homemade textbook displaying Bengali numerical characters

# Special Topic

## Implemented Environment Education Initiatives for the Children of Group Employees

### Major Initiatives in Fiscal 2017

#### Initiatives of the Sekisui Chemical Group

#### Global Children's ECO Summit 2017 Held

The Global Children's ECO Summit 2017 was convened as an event to help educate children who will lead the next generation about the environment, in conjunction with Sekisui Chemical's 70th anniversary over a seven-day period from July 31, 2017. A total of 47 children from the families of Sekisui Chemical's Group employees in 13 countries around the world were invited to participate in environmental exchanges and presentations.



## Principal Theme: "What Children Can Do Themselves for the Future"

In kicking off the Summit, participants gained an insight into the global scale issues that continue to prevail today, with a focus on the natural environment, which provides the foundation for the Group's aspirations toward sustainability management.

To provide participants with the opportunity to experience Japan's natural environment first-hand, tours to observe tidal flats and investigate creatures in their natural habitats were then organized. These initiatives helped showcase the importance of conserving the natural environment. During the Summit, participants were also able to visit Group company plants, view certain unique environmental contribution activities and take home hints on how to conserve the natural environment at the Group's global business sites.

Based on these experiences and the initiatives being undertaken in the countries and regions in which the children reside, discussions were held on what needs to be done to conserve the natural environment for future generations and more specifically on what each individual can do to help secure a bright and sustainable future.

Finally, the children who participated in the event presented a declaration concerning the actions they would take in relation to the environment and offered environmental suggestions to the adults, including their parents. President Koge responded to the declaration and the suggestions with his own declaration: "We will go on to provide environmental education for the next generation around the globe."



Observing living creatures at the Yatsu tidal flats



Plant tour



A group discussion on what each individual can do to help secure a bright and sustainable future



Declaration toward the environment and environmental proposals put forward by children participating in the Summit



Commitment by President Koge

**Click here for more details**

[http://www.sekisui.co.jp/news/2017/1307972\\_29186.html](http://www.sekisui.co.jp/news/2017/1307972_29186.html)

# GRI Standard Context Index

The CSR Report 2018 of Sekisui Chemical Co., Ltd. was written following the Core options of the GRI Standards.

## General Standard Disclosures

### 1. Organizational Profile

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
102-1	Name of organization	Outline of SEKISUI	
102-2	Activities, brands, products, and services a. A description of the organization's activities. b. Primary brands, products, and services, including an explanation of any products or services that are banned in certain markets.	Our Company Products	During the period covered by the report, there were no products or services whose sales were banned in specific markets.
102-3	Location of headquarters	Outline of SEKISUI	
102-4	Location of operations a. Number of countries where the organization operates, and the names of countries where it has significant operations and that are relevant to the topics covered in the report.	Global Rollout SEKISUI Worldwide	
102-5	Ownership and legal form	Financial Information Corporate Governance Report	
102-6	Markets served i. Geographical locations where products and services are offered. ii. Types of industries served. iii. Types of customers and beneficiaries.	Outline of SEKISUI Business Introduction	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
102-7	<p>Scale of the organization</p> <p>i. Total number of employees.</p> <p>ii. Total number of operations.</p> <p>iii. Net sales (for private sector organizations), net revenues (for public sector organizations).</p> <p>iv. Total capitalization broken down in terms of debt and equity (for private sector organizations).</p> <p>v. Quantity of products or services provided.</p>	<p>Outline of SEKISUI</p> <p>Our Company</p> <p>Securities Report (Japanese)</p> <p>Fact Book</p> <p>Employee-related data</p>	
102-8	<p>Information on employees and other workers</p> <p>a. Total number of employees by employment contract (permanent and temporary), by gender.</p> <p>b. Total number of employees by employment contract (permanent and temporary), by region.</p> <p>c. Total number of employees by employment type (full-time and part-time), by gender.</p> <p>d. Whether a substantial portion of the organization's activities are performed by workers who are not employees. If applicable, a description of the nature and scale of work performed by workers who are not employees.</p> <p>e. Any significant variations in the numbers reported in Disclosures 102-8-a, 102-8-b, and 102-8-c (such as seasonal variations in the tourism or agricultural industries).</p> <p>f. Explanations of the methods used to compile data (if any assumptions are made, including those).</p>	Employee-related data	<p>The people who perform a substantial proportion of Sekisui's activities are counted as employees. There were no major fluctuations in the data during the reporting period regarding employees.</p>
102-9	<p>Supply chain</p> <p>a. A description of the organization's supply chains. Including its major components of the supply chains for the organization's activities, major brands, products, and services.</p>	Our Company	



Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
102-10	<p>Significant changes to organizations and supply chain</p> <p>i. Changes in the location of the organization or its operations, including facility openings, closings, and expansions).</p> <p>ii. Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations).</p> <p>iii. Changes in the location of suppliers, the structure of the supply chain, or in relationships with suppliers, including selection and termination.</p>	Not applicable for the fiscal year under review	
102-11	Precautionary principle or approach	<p>Our Approach to CSR</p> <p>CSR Medium-term Plan</p> <p>Promotion System</p> <p>Chemical Substance Management</p> <p>Governance / Internal Control</p>	
102-12	<p>External initiatives</p> <p>a. A list of externally-developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.</p>	Respect for International Norms Corporate Governance	
102-13	<p>Memberships of associations</p> <p>List of the major memberships of industry or other associations, and advocacy organizations in Japan and overseas.</p>	Major Organizations	

## 2. Strategy

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
102-14	<p>Statement from senior decision-maker</p> <p>a. A statement from the highest-ranking decision-maker of the organization (CEO, chairman, or an equivalent top-level executive) concerning the relationship of the organization to sustainability and concerning strategies for working toward sustainability.</p>	Top Message	



Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
102-15	Crucial impacts, risks, and opportunities	Top Message Our Approach to CSR Key CSR Issues CSR Medium-term Plan SDGs Initiatives Climate Change and Our Business Business Risks Identifying Risks Measures to Address Information Leakage Risks Measures to Address Natural Disaster-related Risks	

### 3. Ethics and Integrity

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
102-16	Organization's values, principles, standards, and norms of conduct	Group Principle Top Message Our Approach to CSR CSR Management Policies CSR Medium-term Plan	
102-17	Systems for advice and concerns regarding ethics i. Systems that call for advice concerning ethical behavior, legal behavior, and the integrity of the organization. ii. Systems for reporting unethical behavior or illegal behavior and concerns about the integrity of the organization.	Compliance and Respect for Human Rights	

## 4. Governance

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
102-18	<p>Governance structure</p> <p>a. Governance structure of the organization, including committees of the highest governance body.</p> <p>b. Committees responsible for decision-making on economic, environmental and social topics.</p>	<p>Corporate Governance</p> <p>Governance / Internal Control</p> <p>CSR Management</p> <p>Promotion System</p>	
102-19	<p>Delegating authority</p> <p>a. Process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees.</p>	<p>Governance / Internal Control</p> <p>CSR Management</p> <p>Promotion System</p>	
102-20	<p>Executive-level position responsibility for economic, environmental, and social topics</p> <p>a. Whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics.</p> <p>b. Whether post holders report directly to the highest governance body.</p>	<p>CSR Management</p> <p>Promotion System</p>	
102-21	<p>Consultations with stakeholders on economic, environmental and social topics</p> <p>a. Processes for consultations between stakeholders and the highest governance body on economic, environmental and social topics.</p> <p>b. If consultation is delegated, describe to whom it is delegated and how the resulting feedback is provided to the highest governance body.</p>	—	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
102-22	<p>Composition of the highest governance body and its committees</p> <ul style="list-style-type: none"> <li>i. Executive or non-executive</li> <li>ii. Independence</li> <li>iii. Terms of members of governance bodies</li> <li>iv. Number of each individual's other significant positions and commitments, and the nature of the commitments</li> <li>v. Gender</li> <li>vi. Membership of under-represented social groups</li> <li>vii. Competences relating to economic, environmental and social impacts</li> <li>viii. Stakeholder representation</li> </ul>	<p>Governance / Internal Control</p> <p>Corporate Governance</p> <p>Corporate Governance Report</p>	
102-23	<p>Chairs of highest governance bodies</p> <ul style="list-style-type: none"> <li>a. Whether the chair of the highest governance body is also an executive officer in the organization.</li> <li>b. If the chair also serves as an executive officer, describe his or her function within the organization's management and the reasons for this arrangement.</li> </ul>	<p>Governance / Internal Control</p> <p>Corporate Governance Report</p>	
102-24	<p>Nominating and selecting members of the highest governance body</p> <ul style="list-style-type: none"> <li>a. Nomination and selection processes of the members of the highest governance body and its committees.</li> <li>b. Standards used for nominating and selecting highest governance body members, including whether and how: <ul style="list-style-type: none"> <li>i. Whether and how stakeholders (including shareholders) are involved</li> <li>ii. Whether and how diversity is considered</li> <li>iii. Whether and how independence is considered</li> <li>iv. Whether and how expertise and experience relating to economic, environmental, and social topics are considered</li> </ul> </li> </ul>	<p>Governance / Internal Control</p> <p>Corporate Governance Report</p>	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
102-25	<p>Conflicts of interest</p> <p>a. Processes conducted by the highest governance body to avoid and handle conflicts of interest.</p> <p>b. Whether conflicts of interest are disclosed to stakeholders, including, as a minimum:</p> <p>i. Cross-board membership</p> <p>ii. Cross-shareholding with suppliers and other stakeholders</p> <p>iii. Existence of controlling shareholder</p> <p>iv. Related party disclosures</p>	Governance / Internal Control Corporate Governance Report	
102-26	<p>Highest governance body's role in establishing goals, values, and strategy</p> <p>a. Highest governance body's and senior executives' roles in developing, approving, and updating the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social topics.</p>	Governance / Internal Control	
102-27	<p>Collective knowledge of highest governance body</p> <p>a. Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental, and social topics.</p>	—	
102-28	<p>Evaluation of the performance of highest governance body</p> <p>a. Processes for evaluating the performance of the highest governance body in relation to governance of economic, environmental and social topics</p> <p>b. Whether such evaluation is independent or not, and its frequency.</p> <p>c. Whether such evaluation is a self-assessment.</p> <p>d. Measures taken in response to evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics. Including, as a minimum, changes in membership and organizational practice.</p>	—	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
102-29	Identifying and managing impacts on economy, environment, and society a. Highest governance body's role in identifying and managing economic, environmental and social topics, as well as their impacts, risks, and opportunities – including its role in the implementation of due diligence processes. b. Whether consultations with stakeholders are used to support the identification and management of economic, environmental and social topics and their impacts, risks, and opportunities.	—	
102-30	Effectiveness of risk management processes a. Highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics.	Corporate Governance	
102-31	Review of economic, environmental and social topics a. Frequency of the highest governance body's review of economic, environmental and social topics and their impacts, risks, and opportunities.	Corporate Governance Report	
102-32	Highest governance body's role in sustainability reporting a. The highest-ranking committee or position that fulfills the functions of conducting formal reviews and approves the organization's sustainability reports and confirming that all material topics have been covered.	CSR Management Promotion System	
102-33	Communicating critical concerns a. Processes established for communicating critical concerns to the highest governance body.	CSR Management Promotion System Stakeholder Engagement	
102-34	Nature and total number of communicated critical concerns a. Total number and nature of critical concerns that were communicated to the highest governance body. b. Mechanisms used to handle and resolve critical concerns.	—	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
102-35	<p>Remuneration policies</p> <p>a. Remuneration policies for the highest governance body and senior executives for the below types of remuneration:</p> <p>i. Fixed pay and variable pay, including performance-based remuneration, equity-based remuneration, bonuses, and deferred or vested shares)</p> <p>ii. Sign-on bonuses or recruitment incentive payments</p> <p>iii. Termination payments</p> <p>iv. Clawbacks</p> <p>v. Retirement benefits, including the difference between benefit schemes and contribution rates for the highest governance body, senior executives, and all other employees</p> <p>b. How performance standards in the remuneration policies relate to the highest governance body's and corporate officers' objectives for economic, environmental and social topics.</p>	<p>Corporate Governance</p> <p>Corporate Governance Report</p>	
102-36	<p>Process for determining remuneration</p> <p>a. Process for determining remuneration.</p> <p>b. Whether remuneration consultants are involved in determining remuneration and whether they are independent of management.</p> <p>c. Other relationships that exist between remuneration consultants and the organization.</p>	<p>Corporate Governance Report</p>	
102-37	<p>Stakeholder' involvement in remuneration</p> <p>a. How stakeholders' views are sought and taken into account regarding remuneration.</p> <p>b. If applicable, the results of votes on remuneration policies and proposals.</p>	<p>Corporate Governance</p> <p>Corporate Governance Report</p> <p>Securities Report (Japanese)</p> <p>Notice of Convocation</p>	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
102-38	Annual total compensation ratio a. Ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country.	—	
102-39	Percentage increase in annual total compensation ratio a. Ratio of the percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country.	—	

## 5. Stakeholder Engagement

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
102-40	List of stakeholder groups engaged by the organization	Stakeholder Engagement	
102-41	Collective bargaining agreements a. Percentage of total employees covered by collective bargaining agreements.	Basis for Fostering Personnel	
102-42	Standards for identifying and selecting the stakeholders with which the organization engages	Stakeholder Engagement	
102-43	Approach toward stakeholder engagement a. The organization's approach toward stakeholder engagement, include frequency of engagement by type and by stakeholder group. Additionally, indicate whether any of the engagement was undertaken specifically as part of the report preparation process.	Stakeholder Engagement	
102-44	Critical topics and concerns raised i. How the organization has responded to those critical topics and concerns, including those responded through reporting). ii. Stakeholder groups that raised critical topics and concerns.	Stakeholder Engagement	



## 6. Reporting Practices

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
102-45	Entities included in the consolidated financial statements a. A list of all entities included in the organization's consolidated financial statements or equivalent documents. b. Whether any entities included in the organization's consolidated financial statements or equivalent documents is not covered by the report.	Environmental Management System Scope of the CSR Report 2018 Securities Report (Japanese) Basic Corporate Information	
102-46	Defining report content and topic Boundaries a. Explanations of the processes for establishing the report content and topic Boundaries. b. Explanations of how the organization has implemented the reporting principles for defining report content.	Editorial Policy Scope of the CSR Report 2018 Key CSR Issues GRI Standard Context Index	
102-47	List of material topics identified in the process for defining the report content	CSR Medium-term Plan	
102-48	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements Restatements may result from: • Mergers or acquisitions • Change of base years or periods • Nature of business • Measurement methods	Not applicable for the fiscal year under review	
102-49	Significant changes from past reporting periods concerning material topics and topic Boundaries	Not applicable for the fiscal year under review	
102-50	Reporting period for information provided	Scope of the CSR Report 2018	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
102-51	The date of the most recent previous report (if applicable)	Scope of the CSR Report 2018	
102-52	Reporting cycle	Scope of the CSR Report 2018	
102-53	Contact point for questions regarding the report	Contact CSR Relations	
102-54	<p>Claims of reporting in accordance with the GRI Standards</p> <p>a. A claim that indicates that the organization followed GRI Standards and chose one of the following options when writing a report.</p> <p>i. "This report was written based on the Core option of the GRI Standards."</p> <p>ii. "This report was written based on the Comprehensive option of the GRI Standards."</p>	GRI Standard Context Index	
102-55	<p>Content index</p> <p>a. An index of GRI content, which specifies each of the GRI Standards used and lists all disclosures included in the report.</p> <p>b. For each disclosure, the content index shall include:</p> <p>i. The numbers for the items disclosed (for disclosures covered by the GRI standards)</p> <p>ii. The page number(s) or URL(s) where the relevant information can be found, included in the report or other published materials</p> <p>iii. If applicable, and where permitted, the reasons for omission when a required disclosure cannot be made</p>	GRI Standard Context Index	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
102-56	<p>External assurance</p> <p>a. Explanations of the organization's policy and current practice with regard to seeking external assurance for the report.</p> <p>b. If the report has been externally assured:</p> <p>i. A reference to the external assurance report, statements, or opinions. If not included in the assurance report accompanying the sustainability report, a description of what has and what has not been assured and on what basis, including the assurance standards used, the level of assurance obtained, and any limitations of the assurance process</p> <p>ii. The relationship between the organization and the assurance provider</p> <p>iii. Whether and how the highest governance body or senior executives are involved in seeking external assurance for the organization's sustainability report</p>	Editorial Policy Scope of the CSR Report 2018	

