SUMITOMO CHEMICAL

Change and Innovation 3.0

For a Sustainable Future

Sustainability Data Book 2021

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Editorial Policy

The *Sustainability Data Book* complements Sumitomo Chemical's new *Annual Report*, presenting information deemed important to both the Sumitomo Chemical Group and its stakeholders. The data book principally offers sustainability information about the Group companies from environmental, social, and governance (ESG) perspectives. Regarding quantitative information, assurance is provided on the indicators labeled with a star★ by KPMG AZSA Sustainability Co., Ltd. (Regarding other disclosed information, please check pages 225–227, "Calculation Standards for Environmental and Social Data Indicators," wherein a summary of data collection and calculation methods is presented.)

Sumitomo Chemical hopes that its reports can act as a tool for communication with all its stakeholders that enriches their understanding of the Company and its Group companies.

Sumitomo Chemical's Three Reports

Annual Report

This report summarizes important financial and non-financial information with the aim of conveying our company's value creation story to a wide range of stakeholders, including our shareholders and investors, in a way that is easy to understand.

Investors' Handbook

This handbook summarizes financial data and provides detailed explanations of our businesses and products.

Sustainability Data Book

This data book introduces our sustainability information from the perspectives of the environment, society and corporate governance, and covers more detailed information. (Available online only)

Guide to the Website

Investor Relations

- Financial Results
- Meeting of Shareholders Documents
- IR Events
  (presentation, materials used at briefing sessions)
- Fact Sheet

Sustainability

Report Profile

● Boundary of This Report:

Sumitomo Chemical Co., Ltd. and its consolidated subsidiaries

In this report, "Sumitomo Chemical" and "Sumitomo Chemical Group" are distinguished as follows.

Sumitomo Chemical: Sumitomo Chemical Co., Ltd.

Sumitomo Chemical Group: Sumitomo Chemical and Group companies

▶ Environmental Data (pages 103–147)

Sumitomo Chemical's manufacturing sites and the production plants of major Group companies (22 companies in Japan and 20 companies overseas)

Principal consolidated Group companies, which account for up to 99.8% of Sumitomo Chemical's consolidated net sales for "Energy consumption and greenhouse gas emissions" (page 107).

[Sumitomo Chemical]

Sumitomo Chemical: All production sites of Sumitomo Chemical Co., Ltd.

Sumitomo Chemical (all worksites): All production and non-production sites of Sumitomo Chemical Co., Ltd.

[Group Companies in Japan]

The production plants of 13 companies sharing the Common Targets (Sumika-Kakoushi Co., Ltd.; Sumika Color Co., Ltd.; Sumika Plastech Co., Ltd.; Nippon A&L Inc.; Asahi Chemical Co., Ltd.; Ceratec Co., Ltd.; Sumika Assembly Techno Co., Ltd.; SanTerra Co., Ltd.; Sumika Agro Manufacturing Co., Ltd.; SC Environmental Science Co., Ltd.; Sumika Agrotech Co., Ltd.; Nihon Medi-Physics Co., Ltd.; Sumitomo Joint Electric Power Co., Ltd.). In addition to the 13 companies listed above, **the production plants of 9 information disclosure companies** are included in the calculations of material flow on page 118 (Koei Chemical Co., Ltd.; Taoka Chemical Co., Ltd.; Tanaka Chemical Corporation; SCIOCS COMPANY LIMITED; Sumitomo Dainippon Pharma Co., Ltd.; SN Kasei Co., Ltd.; Sumika Polycarbonate Limited; Sanritz Corporation; Sumika High-Purity Gas Co., Ltd.) for a total of 22 companies.

[Overseas Group Companies]

Production plants of 20 overseas Group companies (Dongwoo Fine-Chem Co., Ltd.; The Polyolefin Company (Singapore) Pte. Ltd.; Sumika Technology Co., Ltd.; Sumika Electronic Materials (Wuxi) Co., Ltd.; Sumitomo Chemical Asia Pte Ltd; Sumika Huabei Electronic Materials (Beijing) Co., Ltd.; Sumitomo Chemical India Private Limited; Zhuhai Sumika Polymer Compounds Co., Ltd.; Sumika Polymer Compounds (Thailand) Co., Ltd.; Sumitomo Chemical Advanced Technologies LLC; Dalian Sumika Jingang Chemicals Co., Ltd.; Sumipex (Thailand) Co., Ltd.; Bara Chemical Co., Ltd.; SSLM Co., Ltd.; Sumika Electronic Materials (Xi'an) Co., Ltd.; Sumika Electronic Materials (Hefei) Co., Ltd.; Sumipex Techsheet Co., Ltd.; Dalian Sumika Chemphy Chemical Co., Ltd.; Sumika Electronic Materials (Shanghai) Co., Ltd.; Sumika Polymer Compounds Dalian Co., Ltd.)

Notes: More detailed information about the boundary of data is listed on each page.
Regarding affiliated companies and plants newly included in the boundary of environmental data reporting, results data are tabulated from the fiscal year when the survey was conducted as the Sumitomo Chemical Group.

● Period covered by this report: April 1, 2020 – March 31, 2021 (FY2020) (with specific exceptions outside this time frame)

● Date of publication: October 2021 (The previous issue was published in October 2020.
Next issue: Scheduled for publication in October 2022)

● Frequency of publication: Once annually

● Guidelines referred to when preparing this report:

- The *GRI Standards*
- The Japanese Ministry of the Environment's "*Environmental Reporting Guidelines*" (2018 edition) and "*Environmental Accounting Guidelines*" (2005 edition)
- The *ISO 26000* international standard on Social Responsibility (SR)

The *Sustainability Data Book 2021* has been prepared in accordance with "Core option" of the Sustainability Reporting Standard of the GRI.

P.229 GRI Standards Reference Table

Introduction to the Sumitomo Chemical Group

Corporate Profile (As of March 31, 2021)

Company name:	SUMITOMO CHEMICAL COMPANY, LIMITED
Incorporated:	June 1,1925
Head office:	Tokyo Sumitomo Twin Building (East), 27-1, Shinkawa 2-chome, Chuo-ku, Tokyo 104-8260, Japan
Management:	Representative Director & President: Keiichi Iwata
Capital:	89,699 million yen
Number of employees:	Non-consolidated: 6,277
	Consolidated: 34,743
Number of subsidiaries and affiliates:	224

Corporate Profile

https://www.sumitomo-chem.co.jp/english/company/about/

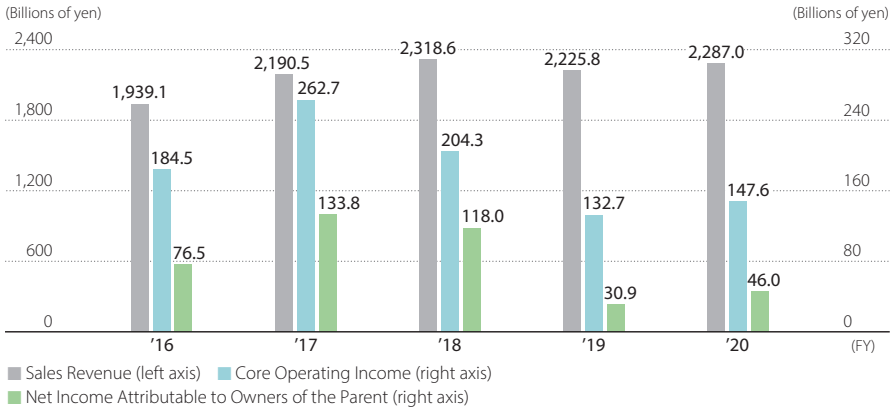
Financial Highlights (For Fiscal 2020, Based on the International Financial Reporting Standards (IFRS))

Sales Revenue:	2,287.0 billion yen (up 3%, year on year)
Core Operating Income:	147.6 billion yen (up 11%, year on year)
Net Income Attributable to Owners of the Parent:	46.0 billion yen (up 49%, year on year)
ROE:	4.7%
Capital Expenditures:	112.7 billion yen (down 3%, year on year)
Research and Development Expenses:	178.7 billion yen (up 2%, year on year)

Chart Generator

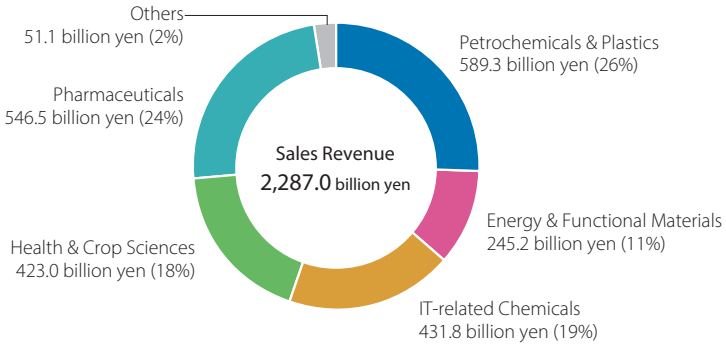
https://www.sumitomo-chem.co.jp/english/ir/finance/highlights/

■ Sales Revenue / Core Operating Income / Net Income Attributable to Owners of the Parent

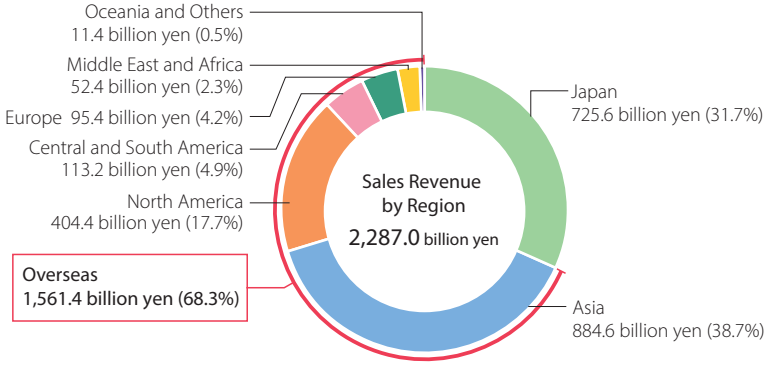


Introduction to the Sumitomo Chemical Group

FY2020 Sales Revenue and Composition Ratio by Business Segment



FY2020 Sales Revenue and Composition Ratio by Region



Investors' Handbook

https://www.sumitomo-chem.co.jp/english/ir/library/investors_handbook/

For a Sustainable Future

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Regarding each ESG information, Please refer to the following chapters

Governance: page 52

Environment: page 102

Society (Social Activities): page 148

President's Message

Keiichi Iwata
Representative Director & President

We Seek to Both Achieve Sustainable Growth for the Sumitomo Chemical Group and Contribute to Achieving a Sustainable Society

President's Message

Q The year 2020 was significantly impacted by COVID-19. Can you share your view of that year?

A Amid enormous changes in the business environment, we were able to demonstrate the strong defensive power of a diversified chemical company engaging in a variety of businesses.

Operating a Business during a Pandemic

In fiscal 2020, we were forced to respond to the challenge of COVID-19 throughout the year. With lockdown measures in countries around the world and the emergency declaration in Japan, people's movements and interactions were severely restricted. As part of the chemical industry, Sumitomo Chemical has a responsibility to supply materials required for society's infrastructure. To fulfill this responsibility, we devoted our efforts toward ensuring continued safe and stable operations, while protecting the health of employees through a wide range of measures to prevent infection. As a result, while there was an unavoidable decline in the capacity utilization rate at some of our subsidiaries outside of Japan, overall we were able to avoid a significant impact on our operations.

In our daily work, we saw a marked decline in opportunities for face-to-face communication. That was a major change, but because we were quickly able to put in place systems for remote work, communication with locations both in and outside Japan has become easier than ever before. In addition, starting in October of 2020, I began an internal blog to convey my own words to all employees throughout the world. The topics I cover range from my morning walk and books I have read to such issues as human rights and climate change. I hope this blog helps in sharing with all employees the issues facing Sumitomo Chemical and the future direction of management.

Financial Results for FY2020: Demonstrating the Strong Defensive Power of a Diversified Chemical Company

Turning to our financial results for fiscal 2020, because automobile-related demand declined due to the spread of COVID-19 infections that began at the start of the year, shipments decreased in the Petrochemical & Plastics Sector and the Energy & Functional Materials Sector. In addition, we had a scheduled maintenance shutdown at Petro Rabigh, so that results in both sectors were weak in the first half of the fiscal year, but starting in the second half, they quickly improved with the recovery in automobile-related demand. In the IT-related Chemicals Sector, we initially expected that COVID-19 would have a negative impact, but because of the stay-at-home trend, results were actually strong throughout the year. In the Health & Crop Sciences Sector, shipments of crop protection products increased with the new addition of agricultural chemicals businesses in South America, and in the Pharmaceuticals Sector, sales of the atypical antipsychotic agent Latuda continued to be strong. In these two sectors, we were able to continue business operations without any major changes from the time before the spread of COVID-19. As a result, our financial results for fiscal 2020 were better than the prior fiscal year even in the face of unprecedented, enormous changes in our business environment. We were able to demonstrate the strong defensive power of a diversified chemical company engaging in a variety of businesses.

President's Message

Q Two years has passed since the start of the current Corporate Business Plan. How has progress been?

A We have been working on improving our competitiveness, and I think we finally reached a position from which we can aim to achieve a return on equity level of around 10%.

Change & Innovation 3.0: Six Basic Policies

Since the start of the current Corporate Business Plan, there have been major changes in our operating environment, including the spread of COVID-19 and the acceleration in the movement in Japan and around the world to become carbon neutral. Despite these, we uphold the six basic policies we put forth at the start of this period, including accelerating the development of next-generation businesses, improving productivity through digital innovation, and further improving our business portfolio. We have, however, made appropriate changes to the weight of emphasis we have placed on them and our timelines for execution as we have implemented them.

Accelerate the Development of Next-generation Businesses

First, for accelerating the development of next-generation businesses, we have designated four priority areas: healthcare, reducing environmental impact, food, and ICT. Going forward, we will put more management resources in healthcare and reducing environmental impact, in which societal needs are increasing enormously because of COVID-19. Up to now we have worked on efforts to build our innovation ecosystem, such as expanding our Corporate Venturing and Innovation Office, an office dedicated to exploring innovation opportunities, and collaborating with a variety of startup companies. In the field of healthcare, we entered into the Contract Development and Manufacturing Organization business for regenerative medicine and cell therapy, and in the field of reducing environmental impact, we decided to build a new research facility at our Chiba site to accelerate the development of chemical recycling and other technologies. Going forward, we will step up efforts to strengthen our innovation ecosystem so that innovations will be produced one after another.

President's Message

Improve Productivity through Digital Innovation

In terms of improving productivity through digital innovation, we have set an ultimate goal of creating new business models through digital transformation, and as milestones toward that goal, we have established a digital transformation strategy with three components, 1.0 through 3.0. With DX Strategy 1.0, we have been working to significantly improve productivity in R&D, manufacturing, supply chain management, and administration. In parallel with that initiative, starting this year we are working to jumpstart our efforts to strengthen the competitiveness of our existing businesses with DX Strategy 2.0 and create new business models with DX Strategy 3.0. As we focus on these initiatives, we have fully absorbed our subsidiary, Sumitomo Chemical Systems Service Co., Ltd., and established a joint venture with Accenture to further strengthen our capabilities for accelerating our digital transformation.

Further Improve Business Portfolio

Further improving our business portfolio was an issue on which we placed particular emphasis in fiscal 2020. We made solid progress in post-merger integration for our large-scale acquisitions and worked to strengthen the competitiveness of each of our businesses in order to maintain our earnings power even in the midst of the major change in our business environment represented by COVID-19.