## Management Approach

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
103-1	<p>Explanations of material item and its boundary</p> <p>a. An explanation of why the topic is material.</p> <p>b. The boundary for the material topic, including description of:</p> <p>i. Where the impacts arise</p> <p>ii. The organization's involvement in any impacts. For example, whether the organization's involvement with an impact is direct or indirect, or whether the impact became relevant via the organization's business relationships</p> <p>c. Any specific limitation relating to the topic boundary.</p>	Key CSR Issues	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
103-2	<p>Management approach and its components</p> <p>a. An explanation of how the organization manages the topic.</p> <p>b. A statement of the purpose of the management approach.</p> <p>c. A description of the following, if the management approach includes that component:</p> <p>i. Policies</p> <p>ii. Commitments</p> <p>iii. Goals and targets</p> <p>iv. Responsibilities</p> <p>v. Management resources</p> <p>vi. Complaint-processing mechanisms</p> <p>vii. Specific measures (processes, projects, programs, initiatives, etc.)</p>	<p>■ Sekisui Chemical Group's CSR</p> <p>Our Approach to CSR</p> <p>CSR Management Promotion System</p> <p>CSR Management Policies</p> <p>Key CSR Issues</p> <p>CSR Medium-term Plan</p> <p>SDGs Initiatives</p> <p>■ Prominence in Environment</p> <p>Prominence in Environment</p> <p>Environmental Management System</p> <p>Environmental Education</p> <p>Environmental Accounting</p> <p>Climate Change</p> <p>Efficient Use of Resources</p> <p>Conservation of Water Resources</p> <p>Chemical Substance Management</p> <p>Environmental Impact Assessment</p> <p>Conserving the Natural Environment</p> <p>■ Prominence in CS &amp; Quality</p> <p>Prominence in CS &amp; Quality</p> <p>Medium-term Plan</p> <p>Creating Attractive Products and Services</p> <p>Improving Quality</p>	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
103-2	<p>Management approach and its components</p> <p>a. An explanation of how the organization manages the topic.</p> <p>b. A statement of the purpose of the management approach.</p> <p>c. A description of the following, if the management approach includes that component:</p> <ol style="list-style-type: none"> <li>Policies</li> <li>Commitments</li> <li>Goals and targets</li> <li>Responsibilities</li> <li>Management resources</li> <li>Complaint-processing mechanisms</li> <li>Specific measures (processes, projects, programs, initiatives, etc.)</li> </ol>	<ul style="list-style-type: none"> <li>■ Prominence in Human Resources</li> <li>Prominence in Human Resources</li> <li>Building a Diverse Organizational Structure</li> <li>Allowing Diverse Human Resources to Excel</li> <li>Basis for Fostering Personnel</li> <li>■ Pledge to Society</li> <li>Pledge to Society</li> <li>Working Environments</li> <li>Safety</li> <li>Compliance and Respect for Human Rights</li> <li>■ Governance /</li> <li>Internal Control</li> <li>Governance /</li> <li>Internal Control</li> <li>Risk Management</li> <li>Cyber Security</li> <li>Respect for International Norms</li> </ul>	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
103-3	<p>Evaluation of management approach</p> <p>a. An explanation of how the organization evaluates the management approach, including:</p> <p>i. The mechanisms for evaluating the effectiveness of the management approach</p> <p>ii. The results of the evaluation of the management approach</p> <p>iii. Adjustments made in relation to management approach</p>	<p>■ Sekisui Chemical Group's CSR</p> <p>Our Approach to CSR</p> <p>CSR Management Promotion System</p> <p>CSR Management Policies</p> <p>Key CSR Issues</p> <p>CSR Medium-term Plan</p> <p>SDGs Initiatives</p> <p>■ Prominence in Environment</p> <p>Prominence in Environment</p> <p>Environmental Management System</p> <p>Environmental Education</p> <p>Environmental Accounting</p> <p>Climate Change</p> <p>Efficient Use of Resources</p> <p>Conservation of Water Resources</p> <p>Chemical Substance Management</p> <p>Environmental Impact Assessment</p> <p>Conserving the Natural Environment</p> <p>■ Prominence in CS &amp; Quality</p> <p>Prominence in CS &amp; Quality</p> <p>Medium-term Plan</p> <p>Creating Attractive Products and Services</p> <p>Improving Quality</p>	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
103-3	<p>Evaluation of management approach</p> <p>a. An explanation of how the organization evaluates the management approach, including:</p> <p>i. The mechanisms for evaluating the effectiveness of the management approach</p> <p>ii. The results of the evaluation of the management approach</p> <p>iii. Adjustments made in relation to management approach</p>	<p>■ Prominence in Human Resources</p> <p>Prominence in Human Resources</p> <p>Building a Diverse Organizational Structure</p> <p>Allowing Diverse Human Resources to Excel</p> <p>Basis for Fostering Personnel</p> <p>■ Pledge to Society</p> <p>Pledge to Society</p> <p>Working Environments</p> <p>Safety</p> <p>Compliance and Respect for Human Rights</p> <p>■ Governance / Internal Control</p> <p>Governance / Internal Control</p> <p>Risk Management</p> <p>Cyber Security</p> <p>Respect for International Norms</p>	



## Economic Performance

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
201-1	<p>Direct economic value generated and distributed</p> <p>a. Direct economic value generated and distributed (EVG&amp;D) on an accruals basis including the basic components for the organization's global operations as listed below. If data is presented on a cash basis, report the justification for this decision and report the basic components as listed below:</p> <p>i. Direct economic value generated: revenues</p> <p>ii. Economic value distributed: operating costs, employee wages and benefits, payments to capital providers of capital, payments to governments by country, and community investments</p> <p>iii. Economic value retained (calculated as 'Direct economic value generated' less 'Economic value distributed')</p> <p>b. Report EVG&amp;D separately at country, regional, or market levels, where significant. Report the criteria used for defining significance.</p>	Distribute Value to Stakeholders	
201-2	<p>Financial implications and other risks and opportunities due to climate change</p> <p>a. Risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue or expenditure, including:</p> <p>i. A description of the risk or opportunity and its classification as either physical, regulatory, or other</p> <p>ii. A description of the impact associated with the risk or opportunity</p> <p>iii. The financial implications of the risk or opportunity before action is taken</p> <p>iv. The methods used to manage the risk or opportunity</p> <p>v. The costs of actions taken to manage the risk or opportunity</p>	Climate Change and Our Business	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
201-3	<p>Defined benefit plan obligations and other retirement plans</p> <p>a. Where the plan's liabilities are met by the organization's general resources, report the estimated value of those liabilities.</p> <p>b. Where a separate fund exists to pay the plan's pension liabilities, report:</p> <p>i. The extent to which the scheme's liabilities are estimated to be covered by the assets that have been set aside to meet them</p> <p>ii. The basis on which that estimate has been arrived at</p> <p>iii. When that estimate was made</p> <p>c. Where a fund set up to pay the plan's pension liabilities is not fully covered, explain the strategy, if any, adopted by the employer to work towards full coverage, and the timescale, if any, by which the employer hopes to achieve full coverage.</p> <p>d. Percentage of salary contributed by employee or employer.</p> <p>e. Level of participation in retirement plans (such as participation in mandatory or voluntary schemes, regional or country-based schemes, or those with financial impact).</p>	<p>Securities Report (Japanese)</p> <p>Fact Book</p>	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
201-4	<p>Financial assistance received from government</p> <p>a. Total monetary value of financial assistance received by the organization from any government during the reporting period, including:</p> <ul style="list-style-type: none"> <li>i. Tax relief and tax credits</li> <li>ii. Subsidies</li> <li>iii. Investment grants, research and development grants, and other relevant types of grants</li> <li>iv. Awards</li> <li>v. Royalty holidays</li> <li>vi. Financial assistance from Export Credit Agencies (ECAs)</li> <li>vii. Financial incentives</li> <li>viii. Other financial benefits received or receivable from any government for any operation</li> </ul> <p>b. The information in 201-4-a by country.</p> <p>c. Whether, and the extent to which, any government is present in the shareholding structure.</p>	—	We regard that there is a risk that this information could contain business strategies and confidential content.

## Presence Within Regional Economies

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
202-1	<p>Ratios of standard entry level wage by gender compared to local minimum wage</p> <p>a. When a significant proportion of the workforce is compensated based on wages subject to minimum wage rules, report the ratio of the entry level wage by gender at significant locations of operation to the minimum wage.</p> <p>b. When a significant proportion of other workers (excluding employees) performing the organization's activities are compensated based on wages subject to minimum wage rules, describe the actions taken to determine whether these workers are paid above the minimum wage.</p> <p>c. Whether a local minimum wage is absent or variable at significant locations of operation, by gender. In circumstances in which different minimums can be used as a reference, report which minimum wage is being used.</p> <p>d. The definition used for 'significant locations of operation'.</p>	—	Because the scope of tabulation is vast and complex, we have not disclosed these figures for fiscal year 2017.
202-2	<p>Proportion of senior management hired from the local community</p> <p>a. Percentage of senior management at significant locations of operation that are hired from the local community.</p> <p>b. The definition used for 'senior management'.</p> <p>c. The organization's geographical definition of 'local'.</p> <p>d. The definition used for 'significant locations of operation'.</p>	—	Because the scope of tabulation is vast and complex, we have not disclosed these figures for fiscal year 2017.

## Indirect Economic Impacts

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
203-1	<p>Infrastructure investments and services supported</p> <p>a. Extent of development of significant infrastructure investments and services supported.</p> <p>b. Current or expected impacts on communities and local economies, including positive and negative impacts where relevant.</p> <p>c. Whether these investments and services are commercial, in-kind, or pro bono engagements.</p>	Integrated Report	
203-2	<p>Significant indirect economic impacts</p> <p>a. Examples of significant identified indirect economic impacts of the organization, including positive and negative impacts.</p> <p>b. Significance of the indirect economic impacts in the context of external benchmarks and stakeholder priorities, such as national and international standards, protocols, and policy agendas.</p>	—	Because the scope of tabulation is vast and complex, we have not disclosed these figures for fiscal year 2017.

## Procurement Practices

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
204-1	<p>Proportion of spending on local suppliers</p> <p>a. Percentage of the procurement budget used for significant locations of operation that is spent on suppliers local to that operation (such as percentage of products and services purchased locally).</p> <p>b. The organization's geographical definition of 'local'.</p> <p>c. The definition used for 'significant locations of operation'.</p>	—	Because the scope of tabulation is vast and complex, we have not disclosed these figures for fiscal year 2017.

## Anti-corruption

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to combating corruption using "GRI 103: Management Approach"	Prevention of Bribery and Corruption	
205-1	<p>Operations assessed for risks related to corruption</p> <p>a. Total number and percentage of operations assessed for risks related to corruption.</p> <p>b. Significant risks related to corruption identified through the risk assessment.</p>	Prevention of Bribery and Corruption	
205-2	<p>Communication and training on anti-corruption policies and procedures</p> <p>a. Total number and percentage of governance body members that the organization's anti-corruption policies and procedures have been communicated to, broken down by region.</p> <p>b. Total number and percentage of employees that the organization's anti-corruption policies and procedures have been communicated to, broken down by employee category and region.</p> <p>c. Total number and percentage of business partners that the organization's anti-corruption policies and procedures have been communicated to, broken down by type of business partner and region. Describe if the organization's anti-corruption policies and procedures have been communicated to any other persons or organizations.</p> <p>d. Total number and percentage of governance body members that have received training on anti-corruption, broken down by region.</p> <p>e. Total number and percentage of employees that have received training on anti-corruption, broken down by employee category and region.</p>	Prevention of Bribery and Corruption	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
205-3	<p>Confirmed incidents of corruption and actions taken</p> <p>a. Total number and nature of confirmed incidents of corruption.</p> <p>b. Total number of confirmed incidents in which employees were dismissed or disciplined for corruption.</p> <p>c. Total number of confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption.</p> <p>d. Public legal cases regarding corruption brought against the organization or its employees during the reporting period and the outcomes of such cases.</p>	Prevention of Bribery and Corruption	

## Anti-competitive Behavior

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to anti-competitive behavior using "GRI 103: Management Approach"	Marketing Communications	
206-1	<p>Legal actions for anti-competitive behavior, anti-trust, and monopoly practices</p> <p>a. Number of legal actions pending or completed during the reporting period regarding anti-competitive behavior and violations of anti-trust and monopoly legislation in which the organization has been identified as a participant.</p> <p>b. Main outcomes of completed legal actions, including any decisions or judgments.</p>	Marketing Communications Responses to Past Legal Violations	



## Materials

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to raw materials using "GRI 103: Management Approach"	Efficient Use of Resources / Basic Concept Environmental medium-term plan targets and Directions for the Future Zero Emissions	
301-1	Materials used by weight or volume a. Total weight or volume of raw materials used to produce and package the organization's major products and services during the reporting period, in accordance with the following classifications: i. Non-renewable raw materials used ii. Renewable raw materials used	Material balance	
301-2	Proportion of recycled materials used in the production of the organization's major products and services	Recycling Construction Materials	
301-3	Recycled products and packaging materials a. Proportion of recycled products and packaging materials by product category. b. How the data for this disclosure have been collected.	Reducing Packaging Materials	

## Energy

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to energy using "GRI 103: Management Approach"	Climate Change / Basic Concept Combating Climate Change	
302-1	<p>Energy consumption within the organization</p> <p>a. Total fuel consumption from non-renewable sources in joules or multiples, including fuel types used.</p> <p>b. Total fuel consumption from renewable fuel sources in joules or multiples, including fuel types used.</p> <p>c. Report in joules, watt-hours or multiples, the total:</p> <p>i. Electricity consumption</p> <p>ii. Heating consumption</p> <p>iii. Cooling consumption</p> <p>iv. Steam consumption</p> <p>d. Report in joules, watt-hours or multiples, the total:</p> <p>i. Electricity sold</p> <p>ii. Heating sold</p> <p>iii. Cooling sold</p> <p>iv. Steam sold</p> <p>e. Total energy consumption in joules or multiples.</p> <p>f. Standards, methods, assumptions, and calculation tools used.</p> <p>g. Source of the conversion factors used.</p>	Climate Change / Performance Data	
302-2	<p>Energy consumption outside of the organization</p> <p>a. Energy consumed outside of the organization, in joules or multiples.</p> <p>b. Standards, methods, assumptions, and calculation tools used.</p> <p>c. Source of the conversion factors used.</p>	—	We regard that monitoring the amount of energy used in supply chains (Scope 3) is an issue which we must consider and deal with.

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
302-3	<p>Energy intensity</p> <p>a. Energy intensity ratio for the organization.</p> <p>b. Organization-specific metric (the ratio denominator) chosen to calculate the ratio.</p> <p>c. Types of energy included in the intensity ratio: fuel, electricity, heating, cooling, steam, or all.</p> <p>d. Whether the ratio uses energy consumed within the organization, outside of it or both.</p>	Climate Change / Performance Data	
302-4	<p>Reduction of energy consumption</p> <p>a. Amount of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives, in joules or multiples.</p> <p>b. Types of energy included in the reductions: fuel, electricity, heating, cooling, steam, or all.</p> <p>c. Basis for calculating reductions in energy consumption such as base year or baseline, and the rationale for choosing it.</p> <p>d. Standards, methods, assumptions, and calculation tools used.</p>	Combating Climate Change Climate Change / Performance Data	
302-5	<p>Reductions in energy requirements of products and services</p> <p>a. Reductions in the energy requirements of sold products and services achieved during the reporting period, in joules or multiples.</p> <p>b. Basis for calculating reductions in energy consumption such as base year or baseline, and the rationale for choosing it.</p> <p>c. Standards, methods, assumptions, and calculation tools used.</p>	Environment-contributing Products	

## Water Resources

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to water resources using "GRI 103: Management Approach"	Conservation of Water Resources	
303-1	<p>Water withdrawal by source</p> <p>a. Total volume of water withdrawn from the following sources:</p> <p>i. Surface water, including water from wetlands, rivers, lakes, and oceans</p> <p>ii. Ground water</p> <p>iii. Rainwater collected directly and stored by the organization</p> <p>iv. Waste water from another organization</p> <p>v. Municipal water supplies or other public or private water utilities</p> <p>b. Standards, methods, and assumptions used</p>	Conservation of Water Resources / Performance Data	
303-2	<p>Water sources significantly affected by withdrawal of water</p> <p>a. Total number of water sources significantly affected by withdrawal by type:</p> <p>i. Size of water source</p> <p>ii. Whether or not the source is designated as a protected area (nationally or internationally)</p> <p>iii. Biodiversity value (such as species diversity and endemism, total number of protected species)</p> <p>iv. Value or importance of water source to local communities and indigenous peoples</p> <p>b. Standards, methods, and assumptions used.</p>	Ongoing Monitoring of Water Risks Conservation of Water Resources / Performance Data	
303-3	<p>Recycled and reused water</p> <p>a. Total volume of water recycled and reused by the organization.</p> <p>b. Total volume of water recycled and reused as a percentage of the total water withdrawal specified in Disclosure 303-1.</p> <p>c. Standards, methods, and assumptions used.</p>	Water Recycling Conservation of Water Resources / Performance Data	

## Biodiversity

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to biodiversity using "GRI 103: Management Approach"	Conserving the Natural Environment / Basic Concept	
304-1	<p>Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas</p> <p>a. For each operational site owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas, the following information:</p> <ul style="list-style-type: none"> <li>i. Geographic location</li> <li>ii. Subsurface and underground land that may be owned, leased, or managed by the organization</li> <li>iii. Position in relation to the protected area (in the area, adjacent to, or containing portions of the protected area) or the high biodiversity value area outside protected areas</li> <li>iv. Type of operation (office, manufacturing or production, or extractive)</li> <li>v. Size of operational site in km2 (or another unit, if appropriate)</li> <li>vi. Biodiversity value characterized by the attribute of the protected area or area of high biodiversity value outside the protected area (terrestrial, freshwater, or maritime ecosystem)</li> <li>vii. Biodiversity value characterized by listing of protected status (such as IUCN Protected Area Management Categories, Ramsar Convention, national legislation)</li> </ul>	Conserving the Natural Environment / Performance Data	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
304-2	<p>Significant impacts of activities, products, and services on biodiversity</p> <p>a. Nature of significant direct and indirect impacts on biodiversity with reference to one or more of the following:</p> <ul style="list-style-type: none"> <li>i. Construction or use of manufacturing plants, mines, and transport infrastructure</li> <li>ii. Pollution (introduction of substances that do not naturally occur in the habitat from point and non-point sources)</li> <li>iii. Introduction of invasive species, pests, and pathogens</li> <li>iv. Reduction of species</li> <li>v. Habitat conversion</li> <li>vi. Changes in ecological processes outside the natural range of variation (such as salinity or changes in groundwater level)</li> </ul> <p>b. Significant direct and indirect positive and negative impacts with reference to the following:</p> <ul style="list-style-type: none"> <li>i. Species affected</li> <li>ii. Extent of areas impacted</li> <li>iii. Duration of impacts</li> <li>iv. Reversibility or irreversibility of the impacts</li> </ul>	<p>Biodiversity Assessment</p> <p>WET Evaluation of Wastewater Environmental Impact Assessment</p>	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
304-3	<p>Habitats protected or restored</p> <p>a. Size and location of all habitat protected areas or restored areas, and whether the success of the restoration measure was or is approved by independent external professionals.</p> <p>b. Whether partnerships exist with third parties to protect or restore habitat areas distinct from where the organization has overseen and implemented restoration or protection measures.</p> <p>c. Status of each area based on its condition at the close of the reporting period.</p> <p>d. Standards, methods, and assumptions used.</p>	Initiatives to Improve Green Space Quality	
304-4	<p>IUCN Red List species and national conservation list species with habitats in areas affected by operations</p> <p>a. Total number of IUCN Red List species and national conservation list species with habitats in areas affected by the operations of the organization, by level of extinction risk:</p> <p>i. Critically endangered IA (CR)</p> <p>ii. Endangered IB (EN)</p> <p>iii. Vulnerable II (VU)</p> <p>iv. Near threatened (NT)</p> <p>v. Least concern</p>	Conserving the Natural Environment / Performance Data	



## Emissions

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to emissions into the atmosphere using "GRI 103: Management Approach"	Climate Change / Basic Concept Combating Climate Change	
305-1	<p>Direct greenhouse gas (GHG) emissions (Scope 1)</p> <p>a. Gross direct (Scope 1) GHG emissions in metric tons of CO<sub>2</sub> equivalent.</p> <p>b. Gases included in the calculation (whether CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>, or all)</p> <p>c. Biogenic CO<sub>2</sub> emissions in metric tons of CO<sub>2</sub> equivalent.</p> <p>d. Base year for the calculation, if applicable, including:</p> <p>i. The rationale for choosing the base year</p> <p>ii. Emissions in the base year</p> <p>iii. The context for any significant changes in emissions that triggered recalculations of base year emissions</p> <p>e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.</p> <p>f. Consolidation approach for emissions (equity share, financial control, or operational control).</p> <p>g. Standards, methods, assumptions, and calculation tools used.</p>	Combating Climate Change Climate Change / Performance Data	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
305-2	<p>Indirect greenhouse gas (GHG) emissions (Scope 2)</p> <p>a. Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO<sub>2</sub> equivalent.</p> <p>b. If applicable, gross market-based energy indirect (Scope 2) GHG emissions in metric tons of CO<sub>2</sub> equivalent.</p> <p>c. If available, the gases included in the calculation; whether CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>, or all.</p> <p>d. Base year for the calculation, if applicable, including:</p> <p>i. The rationale for choosing the base year</p> <p>ii. Emissions in the base year</p> <p>iii. The context for any significant changes in emissions that triggered recalculations of base year emissions</p> <p>e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.</p> <p>f. Consolidation approach for emissions; whether equity share, financial control, or operational control.</p> <p>g. Standards, methods, assumptions, and calculation tools used.</p>	Combating Climate Change Climate Change / Performance Data	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
305-3	<p>Other indirect greenhouse gas (GHG) emissions (Scope 3)</p> <p>a. Gross other indirect (Scope 3) GHG emissions in metric tons of CO<sub>2</sub> equivalent.</p> <p>b. If available, the gases included in the calculation whether CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>, or all.</p> <p>c. Biogenic CO<sub>2</sub> emissions in metric tons of CO<sub>2</sub> equivalent.</p> <p>d. Other indirect (Scope 3) GHG emissions categories and activities included in the calculation.</p> <p>e. Base year for the calculation, if applicable, including:</p> <p>i. The rationale for the base year</p> <p>ii. Emissions in the base year</p> <p>iii. The context for any significant changes in emissions that triggered recalculations of base year emissions.</p> <p>f. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.</p> <p>g. Standards, methods, assumptions, and calculation tools used.</p>	Combating Climate Change Climate Change / Performance Data	
305-4	<p>Greenhouse gas (GHG) emissions intensity</p> <p>a. GHG emissions intensity ratio for the organization.</p> <p>b. Organization-specific metric (the denominator) chosen to calculate the ratio.</p> <p>c. Types of GHG emissions included in the intensity ratio; whether direct (Scope 1), energy indirect (Scope 2), and / or other indirect (Scope 3).</p> <p>d. Gases included in the calculation whether CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>, or all.</p>	Combating Climate Change Climate Change / Performance Data	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
305-5	<p>Reduction of greenhouse gas (GHG) emissions</p> <p>a. GHG emissions reduced as a direct result of reduction initiatives, in metric tons of CO<sub>2</sub> equivalent.</p> <p>b. Gases included in the calculation whether CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>, or all.</p> <p>c. Base year or baseline, including the rationale for choosing it.</p> <p>d. Scopes in which reductions took place; whether direct (Scope 1), energy indirect (Scope 2), and / or other indirect (Scope 3).</p> <p>e. Standards, methods, assumptions, and calculation tools used.</p>	Combating Climate Change Climate Change / Performance Data	
305-6	<p>Emissions of Ozone-Depleting Substances (ODS)</p> <p>a. Production, imports, and exports of ODS in metric tons of CFC-11 (trichlorofluoromethane) equivalent.</p> <p>b. Substances included in the calculation.</p> <p>c. Source of the emission factors used.</p> <p>d. Standards, methods, assumptions, and calculation tools used.</p>	Controlling VOC Emissions Disposal and Storage of Devices Containing PCBs and Management of Equipment That Uses Fluorocarbons	
305-7	<p>Nitrogen oxide (NOx), sulfur oxide SOx, and other critical atmospheric emissions</p> <p>a. Significant air emissions, in kilograms or multiples, for each of the following:</p> <ul style="list-style-type: none"> <li>i. NOx</li> <li>ii. SOx</li> <li>iii. Persistent organic pollutants (POP)</li> <li>iv. Volatile organic compounds (VOC)</li> <li>v. Hazardous air pollutants (HAP)</li> <li>vi. Particulate matter (PM)</li> <li>vii. Other standard categories of air emissions identified in relevant regulations</li> </ul> <p>b. Source of the emission factors used.</p> <p>c. Standards, methods, assumptions, and calculation tools used.</p>	Chemical Substance Management / Performance Data	

## Effluents and Waste

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to emissions into the atmosphere using "GRI 103: Management Approach"	Efficient Use of Resources / Basic Concept Conservation of Water Resources / Basic Concept	
306-1	Water discharge by quality and destination a. Total volume of planned and unplanned water discharges by: i. Destination ii. Quality of the water, including treatment method iii. Whether it was reused by another organization b. Standards, methods, and assumptions used.	Ongoing Monitoring of Water Risks Water Recycling Conservation of Water Resources / Performance Data	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
306-2	<p>Waste by type and disposal method</p> <p>a. Total weight of hazardous waste, by the following disposal methods:</p> <ul style="list-style-type: none"> <li>i. Reuse</li> <li>ii. Recycling</li> <li>iii. Composting</li> <li>iv. Recovery, including energy recovery</li> <li>v. Incineration (mass burn)</li> <li>vi. Deep well injection</li> <li>vii. Landfill</li> <li>viii. On-site storage</li> <li>ix. Other (to be specified by the organization)</li> </ul> <p>b. Total weight of non-hazardous waste, by the following disposal methods:</p> <ul style="list-style-type: none"> <li>i. Reuse</li> <li>ii. Recycling</li> <li>iii. Composting</li> <li>iv. Recovery, including energy recovery</li> <li>v. Incineration (mass burn)</li> <li>vi. Deep well injection</li> <li>vii. Landfill</li> <li>viii. On-site storage</li> <li>ix. Other (to be specified by the organization)</li> </ul> <p>c. How the waste disposal method has been determined:</p> <ul style="list-style-type: none"> <li>i. Disposed of directly by the organization or otherwise directly confirmed</li> <li>ii. Information provided by the waste disposal contractor</li> <li>iii. Organizational defaults of the waste disposal contractor</li> </ul>	<p>Material balance</p> <p>Efficient Use of Resources / Performance Data</p> <p>Chemical Substance Management / Performance Data</p>	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
306-3	<p>Significant spills</p> <p>a. Total number and total volume of recorded significant spills.</p> <p>b. The following additional information for each spill that was reported in the organization's financial statements:</p> <p>i. Location of spill</p> <p>ii. Volume of spill</p> <p>iii. Material of spill, categorized by: oil spills (soil or water surfaces), fuel spills (soil or water surfaces), spills of wastes (soil or water surfaces), spills of chemicals (mostly soil or water surfaces), and other (to be specified by the organization).</p> <p>c. The impacts of significant spills.</p>	Soil Surveys	
306-4	<p>Transportation of hazardous waste</p> <p>a. Total weight for each of the following:</p> <p>i. Hazardous waste transported</p> <p>ii. Hazardous waste imported</p> <p>iii. Hazardous waste exported</p> <p>iv. Hazardous waste treated</p> <p>b. Percentage of hazardous waste shipped internationally.</p> <p>c. Standards, methods, and assumptions used.</p>	Chemical Substance Management / Performance Data	
306-5	<p>Water bodies affected by water discharges and / or runoff</p> <p>a. Water bodies and related habitats that are significantly affected by water discharges and / or runoff, including information on:</p> <p>i. Size of water body and related habitat</p> <p>ii. Whether the water body and related habitat is designated as a protected area (nationally or internationally)</p> <p>iii. Biodiversity value (such as total number of protected species)</p>	—	Because there are a vast number of business sites and data collection is difficult, we have not disclosed these figures for fiscal year 2017.



## Environmental Compliance

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to compliance with laws and regulations concerning the environment using "GRI 103: Management Approach"	Complying with Environmental Laws and Regulations	
307-1	<p>Non-compliance with environmental laws and regulations</p> <p>a. Significant fines and non-monetary sanctions for non-compliance with environmental laws and / or regulations in terms of:</p> <p>i. Total monetary value of significant fines</p> <p>ii. Total number of non-monetary sanctions</p> <p>iii. Cases brought through dispute resolution mechanisms</p> <p>b. If the organization has not identified any non-compliance with laws or regulations, a brief statement of this fact is sufficient.</p>	Complying with Environmental Laws and Regulations	

## Assessments of Suppliers in Environmental Terms

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to suppliers' environmental assessments using "GRI 103: Management Approach"	Environmental Management across the Supply Chain	
308-1	<p>New suppliers that were screened using environmental criteria</p> <p>Percentage of new suppliers that were screened using environmental criteria.</p>	—	<p>When selecting new suppliers, the Sekisui Chemical Group comprehensively evaluates candidate companies from the perspectives of quality, environmental factors, health and safety, and compliance with laws, regulations, and social standards. As a result, all new suppliers must clear the environmental standards required by the group.</p>
308-2	<p>Negative environmental impacts in the supply chain and actions taken</p> <p>a. Number of suppliers subject to environmental impact assessments.</p> <p>b. Number of suppliers identified as having significant actual and potential negative environmental impacts.</p> <p>c. Significant actual and potential negative environmental impacts identified in the supply chain.</p> <p>d. Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which improvements were agreed upon as a result of assessment.</p> <p>e. Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which relationships were terminated as a result of assessment, and why.</p>	—	<p>Because each Company has different suppliers and data collection is difficult, we have not disclosed these figures for fiscal year 2017.</p>

## Employment

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to employment using "GRI 103: Management Approach"	Prominence in Human Resources / Management Approach Building a Diverse Organizational Structure / Management Approach Allowing Diverse Human Resources to Excel / Management Approach Basis for Fostering Personnel / Management Approach	
401-1	New employee hires and employee turnover a. Total number and rate of new employee hires during the reporting period, by age group, gender and region. b. Total number and rate of employee turnover during the reporting period, by age group, gender and region.	Data on Employees	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
401-2	<p>Benefits provided to full-time employees that are not provided to temporary or part-time employees</p> <p>a. Benefits which are standard for full-time employees of the organization but are not provided to temporary or part-time employees, by significant locations of operation. These include, as a minimum:</p> <ul style="list-style-type: none"> <li>i. Life insurance</li> <li>ii. Healthcare</li> <li>iii. Disability and invalidity coverage</li> <li>iv. Parental leave</li> <li>v. Retirement provision</li> <li>vi. Stock ownership</li> <li>vii. Others</li> </ul> <p>b. The definition used for 'significant locations of operation'.</p>	Benefits	
401-3	<p>Parental leave</p> <p>a. Total number of employees that were entitled to parental leave, by gender.</p> <p>b. Total number of employees that took parental leave, by gender.</p> <p>c. Total number of employees who returned to work in the reporting period after parental leave ended, by gender.</p> <p>d. Total number of employees who returned to work after parental leave ended who were still employed twelve months after their return to work, by gender.</p> <p>e. Return to work and retention rates of employees who took parental leave, by gender.</p>	Main Systems Allowing Various Workstyles and Their Use	

## Labor / Management Relations

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
402-1	<p>Minimum notice periods regarding operational changes</p> <p>a. Minimum number of weeks' notice typically provided to employees and their representatives prior to the implementation of significant operational changes that could substantially affect them.</p> <p>b. For organizations with collective bargaining agreements, report whether the notice period and provisions for consultation and negotiation are specified in collective agreements.</p>	Notifications of Major HR-Related Changes	

## Occupational Health and Safety

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to Occupational Health and Safety using "GRI 103: Management Approach"	Safety / Basic Concept Activity Policy and Promotion System Safety Audits Safety Management along Supply Chains	
403-1	<p>Workers representation in formal joint management-worker health and safety committees</p> <p>a. The level at which each formal joint management-worker health and safety committee typically operates within the organization.</p> <p>b. Percentage of workers whose work, or workplace, is controlled by the organization, that are represented by formal joint management-worker health and safety committees.</p>	Occupational Safety Committee Held	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
403-2	<p>Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities</p> <p>a. Types of injury, injury rate (IR), occupational diseases rate (ODR), lost day rate (LDR), absentee rate (AR) and work-related fatalities, for all employees, by:</p> <p>i. Region</p> <p>ii. Gender</p> <p>b. Types of injury, injury rate (IR) and work-related fatalities for all workers (excluding employees) whose work, or workplace, is controlled by the organization, by:</p> <p>i. Region</p> <p>ii. Gender</p> <p>c. The system of rules applied in recording and reporting accident statistics.</p>	Safety / Performance Data	
403-3	<p>Workers with high incidence or high risk of diseases related to their occupation</p> <p>a. Whether there are workers whose work, or workplace, is controlled by the organization, involved in occupational activities who have a high incidence or high risk of specific diseases.</p> <p>b. Organizations working in countries with a high risk or incidence of communicable diseases, and those in professions that have a high incidence of specific diseases.</p>	—	The Group compiles lists of risks, including outbreaks of communicable diseases, for which the Group should prepare, and these lists are shared globally with those in charge of lines of business and local sites. Going forward, we intend to discuss methods of tabulating and disclosing risks uncovered by those with such responsibilities.
403-4	<p>Health and safety topics covered in formal agreements with trade unions</p> <p>a. Whether formal agreements (either local or global) with trade unions cover health and safety.</p> <p>b. If so, the extent, as a percentage, to which various health and safety topics are covered by these agreements.</p>	Occupational Safety Committee Held	

## Training and Education

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to fostering personnel using "GRI 103: Management Approach"	Basis for Fostering Personnel	
404-1	<p>Average hours of training per year per employee</p> <p>a. Average hours of training that the organization's employees have undertaken during the reporting period, by:</p> <p>i. Gender</p> <p>ii. Employee category</p>	<p>Training Systems to Support Our Businesses / Basis for Fostering Personnel / Performance Data</p>	
404-2	<p>Programs for upgrading employee skills and transition assistance programs</p> <p>a. Type and scope of programs implemented and assistance provided to upgrade employee skills.</p> <p>b. Transition assistance programs provided to facilitate continued employability and the management of career endings resulting from retirement or termination of employment.</p>	<p>Developing Business Leaders</p> <p>Follow-up Training for New, Mid-career Hires</p> <p>Support System for Diverse Career Paths</p> <p>Fostering Women's Candidacy for Management Positions</p> <p>Career Plan Training by Age (Sekisui Chemical Group)</p> <p>Developing Personnel Who Can Succeed on the Global Stage</p> <p>Global Talent Employee System</p> <p>Global Trainee Program</p>	
404-3	<p>Percentage of employees receiving regular performance and career development reviews</p> <p>a. Percentage of total employees by gender and by employee category who received a regular performance and career development review during the reporting period.</p>	<p>Periodic Evaluation of Individual Performance and Career Development</p>	



## Diversity and Equal Opportunity

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Report management approach relating to diversity using "GRI 103: Management Approach"	Building a Diverse Organizational Structure	
405-1	<p>Diversity in governance bodies and among employees</p> <p>a. Percentage of individuals within the organization's governance bodies in each of the following diversity categories:</p> <p>i. Gender</p> <p>ii. Age group: under 30 years old, 30-50 years old, over 50 years old</p> <p>iii. Other indicators of diversity where relevant (such as minority or vulnerable groups)</p> <p>b. Percentage of employees per employee category in each of the following diversity categories:</p> <p>i. Gender</p> <p>ii. Age group: under 30 years old, 30-50 years old, over 50 years old</p> <p>iii. Other indicators of diversity where relevant (such as minority or vulnerable groups)</p>	Data on Employees About the Age-Group Composition of Directors	
405-2	<p>Ratio of basic salary and remuneration of women to men</p> <p>a. Ratio of the basic salary and remuneration of women to men for each employee category, by significant locations of operation.</p> <p>b. The definition used for 'significant locations of operation'</p>	Benefits	In part because the number of employees is large and was difficult to collect data during this fiscal year, we have not disclosed figures concerning ratios for total amounts of compensation for fiscal year 2017.