Regarding recent large-scale investments, we added two new blockbuster drug candidates to our pipeline through an alliance in 2019 with the biopharma company Roivant Sciences. Both of these have already been launched this year, and the prospects for securing earnings are in sight. In our crop protection products business, we acquired four South American subsidiaries from Nufarm Limited, a leading Australian agricultural chemical company. In South America, including Brazil, the world's largest crop protection market, we will seek to achieve a significant increase in sales of INDIFLIN™, a promising novel fungicide for soybeans developed using Sumitomo Chemical's proprietary technology.

The Rabigh Phase II Project, another large-scale investment of ours, began commercial operations in November of 2019. Subsequently, in September of 2020, our financial completion guarantee for project finance was terminated, enabling us to substantially lower our future financial risk. In addition, in our methionine business, which has been adversely affected by a weak market in recent years, we have enhanced our cost competitiveness by fully rationalizing our operations, and the market is on the path to recovery.

In addition, in the area of high-performance chemicals, primarily through our Energy & Functional Materials Sector and IT-related Chemicals Sector, we are developing materials for next-generation high-speed communications, enhancing the value added for display materials, and increasing our production capacity for semiconductor materials.

Financial Targets for Our Corporate Business Plan

For fiscal 2021, as a result of these initiatives to strengthen our competitiveness, we are projecting an improvement in our core operating income to 200 billion yen. Return on equity is expected to be at around 10%, the level we want to attain, and in my third year as president, I think we finally stand in a position from which we can aim to achieve it. Our target for core operating income for the current Corporate Business Plan, however, is 280 billion yen. Rather than revising this target, we are redoubling our efforts to achieve it as soon as possible. In our Health & Crop Sciences Sector and Pharmaceuticals, we have already taken needed measures, including making large-scale investments, which we expect to deliver concrete results over the next several years. We will take measures to achieve a level of total core operating income of 280 billion yen over the medium to long term, with 80 billion yen from the Health & Crop Sciences Sector, 80 billion yen from our high-performance chemical product businesses primarily in the Energy & Functional Materials Sector and IT-related Chemicals Sector, and more than 120 billion yen from the pharmaceutical business.

President's Message

Q What kinds of initiatives are you taking to achieve sustainability and respond to climate change and other pressing issues?

A We will work toward achieving carbon neutrality by 2050, and to this end, we have launched a new organization to formulate and implement a strategy that is characteristic of Sumitomo Chemical.

Driving Sustainable Management

At the Sumitomo Chemical Group we strive to generate both economic value and social value through our business and seek to achieve sustainable growth for the Sumitomo Chemical Group and contribute to building a sustainable society. In the current Corporate Business Plan, we are implementing a variety of measures to further intensify and accelerate these initiatives.

First, at the same time we announced our current Corporate Business Plan, we defined our material issues to be addressed as management priorities for sustainable value creation, such as contributions to reducing environmental impact and to the healthcare field, while also identifying items that serve as the foundation for continuing our business, such as safety, respect for human rights, and compliance. In addition, we also established key performance indicators to make visible and manage our progress in addressing these material issues.

Toward Achieving Carbon Neutrality

In recent years, the world has increasingly focused attention on reducing environmental impact in the face of climate change, the problem of plastic waste, and other environmental challenges. For climate change, countries and regions around the world, including Japan, have pledged one after another to achieve carbon neutrality by 2050 to limit the global average temperature increase to below 1.5 degrees Celsius from pre-industrial levels. Governments and private companies have begun to explore ways forward and take action. Sumitomo Chemical has been making substantial efforts to address the issue of climate change for many years. In 2018 we gained certification from the Science Based Targets initiative for our targets to reduce the Sumitomo Chemical Group's greenhouse gas emissions by 30% in 2030 and by at least 57% in 2050*. Achieving these targets will not be easy, but to achieve the even more challenging target of carbon neutrality, we need to rethink the fundamentals of our strategy. Therefore, in February 2021 we established the Carbon Neutral Strategy Council and the Carbon Neutral Strategy Cross-Functional Team to formulate and implement the Sumitomo Chemical Group's strategy for achieving carbon neutrality by 2050. We are going to develop a strategy that is characteristic of Sumitomo Chemical, from the dual perspective of our obligation to minimize our own greenhouse gas emissions and our contribution through our products and technologies that enable us to indirectly achieve a reduction in society's greenhouse gas emissions.

* Scope 1+2, compared to fiscal 2013

Addressing the Problem of Plastic Waste

Plastics are contributing to making products lighter and reducing food loss. In addition, amid the COVID-19 pandemic, they are recognized as a useful material in helping to prevent infection when used in the form of personal protective equipment and partition panels that reduce the spread of droplets. While continuing to utilize this useful material, we need to bring about a circular economy that recycles used plastic for use as a resource. Sumitomo Chemical has been developing and supplying products that lead to reducing and reusing plastic, and in recent years we have also been working on the development of technology for material recycling and chemical recycling. In April 2021, we established the Business Development Office for a Circular System for Plastics to accelerate the development of businesses based on our efforts towards building a circular system for plastics.

President's Message

Q What message do you have for shareholders and investors?

A By leveraging the power of chemistry, we will take on the challenge of resolving major issues to achieve a sustainable society, and seek to enhance our corporate value.

I recognize shareholders and investors as our essential stakeholders. As I lead Sumitomo Chemical and manage our business day-to-day, I always bear shareholders and investors in mind. Regarding shareholder return, we have made it a policy to maintain stable dividend payments, giving due consideration to our business performance and the dividend payout ratio for each fiscal year, the level of retained earnings necessary for future growth, and other relevant factors. Over the medium to long term, we aim to constantly achieve a dividend payout ratio of around 30%.

For fiscal 2020, the annual dividend was 15 yen per share, a reduction of 2 yen from the 17 yen per share dividend of the prior fiscal year. Regarding fiscal 2019 and fiscal 2020, as we were unable to secure a sufficient level of profit, we prioritized stable dividends over the dividend payout ratio in deciding the dividend amount, resulting in two consecutive years of lower dividends. I would like to express my deep regret to our shareholders and investors for these results. For fiscal 2021, because we expect to achieve a certain level of profit in our financial results, we plan to pay a dividend of 20 yen per share.

By leveraging the power of chemistry, we at the Sumitomo Chemical Group will, through innovation and our business, continue to take on the challenge of resolving major issues to achieve a sustainable society and seek to enhance our corporate value. I sincerely hope that our shareholders share this aspiration, and we are determined to become a company whose shareholders can take pride and joy in being our shareholders.

Your continued understanding and support would be very much appreciated.

The Sumitomo Chemical's Corporate Philosophy

Sumitomo Chemical's business began when gasses from the copper smelting process of the Besshi Copper Mine caused a pollution problem, and there was an urgent need for a solution. Sumitomo Chemical was founded to resolve this problem, using those gasses as the raw material for fertilizer manufacturing, overcoming an environmental problem while also improving agricultural productivity. This philosophy of resolving problems facing society through its business is in the DNA of the Sumitomo Chemical Group.

The Sumitomo Chemical's Corporate Philosophy consists of four parts: the Sumitomo Spirit; the Business Philosophy, which expresses the Company's vision, mission and values; the Basic Principles for Promoting Sustainability, which articulates its approach and commitment to sustainability; and the Sumitomo Chemical Charter for Business Conduct, which stipulates the guidelines for our business conduct with a view to promoting the sound development of the Company.

■ The Framework of Sumitomo Chemical's Corporate Philosophy

The Sumitomo Spirit is expressed in the words of the "Sumitomo Business Principles" and "*Jiri-Rita Koushi-Ichinyo*." The Sumitomo Business Principles states that fulfilling the trust placed by business partners and society in us should be our first priority, while also firmly warning us to avoid being preoccupied by pursuing easy gains. "*Jiri-Rita Koushi-Ichinyo*," a verbal phrase passed down through generations, is said to represent the Sumitomo Spirit that Sumitomo's businesses must benefit the nation and society at large, not just our own interests. These principles have been upheld by all companies in the Sumitomo Chemical Group.

The Sumitomo Spirit

The Sumitomo Business Principles

1. Sumitomo's business should seek to thrive and prosper by putting trust first and building on reliability.
2. Sumitomo's business should closely watch the changing of the times and carefully weigh opportunities and risks and should never chase short-term gains in good times and bad.

The Business Philosophy expresses the Sumitomo Chemical's vision, mission and values based on the Sumitomo Spirit, including the "Sumitomo Business Principles" and "*Jiri-Rita Koushi-Ichinyo*," which have been passed down from generation to generation.

Sumitomo Chemical's Business Philosophy

1. We commit ourselves to creating new value by building on innovation.
2. We work to contribute to society through our business activities.
3. We develop a vibrant corporate culture and continue to be a company that society can trust.

The Sumitomo Chemical's Corporate Philosophy

The Basic Principles for Promoting Sustainability articulates the Group's approach and commitment to sustainability. In the framework of our corporate philosophy, we place these principles just below the Sumitomo Spirit and Sumitomo Chemical's Business Philosophy to show our commitment to working on the promotion of sustainability as a management priority.

Basic Principles for Promoting Sustainability

We at the Sumitomo Chemical Group are committed to promote sustainability by acting in accordance with Six Basic Principles, guided by the Sumitomo Spirit and the Group's Business Philosophy, namely contributing to establishment of sustainable society through achieving sustainable growth of business.

Principle 1: Creating economic value which helps create social value (Promoting our credo "Our businesses must benefit society at large, not just our own interests (*Jiri-Rita Koushi-Ichinyo*)")

We are committed to promote creating economic value (*jiri**) which helps to create social value (*rita**) through offering technological or other innovation so that we can continue to grow as a business group that earns the trust and confidence of society.

P.16 What Sumitomo Chemical Group Strives to Be

Principle 2: Contribution to solving globally vital issues

We are committed to contribute to solving a variety of issues that are globally vital, such as establishing diverse and inclusive society and achieving the Sustainable Development Goals (SDGs), as well as doing business in compliance with accepted universal standards and principles, including those concerning human rights, labor, safety, the environment and anti-corruption.

P.17 Material Issues to Be Addressed as Management Priorities

Principle 3: Active participation in global initiatives

We are committed to play a leadership role in multilateral initiatives through actively participating in various partnerships domestically and overseas with international organizations, national or local governments, business corporations, industrial associations, universities, academic circles, civic communities, etc.

P.43 Participation in Initiatives

Principle 4: Collaboration with stakeholders

We are committed to work closely with various stakeholders through promoting spontaneous disclosure of information and open dialogue on the targets of our sustainability promotion initiatives and the progress of their implementation.

P.47 Communication with Stakeholders

Principle 5: Top management commitment and participation by all

We are committed to carry out initiatives toward promoting sustainability, led by our top management having taken firm pledges to this end and advanced by all officers and employees, across the Sumitomo Chemical Group with a shared strong sense of mission and great enthusiasm.

P.35 Promoting Sustainability

Principle 6: Enhancing Corporate Governance

We are committed to assess and improve our activities continually and proactively for promoting sustainability by reviewing the progress of the activities periodically and from holistic viewpoints.

P.34 Sustainability Promotion System

* "*Jiri-Rita Koushi-Ichinyo*," while not expressly stated, is also regarded as an embodiment of the Sumitomo Spirit in that Sumitomo's businesses must benefit the nation and society at large, not just our own interests.

The Sumitomo Chemical's Corporate Philosophy

The "Sumitomo Chemical Charter for Business Conduct" stipulates the guidelines for our business conduct and serves as the foundations of our efforts to promote compliance, with a view to promoting the sound development of the Company.

Sumitomo Chemical Charter for Business Conduct

1. We will respect Sumitomo's business philosophy and act as highly esteemed good citizens.
2. We will observe laws and regulations, both at home and abroad, and will carry out activities in accordance with our corporate rules.
3. We will develop and supply useful and safe products and technologies that will contribute significantly to the progress of society.
4. We will engage in voluntary and active initiatives to achieve zero-accident and zero-injury operations and preserve the global environment.
5. We will conduct business transactions based on fair and free competition.
6. We will endeavor to make our workplaces sound and energetic.
7. Every one of us will strive to become a professional and achieve advanced skills and expertise in our field of responsibility.
8. We will actively communicate with our various stakeholders, including shareholders, customers, and local communities.
9. As a corporate member of an international society, we will respect the culture and customs of every region of the world and contribute to the development of those regions.
10. We will strive for the continued development of our Company through business activities conducted in accordance with the guiding principles described herein.

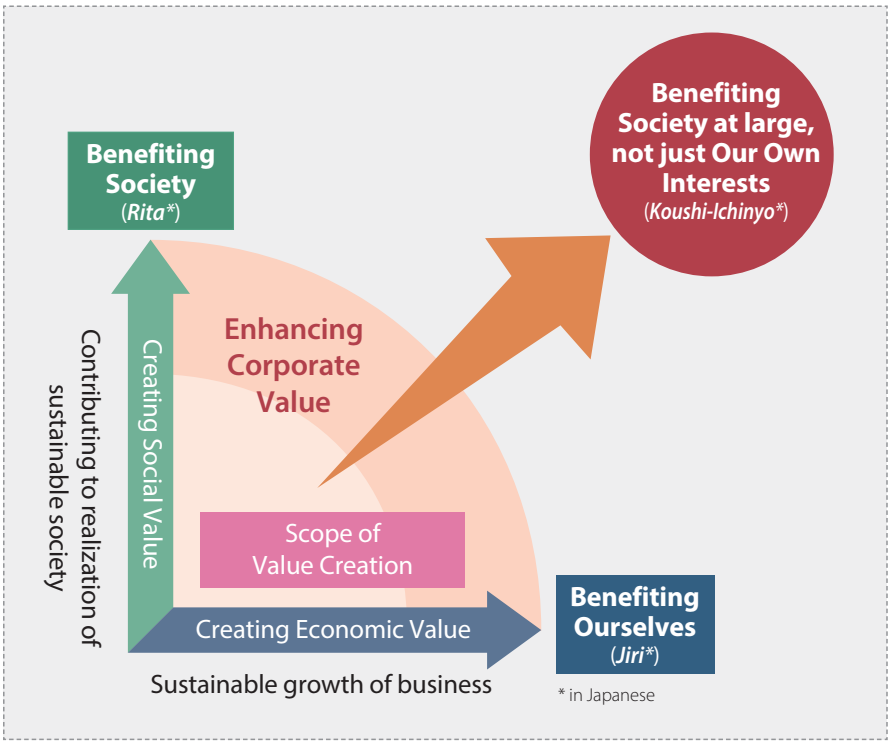
P.77 Compliance

What Sumitomo Chemical Group Strives to Be

The Basic Principles for Promoting Sustainability defines the promotion of sustainability as contributing to the establishment of a sustainable society through our business and achieving sustained growth for our Group, thereby aiming to enhance the Group's corporate value. We will continue to pursue our principle of "*Jiri-Rita Koushi-Ichinyo*," creating both economic and social value and increasing our corporate value along the two axes of *Jiri* and *Rita*—with the *Jiri* axis for economic value and the *Rita* axis for social value.

■ Image of Enhancing Corporate Value

What We Strive to Be	Achieve sustained growth for the Sumitomo Chemical Group and build a sustainable society by creating both economic and social value



*Jiri-Rita Koushi-Ichinyo**	Our businesses must benefit society at large, not just our own interests.