## Non-discrimination

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
406-1	<p>Incidents of discrimination and corrective actions taken</p> <p>a. Total number of incidents of discrimination during the reporting period.</p> <p>b. Status of the incidents and actions taken with reference to the following:</p> <p>i. Incident reviewed by the organization</p> <p>ii. Remediation plans being implemented</p> <p>iii. Remediation plans have been implemented and results reviewed through routine internal management review processes</p> <p>iv. Incident no longer subject to action</p>	Not applicable for the fiscal year under review	

## Freedom of Association and Collective Bargaining

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
407-1	<p>Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk</p> <p>a. Operations and suppliers in which workers' rights to exercise freedom of association or collective bargaining may be violated or at significant risk either in terms of:</p> <p>i. Type of operation (such as manufacturing plant) and supplier</p> <p>ii. Countries or geographic areas with operations and suppliers considered at risk.</p> <p>b. Measures taken by the organization in the reporting period intended to support rights to exercise freedom of association and collective bargaining.</p>	—	Because we have adopted a Company system and are engaged in a vast number of businesses, and because it would be difficult to acquire data for the relevant number of business sites and for each country or territory, we have not disclosed these figures for fiscal year 2017.

## Child Labor

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
408-1	<p>Operations and suppliers at significant risk for incidents of child labor</p> <p>a. Operations and suppliers considered to have significant risk for incidents of:</p> <ol style="list-style-type: none"> <li>Child labor</li> <li>Young workers exposed to hazardous work</li> </ol> <p>b. Operations and suppliers considered to have significant risk for incidents of child labor either in terms of:</p> <ol style="list-style-type: none"> <li>Type of operation (such as manufacturing plant) and supplier</li> <li>Countries or geographic areas with operations and suppliers considered at risk</li> </ol> <p>c. Measures taken by the organization in the reporting period intended to contribute to the effective abolition of child labor.</p>	Assessing the Human Rights Situation at Our Suppliers Initiatives Geared Toward Suppliers	

## Forced or Compulsory Labor

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
409-1	<p>Operations and suppliers at significant risk for incidents of forced or compulsory labor</p> <p>a. Operations and suppliers considered to have significant risk for incidents of forced or compulsory labor either in terms of:</p> <ol style="list-style-type: none"> <li>Type of operation (such as manufacturing plant) and supplier</li> <li>Countries or geographic areas with operations and suppliers considered at risk</li> </ol> <p>b. Measures taken by the organization in the reporting period intended to contribute to the elimination of all forms of forced or compulsory labor.</p>	Assessing the Human Rights Situation at Our Suppliers Initiatives Geared Toward Suppliers	

## Security Practices

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
410-1	<p>Security personnel trained in human rights policies or procedures</p> <p>a. Percentage of security personnel who have received formal training in the organization's human rights policies or specific procedures and their application to security.</p> <p>b. Whether training requirements also apply to third-party organizations providing security personnel.</p>	—	Security personnel are outsourced, and training is left to the discretion of the subcontracting company.

## Rights of Indigenous Peoples

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
411-1	<p>Incidents of violations involving rights of indigenous peoples</p> <p>a. Total number of identified incidents of violations involving the rights of indigenous peoples during the reporting period.</p> <p>b. Status of the incidents and actions taken with reference to the following:</p> <p>i. Incident reviewed by the organization</p> <p>ii. Remediation plans being implemented</p> <p>iii. Remediation plans have been implemented and results reviewed through routine internal management review processes</p> <p>iv. Incident no longer subject to action</p>	Not applicable for the fiscal year under review	

## Human Rights Assessment

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to human rights assessments using "GRI 103: Management Approach"	Respect for Human Rights	
412-1	<p>Operations that have been subject to human rights reviews or impact assessments</p> <p>a. Total number and percentage of operations that have been subject to human rights reviews or human rights impact assessments, by country.</p>	—	Because we have adopted a Company system and are engaged in a vast number of businesses, and because it would be difficult to acquire data for the relevant number of business sites and the proportions for each country, we have not disclosed these figures for fiscal year 2017.
412-2	<p>Employee training on human rights policies or procedures</p> <p>a. Total number of hours in the reporting period devoted to training on human rights policies or procedures concerning aspects of human rights that are relevant to operations.</p> <p>b. Percentage of employees trained during the reporting period on human rights policies or procedures concerning aspects of human rights that are relevant to operations.</p>	Initiatives Geared Toward Employees Employees Using the e-learning System Over Time Basis for Fostering Personnel / Performance Data	Because the total number of hours of training and the proportion of employees who have undergone training are, at the time of this writing, difficult to acquire information regarding, we have not disclosed anything on this matter.
412-3	<p>Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening</p> <p>a. Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening.</p> <p>b. The definition used for 'significant investment agreements'.</p>	Not applicable for the fiscal year under review	

## Local Communities

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to local communities using "GRI 103: Management Approach"	Social Contribution Activities	
413-1	<p>Operations with implemented local community engagement, impact assessments, and development programs</p> <p>a. Percentage of operations with implemented local community engagement, impact assessments, and development programs, including the use of:</p> <ul style="list-style-type: none"> <li>i. Social impact assessments, including gender impact assessments, based on participatory processes</li> <li>ii. Environmental impact assessments and ongoing monitoring</li> <li>iii. Public disclosure of results of environmental and social impact assessments</li> <li>iv. Local community development programs based on local communities' needs</li> <li>v. Stakeholder engagement plans based on stakeholder mapping</li> <li>vi. Broad based local community consultation committees and processes that include vulnerable groups</li> <li>vii. Works councils, occupational health and safety committees and other employee representation bodies to deal with impacts</li> <li>viii. Formal local community grievance processes</li> </ul>	—	We are currently considering evaluation methods for measuring impacts on local communities.
413-2	<p>Operations with significant actual and potential negative impacts on local communities</p> <p>a. Operations with significant actual and potential negative impacts on local communities, including:</p> <ul style="list-style-type: none"> <li>i. The location of the operations</li> <li>ii. The significant actual and potential negative impacts of operations</li> </ul>	—	We are currently considering evaluation methods for measuring impacts on local communities.

## Supplier Assessment for Impacts on Society

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to society-focused assessments of suppliers using "GRI 103: Management Approach"	Assessing the Human Rights Situation at Our Suppliers	
414-1	<p>New suppliers that were screened using social criteria</p> <p>a. Percentage of new suppliers that were screened using social criteria.</p>	—	The Sekisui Chemical Group selects new suppliers after evaluating them comprehensively from the perspectives of quality, the environment, compliance with laws and regulations and with societal norms, and health and safety. Therefore, it is believed that all new suppliers have cleared the societal standards on which the Sekisui Chemical Group insists.
414-2	<p>Negative social impacts in the supply chain and actions taken</p> <p>a. Number of suppliers assessed for social impacts.</p> <p>b. Number of suppliers identified as having significant actual and potential negative social impacts.</p> <p>c. Significant actual and potential negative social impacts identified in the supply chain.</p> <p>d. Percentage of suppliers identified as having significant actual and potential negative social impacts with which improvements were agreed upon as a result of assessment.</p> <p>e. Percentage of suppliers identified as having significant actual and potential negative social impacts with which relationships were terminated as a result of assessment, and why.</p>	—	It is currently difficult to evaluate the social impacts of all suppliers, including because many raw materials are procured from general trading firms, so we have not disclosed any information on this topic.



## Public Policy

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to public policy using "GRI 103: Management Approach"	—	We have decided not disclose information on this topic for reasons of business strategy.
414-1	Political contributions a. Total monetary value of financial and in-kind political contributions made directly and indirectly by the organization by country and recipient / beneficiary. b. If applicable, how the monetary value of in-kind contributions was estimated.	Donations	

## Customer Health and Safety

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to customer health and safety using "GRI 103: Management Approach"	Quality Management Formulating Three Quality Guidelines Product Safety	
416-1	Assessment of the health and safety impacts of product and service categories a. Percentage of significant product and service categories for which health and safety impacts are assessed for improvement.	—	It is currently difficult to calculate values for proportions in this area; we intend to have discussions aimed at disclosing information starting the next fiscal year.

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
416-2	<p>Incidents of non-compliance concerning the health and safety impacts of products and services</p> <p>a. Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services within the reporting period, by:</p> <p>i. Incidents of non-compliance with regulations resulting in a fine or penalty</p> <p>ii. Incidents of non-compliance with regulations resulting in a warning</p> <p>iii. Incidents of non-compliance with voluntary codes</p> <p>b. If the organization has not identified any non-compliance with regulations and voluntary codes, a brief statement of this fact is sufficient.</p> <p>d. Percentage of suppliers identified as having significant actual and potential negative social impacts with which improvements were agreed upon as a result of assessment.</p> <p>e. Percentage of suppliers identified as having significant actual and potential negative social impacts with which relationships were terminated as a result of assessment, and why.</p>	Product Safety	

## Marketing and Labeling

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to marketing using "GRI 103: Management Approach"	Products Information Disclosure and Labeling	
417-1	<p>Requirements for product and service information and labeling</p> <p>a. Whether each of the following types of information is required by the organization's procedures for product and service information and labeling:</p> <ul style="list-style-type: none"> <li>i. The sourcing of components of the product or service</li> <li>ii. Content, particularly with regard to substances that might produce an environmental or social impact</li> <li>iii. Safe use of the product or service</li> <li>iv. Disposal of the product and environmental / social impacts</li> <li>v. Others (Explain in detail)</li> </ul> <p>b. Percentage of significant product or service categories covered by and assessed for compliance with such procedures.</p>	—	It is currently difficult to ascertain various types of information concerning all products and to calculate the percentage values for procedure compliance evaluations; we intend to have discussions aimed at disclosing information starting the next fiscal year.
417-2	<p>Incidents of non-compliance concerning product and service information and labeling</p> <p>a. Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by:</p> <ul style="list-style-type: none"> <li>i. Incidents of non-compliance with regulations resulting in a fine or penalty</li> <li>ii. Incidents of non-compliance with regulations resulting in a warning</li> <li>iii. Incidents of non-compliance with voluntary codes</li> </ul> <p>b. If the organization has not identified any non-compliance with regulations and voluntary codes, a brief statement of this fact is sufficient.</p>	Products Information Disclosure and Labeling	

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
417-3	<p>Incidents of non-compliance concerning marketing communications</p> <p>a. Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by:</p> <p>i. Incidents of non-compliance with regulations resulting in a fine or penalty</p> <p>ii. Incidents of non-compliance with regulations resulting in a warning</p> <p>iii. Incidents of non-compliance with voluntary codes</p> <p>b. If the organization has not identified any non-compliance with regulations and voluntary codes, a brief statement of this fact is sufficient.</p>	Marketing Communications	

## Customer Privacy

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to the protection of customer data using "GRI 103: Management Approach"	Protecting Personal Information	
418-1	<p>Substantiated complaints concerning breaches of customer privacy and losses of customer data</p> <p>a. Total number of substantiated complaints received concerning breaches of customer privacy, categorized by:</p> <p>i. Complaints received from outside parties and substantiated by the organization</p> <p>ii. Complaints from regulatory bodies</p> <p>b. Total number of identified leaks, thefts, or losses of customer data.</p>	Not applicable for the fiscal year under review	

## Socioeconomic Compliance

Code No.	General Standard Disclosures	Locations Posted	Reason for Omitting
DMA (103-1)	Reporting management approach relating to compliance in relation to socioeconomic matters using "GRI 103: Management Approach"	Our Approach to Compliance Growing Awareness Toward Compliance Putting Compliance Management Efforts into Practice Compliance Training	
418-1	<p>Non-compliance with laws and regulations in the social and economic area</p> <p>a. Significant fines and non-monetary sanctions for non-compliance with laws and regulations in the social and economic area in terms of:</p> <p>i. Total monetary value of significant fines</p> <p>ii. Total number of non-monetary sanctions</p> <p>iii. Cases brought through dispute resolution mechanisms</p> <p>b. If the organization has not identified any non-compliance with laws or regulations, a brief statement of this fact is sufficient.</p> <p>c. The context against which significant fines and non-monetary sanctions were incurred.</p>	Not applicable for the fiscal year under review	

# Independent Practitioner's Assurance Report

**Deloitte.**

デロイト トーマツ

(TRANSLATION)

## Independent Practitioner's Assurance Report

June 29, 2018

Mr. Teiji Koge,  
President and Representative Director,  
Sekisui Chemical Co., Ltd.

Masahiko Sugiyama  
Representative Director  
Deloitte Tohmatsu Sustainability Co., Ltd.  
3-3-1, Marunouchi, Chiyoda-ku, Tokyo

We have undertaken a limited assurance engagement of the material sustainability information indicated with ☒ for the year ended March 31, 2018 (the "Sustainability Information") included in the "CSR Report 2018 PDF Edition" (the "Report") of Sekisui Chemical Co., Ltd. (the "Company").

### The Company's Responsibility

The Company is responsible for the preparation of the Sustainability Information in accordance with the calculation and reporting standard adopted by the Company (indicated with the Sustainability Information included in the Report) and "Appendix: Sustainability Reporting Assurance and Registration Criteria" issued by the Japanese Association of Assurance Organizations for Sustainability Information (the "J-sus"). Greenhouse gas quantification is subject to inherent uncertainty for reasons such as incomplete scientific knowledge used to determine emissions factors and numerical data needed to combine emissions of different gases.

### Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. We apply International Standard on Quality Control 1, *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements*, and accordingly 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.

### Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Sustainability Information based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements ("ISAE") 3000, *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*, issued by the International Auditing and Assurance Standards Board ("IAASB"), and ISAE 3410, *Assurance Engagements on Greenhouse Gas Statements*, issued by the IAASB, and the *Practical Guideline for the Assurance of Sustainability Information*, issued by the J-sus.

The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records. These procedures also included the following:

- Evaluating whether the Company's methods for estimates are appropriate and had been consistently applied. However, our procedures did not include testing the data on which the estimates are based or reperforming the estimates.
- Undertaking site visits to assess the completeness of the data, data collection methods, source data and relevant assumptions applicable to the sites.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

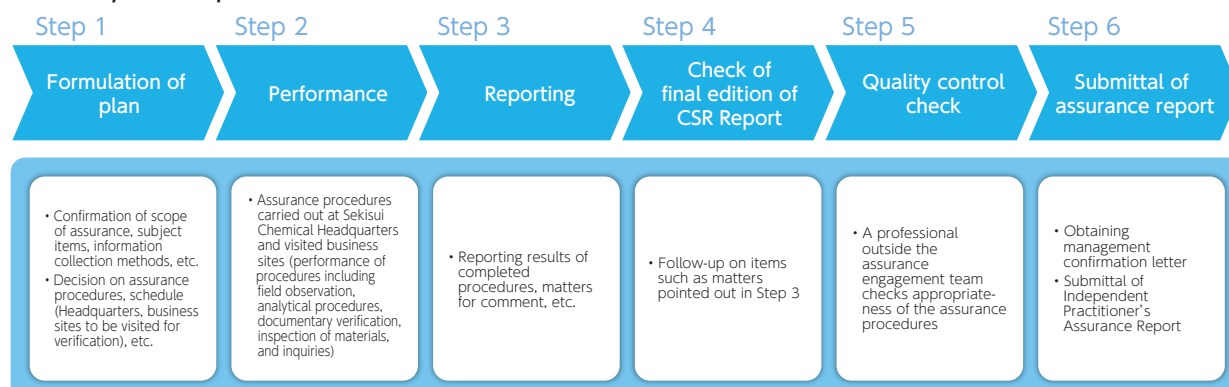
### Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Company's Sustainability Information is not prepared, in all material respects, in accordance with the calculation and reporting standard adopted by the Company and "Appendix: Sustainability Reporting Assurance and Registration Criteria" issued by the J-sus.

The above represents a translation, for convenience only, of the original Independent Practitioner's Assurance report issued in the Japanese language.