Material Issues to Be Addressed as Management Priorities

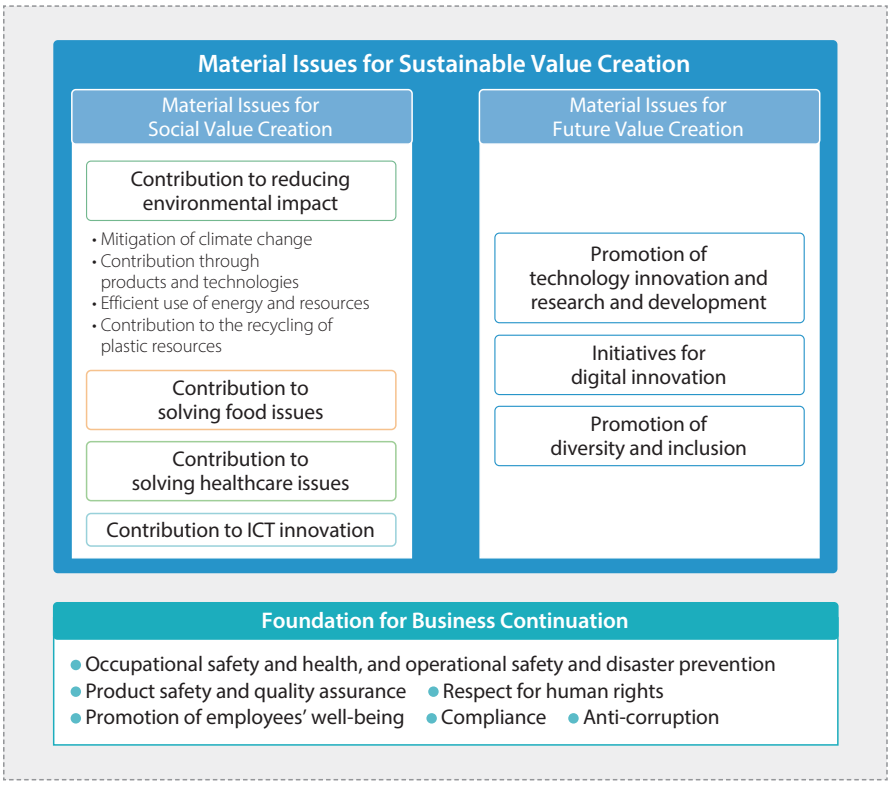
In its Business Philosophy, Sumitomo Chemical affirms its commitment to creating new value by building on innovation, contributing to society through its business activities, and developing an invigorating corporate culture and continuing to be a company that society can trust. Based on this three-part philosophy, we have identified our material issues that we will address as management priorities.

First, we have identified our material issues for sustainable value creation, which comprise two sets of material issues—those for social value creation and those for future value creation. We have classified four items—reduction of environmental impact, food issues, healthcare, and ICT innovation—under material issues for social value creation, while categorizing technology innovation and research and development, digital innovation, and diversity and inclusion as material issues for future value creation.

Furthermore, regarding the items that serve as the foundation for continuing our business—occupational safety and health, operational safety and disaster prevention, product safety and quality assurance, respect for human rights, promotion of employees' well-being, compliance, and anti-corruption—we have been making group-wide efforts and will continue to work on them as management priorities.

We have set key performance indicators (KPIs) for initiatives related to our material issues. With the use of KPIs, we manage and disclose the progress of those initiatives, while also promoting dialogues with stakeholders in and outside the company, to enhance and accelerate our sustainability efforts. Regarding those item serving as the foundation for business continuation, we will continue to proactively make disclosures on our initiatives and outcomes and step up our efforts.

■ Material Issues for Sustainable Value Creation and the Foundation for Business Continuation



The items serving as the foundation for business continuity are elaborated in the following sections:

Occupational safety and health, and operational safety and disaster prevention
P.187 Occupational Safety and Health / Industrial Safety and Disaster Prevention

Respect for human rights
P.151 Respect for Human Rights

Compliance
P.77 Compliance

Product safety and quality assurance
P.194 Product Stewardship / Product Safety / Quality Assurance

Promotion of employees' well-being
P.184 Healthcare

Anti-corruption
P.85 Anti-corruption

Material Issues to Be Addressed as Management Priorities

Process for Identifying Material Issues to Be Addressed as Management Priorities

When identifying our material issues, we selected the issues that we considered, based on our Corporate Philosophy, as what the Group should address and compared them with those societal issues identified in the Sustainable Development Goals and various international guidelines related to sustainability. We also referred to external experts' advice as well as what we learned by engaging in various initiatives and communicating with stakeholders.

We have a belief that resolving issues through our business and creating both social and economic value is as important as continuing our business to achieve it. Based on this view, we have defined the material issues identified as related to the former as the material issues for sustainable value creation, and the material issues for the latter as the foundation for business continuity.

■ Process for Identifying Material Issues

1 An Overall Evaluation of the Group's Contribution to Sustainability

Discussed in the Sustainability Promotion Committee

❶ Begin by analyzing the issue along two axes, importance to business and importance to society

- Identify material issues for continually creating both economic value and social value
- Consider perspectives on utilizing resources, including technology, digital technology, and personnel
- Clarify relationships between various initiatives, including occupational safety and health and compliance

❷ Grasp stakeholder requirements

- Take into consideration trends in international society and outside evaluations obtained through participation in initiatives

Major international guidelines and initiatives we referred to

- Initiatives by WBCSD and other relevant bodies
- ISO 26000
- SDGs
- The 10 Principles of the United Nations Global Compact
- GRI Standards
- Third-party assessments (including FTSE and EcoVadis)

2 Clarifying Material Issues

Discussed in the Sustainability Promotion Committee

- Identified candidates for the Group's material issues to be addressed as management priorities, with a view to creating both economic value and social value sustainably
- Identified the selected Material Issues as "Material Issues for Social Value Creation," for those issues connected to creating business opportunities, and "Material Issues for Future Value Creation," for resources that can become drivers in the creation of business opportunities.
- Identified the items serving as the essential foundation for business continuity, including occupational safety and health and compliance

3 Deliberation and Approval by Management

Approved by the Board of Directors in February 2019, after deliberation in several management meetings

Applied to the Corporate Business Plan that started in April 2019.

P.31 Digest of Expert Opinion and Advice

Material Issues to Be Addressed as Management Priorities

Case Contribution to Developing a Circular System for Plastics

Sumitomo Chemical has defined contribution to developing a circular system for plastics as one of its material issues for social value creation. The "Sumitomo Chemical Group Basic Policy Towards a Circular System for Plastics" articulates our basic guiding principles to advance efforts and expresses our commitment to this issue. To resolve plastic waste problems, we will continue to strive to develop innovative technologies and products while also actively collaborating with various stakeholders.

Sumitomo Chemical Group Basic Policy Towards a Circular System for Plastics

Recognizing that plastic is a useful material supporting a sustainable society, the Sumitomo Chemical Group is committed to work towards building a circular system for plastics and resolving plastic waste problems in accordance with its Basic Principles for Promoting Sustainability and the following policy:

1. The Group contributes to resolving plastic waste problems through its business, particularly by providing technologies, products and services that leverage the power of chemistry.
2. The Group focuses on innovation regarding 3Rs—reduction, reuse and recycling—of plastics and works to accelerate the adoption of new solutions by society, while also considering an impact on actions against climate change issues.
3. The Group takes on challenges difficult to resolve alone, such as marine plastic problems, by working with various stakeholders through alliances and open innovation partnerships.
4. The Group provides its employees with education and awareness-raising programs based on sound science, while also engaging in social actions, such as initiatives for promoting waste sorting and collection and riverside and beach cleaning campaigns, to ensure that every one of its employees has a sense of ownership and can change their actions as needed to address plastic waste problems.
5. The Group constantly reviews progress and works to enhance and improve its efforts by the Plan-Do-Check-Act (PDCA) cycle method.

(Formulated June 2020)

Material Issues to Be Addressed as Management Priorities

Contributing through Business

<System>

In April 2021, we established the Business Development Office for a Circular System for Plastics to accelerate the businesses of such initiatives as chemical recycling related to this endeavor.

Promoting the commercialization of initiatives for waste-derived materials related to creating a circular system for plastics

https://www.sumitomo-chem.co.jp/english/news/detail/20210226e_3.html

< Sumitomo Chemical Group Products that contribute to developing a Circular System for Plastics>

Reduce

• Polyethylene used for refill pouches

For detergent packaging, pouch bags made of this polyethylene material have easy tear-open spouts for easy refilling of dispensers. Plastic waste can be cut by more than 90% compared to that from rigid bottles (for carrying 100 g of contents).

• Temperature response film

With the rise of year-round agriculture, it has become common for farmers to use transparent film that lets in sunlight in the winter and matte film or opaque nets that block excessive sunlight in the summer. Our product, on the other hand, changes its light dispersion properties depending on the temperature, effectively encompassing the functions needed for both seasons. It can be used throughout the year and thus cut the amount of film used annually.

Reuse

• Returnable box (Multi-purpose polypropylene sheet)

Because of its excellent water resistance, load capacity, and cleanliness compared to cardboard, the box can be used repeatedly, reducing waste generated and the overall amount of material used.

Recycle

• Glass-fiber reinforced recycled polypropylene material

This automotive material includes 60% to 100% of recycled waste polypropylene. We reduced the amount of virgin propylene used by around 6,000 tons per year (FY2020, based on Sumitomo Chemical's own research).

Products that contribute to developing a Circular System for Plastics

https://www.sumitomo-chem.co.jp/english/sustainability/management/materiality/plastic/products/

Material Issues to Be Addressed as Management Priorities

Innovation Centered on the 3Rs

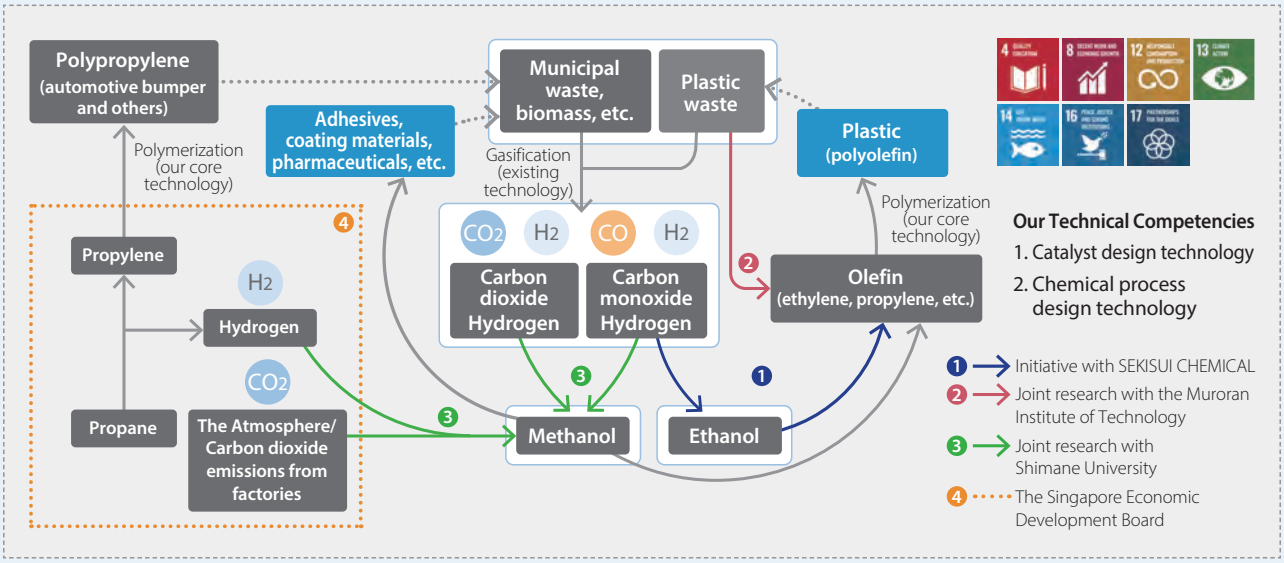
<System>

In April 2020, to accelerate innovation regarding 3Rs, we established a new research group to develop technologies related to reducing environmental impact and strengthened our system.

< Chemical Recycling>

We are engaged in the research and development of chemical recycling technology, processes that chemically convert municipal and plastic waste and use them as new raw materials for plastics. We are working on this extremely challenging endeavor by leveraging our catalyst design and chemical processing design technologies, while also collaborating with partners.

■ Chemical Recycling



SEKISUI CHEMICAL and Sumitomo Chemical to Cooperate on Circular Economy Initiative
Manufacturing Polyolefin using Waste as Raw Material

https://www.sumitomo-chem.co.jp/english/news/detail/20200227e.html

Sumitomo Chemical and Muroran Institute of Technology to Accelerate Joint Research on Chemical Recycling Technology

https://www.sumitomo-chem.co.jp/english/news/detail/20200304e.html

Shimane University and Sumitomo Chemical to Accelerate Joint Research on Methanol Synthesis from Carbon Dioxide:
Promoting the Use of Carbon Cycle Chemistry to Build a Sustainable Society

https://www.sumitomo-chem.co.jp/english/news/detail/20200910e.html

Sumitomo Chemical to Examine the Combination of Propane Dehydrogenation Technology with CO_2 Utilization Technology in Singapore, Aiming to Improve both Economic Activity and Eco-friendliness

https://www.sumitomo-chem.co.jp/english/news/detail/20201224e.html

Material Issues to Be Addressed as Management Priorities

Collaboration with Others

<Participation in Initiatives>

Through participation in various initiatives, the Sumitomo Chemical Group is working with stakeholders involved in the plastic value chain to address a broad range of issues related to a circular system for plastics.

Alliance to End Plastic Waste (AEPW)

The AEPW is an international alliance launched in January 2019 working to solve the plastic waste problem. Global companies associated with the plastic value chain have joined the alliance.

As a member company, Sumitomo Chemical financially supports AEPW's activities and also engages in the selection of projects, verification of sustainability, and evaluation of impacts. In addition, we work with others through AEPW on initiatives that would be difficult to undertake alone, such as projects to upgrade trash collection infrastructure in countries around the globe with high plastic waste emissions.

Japan Clean Ocean Material Alliance (CLOMA)

CLOMA is a domestic alliance launched in January 2019 working to solve the marine plastic waste problem. By fostering cross-industry cooperation related to the plastic value chain, we are promoting activities to accelerate innovation as well as encouraging the sustainable use of plastic products and the development and adoption of alternative materials.

The Company is helping out with the planning of pilot tests that aim to improve the material recycling rate. In addition, to help solve the marine plastic problem through international cooperation, we are working with other members to determine whether Japan can offer effective proposals in light of conditions in countries with high plastic waste emissions.

Educational Activities

- In fiscal 2020, we rolled out original educational videos on the fundamentals of a circular system for plastics for all employees of the Sumitomo Chemical Group. Through these videos, we enhanced the understanding of many executives and employees regarding how a circular system for plastics functions and sparked greater interest in this topic. We will continue to educate employees so that they can take ownership of various issues related to a circular system for plastics.
- As part of our JaIME* activities, we participated in the creation of a DVD for middle school science classes. This DVD has been used in science classes at middle schools across the country since fiscal 2021 and is also available on the website of Japan Chemical Industry Association.
- In Nigeria, which is a country with high plastic waste emissions, to spur a transformation in behavior of people in the region, we supported plastic recycling education for children who will carry the future.

P.211 Support for Education in Africa

* Japan Initiative for Marine Environment. The organization mainly educates the public, shares information, and disseminates information related to the marine plastic problem. (Japan Chemical Industry Association-JaIME (https://www.nikkakyo.org/upload_files/jaime/JaIME_jp.pdf (Japanese only))

Cleanup Activities

Through cleanup activities mainly in business site regions and at beaches, we are helping solve the plastic waste problem. For example, as part of measures to tackle marine plastic waste, Misawa Works conducts cleanup activities of washed up plastic waste along the Sabishiro beach every year.

P.206 Results of Social Contribution Activities

Cleanup activities at Sabishiro Beach

Key Performance Indicator (KPI)

Sumitomo Chemical has recently established key performance indicators (KPIs) for initiatives related to our material issues for sustainable value creation.