Member of  
Deloitte Touche Tohmatsu Limited

## Summary of Independent Practitioner's Assurance Procedures



# References

[Risk]										
	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Regulatory	International agreements	Sekisui Chemical Group is performing synthesis of a synthetic resin, and molding of the plastic in each country. Our customers are an airplane, an automobile, electronics, and the construction engineering-works field, and have shifted to the product which responds to a customer's advanced features and an environmental contribution. These products consume much energy compared with the conventional product at the time of manufacture. Moreover, since it is manufacturing in each country, it is necessary to correspond to regulation of each country related to a climate change. When a GHG emissions quota is decided according to each country, in order to make effluent control suit by Framework Convention on Climate Change, restriction of production and the replacement to small equipment of the amount of emission arise. For this reason, a manufacturing cost and equipment cost increase. Furthermore, indirectly, a raw-material supply cost goes up.	Increased operational cost	1 to 3 years	Direct	Very likely	Medium-high	Equipment cost will increase 10,000 million yen for replacement to the equipment which emission reduces.	Manufacturing Innovation center was set to improve energy efficiency of manufacture. Visualize of energy use and energy reduction is guided. When set equipment or changing process, "Safety & Environmental check sheet" and "Energy check sheet" must be made. Then, change of energy and GHG emissions is checked. When reduction is insufficient, additional plan is required from head office. This is the risk management approach. Moreover, "3rd energy-saving investment promotion policy" began from the FY2016. At the time of energy-saving equipment adoption, the money proportional to emission reduction is paid to the operating department from the head office for maximum eight years. Injection molding machine of plastic was replaced with the electric type which is energy-saving type from the oil pressure type. At this time, that policy was used and the adoption of energy-saving equipment and emission reduction were brought forward. Furthermore, energy analysis and energy-saving planning were carried out, South Korean Youngbo Chemical, Alveo of the Netherlands, etc. at the plant with much energy use. As a result, the leak by compressed air piping was detected, by being fixed, the load of compressor decreased and emission reduction was carried out. Emission of every site is grasped in the head office, and is reported twice per year to a zone of management by the environmental subcommittee. When emission is an increase, a reduction plan is required from a zone of management.	About 1 billion yen is used in replacement of equipment, and the total of labor cost for energy-saving activities, every year.
	Air pollution limits	Strengthening of air pollution regulation will make the carbon dioxide effluent control of a car. And replacement of a proprietary car is performed with an enterprise. Regulation of supply of chlorofluorocarbon will need change of a coolant. And replacement of the cooling device which was used by the manufacturing process is needed. Regulation of a chlorinated solvent will need solvent change by a manufacturing process. Therefore, equipment reconstruction is needed. For this reason, a manufacturing cost and equipment cost increase. Furthermore, indirectly, a raw-material supply cost goes up.	Increased operational cost	3 to 6 years	Direct	likely	Low-medium	Equipment cost will increase 100 million yen for replacement of cars, frozen equipments etc.	The car which the Sekisui Chemical Group owned or was leased is intentionally switched to the type of low pollution and low fuel consumption for some time. The car which I use in Japan is chosen from the cars of the listed low pollution and low fuel consumption. The coolant of cooling installation is checked at the time of environmental auditing or energy diagnostics. And it is checked whether the coolant is able to be purchased in the future. And replacement of equipment is performed intentionally. Use of a chlorinated solvent is performed very restrictively. However, small-scale equipment reconstruction will be performed when regulation of a chlorinated solvent is completed.	When regulation of air pollution is tightened up, required expense has estimated it as 10 million yen.
	Carbon taxes	Introduction of the carbon tax will increase fuel cost and the manufacturing cost, directly. Moreover, in order that materials cost may go up, the funding cost increase indirectly. Sekisui Chemical group is manufacturing and selling the interlayer plastic film for automobile windshields. And plastic resin required for the product is produced in production at five plants of four nations. Since there is a plan to increase sale in the future, a new factory may be built. In order to correspond to the carbon tax, it is necessary to add or replace the equipment which raises energy efficiency. For this reason, temporary equipment cost occurs. Furthermore, when the limit of the amount of emission is exceeded, the payment of a carbon tax occurs continuously.	Increased operational cost	1 to 3 years	Direct	Very likely	High	When adding or replacing high equipment of energy efficiency, the equipment cost of 5 billion yen occurs. When energy tax or carbon tax is set up to 5%, it is expected that raw-material cost and the manufacturing cost increase 1 billion yen. This leads to reduction in profits.	The section "Manufacturing Development Innovation Center" aiming at raising manufacture energy efficiency drastically was established in 2009. This section is working on visualization of energy use of each manufacture site, and reduction of use energies. The equipment which uses many energies is replaced to what has good efficiency, one by one. The loss of energy is found by visualization of energy, and that loss is improved. The listing of the part of an equipment improvement required for the improvement in energy efficiency about a plastic resin manufacture plant which consumes energy so much is advancing. Equipment to be corresponded to a carbon tax is included in this list. Now, this list is completion mostly. And equipment is introduced one by one from the large cost effect.	About 1 billion yen is used in replacement of equipment, and the total of labor cost for energy-saving activities, every year.
	Cap and trade schemes	When the cap and trade system was introduced and the amount of emission exceeds a cap, carbon credit purchase cost is needed. Moreover, in order to suppress generating of the every year of credit expense, when the replacement to energy-saving equipment is performed, equipment expense is needed temporarily.	Increased operational cost	3 to 6 years	Direct	Very likely	Medium	Credit purchase cost when the system of cap and trade is decided is estimated at 100 million yen every year. This leads to reduction in profits.	The section "Manufacturing Development Innovation Center" aiming at raising manufacture energy efficiency drastically was established in 2009. This section is working on visualization of energy use of each manufacture site, and reduction of use energies. The equipment which uses many energies is replaced to what has good efficiency, one by one. The loss of energy is found by visualization of energy, and that loss is improved.	About 1 billion yen is used in replacement of equipment, and the total of labor cost for energy-saving activities, every year.
	Emission reporting obligations	The process of calculating the amount of emission is generated by the emission reporting obligations. When reporting the emission by transportation, the creation expense of the system which calculates distance, weight, and fuel consumption is needed. Therefore, when sorting out a transportation contractor, transportation cost goes up.	Increased operational cost	Up to 1 year	Direct	Virtually certain	Low	The correspondence cost of the reporting system is estimated at 10 million yen. This leads to reduction in profits.	In accordance with the law of Japan, energy use and the amount of emission of the plant are reported to the government. Moreover, energy use in the transportation company is also reported by shipper every year. Moreover, the amount of emission is reported to the local government by the local law of Saitama Prefecture every year. In order to reduce the amount of the energy used 1% every year according to a legal demand, company-wide energy-saving activities are carried out.	About 10 million yen is used every year for the report system.
	Fuel/energy taxes and regulations	If a renewal energy use rate is decided or the tax for expansion of renewal energy is made, fuel cost and a manufacturing cost will be increased. Furthermore, indirectly, a raw-material supply cost goes up.	Increased operational cost	Up to 1 year	Direct	Very likely	Medium-high	When energy tax or carbon tax is set up to 5%, it is expected that raw-material cost and the manufacturing cost increase 1 billion yen. This leads to reduction in profits.	The section "Manufacturing Development Innovation Center" aiming at raising manufacture energy efficiency drastically was established in 2009. This section is working on visualization of energy use of each manufacture site, and reduction of use energies. The equipment which uses many energies is replaced to what has good efficiency, one by one. The loss of energy is found by visualization of energy, and that loss is improved.	About 1 billion yen is used in replacement of equipment, and the total of labor cost for energy-saving activities, every year.



Product efficiency regulations and standards	If the standard of the insulation efficiency of housing products or energy-saving performance is established or a standard goes up, the additional manufacturing cost and R&D cost will be raised.	Increased operational cost	Up to 1 year	Direct	Virtually certain	Medium	When the standard of energy-saving performance of housing products is decided by law, the cost for setting a products by regulation increases about 100 million yen, it expects. This leads to reduction in profits.	The modular house "Sekisui Heim" of Sekisui Chemical Group has attaches the photovoltaic cell equipment, attaches "Smart Heim Navi" which realize energy use visible, and has outstanding insulation properties. For these reasons, Sekisui Heim is in the position of the top of the housing by energy-saving performance. Thus, it is the main method to manage risk and opportunity of our company to continue R&D and to improve the performance of housing products, "Sekisui Heim."	About 1,000 million yen is spent on R&D of the improvement in energy-saving performance of the housing products every year.
Product labelling regulations and standards	When a product is asked for the display of energy performance or a carbon footprint, the cost of labelling and calculation is needed. Moreover, when the performance of carbon emission is inferior in our product compared with competitive products, sales decrease.	Reduced demand for goods/ services	1 to 3 years	Direct	likely	Medium-high	The cost for the display of the energy performance of a product and the labelling of a carbon footprint is estimated at about 100 million yen. This leads to reduction in profits.	The modular house "Sekisui Heim" of Sekisui Chemical Group has attaches the photovoltaic cell equipment, attaches "Smart Heim Navi" which realize energy use visible, and has outstanding insulation properties. For these reasons, Sekisui Heim is in the position of the top of the housing by energy-saving performance. Thus, it is the main method to manage risk and opportunity of our company to continue R&D and to improve the performance of housing products, "Sekisui Heim."	About 1,000 million yen is spent on R&D of the improvement in energy-saving performance of the housing products every year.
Voluntary agreements	When a voluntary agreement is arranged with the local government, the cost of measurement or activity is generated for observance of regulation.	Increased operational cost	1 to 3 years	Direct	More likely than not	Low-medium	The activity cost for a voluntary agreement is estimated at about 10 million yen. This leads to reduction in profits.	At the plant and the research institute, measurement, activity, and reporting to the local government are performed for the voluntary agreement with the local government. At the plant and research institute in Japan, even if there is an agreement or not, environmental site report is created. In the report, the data of the atmosphere, waste water quality, carbon emission, and waste data is shown. Furthermore, the report is passed to the local government. It becomes the main management approach to continue these.	10 million yen is used every year for the conformity to a voluntary agreement.
Gneral environmental regulations, including planning	When environmental regulation is decided, the cost of the equipment for adapted to regulation is needed. In that case, the manufacturing cost in the area goes up. If cost competitiveness declines, sales will decrease.	Increased operational cost	1 to 3 years	Direct	Very likely	Medium	The equipment cost for regulation is estimated at 10 million yen. This leads to reduction in profits.	The Sekisui Chemical Group has a plant in each country. A possibility that new environmental regulation will be made in non-OECD country is high. Irrespective of a country, the Sekisui Chemical Group performs an environmental impact assessment at the time of installation of equipment. And what was taken into consideration to water or the atmosphere is installed. Also high energy performance equipment is chosen. It becomes the main management approach to continue these.	When a new regulation is made, measure expense is considered to be about 10 million yen every year.
Renewable energy regulation	Energy expense is increased in order to buy renewable energy more expensive than the conventional energy, when a renewable energy introduction target is decided by government.	Increased operational cost	1 to 3 years	Direct	Very likely	Medium	The additional charge for buying renewable energy is considered to be 1 billion yen. This leads to reduction in profits.	The solar energy power generation system is put on the many plant of Sekisui Chemical Group. The generated electricity is used at a plant. When a location is good, a solar energy power generation system continues to be installed. It becomes the main management approach to continue these.	The cost for renewable energy is 10 million yen every year.
Uncertainty surrounding new regulation	If a new regulation is made, the cost for regulation will appear at the plant of the area. Moreover, when a product is not adapted to of a new regulation, sale of the product is stopped. In that case, sales fall.	Increased operational cost	3 to 6 years	Direct	likely	Medium	The cost corresponding to a new regulation is considered to be about 10 million yen. This leads to reduction in profits.	The Sekisui Chemical Group has a plant in each country. A possibility that new environmental regulation will be made in non-OECD country is high. Irrespective of a country, the Sekisui Chemical Group performs an environmental impact assessment at the time of installation of equipment. Moreover, we think that the Sekisui Chemical Group is asked for continuation of supply of the product of high environmental performance. It becomes the main management approach to continue these.	The R&D cost of environmental contribution products is about 10 million yen every year.
Lack of regulation	The superiority of environmental contribution products is lost in a country without environmental regulation. And the sales in the area decrease.	Reduced demand for goods/ services	Up to 1 year	Direct	Very likely	Medium	Cost is considered to be zero.	Even if there is no regulation, the Sekisui Chemical Group performs business operation with small environmental impact. And continuation of supply of environmental contribution products is our policy. Thereby, an business is not influenced by regulation.	An additional charge is considered to be zero.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in precipitation pattern	Sekisui Chemical Group has a business to be constructed, such as a house and a water service infrastructure. By change of a precipitation pattern, the amount of water of a sewer may increase suddenly. In that case, it is possible that construction of a sewer pipe renewal is postponed. When such, the contractor who constructs using our products may suffer damage. The sales of this business are influenced by these. The traffic infrastructure will be affected by influence if local severe rain occurs. Then, commuting and shipment are influenced. Operation of a plant may stop. For this reason, sales decrease.	Reduction/ disruption in production capacity	Up to 1 year	Direct	Virtually certain	High	The influence of sales by change of a precipitation pattern estimates it as about 100 million yen.	In sewer rehabilitation construction, our company holds a meeting to a construction vendor, and is exchanging the information about precipitation or safety frequently. And precise scheduling is made to the rainy season. This is the management method. Moreover, at the time of acquisition or construction or acquiring the plant, Sekisui Chemical Group uses "environmental & safety check sheet." And after confirming the surrounding situation individually, the environmental section of the head office approves construction and acquisition. This is a process of risk management. Since Japan has much precipitation, the place which does not become a flood is selected. And equipment is installed after padding the ground if needed. These are also confirmed in an "environmental & safety check sheet." When required, the additional measure is required from an environmental section. Through these processes, on the occasion of construction of the plant of the Tohoku district in Japan, about 2-meter padding of land was done and the plant was built on it. At the time of the tsunami of Japan in 2011, although the surrounding road sank, a plant site and the equipment could not be covered with water, and could suspend equipment safely, and there was no damage of our employee. To the trouble of traffic by a heavy rain, we are minimizing the loss of a sales opportunity by the alternate production in a plant and shipment which have not been affected by the heavy rain.	The measure expense of sewer renewal estimates it as about 1 million yen. The measure against plant construction is considered to be about 10 million yen. The cost of the switch of production and shipment is estimated at about 10 million yen.