Material Issues		KPIs	SDGs Targets
Material issues for social value creation			
Reducing environmental impact	Mitigation of climate change	Amount of Group's GHG emissions (Scope 1+2)	13.3
		Contribution to reducing GHG emissions throughout the product life cycle (Battery-related materials)	13.3
	Contribution through products and technologies	Sales revenue of Sumika Sustainable Solutions*1 designated products	
	Efficient use of energy and resources	Unit energy consumption	7.3
		Number of petrochemical-related technology licenses	9.4
	Contribution to the recycling of plastic resources*2	The development of recycling technologies and their practical application in society are under consideration, and international initiatives are being promoted through alliances.	12.5
		KPIs are being determined to assess the impact on resource recycling	12.5
Food issues		Effect of increasing production of animal protein including poultry	2.1
		Agricultural land area where agrosolution products are used	2.4
Healthcare		Number of people protected by products for the control of tropical infectious diseases	3.3
		Constant development of new drugs in areas where high unmet medical needs exist	
ICT innovation		Number of mobile devices using polarizing films	8.2
Material issues for future value creation (creating social value and economic value)			
Promotion of technology innovation and research and development		Patent asset size	
Initiatives for digital innovation		Digital maturity	
Promotion of diversity and inclusion		Each group company sets its own KPI in light of the environment facing each	

*1 Our Group's products and technologies that help to address global warming, reduce environmental impact and promote effective use of resources.
*2 Sumitomo Chemical Group Basic Policy Towards a Circular System for Plastics

Specifications of KPIs

We have set key performance indicators (KPIs) for initiatives related to our material issues for sustainable value creation, after the deliberation by the Sustainability Promotion Committee and considering opinions of outside experts. Regarding our material issues for social value creation, we have set KPIs by referring to the 169 targets of the 17 SDGs* to indicate specifically how we aim to contribute to resolving each issue. As for our material issues for future value creation, KPIs related to technology innovation and research and development and to digital innovation are set on a group-wide basis, while those related to diversity and inclusion are determined by each Group company in view of their respective circumstances, which vary by country or region. With the use of KPIs, we will manage the progress of our efforts, while also promoting dialogues with stakeholders in and outside the company.

* Each of the 17 SDGs has specified targets. For example: "13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning."

Key Performance Indicator (KPI)

KPIs for material issues for social value creation

Material Issue **Contribution to reducing environmental impact: Mitigation of climate change**

KPI

Amount of reduction of Group's GHG emissions (Scope 1+2)

Reducing GHG emissions through our group operations

Contributing to the achievement of SDG 13.3

Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

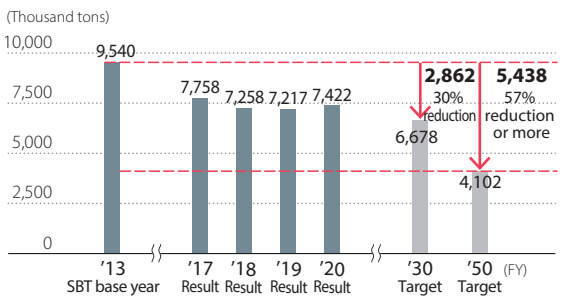
◆ In 2018, Sumitomo Chemical obtained the SBT approval, becoming the first diversified chemical company to receive the approval.

Targets (vs. FY2013)
Reduce by **30%** by FY2030

Initiatives to achieve the commitment

- Switch fuel to LNG
- Thorough energy conservation and other measures

■ GHG Emissions and Reduction Targets



Material Issue **Contribution to reducing environmental impact: Mitigation of climate change**

KPI

Contribution to reducing GHG emissions throughout the product life cycle (Battery-related materials)

Contributing to the achievement of SDG 13.3

Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

◆ **Mitigation of climate change by using battery materials**

Due to the strengthening of environmental regulations around the world, the shift to eco-friendly vehicles* is accelerating. We will help mitigate climate change by providing battery materials.

* EVs, HEVs, PHEVs, Fuel cell cars

◆ **Toward the achievement of SDG 13.3**

We will continue to develop technologies in the fields of energy storage and energy saving, and will promote the technological development of chemical recycling for our principal chemical products, such as polyolefin, to help achieve a carbon recycling society.

◆ **Highlights of sustainability efforts**

To accelerate the practical application of solid-state batteries, in April 2020 Kyoto University and Sumitomo Chemical jointly established a business-academic course focused on comprehensive material design that combines cathodes and anodes for oxide-based solid electrolytes with the target of achieving a 500kWh gravimetric energy density.

Eco-friendly vehicles manufactured in FY2020 incorporating SCC's battery materials (Separator, Cathode, Almina) will help reduce the GHG emission volume* over the next 10 years by:

FY2020 actual results
17.65 million tons-CO_2

* Based on 2020-made vehicles in "cLCA evaluation on next generation vehicles" by the Japan Chemical Industry Association.

Key Performance Indicator (KPI)

Material Issue Contribution to reducing environmental impact: Products and technologies

KPI

Sales revenue of Sumika Sustainable Solutions* designated products

Provide solutions for the realization of a sustainable society through the development and popularization of Sumika Sustainable Solutions (SSS) designated products

Sumika Sustainable Solutions

- Certification began in 2016 to encourage the development and promotion of products and technologies that will address environmental aspects of the SDGs, such as reduced environmental impact.
- Verified by a third-party institution. The results of the internal designation have been evaluated as valid.

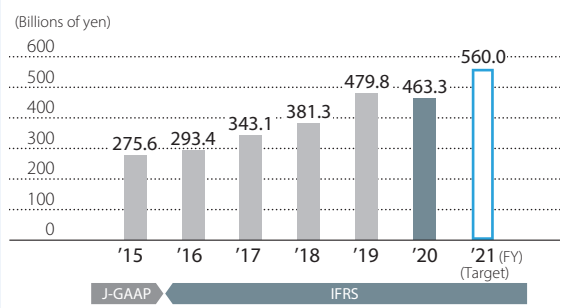
Targets

Sales revenue of **560** billion yen by FY2021

Initiatives to achieve the commitment

- Designated 57 products and technologies as of August 2021
- Participation by all SCC Group companies

Sales Revenue of SSS-designated Products



* Our Group's products and technologies that help to address global warming, reduce environmental impact and promote effective use of resources.

Material Issue Contribution to reducing environmental impact: Efficient use of energy and resources

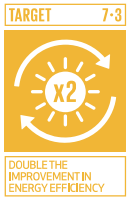
KPI

Unit energy consumption

Continuous improvement of unit energy consumption by rationalization

Contributing to the achievement of SDG 7.3

By 2030, double the global rate of improvement in energy efficiency



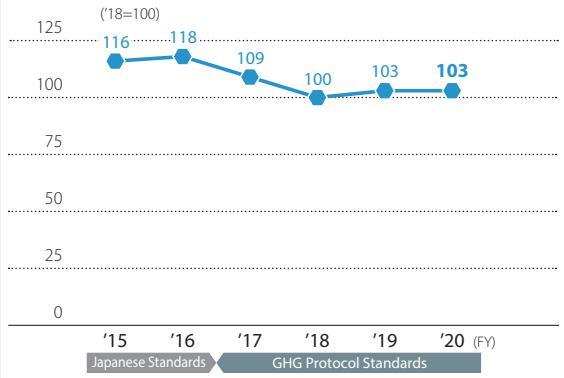
Targets (FY2018 level as baseline)

Will achieve improvement of **3%** or more per each MRP period as a group

Initiatives to achieve the commitment

- Optimization of facilities using steam
- Improvement in energy collection and quantification of lost volume such as waste heat

SCC Group Unit Energy Consumption Index



Key Performance Indicator (KPI)

Material Issue Contribution to reducing environmental impact: Efficient use of energy and resources

KPI

Number of petrochemical technology licenses

Helping to reduce environmental impact through technology licensing

Contributing to the achievement of SDG 9.4

By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

Reduction of environmental impact by applying licensed technologies

- **Hydrogen Chloride Oxidation process:**
  Highly energy efficient, enables recycling of byproducts as raw materials.
- **Propylene oxide (PO) – only process:**
  No co-products, high yield and energy efficient, stable operation. First in the world to succeed in recycling cumene on a commercial scale.

Total number of plants under license as of the end of FY2020

14

Note: Propylene oxide (PO)-only process and hydrogen chloride oxidation process licenses

Toward the achievement of SDG 9.4

We will strive to develop technologies for use in a wide range of fields, such as CO_2 separation membranes to improve energy efficiency, and waste water treatment processes with less environmental impact, in order to reduce society's total environment impact.

Highlights of sustainability efforts

- Executed the GHG emission reduction plan:
  Highly efficient gas turbines (Chiba Works), switch to alternative raw materials and fuels (Ehime Works), etc. to realize low GHG emission.
- Developed technologies to promote the 3Rs
  Developed monomaterials application and executed chemical recycling and material recycling.
- Developed Sumika Sustainable Solutions-certified products
  GFPP (contributing to greater recycling), aluminum vapor-deposited PP (contributing to long-term food storage)
- Established the Business Development Office for a Circular System for Plastics on April 1, 2021 and promoted the practical application of chemical recycling technologies.
- Promoted the pilot production of PE derived from waste materials in collaboration with Sekisui Chemical Co., Ltd.

Material Issue Contribution to solving food issues

KPI

Effect of increasing production of animal protein including poultry

Continuously improving the production of animal protein, including poultry, by developing and providing feed additives

Contributing to the achievement of SDG 2.1

By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round

Feed additives

Nutrition that is added to feed for such livestock as poultry in order to increase the production of animal protein and contribute to solving food issues worldwide on an ongoing basis.

We provide methionine, an essential amino acid, and started operation of a new low environmental impact, high-efficiency plant with an annual capacity of 100 thousand tons in October 2018.

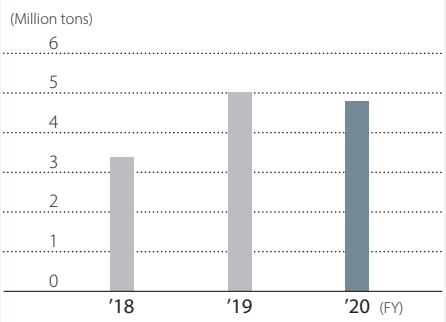
Toward the achievement of SDG 2.1

We will continue to contribute to the safe and secure supply of food by providing high-quality products, taking full advantage of our sophisticated safety and environmental management systems backed by our expertise in a diverse range of chemical manufacturing operations.

Highlights of sustainability efforts

We introduced measures for enhanced productivity, the environment and safety, and continuously promoted the stable production of methione. In addition, we began development of new products that can help enhance livestock productivity, including improved feed efficiency.

Increased Production of Animal Protein



Note: Calculation method undisclosed (confidential)

Key Performance Indicator (KPI)

Material Issue **Contribution to solving food issues**

KPI

Agricultural land area where agrosolution products are used

Ensuring the stable supply of food by developing and providing agrosolution products

Contributing to the achievement of SDG 2.4

By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

Agrosolution products

Products that improve the quality and yield of crops and help farmers achieve high productivity and profitability, including paddy rice crop protection products, seed treatments, herbicides for soybeans, plant growth regulators, biorational insecticides and products to improve soil health.

We develop new products to serve various needs by inventing new active ingredients, evaluating safety on humans and the environment, and developing application technologies.

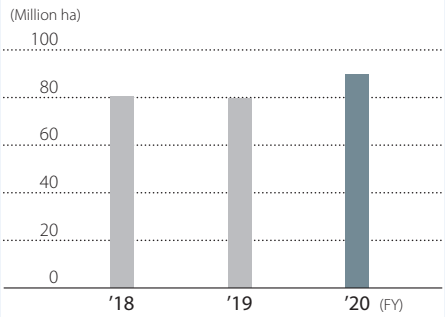
Toward the achievement of SDG 2.4

We will develop next-generation crop protection products to enable the earliest market launch while expanding our lineup of unique products, such as biorationals, etc., where we hold a competitive advantage.

Highlights of sustainability efforts

Valent BioSciences, a group company supplying biorationals—a category of agrosolution products—has issued its Sustainability Report 2018/2019.

Farmland Utilizing SCC Agrosolution Products



Note: Calculation method undisclosed (confidential)

Material Issue **Contribution to solving healthcare**

KPI

Number of people protected by products for the control of tropical infectious diseases

Helping protect people from infectious diseases carried by mosquitoes by developing and providing vector control products including Olyset™ Nets

Contributing to the achievement of SDG 3.3

By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases

Vector control products

Products that are used to control mosquitoes and thus prevent malaria and other tropical infectious diseases. These include long lasting insecticidal nets such as Olyset™ Nets and indoor residual sprays.

Recent climate change is increasing the threat of tropical infectious diseases worldwide, thus increasing the importance of such products.

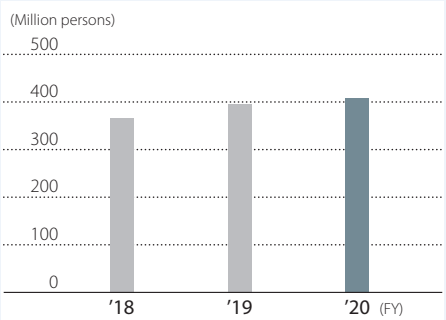
Toward the achievement of SDG 3.3

We aim at developing new insecticides and also promoting integrated vector management programs capitalizing on our technological platform (chemical insecticide, biorational, botanical, etc.) based on long-term development activities.

Highlights of sustainability efforts

In the area of tropical infectious disease control solutions, we are promoting long-lasting insecticidal bed nets, which show a significant effect against insecticide-resistant mosquitoes, and indoor residual spray SumiShield across Africa.

People Protected by Our Vector Control Products*



Note: Calculation method undisclosed (confidential)

* The total number of people per year who have been protected from tropical diseases thanks to the use of these products during the products' periods of efficacy

Key Performance Indicator (KPI)

Material Issue **Contribution to ICT innovation**

KPI

Number of mobile devices using polarizing films

Advancing technological innovation for diversified workstyles and improved productivity through the provision of materials for mobile devices

Contributing to the achievement of SDG 8.2

Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors

Polarizing films

Indispensable material for flat panel displays, such as liquid crystal displays and OLED displays. Contributes to improved performance of displays with regard to such factors as brightness, contrast and viewing angle.

Toward the achievement of SDG 8.2

We are developing various ICT-related materials and devices for 5G telecommunication equipment, next-generation semiconductors, optical image sensors, etc., to promote the realization of Society 5.0.

Highlights of sustainability efforts

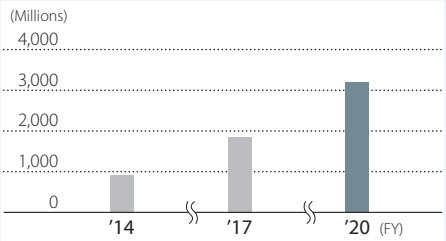
We are working to develop and improve the quality of the following products to support the diverse workstyles, productivity improvement, and lifestyle changes that have accompanied the proliferation of 5G service and the expansion of telework during the pandemic:

(1) Polarizing films for OLED Panel
(2) Coated-type polarizing films suitable for foldable devices
(3) Polarizing films for 5G-compatible mobile devices
(4) Materials related to 5G telecommunications
(5) Gallium nitride substrates, which help reduce electric power loss

Mobile devices that use our polarizing films

Cumulative total for the period from FY2007 to date (as of the end of FY2020)
3.2 billion

■ Transition of Cumulative Total for the Period from FY2007



Note: Calculation method undisclosed (confidential)

KPIs for material issues for future value creation (creating social value and economic value)

Material Issue **Promotion of technology innovation and research and development**

KPI

Patent asset size

Patent rights

The right granted by patent authorities through prescribed screening procedures for the exclusive use for a defined period of time of a valuable invention generated by R&D.

Patent asset size (Patent Asset Index™)

An objective quantification of the overall value of the patents held by Sumitomo Chemical Group based on the technological attractiveness and market exclusivity of each patent. Maintaining attractiveness requires continued R&D that addresses new requests from society.