Physical	changes in mean (average) temperature	Since the outstanding thermal insulation will not be required for if average temperature changes, the sales of the thermal insulation for a car or a house are affected by influence. Moreover, if prevalence of an infection disease changes with areas, those who need diagnosis may decrease in number. In that case, I influence the sales of medical products, such as a diagnostic product.	Reduced demand for goods/ services	>6 years	Direct	likely	Medium	Reduction of the sales of thermal insulation or a diagnostic product is considered to be about 10 billion yen every year.	Change of temperature is various by a place. Sales area is expanded in order to influence small. If it does so, the influence of sales will become small. The business of plastic thermal insulation or a diagnostic product is manufactured and sold in various places mainly by Asia, the United States, and EU. It becomes the main management approach to continue these.	The business which will be affected by the influence of average temperature is already undertaken in the large area. Risk management expense is estimated at about 100 million yen.
	Change in temperature extremes	The Sekisui Chemical Group has a business to be constructed, such as a house and a water service infrastructure. When temperature extremes changes severely, construction of our product becomes impossible. The situation worker cannot carry out should be considered. For this reason, sales decrease.	Reduced demand for goods/ services	Up to 1 year	Direct	likely	Low-medium	The influence on the sales which a house and a water service infrastructure business receive is considered to be about 100 million yen every year.	Climate changes by the area. By proposing the construction in consideration of a season to a customer, the influence of sales becomes small. It becomes the main management approach to continue these. The Iwate plant of Sekisui Medical, using a lot of water, has its own source of water supply.	The expense to a severe change of extreme temperature is considered to be about 100 million yen.
	Change in mean (average) precipitation	The Sekisui Chemical Group has a business to be constructed, such as a house and a water service infrastructure. When average precipitation changes and rainfall increases to a rainy season, construction days decrease. Production and shipment become impossible, if rainfall increases and flood damage occurs about manufacture of a product. If a customer's business stops, sales will fall. If rainfall decreases, water supply of the area will decrease. At the plant of a chemicals a lot of water requires in process, so if water supply is regulated, production stops. And an business opportunity is made to lose and sales decrease.	Reduction/ disruption in production capacity	3 to 6 years	Direct	likely	Medium	When average precipitation increases, the reduction in sales is generally considered to be 1 billion yen every year. Moreover, if regulation of water supply occurs, the reduction in sales will estimate it as 100 million yen generally every year.	Climate changes by the area. By proposing the construction in consideration of a season to a customer, the influence of sales becomes small. About regulation of water supply, it is the risk management approach to have original source of water supply. And surrounding population is small. For this reason, the influence of change of precipitation is small at that plant.	The measure cost of change of precipitation is estimated at about 100 million yen.
	Change in precipitation extremes and droughts	When precipitation decreases sharply and supply of water decreases, at the plastic resin plant which uses a lot of water, a risk of reducing production or stopping arises. A lot of water is used for plastic resin for the interlayer films for automobile windshields by a manufacturing process. If water supply stops, the product supply to an automobile manufacturer will stop as a result. That is, not only our company but an automotive manufacturing supply chain is affected by influence. Moreover, when the influence of precipitation affects agriculture, the agricultural production in a certain area may stop. The Sekisui Chemical Group is manufacturing and selling the soil film for agriculture, the film for Green House, the plastic container for agriculture, the move flush tank for agriculture, etc. in the agricultural field. These sales opportunities may decrease.	Reduction/ disruption in production capacity	Up to 1 year	Direct	Very likely	High	If water supply decreases and production of plastic resin stops, 10 billion yen sales may decrease. Moreover, by a drought, sales reduction of an agricultural commodity estimates it as 10 billion yen.	Sekisui Chemical Group has 5 plastic resin plant in four nations. When water supply has restriction, the quantity of production is maintained by changing the plant. Thereby, influence on an automotive manufacturing supply chain is made small. The Sekisui Chemical group has a sales base in all parts of Japan about the agricultural commodity. When agricultural production stops at a certain area, the production place of the crops moves. According to movement of an agricultural production place, changing a sales base makes a risk of losing a sales opportunity small.	The cost which switches a plant estimates it as about 10 million yen.
	Snow and ice	Communing, production, transportation, and shipment are affected by influence by severe snowfall and Ice Storm. There is a risk of sales decrease by this. Moreover, the cost by the damage to materials or stocks occurs.	Reduction/ disruption in production capacity	Up to 1 year	Direct	Very likely	Medium	When commuting plant operation and shipment are affected by heavy snow, the reduction in sales estimates it as about 100 million yen.	There was an obstacle of transportation by heavy snow in Japan in 2013. And plant operation and shipment stopped. Since the warehouse broke by snow, raw materials and a product received the damage. Production was switched to the plant without snow. Then, sales reduction was prevented.	The cost of the switch of production and shipment estimates it as about 10 million yen.
	Rising sea level	In the plant near the sea, production equipment receives a damage by sea level rise. And a risk of production stopping exists.	Reduction/ disruption in production capacity	>6 years	Direct	About as likely as not	Low-medium	When the plant near the sea is abolished, the price of the loss of property is about 1 billion yen.	Sekisui nano-coat technology and the Tokuyama Sekisui industry exist near the sea. Plant operation stops at the time of a large-scale rise in the sea level. Each equipment is installed in the several meters place from the sea level. For this reason, it is thought that the influence by a rise in the sea level is small.	The cost of the measure at the time of an equipment change estimates it as about 10 million yen every year.
	Tropical low pressure system	Plant in Southeast Asia including Japan and southern U.S. may be affected by the influence of hurricane or the Typhoon. In that case, equipment and a product suffer damage. Moreover, commuting may be affected by influence and plant operation may stop. Thereby, sales decrease. Also when a supplier or a customer are affected by influence, production and sales decrease.	Reduction/ disruption in production capacity	Up to 1 year	Direct	Virtually certain	Medium	Reduction of the sales and property by the Typhoon or hurricane expects 100 million yen generally every year.	Japan has every year experience which a typhoon approaches. The Sekisui Chemical Group takes the influence of a wind and rain into consideration, when performing plant construction and equipment installation in every corner of the earth.	The cost to the Typhoon and hurricane estimates it as about 10 million yen every year.
	Induced changes in natural resources	Equipment of our company may be affected by influence by a flood, the Ice Storm, hurricane, and tsunami. Furthermore, production and sales are influenced even if our supplier and a customer are affected by influence.	Reduced demand for goods/ services	Up to 1 year	Indirect (Supply chain)	likely	High	By the flood of Thailand in 2011, although the plants of the Sekisui Chemical Group was not affected by influence, our customer's factory could not operate cause of flood, and it was not able to supply our products. In such a case, it has the influence of a loss of the sales opportunity.	Sekisui Chemical Group has decided upon BCP (Business Continuity Planning) until now, and has a means to avoid the risk if possible. Specifically, it is a switch of production to the plant of the area which has not been affected by influence. Furthermore, it is the cross-supply of a product with a competitor.	The additional cost of BCP decision expects 10 million or less yen.
	Uncertainty of physical risks	The influence by which the Sekisui Chemical Group is affected by the uncertainty of a climatic change is as follows. 1. The stop of raw-material supply, and the increase in supply cost. 2. Influence on the plant operation under the influence of commuting or transportation. 3. The stop of construction of a house or a water service infrastructure. These reduce sales.	Reduced demand for goods/ services	3 to 6 years	Direct	More likely than not	Medium	The influence by which the Sekisui Chemical Group is affected can consider various cases. The influence on sales has estimated it as about 1 billion yen.	In Japan, a house is produced at seven plants. Water supply infrastructure products are produced at the plant of 10. A production plant is switched when a plant is affected by influence under the influence of a climate change. This is a measure against a risk to sales reduction.	The cost of a plant switch estimates it as about 100 million yen.
	Other physical effects	The Sekisui Chemical Group manufactures a house and uses wood. The Sekisui Chemical Group manufactures a house and uses wood. When a forest fire increases by abnormal weather, supply of wood decreases. As a result, wood cost goes up. If damage occurs in the forest which the wood supplier of our company owns, wood will not be supplied temporarily but production of a house will stop.	Reduction/ disruption in production capacity	1 to 3 years	Direct	More likely than not	Medium-high	The influence of wood supply has estimated it as about 1 billion yen.	At the time of wood supply, the Sekisui Chemical Group checks forest certification and purchases it from two or more areas. Canada where temperature is low is also one of the suppliers. Supplying from two or more places is the method of risk management.	The cost of the wood supply from two or more places has estimated it as about 10 million yen.

	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Reputation	Sekisui Chemical Group is evaluated as a company which is tackling seriously to the environmental problem containing a climate change, especially in Japan. And continuation of supply of environmental contribution products was evaluated and we recognize it as it being one of the reasons a customer chooses our products. The prefabricated house "Sekisui Heim" of the Sekisui Chemical Group had a solar energy power generation system and a storage battery, and has advocated that ZEH(Net Zero Energy House) is realized. Thereby, Sekisui Heim has received evaluation from the market and consumers. If evaluation of a company gets worse about carbon emission, the sales of housing products will be influenced. Sale of Sekisui Heim especially whose customers are consumers is affected to reputation by influence.	Reduced demand for goods/ services	Up to 1 year	Direct	More likely than not	High	Reduction of sales when the reputation about the environment of the Sekisui Chemical Group worsens estimates it as about 100 billion yen.	Sekisui Chemical Group understands that, our environmental contribution products are evaluated from society. Our vision is as follows. We use natural capital at materials use, manufacture and use and abandonment of product. And through the impact reduction activities of environmental contribution products, energy saving, etc., and nature conservation activities, more than it used natural capital, it is planned to return the natural capital by 2030. We understand sales expansion of these products leads to return larger. Return rate to natural capital is reported to zone of management by CSR committee every year, and when required, directions of a return rate improvement are taken out from a zone of management. Return rate of natural capital is disclosed in a CSR report. In the case of development or improvement, emission is calculated by a "product environmental impact assessment note." In it, assessment of an environmental impact and contribution is calculated. Emission from the manufacture of a product to use and abandonment is also calculated. Plastic sheet "KYDEX" used for the seat parts and window frame of airplane realize the weight saving of airplane. Operating department and environmental section collaborated and reduction of the airplane fuel by this product was calculated. It becomes the way of the risk management to reputation to develop environmental contribution products and to calculate and disclose the environmental contribution of a product.	The R&D cost of environmental contribution products and disclosure cost of contribution of our products is about 1 billion yen.
Other	Changing consumer behaviour	When a customer chooses goods, he comes to choose the thing in consideration of sustainability. For example, what changed material and energy into renewable resource from fossil resources, is chosen. Probably, the R&D cost for converting into such products is needed.	Increased operational cost	1 to 3 years	Direct	Very likely	Medium-high	When 10% of the materials and energies which the Sekisui Chemical Group uses is changed into renewable resource from fossil resources, the cost rise of about 10 billion yen is expected.	Sekisui Chemical Group made the long-term environmental vision. The contents are the following. We use natural capital from materials, manufacture, use, and abandonment. We do the return of the natural capital used to the earth, by environmental contribution products, environmental impact reduction activities, and nature conservation activities. More than we used natural capital, we do the return of it in 2030. We continue these activities and continue development of environmental contribution products. It is correspondence to change of goods selection of a customer.	The R&D cost of environmental contribution products is about 1 billion yen.
	Induced changes in human and cultural environments	The Sekisui Chemical Group is manufacturing and selling the prefabricated house "Sekisui Heim." By a climate change, change of vegetation, geographical feature, and an ecosystem may change eating habits. In addition, change of people's occupation, change of activity hours and family structure are predicted. These lead to change of people's wish to a house. When the house corresponding to change cannot be supplied, the sales of a house business decrease.	Reduced demand for goods/ services	>6 years	Direct	More likely than not	Medium	When housing business cannot respond to change in the change, family structure, or housing culture of people's wish to living environment, sales decrease by about 100 billion yen.	The Sekisui Chemical Group has founded the living environment research institute. Then, we are studying a people's wish to the house, and change of housing culture. The result is used for R&D of housing products. Moreover, since we are undertaking the housing renovation business, we have a means to get to know people's favorite change to a dwelling. This serves as risk management.	The research cost to change of the person about a dwelling and culture estimates it as 100 million yen.
	Fluctuating socio-economic conditions	When it has the physical influence by a climate change, it becomes impossible to continue agriculture by the area for example. Moreover, change arises in the kind of crops. If regulation takes place to use of water or fuel, the structure of the industry may change. Since the Sekisui Chemical Group is manufacturing the product for agriculture, and the parts of a car and electric products, when it cannot respond to change of industry or economy, sales decrease.	Reduced demand for goods/ services	>6 years	Direct	More likely than not	Medium	When it cannot respond to change of a socioeconomic situation, it is predicted that sales decrease about 100 billion yen.	Sekisui Chemical Group is developing and selling environmental contribution products, and recognizes it as being evaluated from society. Even if a socioeconomic situation changes, planning environmental contribution products and continuing providing is a measure against this risk.	The R&D cost of environmental contribution products is about 1 billion yen.
	Increasing humanitarian demands	Under the physical influence by a climate change, an epidemic may break out the area, or a life place may disappear by a rise in the sea level. In that case, a humanitarian activity is increased. When the Sekisui Chemical Group does not contribute to the area in case of such a situation, the business in the area is affected by influence. And sales decrease.	Reduced demand for goods/ services	>6 years	Direct	More likely than not	Low-medium	When the humanitarian activity is increasing, however the Sekisui Chemical Group does not perform contribution activities in a certain area, reduction in a customer is expected. The reduction in sales estimates it as about 1 billion yen.	The Sekisui Chemical Group has determined that all the places of business perform the environmental contribution activities including afforestation or cleaning activities in our environmental mid-term plan. Continuation of this activity will recognize the contribution of a company to the area. And the influence on the business in the area is minimized.	The cost of environmental contribution activities estimates it as about 100 million yen every year.
	Uncertainty of social factors	The Sekisui Chemical Group manufactures and sells a prefabricated house, and is manufacturing and selling the plastic article relevant to a life and industry. It is expected that people's life style, family structure, the liking to the product, and the industrial structure in the area change with climate changes. However, there is uncertainty in the change. When we can respond to neither a life of people nor change of industry, the sales in the area decrease.	Reduced demand for goods/ services	>6 years	Direct	More likely than not	Low-medium	When it cannot respond to the uncertainty in a social effect, sales decrease by about 100 billion yen.	Sekisui Chemical Group is developing and selling environmental contribution products, and recognizes it as being evaluated from society. Even if a life and industry change, it is a measure against a risk to continue supplying environmental contribution products corresponding to the change.	The R&D cost of environmental contribution products is about 1 billion yen.
	Uncertainty of market signals	If a market reacts to the matter considered to be prediction of a climate change, and influence of a climate change sensitively, it is possible that a stock price fluctuates quickly. If a market judges that the Sekisui Chemical Group does not have the product or solution to a climate change, a stock price will change.	Reduced stock price (market valuation)	1 to 3 years	Direct	Very likely	Medium	Reduction of the market value of the Sekisui Chemical group by the uncertainty of a market signal estimates it as 10 billion yen.	Sekisui Chemical Group is developing and selling environmental contribution products, and recognizes it as being evaluated from society. It is an answer to the uncertainty of a market signal to consider the influence of a climate change and to continue supplying environmental contribution products.	The R&D cost of environmental contribution products is about 1 billion yen.

	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Regulatory	International agreements	By Framework Convention on Climate Change, if emission restrictions of GHG are defined according to a more extensive country and a sector, the regulation for making emission restrictions adapted to and voluntary reduction activities will advance. Sekisui Chemical Group attaches a solar energy power generation system, a storage battery, and a home energy management system to a prefabricated house "Sekisui Heim", and sells it as ZEH(Net Zero Energy House). This is one integrative solution to a climate change. Although the business of the prefabricated house is undertaken in Japan and Thailand now, the business may be undertaken in the country required for ZEH in the future. This becomes sales expansion. Moreover, the Sekisui Chemical Group also sells the interlayer film for glass which interrupts the heat for an automobile or buildings. And, we are performing development of the part for LED, and a next-generation battery. The emission regulation by international agreement leads an opportunity of these product sale. If a country with a reduction target will increase in the future, the need to our goods will be expanded. Our sales are expanded when energy-saving regulation is introduced into the automobile and the electric product in which our products are included.	Increased demand for existing products/services	3 to 6 years	Direct	likely	High	Sales expansion of the house, interlayer film, LED parts and the charge of next-generation battery material is assumed to be 200 billion yen.	About energy saving of prefabricated house "Sekisui Heim", by collaboration with our customer, energy use is monitored and energy-saving performance is disclosed every year. Moreover, the result is used in the development of next product. This is the management method. Moreover, Sekisui Chemical Group is manufacturing the part which saves energy of automobile and electric. Solar control Interlayer film for automobile glasses, LED component, and next-generation battery are so. Moreover, evaluation of environmental contribution of these products is performed one by one. As the section which develops environmental contribution products, "Development center" is organized in the head office. Product corresponding to reduction target of the government after the Paris agreement is developed. Use of sustainable materials is also studied. Contribution to environment is calculated using "Product environmental impact assessment note". At the monthly development meeting, progress of product development is checked from zone of management. Environmental contribution of a product is counted up by the environmental section based on sales data. And it is reported to the zone of management. It is our long-range plan to carry out the return of natural capital by the environmental contribution of a product, etc., more than it used natural capital by 2030. Continuing development of environmental products towards achievement of this target leads to maximization of the opportunity.	R&D expense is about 10 billion yen. Since the development section is already organized, there is no additional cost.
	Air pollution limits	By strengthening of regulation of air pollution, reduction of VOC(s), reduction of emission of chlorofluorocarbon, and reduction of the excretions by combustion of fuel are required. Sekisui Chemical Group sells the pressure sensitive adhesive tape converted into the process which does not emission VOC at the time of manufactures of "craft tapes", "supreme tape." Moreover, we are carrying out the production and sales of the plastic sponge "softlon" and the "Fenovaboard" that has no chlorofluorocarbon emission in the manufacturing process. We are also making the parts of the battery required for the car which does not take out the quality of an air pollutant. Strengthening of regulation will increase a demand for these products.	Increased demand for existing products/services	1 to 3 years	Direct	likely	Medium-high	Sales expansion of our adhesive tape, plastic sponge products and battery raw materials could be an opportunity for a possible increase in sales of 10 billion yen per year.	The Sekisui Chemical Group has completed the investment in pressure sensitive adhesive tape and the manufacturing process of plastic sponge. Moreover, we have been continuing R&D of the parts for batteries from before. This continuation is a management method.	There is no additional cost.
	Carbon taxes	If a carbon tax is introduced, fuel cost will increase and energy cost will go up. For this reason, a product with sufficient energy-saving performance comes to be chosen. The Sekisui Chemical Group provides "Sekisui Heim", which is high energy-saving performance, and realized ZEH(Net Zero Energy House) with the solar energy power generation system. Moreover, we sell the interlayer film for glass which intercepts the heat for a car or buildings. Also, we developed the material for next-generation batteries. Introduction of a carbon tax will increase the sales of these products.	Increased demand for existing products/services	1 to 3 years	Direct	likely	Medium-high	Sales expansion of Sekisui Heim, and the parts for batteries estimates it as about 10 billion yen.	Sekisui Chemical Group is continuing R&D of ZEH, a interlayer film, LED parts, or next-generation battery parts from the former. Continuation of these R&D is a management method.	There is no additional cost.
	Cap and trade schemes	The maximum of the amount of emission is set up in a cap and trade scheme. For this reason, investment to reduce the amount of emission prospers. The Sekisui Chemical Group R&D and sells plastic sponge "softlon", a "Fenovaboard", and the interlayer film for glass which interrupts heat as thermal insulation, LED parts and the parts of a next-generation battery. Expansion of a cap and trade scheme increases these sales.	Increased demand for existing products/services	1 to 3 years	Direct	likely	Medium-high	Sales expansion thermal insulation parts for LED and batteries estimates it as about 10 billion yen.	Sekisui Chemical Group is continuing R&D of thermal insulation, LED parts, or next-generation battery parts from the former. Continuation of these R&D is a management method.	There is no additional cost.
	Emission reporting obligations	Grasp of energy use is needed in the emission reporting obligations. The Sekisui Chemical Group attaches HEMS(Home energy management system) to housing products, and sells it. It can grasp and record the amount of the energy used, a production of electricity, and purchase electric energy. An office may also be provided with this product. Expansion of the emission reporting obligations increases the sales of these products.	Increased demand for existing products/services	1 to 3 years	Direct	likely	Low	1 billion yen is predicted as a HEMS-related sales expansion.	The Sekisui Chemical Group has been performing R&D of HEMS for some time. Continuation of this R&D is a management method.	There is no additional cost.
	Fuel/energy taxes and regulations	If fuel/energy taxes are introduced, fuel cost will increase and energy cost will go up. For this reason, a product with sufficient energy-saving performance comes to be chosen. The Sekisui Chemical Group provides "Sekisui Heim", which is high energy-saving performance, and realized ZEH(Net Zero Energy House) with the solar energy power generation system. Moreover, we sell the interlayer film for glass which intercepts the heat for a car or buildings. Also, we developed the material for next-generation batteries. Introduction of a carbon tax will increase the sales of these products.	Increased demand for existing products/services	1 to 3 years	Direct	likely	Medium-high	Sales expansion of Sekisui Heim, and the parts for batteries estimates it as about 10 billion yen.	Sekisui Chemical Group is continuing R&D of ZEH, a interlayer film, LED parts, or next-generation battery parts from the former. Continuation of these R&D is a management method.	There is no additional cost.