Accelerated generation of new businesses for a sustainable society

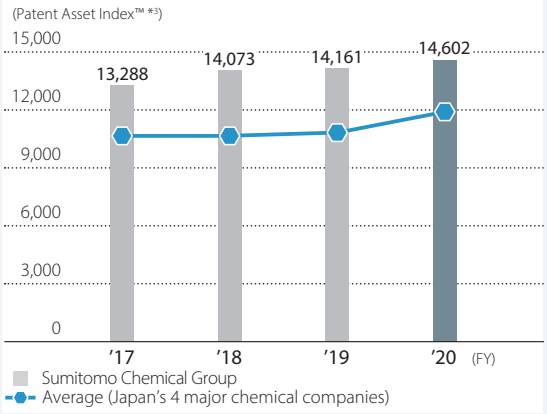
We will thoroughly implement the use of AI/MI*1 in our R&D labs, and accelerate the generation of new businesses in four priority areas through collaboration with academia and startups. In addition, we will formulate the Group's strategies to achieve carbon neutrality and implement them from a long-term, comprehensive perspective.

Trends in our patent asset size

Our patent asset size has remained high, reflecting our efforts to step up R&D and patenting in recent years. We will continue to enhance and strengthen our patent portfolio.

*1 Artificial Intelligence / Materials Informatics

■ Patent Asset Size*2



*2 Patent asset size is evaluated using the Patent Asset Index™, generated using the patent analysis tool LexisNexis PatentSight™.

*3 The Patent Asset Index™ is an index for comprehensively assessing the status of legally active patents based on quantity (number of patents) and quality (countries of registration and number of citations).

Key Performance Indicator (KPI)

Material Issue

Initiatives for digital innovation

We will evaluate our level of achievement in terms of 12 items, using a rating scale from 1 to 4, and use the mean value of the scores as our Digital Maturity Level.

KPI
Digital maturity level (a 4-point-rating scale)

Digital maturity level	
FY2019	FY2020
2.6 points	2.9 points

We have put forward the concept of Digital Maturity Level, which includes evaluations of 12 items, including ideal approaches to business management and systems for promoting digital transformation (DX), as well as the development of IT systems as a foundation for achieving DX. Self-assessment of our level of achievement and challenges for each item can lead us to take actions to attain higher levels, and help us sustainably improve in a continuous evaluation cycle.

Digital Maturity Level

Score	Maturity Level
4	Continuous Group-wide implementation of digital technologies based on the "SCC Group strategy" and quantitative evaluation criteria
3	Group-wide implementation of digital technologies based on the "SCC Group strategy"
2	Implementation of digital technologies in some business units based on the "SCC Group strategy"
1	Implementation of DX in some business units without a clear "SCC Group strategy"

12 Evaluation Items

Ideal approaches to business management and systems for promoting DX*1

1. Strategies and visions
2. Commitments by business management
3. Mindset and corporate culture
4. Promotion and support systems
5. HR development and secure HR recruitment
6. Reflection of outcomes in business

Development of IT systems as a foundation for achieving DX

7. Systems and governance
8. Secure HR recruitment
9. Ownership of the business operation department
10. Analysis and assessment of IT assets
11. Categorization of IT assets and planning thereof
12. IT system after IT Renovation: Ability to follow up on changes

*1 DX stands for Digital Transformation

Note: Refer to the Guidelines for Promotion of Digital Transformations and Assessment Indices for Digital Management Reforms ("DX Promotion Indices") by METI

Status of Utilizing KPIs

- We implemented self-assessments for each KPI item, referring to evaluated KPI items of the first year (FY2019) of the evaluation as benchmarks.
- To improve the status in FY2020, we deployed key initiatives, such as formulating strategies, implementing in-house promotions, and training personnel.
- We set medium- to long-term improvement targets, and, going forward, we aim to achieve sustainable improvement by implementing continuous evaluation cycles.

Highlights of sustainability efforts

Enhanced Company-wide DX Initiatives Based on the Company-wide Digital Innovation Strategies

- Formulated the Company's DX vision and DX Strategies 1.0, 2.0, and 3.0*2 as the medium- to long-term milestone
- Moved onto business competitiveness enhancement initiatives (DX Strategy 2.0) ahead of schedule
- Raised internal awareness and shared DX projects within the company through such initiatives as DX events (DX Repository) and DX activity promotion awards
- Re-organization of IT Division for promoting DX (integration with Sumitomo Chemical Systems Service Co., Ltd. and founding of SUMIKA DX ACCENT Co., Ltd.)

*2 Main focus areas for digital innovation (DX Strategy 1.0: enhancing productivity; DX Strategy 2.0: enhancing the competitiveness of existing businesses; DX Strategy 3.0: creating new business models)

Each Field's Promotion Divisions and Frontlines Cooperated to Steadily Promote Initiatives

Plant	• Continued to promote the transition to smart factories at each plant
R&D	• Organized the base of materials informatics (MI) of the research frontlines.
SCM	• Began using the S/4 HANA and peripheral systems (purchasing, import/export control). Implemented proof of concept (PoC) for planning systems.
Office	• Promoted transition toward paperless and stampless "hanko-less" offices through the digitization of various applications and contract agreements • Upgraded and strengthened digital communications through Teams/box
Personnel Training	• Data scientists*3: 10 employees certified based on internal certification standards. On track to achieve the medium-term target of 20 employees. • Data engineers*4: 106 employees completed training through our in-house education program and OJT. On track to achieve the medium-term target of 150 employees. • Began training business DX personnel (business translator and business data analyst)

*3 Data scientists: Personnel who develop Company-wide elemental technologies to promote the wider use of data analysis, work to put said technologies into practical use at the frontlines, and support the training of frontline data engineers as well as finding solutions to individual problems

*4 Data engineers: Personnel who apply optimal analysis methods to individual issues on R&D themes or production frontlines, and combine a data-driven awareness with frontline expert knowledge to swiftly resolve issues

Key Performance Indicator (KPI)

Material Issue **Promotion of diversity and inclusion**

We have established the Basic Principles on the Promotion of Diversity and Inclusion as our group-wide guiding philosophy related to the promotion of diversity and inclusion. Based on these principles, each of **about 100 major Group companies** will determine their own KPIs in view of their respective circumstances.

Sumitomo Chemical (non-consolidated)

Percentage of female employees in positions equivalent to manager or above

Target Over **10%** (by 2022)

Actual: 6.3% (as of April 2021)

Percentage of male employees taking childcare leave

Target Over **70%** (by 2022)

Actual: 63.8% (FY2020)

◆ Progress of Group companies in Japan and overseas in setting KPIs

Many of the KPIs set by Group companies are related to the active promotion and empowerment of women, work-life balance, and diversity regarding nationality, racial background, and age. Going forward, we will continue working with Group companies to promote initiatives aimed at achieving these KPIs.

https://www.sumitomo-chem.co.jp/english/sustainability/files/docs/kpi_diver_group.pdf

Key Performance Indicator (KPI)

Digest of Expert Opinion and Advice

Between July and August 2019, we met with outside experts to discuss the material issues that we will address as management priorities and our approach to the setting of KPIs for those issues and the appropriateness of our method.

Mr. Hidemi Tomita, Director, Lloyd's Register Japan K.K.

Sumitomo Chemical has a basic policy of continually creating both economic and social value based on Sumitomo's business principles, which are represented by the words "*Jiri-Rita Koushi-Ichinyo* (Our businesses must benefit society at large, not just our own interests)." Under this policy, the Company has classified their material issues into "Material Issues for Social Value Creation" and "Material Issues for Value Creation in the Future," as well as the "Foundations for Business Continuity," which underpins their efforts to address both of these sets of material issues.

It is notable that they have clearly defined what materiality means to the Company. Meanwhile, materiality generally refers to important "issues," but the Company's materiality is primarily concerned with strategies and initiatives. Accordingly, the Company needs to first specify "issues" that they consider important and then tell its story about strategies for resolving those issues. In addition, it would be preferable to discuss not only business opportunities but also risks.

With regard to KPIs, it is important to show outcomes of each initiative, or social value created by each initiative, not just results of initiatives. Let's take the Sumika Sustainable Solutions as an example. It would be desirable to provide both KPIs to demonstrate results—such as net sales—as well as KPIs to describe outcomes achieved by these products for the benefit of society—such as GHG emissions reduction and improved agricultural productivity.

Enhancing social value is not easy, but it is important that the Company will make sure efforts are aligned with its basic policy of creating both economic and social value and will work to build its unique cohesive story.

Mr. Hidemi Tomita
Director
Lloyd's Register Japan K.K.

Ms. Yukari Takamura, Professor, the Institute for Future Initiatives, the University of Tokyo

KPIs should be such that by using them you can tell a story about timelines of your efforts and what kind of society you envision for a target year—just as is the case with Sumitomo Chemical's KPIs related to the mitigation of climate change. It is necessary to make that kind of story for other KPIs as well and communicate them to stakeholders. In addition, with respect to GHG emissions reduction, how the Company should demonstrate its Scope 3 emissions reduction efforts is also an important issue.

In the area of climate change, I recommend that the Company more actively promote its products that contribute to GHG emissions reduction and the adaptation to climate change. For those products designated as Sumika Sustainable Solutions, in particular, it would be advisable to step up promotion and public relations efforts so that more people will get to know them. This could be an initiative that represents Sumitomo Chemical's originality.

Many companies are finding it difficult to set KPIs and promote initiatives to contribute to a circular system for plastics. That is because plastic products are being used in all aspects of daily life and also because plastic collection and recycling cannot be done only by an individual company.

For other industries, which use plastics, it is difficult to resolve this issue unless alternative materials become available, so these industries are holding high expectations about the chemical industry. I strongly hope that Sumitomo Chemical will show its path to building a circular system for plastics, including medium- to long-term plans and solutions and relevant KPIs.

Ms. Yukari Takamura
Professor
The Institute for Future Initiatives
The University of Tokyo

Key Performance Indicator (KPI)

Ms. Kaori Kuroda, Executive Director, CSO Network Japan

It is important to work to resolve social issues through excellent products and technologies and to measure progress by setting KPIs. However, there are also issues that cannot be resolved with products and technologies alone. A case in point is Olyset™ Net. This product does not just help control malaria. I have learned that local production of the nets is contributing to creating jobs, to improving work environment and thereby promoting women's active participation in society, to spurring the development of local economy, and to alleviating poverty. In this way, it is essential to include a wide range of initiatives, including building relationships with local communities, in the narrative of your efforts and carry them out.

Second, it is appropriate that Sumitomo Chemical has defined the promotion of diversity and inclusion as a Material Issue for Value Creation in the Future and that each Group company has set KPIs for this issue in view of culture and social situations that vary depending on the country or region where it operates. Regarding respect for human rights, while it is commendable that the Company has established its basic policy, this issue is classified as one of the Foundations for Business Continuity. It should be noted that respect for human rights can also lead to enhancing corporate value. I suggest that with this understanding in mind, the Company take stock of the initiatives it has implemented to date and communicate them, while working to enhance its efforts.

I offer high praise for the fact that in its material issues, the Company has included those material issues for which it has not implemented sufficient measures yet. I look forward to Sumitomo Chemical's efforts and progress going forward.

Ms. Kaori Kuroda
Executive Director*
CSO Network Japan

* At the time of the interview

Corporate Business Plan (FY2019 – FY2021) and Sustainability

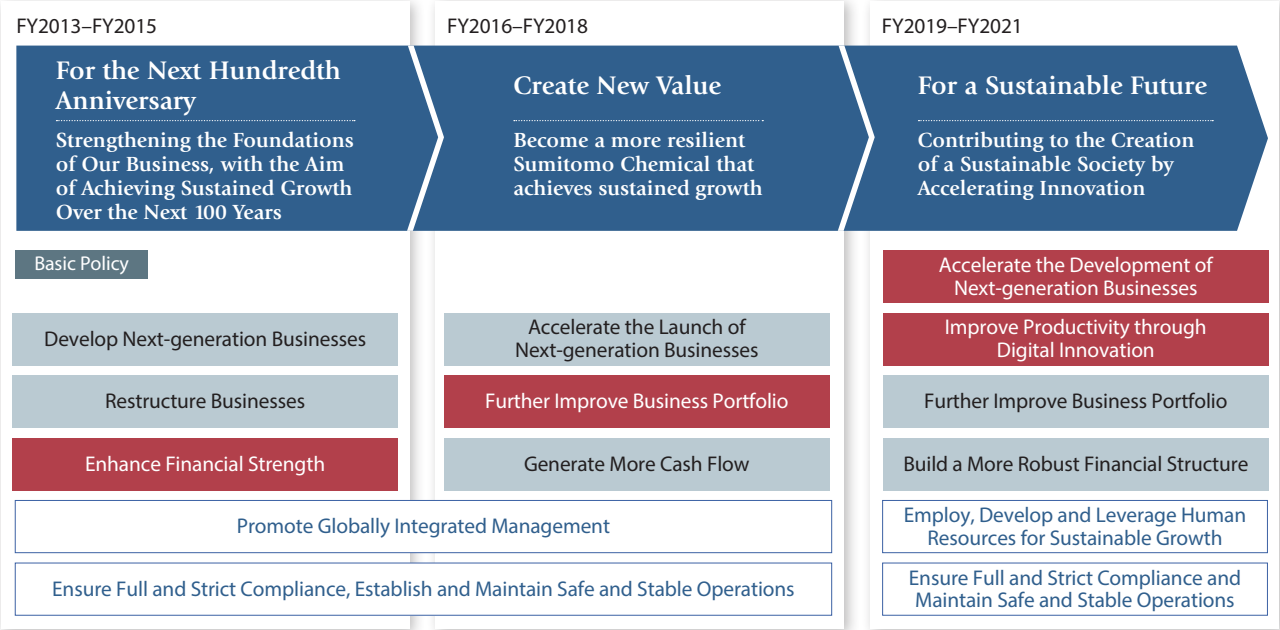
The Corporate Business Plan (FY2019 – FY2021), which started in FY2019, has "Change and Innovation 3.0: For a Sustainable Future" as a slogan. This represents the Group's commitment to increasing productivity exponentially through digital innovation in view of the advent of "Society 5.0 (ultra-smart society)," while at the same time contributing to creating a sustainable society by resolving issues facing society.

With regard to our efforts to accelerate the development of next-generation businesses, we have set out four focus areas: healthcare, reducing environmental impact, food, and ICT. These four areas correspond with the four items of our "Material Issues for Social Value Creation," which are included in our material issues for sustainable value creation.

We at the Sumitomo Chemical Group will continue to carry out our initiatives under the Corporate Business Plan, create both economic and social value, and achieve sustained growth for the Group while also helping to build a sustainable society.

P.17 Material Issues to Be Addressed as Management Priorities
P.23 Key Performance Indicator (KPI)

Transition of the Corporate Business Plan "Change and Innovation" from FY2013



Note: The current Corporate Business Plan is the first that positioned "contributing to the creation of a sustainable society" as a major pillar.

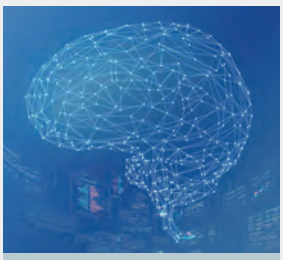
The Four Priority Areas for Accelerating the Development of Next-generation Businesses
(From the basic policy of the FY2019–FY2021 Corporate Business Plan)

Accelerate the development of
next-generation technologies and create new businesses for a sustainable society

Healthcare

Reducing Environmental Impact

Food


ICT

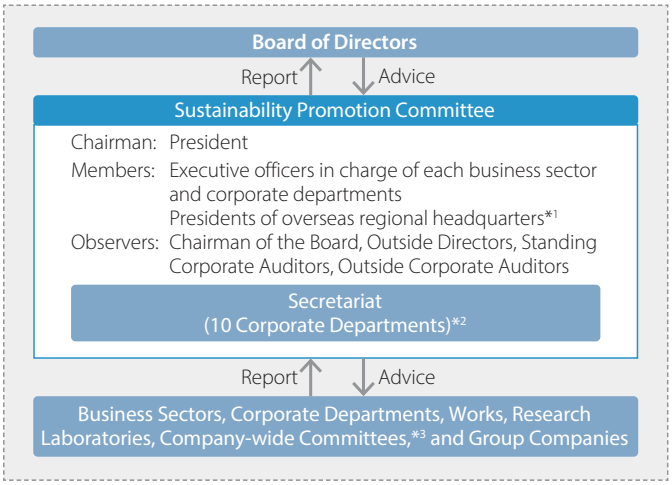
Medium- to long-term priority areas

Sustainability Promotion System

Promotion System

In April 2018, Sumitomo Chemical enhanced the CSR Promotion Committee, thereby creating the Sustainability Promotion Committee. The results of the committee's discussions are reported to the Board of Directors every time they convene, and the committee receives guidance as necessary.

■ Sustainability Promotion Committee



*1 The Americas region, Europe region, China region, and Asia-Pacific region
*2 The Sustainability Department, Legal Department, Human Resources Department, Corporate Communications Department, Corporate Planning Department, Research Planning and Coordination Department, Responsible Care Department, Finance Department, Procurement Department, and Logistics Department
*3 The Responsible Care Committee, Human Rights Promotion Committee, Carbon Neutral Strategy Council, etc.

(Purpose)
1. Oversee the Group's sustainability promotion activities
2. Comprehensively verify contributions to sustainability
3. Accelerate efforts to solve issues in society, including the SDGs

(Role)
The committee provides advice to each executive organization to ensure that the Group's business activities all function organically to realize sustainability for all society and that said activities are fairly assessed by stakeholders.
1. SOLUTION: Providing advice to each business sector and each Group company on contributing to the sustainable growth of society through business operations
2. INITIATIVE: Providing advice to various committees through participation in international initiatives
3. ENGAGEMENT: Providing advice related to assessing and enhancing communication through dialogue with stakeholders

(Members)
The Sustainability Promotion Committee is chaired by the president of Sumitomo Chemical and composed of executive officers in charge of each business sector, the executive officers in charge of the corporate departments and the presidents of four overseas regional headquarters.

(Observers)
The Chairman of the Board, Outside Directors, Standing Corporate Auditors, and Outside Corporate Auditors attend as observers.

(Secretariat)
The committee's secretariat comprises the Sustainability Department, Legal Department, Human Resources Department, Corporate Communications Department, Corporate Planning Department, Research Planning and Coordination Department, Responsible Care Department, Finance Department, Procurement Department, and Logistics Department.

(Fiscal 2020 Results)
The Sustainability Promotion Committee meeting was convened twice. The committee shared information on international trends related to sustainability and comprehensively assessed medium- to long-term ESG issues from a risk-reward perspective to promote specific measures and suggest measures to accelerate contributions to the Group's sustainability to relevant departments and organizations.

Promoting Sustainability

As the Sumitomo Chemical Group works on the issue of sustainability, we follow the principle of "T-S-P." "T" stands for top management's commitment, "S" for solutions, and "P" for participation by all. We believe that to effectively drive our sustainability efforts, it is essential that every one of over 30,000 officers and employees in the Group work together as one, sharing our corporate philosophy comprising Sumitomo's business principles, the Business Philosophy, the Basic Principles for Promoting Sustainability, and the Sumitomo Chemical Charter for Business Conduct.

Approach to accelerate sustainability

Top Commitment: Addressing the Promotion of Sustainability as a Management Priority

In the Basic Principles for Promoting Sustainability, we declare that Sumitomo Chemical's top management is committed to promoting sustainability. We also place these principles just below Sumitomo's business principles and the Business Philosophy in the framework of our corporate philosophy to demonstrate the Group's commitment to addressing the promotion of sustainability as a management priority. In addition, under our Corporate Business Plan, which was launched in April 2019, we have defined contributing to building a sustainable society as a major pillar of the plan.

In fiscal 2020, as in fiscal 2019, the president of Sumitomo Chemical sent a letter to all Group companies' presidents to communicate the Group's new sustainability initiatives, including key performance indicators (KPIs) for our initiatives to address the Group's material issues, the Group Policy for the Promotion of Diversity and Inclusion, the Group Basic Policy Towards a Circular System for Plastics, and new measures for promoting respect for human rights. In his letter, the president also called on all officers and employees to share the Group's corporate values and work together to carry out our sustainability efforts. Videos have been produced explaining the new measures and distributed to Sumitomo Chemical's operating sites. Meanwhile, the Senior Managing Executive Officer in charge of sustainability and Sustainability Department employees held multiple briefing sessions at Group companies in Japan to communicate the Group's sustainability initiatives, while also implementing the same communication efforts for Group companies outside Japan through our four overseas regional headquarters.

FY2020 Sustainability Efforts Briefing Session

Location	Sessions	Participants
Sumitomo Chemical	Distributed explanation videos	All employees
Group companies in Japan	4	Presidents and sustainability managers of each company
Group companies overseas	8	Presidents of regional headquarters Sustainability managers of regional headquarters Sustainability managers of each company

P.7 President's Message

Promoting Sustainability

Solutions: Contributing through Business—Sumika Sustainable Solutions (SSS)

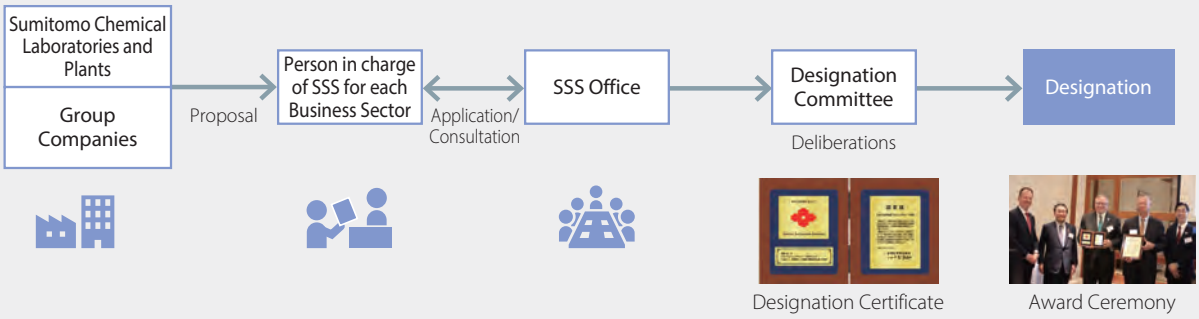
Sumitomo Chemical recognizes that climate change problems present the Group with business opportunities, such as an increase in demand for products that help solve issues related to the environment and climate change by, for example, reducing GHG emissions. To seize these kinds of opportunities, we are promoting an initiative to designate those of our products and technologies that contribute to such issues as global warming countermeasures, reducing environmental burdens, and effective use of resources, as Sumika Sustainable Solutions (SSS).

We have also set KPIs based on sales revenue from SSS-designated products, and we have been monitoring the progress of our efforts by using those KPIs. In addition, we include contributions to the creation of social value and SSS designation in the selection criteria for our employee commendation system.

Going forward, the Company will continue solving issues in order to build a sustainable society by devoting its attention to promoting the development and widespread use of SSS-designated products and technologies.

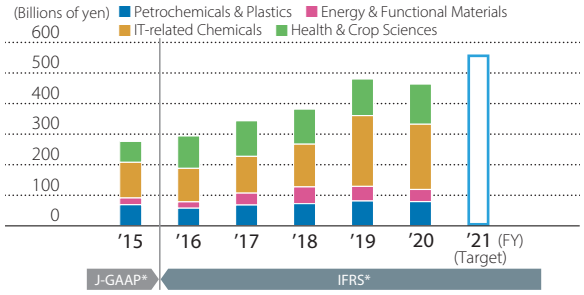
The Process of SSS Designation

Our laboratories, plants and group companies apply for designation for their products and technologies, and the Designation Committee formally makes the designation. A third-party organization has reviewed all cases designated to date and assessed the results of the in-house designation for them as valid.



In fiscal 2020, the sixth year of this initiative, Sumitomo Chemical newly designated three of its products as Sumika Sustainable Solutions (SSS). With the addition of these three products, the total number of SSS-designated products and technologies is now 57, amounting to approximately 463.3 billion yen in terms of sales revenue in fiscal 2020. New designations were given to polyolefin thermoplastic elastomers (TPEs) for non-painted airbag covers, which eliminate the need for the surface design painting and offer a superb appearance; heat storage plastic materials HEATORAGE™ and COMFORMER™, which are designed to absorb and release heat in specific temperature ranges and can be used in residential building materials and textile products, such as clothing and bedclothes to maintain appropriate temperatures inside houses, clothes, or blankets; and new cathode materials and their precursors, which significantly improve the performance of lithium-ion secondary batteries. These are all Sumitomo Chemical and the Sumitomo Chemical Group products and technologies. The Company is now aiming to achieve sales revenues of 560 billion yen from SSS-designated products and technologies by fiscal 2021, the final year of the current Corporate Business Plan.

Sales Revenue of SSS-designated Products



(Billions of yen)

	FY2020
Sales revenue of the Sumitomo Chemical Group	2,287.0
Sales revenue of SSS-designated products	463.3

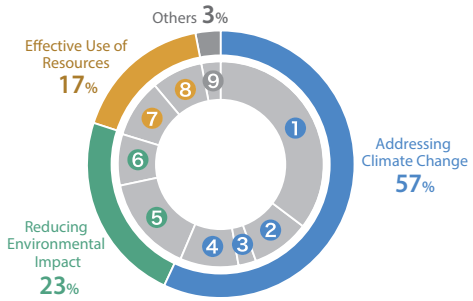
* J-GAAP: Japanese GAAP, IFRS: International Financial Reporting Standards

Promoting Sustainability

Designation Requirements by Category

Category	Designation Requirements
Addressing Climate Change	① Contributing to reducing GHG emissions
	② Products, components, and materials used for the creation of new energy sources
	③ Using biomass-derived raw materials
	④ Contributing to adapting to the impacts of climate change
Reducing Environmental Impact	⑤ Contributing to reducing waste and toxic substances, and contributing to reducing environmental impact
	⑥ Contributing to reducing environmental impact in food production
Effective Use of Resources	⑦ Contributing to recycling and energy-saving
	⑧ Contributing to the efficient use of water
Others	⑨ Other contributions to building a sustainable society

Designation Requirements by Category/Actual Environmental Contribution (FY2020)



● **Addressing Climate Change**
Contributed to reducing **62** million tons of GHG emissions (CO_2 equivalent; a projection for FY2020) through the life cycles of the designated products and technologies in this category

Note: Calculated with reference to "New Perspective on Reducing Greenhouse Gases" by the Japan Chemical Industry Association and "Global Value Chain" by the Japan Business Federation.

● **Reducing Environmental Impact**
Contributed to reducing the use of organic solvents by **100** thousand tons per year by using the designated products and technologies in this category

● **Effective Use of Resources**
Contributed to reducing the use of water by **14.2** million tons per year by using the designated products and technologies in this category

In May 2020, Sumitomo Chemical was awarded the Grand Prize in the 52nd Annual JCIA Technology Awards from the Japan Chemical Industry Association for its technology that enabled "the development and commercialization of a process for manufacturing propylene oxide (PO) using cumene, which has low environmental impact and is free from co-products." This technology has been designated a Sumika Sustainable Solution.

Sumika Sustainable Solutions

https://www.sumitomo-chem.co.jp/english/sustainability/management/promotion/sss/

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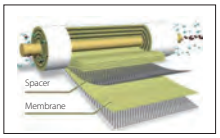
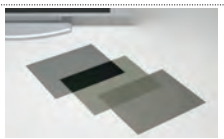
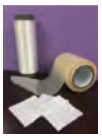
https://www.sumitomo-chem.co.jp/english/ir/library/annual_report/

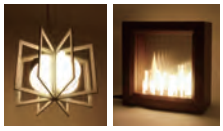
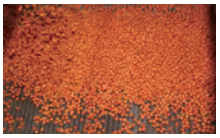
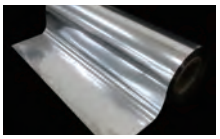
Promoting Sustainability

"Sumika Sustainable Solutions" Main Products and Technologies

Solutions		◆Features / ●Contributions	Contributions to SDGs
Addressing Climate Change			
PERVIO™, lithium-ion secondary battery separator		◆A material capable of providing high-capacity lithium-ion secondary batteries ●Contributing to the expanded use of next-generation vehicles, such as electric vehicles	7, 13
SUMIKAEXCEL™, polyethersulfone		◆An additive for carbon-fiber reinforced plastics used in aircraft ●Making aircraft lighter and hence fuel-efficient	7, 13
CO_2 separation membrane		◆Used in hydrogen production and natural gas refining to remove CO_2 ●It significantly reduces energy consumption during CO_2 separation compared with conventional methods	7, 13
UV curing for polarizer lamination		◆A polarizing film for displays ●Achieves substantial energy saving in manufacturing compared with conventional methods	7, 12, 13
SUMIMET™, feed additive methionine		◆Adding methionine to poultry feed improves the balance of amino acids in feed ●Reduced nitrogen in poultry excrement, a cause for greenhouse gas emissions	12, 13
Olyset™ Net, anti-malarial long-lasting insecticidal mosquito net		◆A mosquito net developed for controlling malaria-carrying mosquitoes ●Helping reduce malaria infection	3, 13
Vector-control pesticides		◆Fulfilling an important role in repelling and exterminating insects that spread infectious diseases ●These pesticides facilitate adaptation to the effects of climate change	3, 13
Carbon dioxide separation and recovery technology (Sumitomo Joint Electric Power Co., Ltd.)		◆Separates and recovers CO_2 from gases exhausted from a thermal power station, which is then used as an auxiliary material for chemicals production at another manufacturing plant of Sumitomo Chemical's Ehime Works.* * Technology for CO_2 separation and recovery is a proprietary technology of Nippon Steel Engineering Co., Ltd. ●Contributes to reducing CO_2 emissions.	13
High performance insulating coating material (Taoka Chemical Co., Ltd)		◆High performance insulating coating mainly used for automotive batteries. ●Contributes to motor miniaturization and higher output, and reduces greenhouse gas emissions.	7, 12
Heat storage plastic material HEATORAGE™ COMFORMER™		◆These heat storage plastic materials are designed to absorb and release heat in the specific temperature range of between 20°C and 50°C. ●Using this between insulation layers in the roofs of residences reduces the cooling burden in summer.	12, 13
Cathode materials and their precursors for lithium-ion secondary batteries (Battery Materials Division / Tanaka Chemical Corporation)		◆These cathode materials and precursors significantly improve the performance of lithium-ion secondary batteries. ●Switching from gasoline cars to hybrid cars will help enhance fuel efficiency	7, 13

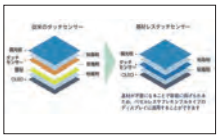
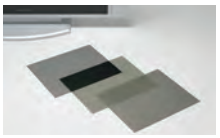
Promoting Sustainability