Product efficiency regulations and standards	The prefabricated house "Sekisui Heim" of the Sekisui Chemical Group carries a solar energy power generation system, and has insulation properties, and its energy-saving performance is high. When the system of the subsidy to the solar energy power generation system of a house is made or the energy-saving standard of a house is enacted, Sekisui Heim's sales increase.	Increased demand for existing products/ services	1 to 3 years	Direct	Very likely	Medium-high	100 billion yen is predicted as a Sekisui Heim sales expansion.	Sekisui Chemical Group is continuing R&D of Sekisui Heim's energy saving, and visualization of energy "Smart Heim nav" from the former. Continuation of these R&D is a management method.	There is no additional cost.
Product labelling regulations and standards	The prefabricated house "Sekisui Heim" of the Sekisui Chemical Group has released the evaluation result about the high energy-saving performance. Moreover, also with other environmental contribution products, use of natural capital and evaluation of environmental performance are carried out one by one. When an environmental label is institutionalized, we use data in the Company, are receiving verification if needed and can display a product label promptly. As a result, sales increase to the customer who thinks especially environmental performance as important.	Increased demand for existing products/ services	1 to 3 years	Direct	likely	High	When the system of an environmental label is made and we perform a label display, the sales expansion is about 10 billion yen.	Into the Sekisui Chemical Group, I have many evaluation results about Sekisui Heim's energy-saving performance. Moreover, they are released by Press Releases. We are carrying out calculation of the contribution of environmental contribution products, and visualization one by one. Continuation of these activities is a management method.	Calculation of the data of an environmental label and the cost of verification estimate it as about 10 million yen every year.
Voluntary agreements	A voluntary agreement is decided among the local governments, the contents and results are released, and when it is able to be shown that the environmental impact is decreasing, evaluation of the environment of a company increases. And those who choose our products increase.	Increased demand for existing products/ services	1 to 3 years	Direct	likely	High	When a voluntary agreement is determined and the release of reduction of environmental impacts is continued, sales expansion estimates it as about 100 million yen every year.	The plant and research institute in Japan are creating the environmental site report irrespective of the existence of a voluntary agreement. An environmental impact is shown in the report. It is reported also to the local government. Continuation of these activities is a management method.	Additional cost estimates it as about 10 million yen every year.
Gneral environmental regulations, including planning	If environmental regulation is made, in order to follow it, installation and an improvement of equipment are needed. The Sekisui Chemical Group performs environmental assessment also in a country without environmental regulation at the time of plant construction or capital investment. Equipment of a low environmental impact is installed using the procedure. Then, only the minimum correspondence is needed even if regulation is possible. This serves as an opportunity to reduce a cost of capital.	Reduced capital costs	1 to 3 years	Direct	Very likely	Medium-high	As compared with the case where environmental impact reduction is not considered, reduction of the cost of an equipment improvement when environmental regulation is made estimates it as 10 million yen generally every year.	The Sekisui Chemical Group has a plant in each country. A possibility that new environmental regulation will be made in non-OCED country is high. Irrespective of a country, the Sekisui Chemical Group performs an environmental impact assessment at the time of installation of equipment. Moreover, we think that the Sekisui Chemical Group is asked for continuation of supply of the product of high environmental performance. Continuation of these activities is a management method.	Additional cost estimates it as about 10 million yen every year.
Renewable energy regulation	It is the feature that the prefabricated house "Sekisui Heim" of the Sekisui Chemical Group has a solar energy power generation system and a storage battery. Moreover, we developed the next-generation battery. When the target of a renewal energy rate is decided by the government, Sekisui Heim's buyer may get a subsidy. Use of a next-generation battery may increase. As a result, the sales of our company increase.	Increased demand for existing products/ services	1 to 3 years	Direct	likely	Medium	When the target of a renewable energy ratio is decided, sales expansion estimates it as 10 billion yen.	The Sekisui Chemical Group sells Sekisui Heim who carries a solar energy power generation system and a storage battery. Development of a next-generation battery is also continued. Continuation of these activities is a management method.	There is no additional cost.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in mean (average) precipitation	The Sekisui Chemical Group sells the water supply infrastructure and the product which collects water. There are a pipe for water service, a joint, a valve, etc. in water supply products. Also there are product which collects water. In the area whose precipitation decreased, supply of safe water becomes a pressing subject. Sekisui Chemical Group has a business of a water supply infrastructure. We make solution supply immediately to the area where safe water supply is required. Flood damage and a mudslide may occur in the area which precipitation increased. In that case, collecting water underground in a hurry, or pouring water downstream promptly is required. We have a product of "Cross-wave" and a "Rain-station" about underground storage of water. Moreover, we have the various materials for sewer infrastructure. Furthermore, we have a solution service of sewer pipeline renewal (SPR). Construction of accident prevention occurs in the area which precipitation increases. For this reason, the opportunity for our products to be used increases. For this reason, change of precipitation serves as an opportunity to increase the sales of our company.	Increased demand for existing products/ services	3 to 6 years	Direct	Very likely	High	Sales expansion of 10 billion yen is expected with a related product.	Sekisui Chemical Group continues R&D and the business over supply safe water, storage and drainage for 60 years or more, and has all these solutions, and the scale is the largest in Japan. In order to expand the product of this field, Urban Infrastructure & Environmental Products Company invested in the Shiga-Ritto plant 7 billion yen, and has expanded development organization. Sekisui Chemical has the system "Cross-Wave" which stores rain temporarily. We also have SPR of the product which reforms an inner side, without digging up the sewer pipe. And in 2017 we started sale for the product "Infra Guard" which repairs the inner side of concrete piping. This makes digging up of the ground unnecessary and attains extension of life-span of a drainage pipe. These are products which protect a city from increase of precipitation. The operating department for developing these products and expanding sale was organized in that company. Development project and a sales plan are confirmed by the zone of management every month. Management method is to continue R&D and the business, of supply, storage and drainage of water.	R&D expense is about 5 billion yen. There are already development organization and sales organization and there is no additional cost.
changes is mean (average) temperature	The Sekisui Chemical Group has the product "Ribcool" which air-conditions by carrying out heat exchange in underground. This product reduces air-conditioning energies. For this reason, the sales of this product may be expanded in the situation from which average temperature changes.	Increased demand for existing products/ services	1 to 3 years	Direct	Very likely	Medium-high	Sales expansion of 1 billion yen is expected with a related product.	Since development of the products is finished yet, improvement of the products according to each case is the method of opportunity management.	There is no additional cost.
Change in temperature extremes	The Sekisui Chemical Group has the heat insulation products "Softlon" and a "Fenovaboard." We also have a water supply pipe and building materials excellent in heat resistance or refractoriness. The prefabricated house "Sekisui Heim" is excellent in insulation properties. When a severe change of temperature extremes increases, insulation properties and heat resistance of a product are required. Moreover, when hot climate continues, the possibility of a fire increases. These change increases sales.	Increased demand for existing products/ services	1 to 3 years	Direct	likely	Medium-high	Sales expansion of 1 billion yen is expected with a related product.	Since development of the products is finished yet, improvement of the products according to each case is the method of opportunity management.	There is no additional cost.

Physical	Change in precipitation pattern	Our product "Cross Wave" which collects water underground can respond to overflow of a flood or a sewer by using collected water at the time of local severe rain. Moreover, collected water can be used at the time of a water shortage. Therefore, sales are expanded in the situation where the precipitation pattern changes.	Increased demand for existing products/ services	1 to 3 years	Direct	Very likely	Medium-high	Sales expansion of 1 billion yen is expected with a related product.	Since development of the products is finished yet, improvement of the products according to each case is the method of opportunity management.	There is no additional cost.
	Change in precipitation extremes and droughts	The Sekisui Chemical Group sells the water supply infrastructure and the product which collects water. There are a pipe for water service, a joint, a valve, etc. in water supply products. There are "Cross-wave", "Rain-station" and "Panel tank" as a product which collects water. If precipitation extremes and droughts changes, the demand of the product which supplies safe water will increase. The product which collects water for reuse of water, and the product for draining water early also come to be required. Change of precipitation extremes and droughts brings about the opportunity of sales expansion.	Increased demand for existing products/ services	3 to 6 years	Direct	Very likely	Medium-high	Sales expansion of 10 billion yen is expected with a related product.	Since development of the products is finished yet, improvement of the products according to each case is the method of opportunity management.	There is no additional cost.
	Snow and ice	The Sekisui Chemical Group sells the prefabricated house "Sekisui Heim." In it, the cold district-oriented house which also bears snowy weight is included by thermally insulated. Moreover, we have a solution for constructing water, electricity, and a telephone cable in underground. This serves as a solution which maintains a life and business, when traffic stops at snow or the Ice Storm. For this reason, if the influence of snow or ice increases, sales will increase.	Increased demand for existing products/ services	3 to 6 years	Direct	likely	Medium-high	Sales expansion of 10 billion yen is expected with a related product.	Since development of the products is finished yet, improvement of the products according to each case is the method of opportunity management.	There is no additional cost.
	Induced changes in natural resources	The generation frequency of the typhoon or hurricane goes up, the opportunity for an agricultural house and housing materials (drainspout etc.) to be destroyed will increase. So, the agricultural film, the drainspout for housing, and the demand of housing reformation increase. Therefore, sales are expanded in such a situation.	Increased demand for existing products/ services	1 to 3 years	Direct	Very likely	Medium-high	Sales expansion of 10 billion yen is expected with a related product.	Since development of the products is finished yet, improvement of the products according to each case is the method of opportunity management.	There is no additional cost.

	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other	Reputation	Sekisui Chemical Group performed GHG emission reduction activities, and has already released the activity situation for many years. The Sekisui Chemical Group released the environmental long-term vision in 2014. We calculate the natural capital which I use with a business. And we do the return of the natural capital to the earth by three activities, environmental contribution products, environmental impact reduction activities, and nature conservation activities. Our product is chosen as a customer when these activities are evaluated by a market and people.	Increased demand for existing products/ services	1 to 3 years	Direct	Very likely	Medium-high	Sales expansion of 10 billion yen is expected with a related product.	Sekisui Chemical Group decided upon the long-term vision in 2014. We do a return to natural capital by a product, environmental impact reduction, and environmental contribution activities to use of the natural capital in a business. Return rate to natural capital is disclosed in a CSR report every year. In order to calculate the return of natural capital, the environmental contribution of a product is calculated and environmental impacts, such as greenhouse gas emission, are measured. We understand that activity of the increase in the return to natural capital has led to the reputation of Sekisui Chemical Group. In order to increase the return of natural capital by design, we made the environmental mid-term plan including the sales of environmental contribution products, and emission reduction of GHG. The present mid-term plan is raising the return rate to natural capital to 90% by 2020, and making it not less than 100% by 2030. Progress of activity is reported to a zone of management by the environmental subcommittee for every half a year, and correction of a plan is directed if needed. And a plan and a result are disclosed in a CSR report. The effort for the return to natural capital leads also to emission reduction of GHG, and serves as the way of maximization of an opportunity to maintain the reputation of our company as a result.	The disclosure including the calculation and the CSR report of the amount of returns of natural capital cost about 1 billion yen. The system is already made and there is no additional cost.
	Changing consumer behaviour	At the situation in which the climate change is advancing, the customer will choose the more "sustainable" products when they choose the product. For example, in energy use or use material, what was converted into the renewable resource is chosen from fossil resources. Moreover, what has the few amount of the energy used, and what has the few amount of the resources used are chosen.	Increased demand for existing products/ services	1 to 3 years	Direct	Very likely	Medium-high	Sales expansion of 10 billion yen is expected with a related product.	The Sekisui Chemical Group is tackling visualization of the contribution to the environment of our environmental contribution products. Moreover, we have authorized the product which reduces the GHG emission at the time of a customer's use for environmental contribution products. We continue conversion for material or use energy to a renewable resource, promoting these activities. That is a management method.	There is no additional cost.
	Induced changes in human and cultural environments	The Sekisui Chemical Group is manufacturing and selling the prefabricated house "Sekisui Heim." By a climate change, change of vegetation, geographical feature, and an ecosystem may change eating habits. In addition, change of people's occupation, change of activity hours and family structure are predicted. These lead to change of people's wish to a house. For example, the solution "comfortable Airy" is taken in by Sekisui Heim to people's potential need that nature and clean air circulate about the air environment of a house. This has gained the customer's support. Moreover, the Sekisui Chemical Group has a living environment research institute. The research institute is continuing research of the liking to people's dwelling, and change of life culture. If it can continue supplying people and the house corresponding to change of culture, sales will increase.	Increased demand for existing products/ services	3 to 6 years	Direct	likely	High	Sales expansion of 10 billion yen is expected with a related product.	The Sekisui Chemical Group develops the solution which makes environment in a house comfortable, and is continuing taking it in to Sekisui Heim. The air conditioning and ventilating system "comfortable Airy" is so. Thereby, the air in a house is circulated and temperature and humidity are maintained comfortably. The Sekisui Chemical Group founds a living environment research institute, and is studying change of the liking to people's house, and the culture of a house. The result is used for R&D of housing products. Furthermore, we are undertaking the housing renovation business. That is, we have a means to get to know the favorite change to people's house. That is a management method.	There is no additional cost.

Fluctuating socio-economic conditions	The Sekisui Chemical Group has a housing business. And we are manufacturing and selling the plastic article used in a life and industry. A climate change may change a life style, family structure, the liking to people's product, and industry, for example, fishery industry and agriculture. However, the possibility is uncertain. If the Sekisui Chemical Group follows in footsteps of change of a life style or industry and can provide service with a product, sales will increase.	Increased demand for existing products/services	3 to 6 years	Direct	likely	Medium	Sales expansion of 10 billion yen is expected with a related product.	Sekisui Chemical Group is developing and selling environmental contribution products, and recognizes it as being evaluated from society. While a life style and industry change, it is a management method for us to correspond to change, to plan environmental contribution products, and to continue R&D.	There is no additional cost.
Increasing humanitarian demands	Under the physical influence by a climate change, an epidemic may break out the area, or a life place may disappear by a rise in the sea level. In that case, a humanitarian activity is increased. If the Sekisui Chemical Group has it recognized to contribute to the area, the reputation of the Company in the area is maintainable. And it is an opportunity to increase sales.	Increased demand for existing products/services	3 to 6 years	Direct	likely	Medium-high	Sales expansion of 1 billion yen is expected with a related product.	The Sekisui Chemical Group has the business of the diagnostic product to infection, and a diagnostic system. And we have the business of the prefabricated house which can shorten construction time sharply. That is, the contribution of our products is possible to generating of infection, and reservation of a life place. The Sekisui Chemical Group performs the environmental contribution activities, such as afforestation activities etc. in all the places of business. Continuation of these activities is a management method to the increase in a humanitarian demands.	There is no additional cost.



# Corporate Governance Basic Policies

The Company sets forth as its basic policy for corporate governance the promotion of sustainable corporate growth and the increase of corporate value. To realize this, the Company will enhance the transparency/fairness of management, pursue prompt decision-making, and continue to fulfill the expectations of “customers,” “shareholders,” “employees,” “business partners,” and “local communities and the environment,” the five major categories of stakeholders that the Company values most, through the creation of value to society.

## ■ SEKISUI Corporate Governance Principles

The Company has established and disclosed the Sekisui Corporate Governance Principles for the purpose of further evolving its corporate governance initiatives and communicating our corporate governance approach and initiatives to our stakeholders.

In addition to the above Principles, the status of the Company’s initiatives and its approach with respect to all 78 items of the Corporate Governance Code, consisting of the General Principles, Principles and Supplementary Principles, are summarized and disclosed in the form of the Initiatives to Each of Principles of the Corporate Governance Code.