"Sumika Sustainable Solutions" Main Products and Technologies

Solutions		◆Features / ●Contributions	Contributions to SDGs
Reducing Environmental Impact			
Halogen-free flame-retardant elastomer		◆This elastomer is used in railway and construction materials. It does not contain halogen but is as flame retardant as a halogen-based material. ●It helps limit emissions of hazardous gases while burning.	12
High-purity alumina (for use in automotive O_2 / NOx sensors)		◆This material is used as insulation for the high-performance sensors that are needed to keep automotive emissions of NOx and other gases under mandated levels. ●It helps reduce greenhouse gas emissions.	12
Polymer OLED lighting		◆These lights can produce color over a wide temperature range, from gentle to vivid, due to the coating and printing methods ●The coating and printing methods help save energy and resources in manufacturing processes	7, 13
Biorationals (Microbial pesticides, plant growth regulators, biorational rhizosphere microbial agricultural materials)		◆Use of active ingredients derived from naturally occurring substances ●Contributes to the promotion of sustainable agriculture and the stable supply of safe and secure food	2, 12, 13
Seed treatment agents		◆Accurate treatment of seeds prior to sowing with seed treatment agents makes it possible to substantially reduce the spraying dosage and frequency of crop protection products ●Contributing to reduced environmental burdens in food production	2, 12
Binder for lithium-ion secondary batteries (Nippon A&L Inc.)		◆Use of water as the dispersion medium. ●This product reduces the consumption of organic solvents in the manufacture of electrodes for lithium-ion secondary batteries	7, 12
Temperature-sensitive film "「調光®」(CHO-CO)" (SanTerra Co., Ltd.)		◆A temperature-sensitive plastic film for greenhouse use that stays transparent and allows sunlight to enter at low temperatures while becoming opaque and scattering the sunlight high temperatures. ●Contributing to the reduction of heat damage to produce	2, 12, 13
Cobalt-coated nickel Hydroxide positive Electrode material (Tanaka Chemical Corporation)		◆Making the designing of high-output nickel hydride batteries possible ●It contributes to widespread use of environmentally friendly vehicles. Cobalt usage can also be reduced	7, 12
Polypropylene materials for aluminum metallization film (The Polyolefin Company Pte. Ltd.)		◆Polypropylene materials for aluminum metallization film, used for food packaging to extend shelf life. ●Helping extend the shelf life of food products	2
TPEs for non-painted airbag covers		◆These TPEs are for airbag covers and offer a superb, high-quality appearance even when not painted. ●These TPEs reduce the generation of VOCs during painting, which occurs mainly during the drying process.	12, 13

Promoting Sustainability

"Sumika Sustainable Solutions" Main Products and Technologies

Solutions		◆Features / ●Contributions	Contributions to SDGs
Effective Use of Resources			
SUMIKATHENE™EP, EXCELLEN™GMH, polyethylene used for refill pouches		◆For detergent packaging, pouch bags made of this polyethylene material have easy tear-open spouts for easy refilling of dispensers ●Producing less plastic waste than rigid bottles	12 RESPONSIBLE CONSUMPTION AND PRODUCTION, 13 CLIMATE ACTION
Substrate-less touch sensor (Dongwoo Fine-Chem Co., Ltd.)		◆This product performs all the functions of a touch sensor without requiring substrates such as glass and film, which are indispensable elements in conventional touch sensors. ●This product contributes to resource saving	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
Multi-purpose polypropylene sheet (Sumika Plastech Co., Ltd.)		◆Being free from paper dust concern and desirable from a viewpoint of re-use, it is used for food containers and delivery materials for electronic parts. ●Contributing to reducing greenhouse gas emissions.	12 RESPONSIBLE CONSUMPTION AND PRODUCTION, 13 CLIMATE ACTION
Effluent treatment technology using a deammoniation tower		◆Removes and recovers ammonia in effluent and recycles it for re-use. ●Contributes to reducing nitrogen discharge from a manufacturing plant.	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
Transfer technology used in the manufacture of flexible touch sensors (Dongwoo Fine-Chem Co., Ltd.)		◆Manufacturing touch sensors for use in foldable smartphones without the use of adhesive film ●Resource savings and reductions in power consumption have been achieved	12 RESPONSIBLE CONSUMPTION AND PRODUCTION, 13 CLIMATE ACTION
Glass Fiber Recycled Polypropylene (Sumika Polymer Compounds Europe)		◆This automotive material includes 60 to 100% of recycling waste polypropylene. ●Compatible with the EU circular economy action plan.	12 RESPONSIBLE CONSUMPTION AND PRODUCTION, 13 CLIMATE ACTION
MISTACE S, MISTACE S NIAGARA (Sumika Agrotech Co., Ltd.)		◆Irrigation tubes that enable uniform and efficient water spray in greenhouse cultivation. ●Enhances a great water saving effect.	6 CLEAN WATER AND SANITATION, 13 CLIMATE ACTION
Prevention of iodine oxidation in polarizing films manufacturing process		◆A technology that prevents the oxidation of iodine through optical control, used in the polarizing film manufacturing process. ●Contributes to resource saving and environmental impact mitigation by reducing the use of chemicals.	6 CLEAN WATER AND SANITATION, 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Promoting Sustainability

Participation: Officer and Employee Engagement Project to Promote Sustainability (the Sumitomo Chemical Group Global Project)

To accelerate the promotion of sustainability, the Sumitomo Chemical Group considers it essential that all executives and employees share the Corporate Philosophy, have a deep understanding of sustainability, and work together to carry out our initiatives. As an effort to engage all officers and employees and promote this "participation by all" principle, we have run the Global Project since 2014. We set up a dedicated website for the project that all Group officers and employees in Japan and overseas can access from anywhere at any time. The project is intended to spur action to promote sustainability in line with the annual shared themes within a set period of time.

FY2020 Initiatives

In fiscal 2020, the COVID-19 pandemic caused major changes in the business environments and values around the world. Amid this situation, we established the slogan "Build Back Better by JIRI RITA" with the aim of promoting sustainability during the pandemic in line with our Corporate Philosophy and stance on resolving issues confronting society through our business, which is the Group's DNA.

To enable people to take ownership of the issues that must be addressed to realize a sustainable society, we added a vocabulary list to the dedicated website so they can fully comprehend terms related to sustainability, enjoy learning about global trends and the Group's initiatives through quizzes and case studies, and post and share their efforts, endeavors, and determination to solve issues as individuals or part of a team.

■ Three Steps for Participation

1. Challenge yourself to the quiz → **2. Read case studies** → **3. Post**

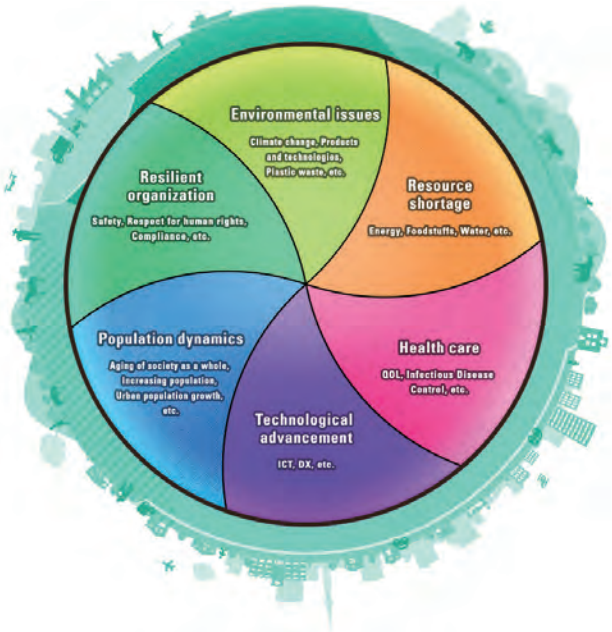
On sustainability
- Global trends
- Keywords
- The Sumitomo Chemical Group approach

On the Sumitomo Chemical Group's initiatives
- Sumitomo Chemical Group's initiatives for promoting sustainability
- Group's practice of "*Jiri-Rita Koushi-Ichinyo* (Our businesses must benefit society at large, not just our own interests)"

Introductory case studies
- Manufacturing plastic from garbage
- Shoes made from marine plastic waste
- Floating offshore wind turbines, a remarkable emerging ecological power generation technology
- A future world powered by autonomous driving technology
- Development of more transparent food supply chains –Efforts to protect the environment and respect human rights–

Etc.

■ The Six Fields



Note: Employees made posts in the six fields that were selected from global sustainability trends and our material issues that we will address as management priorities.

Promoting Sustainability

For fiscal 2020, 115 Group companies participated in the Global Project, with a total of 9,690 people taking a quiz and 18,764 posts. Each company's top management posted messages, and, having read those messages, employees posted about their own inventive ideas and endeavors. Moreover, in response to employee posts, officers post encouraging and compassionate comments. This virtuous cycle has expanded compassion and empathy within the Group.

FY2020 Participation Results

			Results
Number of participating companies*	Total		115
	By organization	Sumitomo Chemical and Group companies in Japan	53
		Group companies overseas	62
Total quiz participants	Total		9,690
	By organization	Sumitomo Chemical	2,058
		Group companies in Japan	3,044
		Group companies overseas	4,588
Number of posts	Total		18,764
	By organization	Sumitomo Chemical	9,714
		Group companies in Japan	5,298
		Group companies overseas	3,752

* Companies that participated through the website by way of at least one of the following: the top management delivered a message; officers and employees took a quiz; and officers and employees made posts.

What the Sumitomo Chemical Group has achieved through Global Project 2020

(1) Deepened understanding and heightened awareness of social issues
(2) Fostered a greater sense of unity in the face of Covid-19 crisis
(3) Increased the drive to address social issues
– Contributing "through our business"
– Taking on sustainability challenges "as my own issues"

By building on the achievements of the Global Project, with its solidarity and determination enhanced through this initiative, the Sumitomo Chemical Group will continue to work as one to create new value and help resolve major social issues with its creativity and the power of chemistry.

The Sumitomo Chemical Group (SCG) Global Project in the past

https://www.sumitomo-chem.co.jp/english/sustainability/management/promotion/globalproject/archive/

Participation in Initiatives

Basic Policy

The Sumitomo Chemical Group lists active participation in global initiatives as one of its Basic Principles for Promoting Sustainability. To promote sustainability (i.e. help realize a sustainable society through business and achieve our sustained growth), we are actively participating in initiatives because we consider it important to work with a broad range of organizations, including various international organizations, national and local governments, companies, and industry groups.

Initiative Participation Record

Our UN Global Compact Activities

The Sumitomo Chemical Group joined the UN Global Compact (UNGC) in January 2005, as the first Japanese chemical company. The UNGC is a voluntary initiative that encourages participating companies and organizations to help create a global framework for realizing sustainable growth and take action as a good member of society by demonstrating responsible and creative leadership. It outlines ten principles related to protecting human rights, abolishing unfair labor practices, adapting to the environment, and preventing corruption, and over 13,000 companies and organizations have signed on. We are one of the 37 Global Compact LEAD companies* in the world, recognized for our constant engagement with the UNGC and our business activities that comply with the UNGC's ten principles.

In fiscal 2020, we participated in two action platforms: "Business Ambition for Climate and Health" and "Peace, Justice and Strong Institutions."

In addition, at the September 2020 UN General Assembly, which coincided with the 75th anniversary of the United Nations and the 20th anniversary of the UNGC, we signed onto the UNGC's A Statement from Business Leaders for Renewed Global Cooperation. The purpose of this statement was for the world's business leaders to again emphasize the importance of international cooperation and global governance. The statement was presented to the UN Secretary-General along with a list of CEOs who signed on to it.

* As of September, 2021

Gist of a Statement from Business Leaders for Renewed Global Cooperation

- This year, coinciding with the 75th anniversary of the United Nations, the world is facing a range of crises, including the COVID-19 pandemic, climate change, and economic uncertainty.
- Against this backdrop, we as global business leaders commit to demonstrate leadership based on ethics, practice good corporate governance, and take measures to respect human rights so as to correct structural inequalities and injustices, by working together with all stakeholders in the spirit of renewed global cooperation.
- In making this commitment, we call on governments to protect human rights, ensure peace and security, and uphold the rule of law in order to ensure the prosperity of businesses, individuals and societies; to contribute to the welfare of people and the planet by strengthening international cooperation and national legal frameworks; and to enhance multilateralism and global governance so as to fight corruption, build resilience, and achieve the SDGs.

A Statement from Business Leaders for Renewed Global Cooperation on the UNGC website

https://ungc-communications-assets.s3.amazonaws.com/docs/publications/UN75_UnitingBusinessStatement.pdf

Participation in Initiatives

The Ten Principles of the UN Global Compact

Human Rights

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and
Principle 2: make sure that they are not complicit in human rights abuses.

Labour

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
Principle 4: the elimination of all forms of forced and compulsory labour;
Principle 5: the effective abolition of child labour; and
Principle 6: the elimination of discrimination in respect of employment and occupation.

Environment

Principle 7: Businesses should support a precautionary approach to environmental challenges;
Principle 8: undertake initiatives to promote greater environmental responsibility; and
Principle 9: encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

Principle10: Businesses should work against corruption in all its forms, including extortion and bribery.

Global Compact LEAD 2021 PARTICIPANT

The Ten Principles of the UN Global Compact (from the Official Website of the UN Global Compact)

https://www.unglobalcompact.org/what-is-gc/mission/principles

LEAD Company Certification Standards

- Participate in at least two UNGC action platforms, contribute to UNGC activities on an ongoing basis, and clearly demonstrate leadership in line with the Ten Principles and Global Goals
- Release an annual sustainability report detailing the progress of initiatives for the Ten Principles

Participation in the WBCSD*

The Sumitomo Chemical Group joined the World Business Council for Sustainable Development (WBCSD) in 2006 and has participated primarily in activities related to addressing climate change.

Recently, we have broadened the scope of our activities while strengthening our alliances with member companies in the chemical sector. Specifically, we participated in formulating the Chemical Sector SDG Roadmap, which organizes sustainability-related fields and issues pertaining to the chemical industry using the SDG framework with the aim of realizing sustainability.

WBCSD | Chemical Sector SDG Roadmap

https://www.wbcsd.org/Programs/People/Sustainable-Development-Goals/Resources/Chemical-Sector-SDG-Roadmap

In addition, we participated in the formulation of the WBCSD TCFD Chemical Sector Guidance. The guidance explains how to make effective disclosures using the frameworks of the TCFD recommendations for the chemical sector and details the fundamental elements needed to analyze scenarios.

WBCSD | TCFD Chemical Sector Preparer Forum Report

https://www.wbcsd.org/cfbcso

* WBCSD:
This organization was established to advocate for business sector views on sustainable development. The group provides advice to help promote sustainability at international conferences, such as the World Economic Forum, the B20 Summit, and the Conference of the Parties of the UNFCCC.

Participation in Initiatives

Initiatives for TCFD* recommendations

The Sumitomo Chemical Group uses the framework of the Task Force on Climate-related Financial Disclosures (TCFD) recommendations for disclosing information on addressing climate change and actively communicating our efforts, with the recognition that such disclosures reflect the demands of the current era.

Initiatives in line with the TCFD recommendations have only just begun globally. Going forward, through continual dialogue that is perpetuated by corporate disclosures and feedback from investors in response to said disclosures, we expect an international consensus to form about how data related to climate change should be disclosed. By participating in initiatives related to the TCFD recommendations amid this situation, we are collaborating on the creation of guidance through dialogue between investors and companies while learning best practices.

Our Efforts through Participation in External Initiatives

June 2017	Supported TCFD recommendations concurrently with their publication
From August to December 2018	Joined in the TCFD Study Group led by the Ministry of Economy, Trade and Industry (METI) This group studied the way in which Japanese companies disclose information to evaluate their strengths. December 2018: METI issued TCFD guidance
Since December 2018	Joined WBCSD TCFD Preparer Forum July 2019: WBCSD issued TCFD chemical sector guidance
Since May 2019	Joined the TCFD consortium established by Japanese industrial and financial communities In October 2019 at the TCFD Summit, Chairman Tokura introduced the Company's initiatives to seize climate-related opportunities. October 2019: TCFD consortium announced green investment guidance July 2020: TCFD consortium released TCFD Guidance 2.0 At the TCFD Summit in October 2020, the general manager of Sumitomo Chemical's Corporate Communications Department, Toshihiro Yamauchi, introduced the Company's initiatives to address climate change.

* TCFD:
This privately helmed special team was established by the Financial Stability Board, which comprises financial agencies of major countries, at the request of the G20 finance ministers and central bank governors. The task force encourages companies to make disclosures related to climate change.