Corporate Governance Report (June 28, 2018) (pdf:548KB)

<http://www.sekisuichemical.com/about/outline/governance/pdf/20180628cgre.pdf>

SEKISUI Corporate Governance Principles(June 27, 2018) (pdf:254KB)

<http://www.sekisuichemical.com/about/outline/governance/pdf/20180627cgpe.pdf>

Initiatives to Each of Principles of the Corporate Governance Code(June 27, 2018) (pdf:260KB)

<http://www.sekisuichemical.com/about/outline/governance/pdf/20180627cgie.pdf>

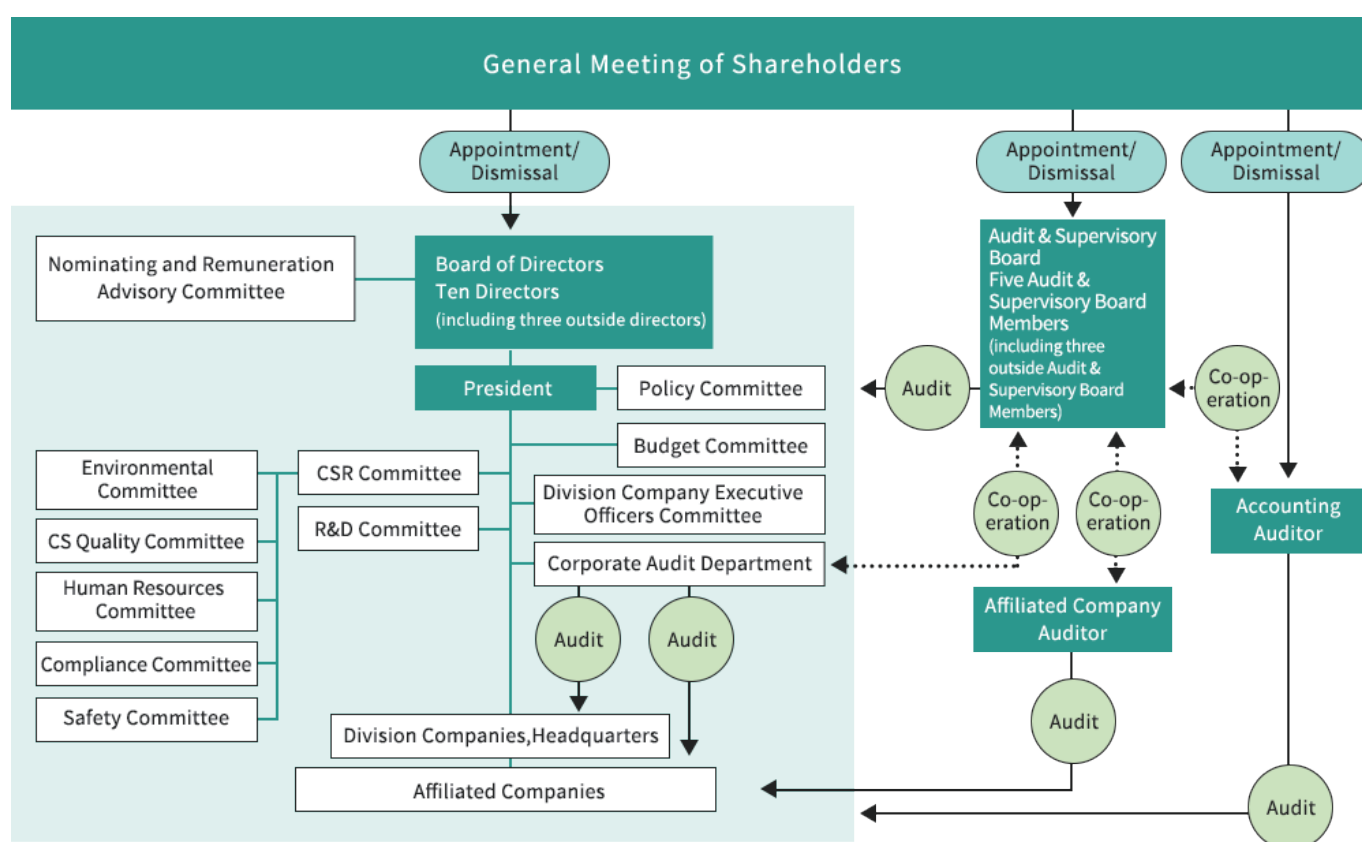
# Corporate Governance Systems

## Organizational Structure

As an organizational structure under the Companies Act, the Company has chosen to be a company with Audit & Supervisory Board.

Under the Divisional Company System, the Company has adopted the Executive Officer System in order to clearly distinguish the business execution function from the decision-making function in management.

## Corporate Governance System Chart



## **Board of Directors**

### **Roles and Responsibilities of the Board of Directors**

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The Board of Directors continually strives to strengthen its role as a body responsible for decision-making concerning the Company's fundamental policies and upper-level management issues, and supervising the execution of business. The Board includes three Outside Directors to ensure transparency in management and fairness in business decisions and operations.

### **Composition of the Board of Directors**

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The number of directors shall not exceed 15, and 2 or more of them shall be independent outside directors.

The Board of Directors of the Company shall consist of directors who have an excellent character, insight, and a high moral standard in addition to knowledge, experience, and competence. In addition, Audit & Supervisory Board Members, including Outside of them, shall attend the meetings of the Board of Directors.

The Company ensures diversity among board members and keeps the number of directors at an optimal level for appropriate decision-making that is commensurate with the business domain and size. The presidents of the division companies who are the top management of each business and senior corporate officers with significant experience and strong expertise are appointed as inside directors. Together with the outside directors who have broad knowledge and experience and Audit & Supervisory Board Members with strong expertise, they effectively perform the roles and responsibilities of the Board of Directors, taking the balance with respect to diversity, optimal size, and capabilities.

### **Outside Directors**

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The Company appoints to the Board three Outside Directors with verified independence from the Company who contribute to the enhancement of corporate value by providing advice and oversight based on their extensive administrative experience and specialized knowledge. The Outside Directors provide counsel based on their diverse and objective perspectives on priority management issues, such as global development strategy, business model revisions, and strengthening of CSR management.

#### **Kunio Ishizuka, Outside Director**

Mr. Ishizuka is Senior Advisor of Isetan Mitsukoshi Holdings Limited. Since he has provided advice with respect to the business management of the Company and supervised business execution appropriately by leveraging his abundant knowledge of business management and leadership fostered through his position as a management executive of a leading retail and service company, he is expected to contribute to further enhancing the corporate value of the Sekisui Chemical Group.

#### **Yutaka Kase, Outside Director**

Mr. Kase is Senior Corporate Advisor of Sojitz Corporation. Since he has provided advice with respect to the business management of the Company and supervised business execution appropriately by leveraging his abundant experience and past achievements regarding global corporate management and business strategy fostered through his position as a corporate manager of a general trading company, he is expected to contribute to further enhancing the corporate value of the Sekisui Chemical Group.

### **Hiroshi Oeda, Outside Director**

Mr. Oeda serves as a Corporate Special Advisor of Nisshin Seifun Group Inc. The Company expects him to leverage his abundant experience and skill regarding global corporate management, business strategies and overseas M&A, fostered through having been a management executive of the largest milling company in Japan, provide advice with respect to the business management of the Company and supervise business execution appropriately and be able to contribute to enhancing the corporate value of the Sekisui Chemical Group.

## **Nominating and Remuneration Advisory Committee**

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The Company has established an optional advisory committee concerning nomination and remuneration to further enhance the fairness and transparency of management.

The Nomination and Remuneration Advisory Committee deliberates matters related to the nomination and dismissal of senior executives, including representative directors, the nomination of candidates for Director, enhancing the effectiveness of the Board of Directors, including the system of remuneration and levels of remuneration for Directors, as well as the commissioning of and dealings with advisors or executive advisors, including former representative directors and presidents, and submits recommendations and advice to the Board of Directors. The Nomination and Remuneration Advisory Committee comprises five members, the majority of whom are independent outside board members. The Chairperson is elected from the independent outside board members.

### **Director Compensation**

The remuneration, etc., for Directors of the Company consists of basic remuneration, bonus and share-based compensation (excluding Outside Directors), whereas the remuneration for Audit & Supervisory Board Members consists of base remuneration and bonus (excluding Outside Audit & Supervisory Board Members).

The basic remuneration is provided in a flat amount commensurate with the roles and responsibilities of each Director within the limit of the officers' remuneration allowance. Directors are obliged to allocate a certain amount of the base remuneration to purchase the shares of the Company through the Officers Stock Ownership Plan with the aim of enhancing management awareness of placing an emphasis on the stock price.

The bonus represents the performance-based remuneration, the amount of which is determined based on the payment standards linked to the business performance of the Company and each divisional company, the dividend policy and ROE (return on equity).

The share-based compensation plan is an incentive plan aimed at further raising motivation to contribute to the improvement of mid- and long-term business performance and improve the Group's corporate value, under which the number of shares to be granted is determined in accordance with the position of Directors (excluding Outside Directors). Said plan has a structure enabling Directors to receive a benefit at the time of retirement for the results for which they contributed to enhancing the Company's mid- and long-term corporate value in the form of the Company's shares reflecting such enhancement in share value, thereby enhancing the link with mid- and long-term shareholders' value.

**Compensation in Fiscal 2017**

(Millions of yen)

	Basic remuneration		Bonus		Share-based compensation		Stock options		Total	
	Number of eligible officers (persons)	Amount	Number of eligible officers (persons)	Amount	Number of eligible officers (persons)	Amount	Number of eligible officers (persons)	Amount	Number of eligible officers (persons)	Amount
Directors	10	327	8	182	8	68	9	1	10	579
(Of which external Directors)	2	24	-	-	-	-	1	0	2	24
Audit & Supervisory Board Members	6	78	2	14	-	-	-	-	6	92
(Of which external Audit & Supervisory Board Members)	3	28	-	-	-	-	-	-	3	28

**(Notes)**

1. The number of eligible officers includes one Audit & Supervisory Board Member who retired at the closing of the 95th Annual General Meeting of Shareholders held on June 28, 2017.
2. The amount paid to Directors does not include the portion of employee's salary (including bonus) amounting to 142 million yen for Directors who concurrently serve as employees.
3. We are not granting shares since we have transferred to the share-based compensation system in June 2016, and the number of Stock Option above shows the booked amount necessary for the accounting processing of fiscal 2017 from the shares granted in the past fiscal years.

Notice of Convocation of the Annual General Meeting of Shareholders

[http://www.sekisuichemical.com/ir/library/notice\\_of\\_convocation/index.html](http://www.sekisuichemical.com/ir/library/notice_of_convocation/index.html)

### Director Company Stock Ownership Guidelines

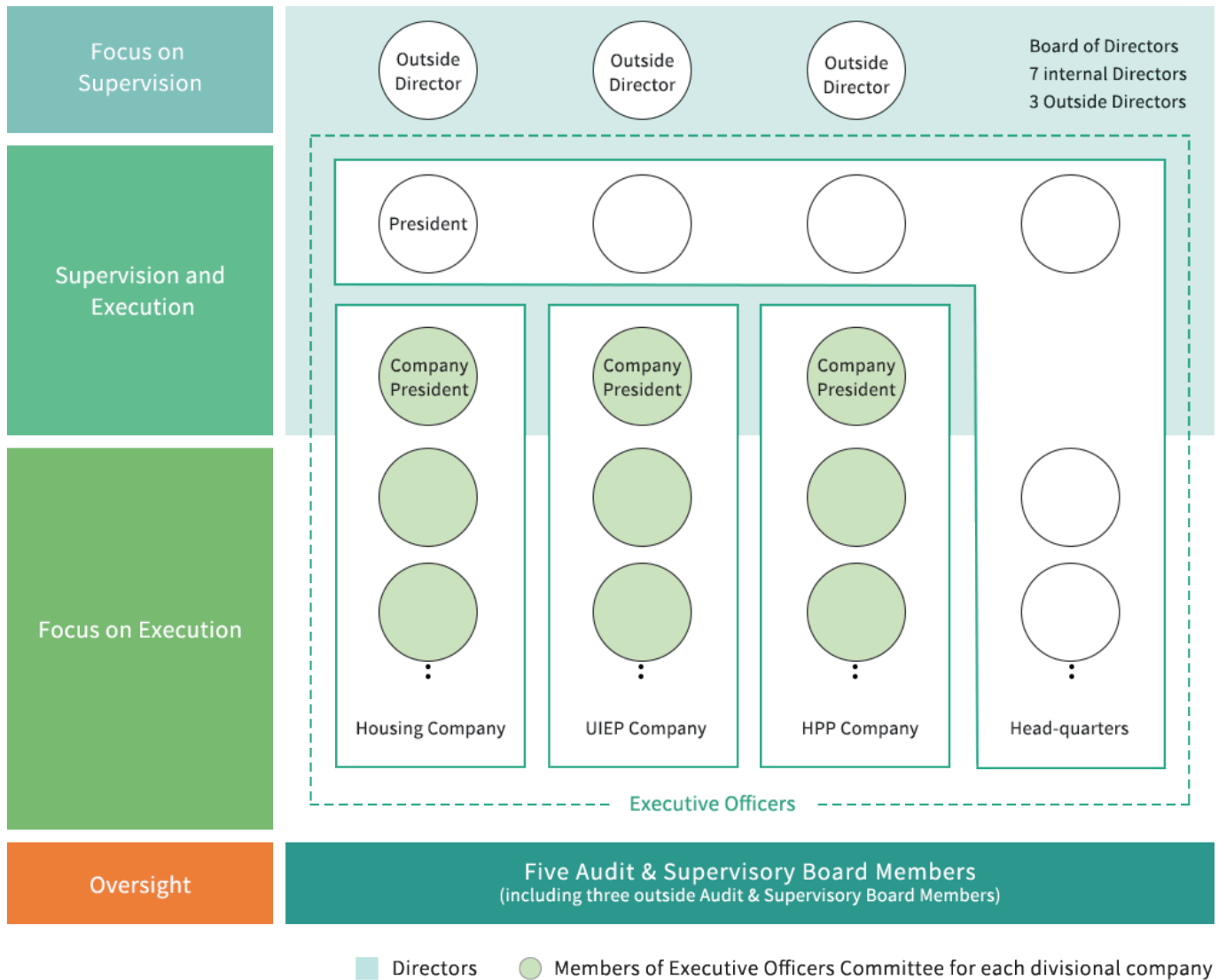
In addition to having introduced, for Directors (excluding Outside Directors) and division company operating officers, a share-based compensation plan to further raise motivation to contribute to the improvement of mid- and long-term business performance and improve the Group's corporate value, the Company has established "Company Stock Ownership Guidelines" for those who are holding more than a certain number of shares.

## **| Executive Officer System and Executive Committee**

To maximize corporate value, the Company has built its management structure based on a system of three division companies. Together with assigning to each division company operating officers specializing in business execution, an Executive Committee has been established to serve as the top decision-making body in each division company. Executive Committee members, whose term of office is deemed to be for one year, are appointed by resolution of the Board of Directors.

By transferring authority to the division companies, the Board of Directors strives to achieve continual improvements in corporate value as an organization responsible for decisions on basic policies of the Sekisui Chemical Group's management as well as high-level management decision-making and supervision of business execution.

## Management System





## **| Auditing System**

### **Approach to Appointment of Audit & Supervisory Board Members**

To enhance the internal audits that form part of internal control, the Company is working to appoint talented people who possess exceptional corporate management as well as finance and accounting knowledge to corporate auditor positions.

In fiscal 2017, a total of five corporate auditors, consisting of two full-time corporate auditors and three part-time outside auditors, were appointed. For the two full-time corporate auditor positions, the Company appointed the former heads of the Corporate Audit Department and Corporate Finance & Accounting Department. One of the outside auditors appointed is Mr. Yasuhiro Nishi, who possesses experience as a certified public accountant and from having worked for an auditing company.

## **Internal Control System**

In May 2006, the Board of Directors resolved to adopt a fundamental policy regarding the establishment of an internal control system for ensuring the appropriateness of the Group's business activities.

Based on the Corporate Activity Guidelines set forth in accordance with the Group management principles, the Company seeks to realize collaborative interaction concerning the supervision, directives, and communications of the Sekisui Chemical Group (the Company and its subsidiaries), and Sekisui Chemical's duties include providing guidance and counsel, and undertaking evaluations of all Sekisui Chemical Group members to ensure that their business activities are being conducted in an appropriate manner.

## **| Compliance**

To further strengthen the Group's compliance activities, the CSR Committee, chaired by the president, deliberates the Fundamental Compliance Policies, which are subject to approval by the Board of Directors. In addition, the Compliance Sub-committee supervises compliance activities group wide, and conducts activities to highlight the importance of compliance as a fundamental aspect of our corporate culture.

## **Risk Management**

Sekisui Chemical maintains a companywide risk management structure for integrated management of measures to prevent risk events from occurring (risk management) and to respond with risk events occur (crisis management). The Risk Management Group of the Human Resources Department maintains and refines the risk management structure and disseminates information to all directors, executive officers, and employees of the Company and the Group companies.

In fiscal 2017, some 170 task forces are working to reduce and eliminate risk by analyzing and assessing conditions and implementing risk management measures followed by periodic reviews and implementation of the PDCA cycle of risk management for ongoing improvement. The Risk Management Group addresses risk expediently and systematically, reports to each subcommittee of the CSR Committee, and considers measures for implementation throughout the Company.

Crisis management activities are carried out following the Sekisui Chemical Group Crisis Management Guidelines. Risk management officers of each department regularly hold crisis management liaison meetings to research incidents and reinforce practices.

The Company's overseas crisis management activities are overseen by the Global Crisis Management Office and Regional Crisis Management Responsibility in each of the Company's nine regions in line with the Sekisui Chemical Group Global Crisis Management Guidelines.

## **Information Disclosure and Communication with Stakeholders**

In order to deepen mutual trust with all of our shareholders, we believe it is important not only to actively disclose information in a timely and appropriate manner, but also to enhance two-way communications with our shareholders. To steadily put this belief into practice throughout the Group, we established the "Principle of Corporate Information Disclosure" in December 2005 and simultaneously, beefed up our internal information disclosure framework. For instance, we have set up the "Corporate Information Disclosure Regulations" which specify the content and system of disclosure. In order to pursue this principle further, that is to actively disclose more information, since fiscal year 2006 we have been holding meetings with the staff who are responsible for information disclosure at the respective divisions.

In Sekisui Chemical Group, the Investor Relations Group within the Business Strategy Department is working hard to strengthen two-way communications with our shareholders and investors, not only by disclosing financial statements in a timely and appropriate manner but also by actively reflecting our shareholders' voice in our management. For example, we hold quarterly briefings on financial results where our management explains these figures. Also, we pay heed to the voice of capital markets by holding one-on-one meetings with analysts and investors.

To ensure information is provided in a fair manner, the Group posts its financial statements and results briefings on the Company website in Japanese and English simultaneously and additionally provides audio recordings of the briefing and a transcript of the question and answer session.

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CSR Report 2018 (PDF) has been reviewed for assurance by an independent third party and as a result has been granted the sustainability report review and registration logo.

This demonstrates that this report satisfies the necessary criteria established by the Japanese Association of Assurance Organizations for Sustainability Information (J-SUS; <http://www.j-sus.org/>) for the use of this logo, intended to assure the reliability of sustainability information.

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