An International Alliance to Solve the Plastic Waste Problem Joining the Alliance to End Plastic Waste (AEPW)

P.22 [Case] Contribution to Developing a Circular System for Plastics: Collaboration with Others

A Domestic Alliance to Solve the Marine Plastic Waste Problem Joining the Japan Clean Ocean Material Alliance (CLOMA)

P.22 [Case] Contribution to Developing a Circular System for Plastics: Collaboration with Others

Our ICCA* Activities

The Sumitomo Chemical Group participated in the leader group for energy and climate change of the International Council of Chemical Associations (ICCA). We contributed to joint international research related to helping reduce GHG emissions through chemical products and technologies. We also worked to promote the spread of the results of the research.

In addition, we also participate in the leader group for chemical substance policy and health. We conduct surveys related to regulatory trends around the world and mechanisms for relaying information on chemical substances contained in products. We also cooperate in promoting widespread product stewardship in each participating country, focusing on those in Asia. Furthermore, we participated in a task force on plastic waste problems and in discussions based on sound science related to problems surrounding microplastics and plastic substitutes.

* ICCA:
This organization was established to harmonize the strategies of chemical industry associations and councils around the world through dialogue and cooperation. As the principal representative of the chemical industry, ICCA presents opinions to international organizations about key topics shared by its members and various activities of the chemical industry.

Participation in Initiatives

Our WEPs Activities

The "Women's Empowerment Principles" (WEPs) are seven principles formulated collaboratively in March 2010 by the United Nations Global Compact (UNGC), which is a voluntary commitment framework between companies and the UN, and the United Nations Development Fund for Women (UNIFEM, now UN Women). With companies taking proactive steps and positioning gender equality and female empowerment at the core of management, the expectation is that the WEPs will be applied internationally to promote the economic empowerment of women.

We Support

WOMEN'S EMPOWERMENT PRINCIPLES
EQUALITY MEANS BUSINESS
UN WOMEN
UNITED NATIONS GLOBAL COMPACT
www.weprinciples.org

The Women's Empowerment Principles

(1) Establish high-level corporate leadership for gender equality
(2) Treat all women and men fairly at work – respect and support human rights and nondiscrimination
(3) Ensure the health, safety and well-being of all women and men workers
(4) Promote education, training and professional development for women
(5) Implement enterprise development, supply chain and marketing practices that empower women
(6) Promote equality through community initiatives and advocacy
(7) Measure and publicly report on progress to achieve gender equality

In 2013, the Sumitomo Chemical Group (under the President's name) endorsed the "Women's Empowerment Principles" (WEPs). Since 2015, we have participated in the annual WEPs forum held annually at the UN Headquarters in New York.

Furthermore, we have participated in the Global Compact Network Japan's (GCNJ (UNGC's local network)) WEPs Subcommittee as a leading company since its founding in fiscal 2016. Since fiscal 2017, we have conducted activities and messaging to support the specific initiatives of each participating company, referencing the seven WEPs to address issues related to empowering women in the workplace. Through these efforts, we are actively enhancing the international competitiveness of GCNJ signatory companies and thereby helping raise the bar for gender equality in Japanese society.

■ GCNJ's WEPs Subcommittee Meetings Attended by the Company: Fiscal 2020 Activities

Meeting	Date	Theme	Lecturer
1	July 10, 2020 (Friday)	Latest trends in WEPs	Sachiyo Onishi Professor, College of Law, Ritsumeikan University
2	October 16, 2020 (Friday)	Diversity from a business administration perspective	Akie Iriyama Professor, Waseda Business School (Graduate School of Business and Finance), Waseda University
3	December 4, 2020 (Friday)	The relationship between unconscious bias and women's empowerment	Sook Ja Park Representative, Appassionata, Inc.
4	February 18, 2021 (Thursday)	Expectations for women's perspectives and roles in safety, emergency preparedness, and disaster mitigation	Sachiko Asano Co-Representative, Training Center for Gender & Disaster Risk Reduction
5	April 23, 2021 (Friday)	About women's empowerment	Atsuko Muraki Former Vice Minister of Health, Labour and Welfare; visiting professor, Tsuda University

Note: Conducted online due to the COVID-19 pandemic

Communication with Stakeholders

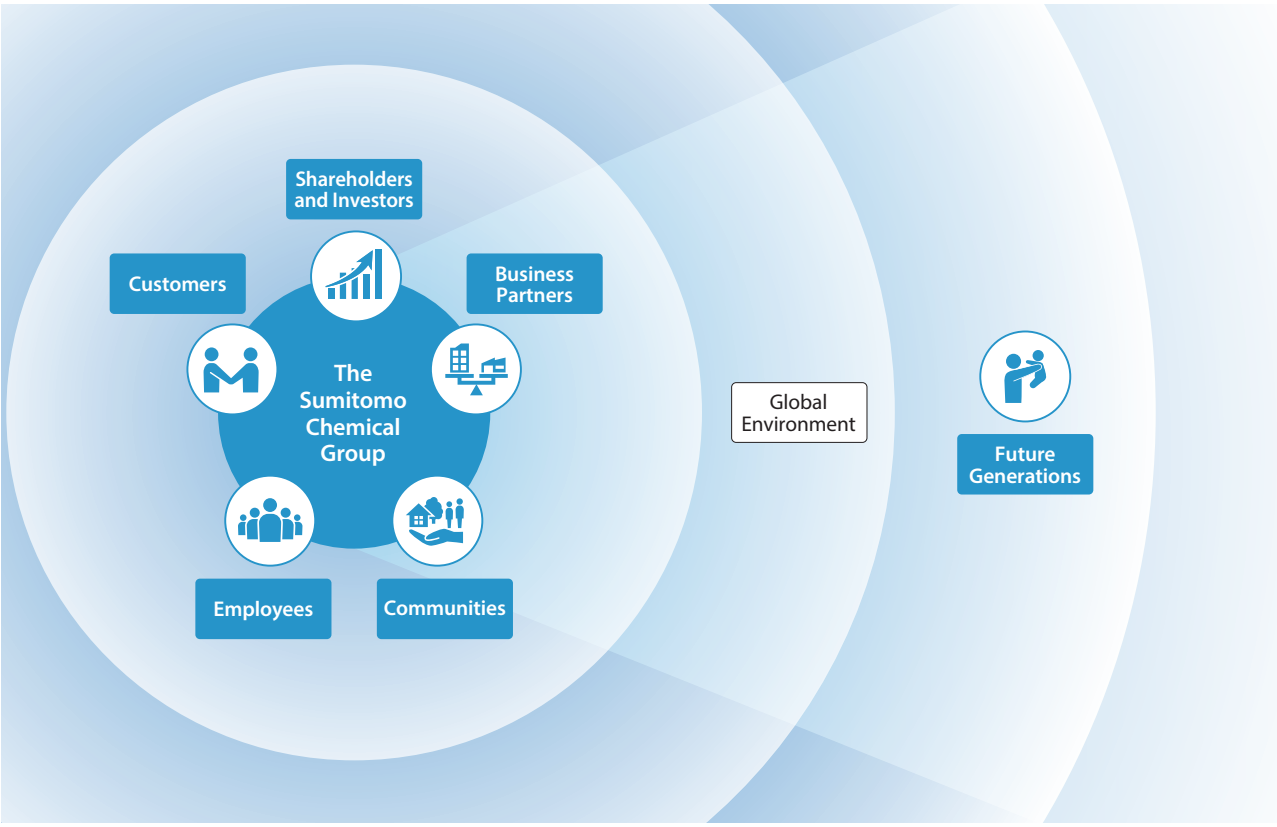
Basic Policy

Principle 4 of the Sumitomo Chemical Group's Basic Principles for Promoting Sustainability states, "We are committed to work closely with various stakeholders through promoting spontaneous disclosure of information and open dialogue on the targets of our sustainability promotion initiatives and the progress of their implementation." Our efforts to communicate with shareholders based on this principle fall into the following two categories.

(1) Disclosures	(2) Dialogues
We disclose necessary information and report on the progress of our various initiatives. We also make an analysis of the needs of society as appropriate and review external assessment results in order to improve our communication and ensure proper disclosure.	In addition to proactive disclosure, we actively engage in two-way communication or dialogue with various stakeholders. Based on the feedback provided in dialogues, we work to improve our communication and implement new initiatives.

We will continue to fulfill our responsibility to all stakeholders on the two fronts of disclosure and dialogue by enhancing our communication through a variety of efforts. We will also align our future generations with a sustainable society, paying attention to the international community and global environment.

■ Stakeholder Engagement



Communication with Stakeholders

Opportunities to Communicate with Stakeholders

Stakeholders	Sumitomo Chemical Group's Responsibility	Measures
Shareholders and Investors	We communicate regularly, effectively and strategically with shareholders and investors with regard to management policies, business strategies, and earnings trends. We fulfill our accountability to shareholders to maintain and improve the market's trust in the Sumitomo Chemical Group, while also promoting the market's accurate understanding of the Company with a view to a fair market valuation of the Company's shares and the improvement of our corporate value.	• General meetings of shareholders • Corporate strategy briefing meetings and business strategy briefing meetings • Conference calls • Briefing meetings for individual investors • Interviews with investors and analysts • Investor relations publications, including *Annual Report*, *Investors' Handbook* and *Sustainability Data Book* • Disclosure via the Company's website
Customers	We supply high-quality products and services that satisfy customers' needs and ensure safety in use to establish long-term relations with customers that are built on trust.	• Customer support including communication in sales activities and quality assurance • Providing information via the Company's website and other communication media • Customer support by the customer support center
Business Partners	We are committed to building mutually-beneficial sound relations with business partners based on our Basic Procurement Principles. We also conduct fair, equitable and transparent transactions, while also encouraging our business partners to engage in sustainability efforts, in order to promote sustainable procurement across our supply chain.	• Communication through purchasing activities • Monitoring and providing feedback by using our *Sustainable Procurement Guidebook* and *check sheets* • A dedicated team to answer inquiries from business partners
Employees	We are committed to ensuring employees' health and respecting employee diversity, while also devoting constant effort to human resource development and the improvement of a workplace environment so that individual employees can realize their full potential. The Company is also committed to maintaining its good relationship with the Sumitomo Chemical labor union built on mutual understanding and trust.	• Central labor-management meetings and operation-site labor-management meetings • Labor-management committee for the promotion of work-life balance • Various training programs • Communication via the Company's internal newsletters and intranet
Communities	We work to help solve various global issues through cooperation on international initiatives as well as to achieve mutual prosperity with local communities by holding two-way dialogues and enhancing disclosure.	• Participating in international initiatives (Including UNGC, WBCSD and ICCA) • Providing information mainly through the Company's website, *Annual Report*, *Investors' Handbook*, *Sustainability Data Book* and Social media • Holding dialogues with local communities • Social Contribution Activities (Including Support for Education in Africa, Holding Science workshop classes and Local cleanup activities)

Communication with Stakeholders

External Evaluation

FTSE4Good Index Series

This index, designed by FTSE Russell, a global index provider, consists of companies demonstrating strong Environmental, Social and Governance (ESG) practices selected from among all leading global companies.

FTSE Blossom Japan Index

This index, designed by FTSE Russell, a global index provider, consists of Japanese companies demonstrating strong ESG practices. It is designed so as to make the industry segment allocation similar to that of the Japanese stock market.

MSCI Japan ESG Select Leaders Index https://www.msci.com/esg-investing

This index is designed by MSCI, a provider of various tools to support institutional investors around the world in their investment decision making. It selects companies demonstrating strong ESG practices from component issues of the MSCI Japan IMI Top 500 Index.

MSCI Japan Empowering Women Index (WIN)

This index is designed by MSCI, a provider of various tools to support institutional investors around the world in their investment decision making. It selects companies demonstrating strong practices in promoting women's participation and advancement.

S&P/JPX Carbon Efficient Index

This index is designed by S&P Dow Jones Index, and selects companies from the Tokyo Stock Price Index (TOPIX). The better the companies are in their demonstration of higher carbon efficiency and disclosure of environmental information, the higher their component percentages are in this index. Our decile rating is 3, and the disclosure status is "disclosed."

Gold Medal in EcoVadis Sustainability Assessment

Sumitomo Chemical has received a Gold medal in a sustainability assessment by EcoVadis for the second consecutive year, an award recognizing companies whose performance is in the top 5% of all companies rated. Established in 2007, EcoVadis is a performance rating agency focused on corporate environmental, social, and governance (ESG) practices, working to help companies improve their environmental and social practices through their global supply chains. The agency has assessed about 75,000 companies from 160 countries across 200 business sectors in terms of corporate policies, initiatives, and achievements in four areas: Environment, Labor & Human Rights, Ethics, and Sustainable Procurement.

CDP "Climate Change A List 2020", CDP "Water Security A List 2020"

Sumitomo Chemical has been named on CDP's "Climate Change A List 2020" and "Water Security A List 2020" as a company recognized for its particularly excellent activities to address climate change and water security, including target setting, actions and transparency. The Company has been named on the Climate A list, the highest rating given by CDP, for the third consecutive year, and on the Water Security A list for the first time.

Established in 2000, CDP (formerly the Carbon Disclosure Project) is an international non-governmental organization that incentivizes companies and governments to become leaders in reducing greenhouse gas emissions, managing water resources, and conserving forests. On behalf of institutional investors around the world, CDP collects information about environmental efforts of leading companies and scores them. Of 9,600 companies that disclosed their environmental efforts to CDP, 64 global companies and 17 Japanese companies received the highest ratings in terms of actions for both climate change and water security.

Nikkei Annual Report Awards 2020, Outstanding Performance

Sumitomo Chemical's integrated report, Annual Report 2020, received an Award of Excellence in the Nikkei Annual Report Awards 2020. It was the fourth time to receive the same award, following last year. Nikkei Annual Report Awards is an awards program that Nikkei Inc. has organized every year since 1998 for the purpose of raising the quality and encouraging the publication of annual reports published by Japanese companies. Companies with the highest scores by the screening of institutional investors are recognized. For fiscal 2020, which was the 23rd awards program, 132 companies applied, and one company was selected for the First Prize, three for the Second Prize, three for the Special Award, and fourteen for the Award of Excellence.

The 24th Environmental Communication Awards, the Grand Prize for Environmental Report

Our Annual Report 2020 and Sustainability Data Book 2020 won the Grand Prize for Environmental Reports at the 24th Environmental Communication Awards. This is an accreditation system to promote corporate initiatives for environmental management and communications while improving the quality of information disclosure on the environment. For the 24th Environmental Communication Awards, 147 reports were submitted for consideration, and 26 reports were selected to be awarded the Grand Prize.

<Certification>

2021 Health and Productivity Management Awards – White 500

P.184 Healthcare

Next-generation Support Certification Logo

P.179 Work-Life Balance

Acquired registration under the Whistleblowing Compliance Management System

P.77 Compliance

The Sumitomo Chemical Group's Contribution to the SDGs

We at the Sumitomo Chemical Group are committed to contribute through our business to establishing a sustainable society while also achieving our sustained growth. We have set out our guiding principles for efforts toward these goals in the Basic Principles for Promoting Sustainability. In these principles, we affirm our commitment to helping resolve critical issues facing the international community.

Sumitomo Chemical's Sustainability Efforts and the SDGs

In Principle 2 of the Basic Principles for Promoting Sustainability, we express the Group's commitment to abiding by international rules related to sustainability and helping resolve vital issues facing the international community. In particular, we pledge to promote efforts toward achieving the United Nations Sustainable Development Goals (SDGs).

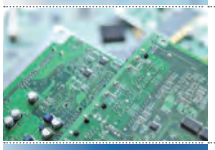
P.14 Basic Principles for Promoting Sustainability

When identifying the material issues that Sumitomo Chemical addresses as management priorities, we referred to the SDGs as a guideline for surveying social needs and issues. In addition, with the aim of aligning our efforts with the contribution to the achievement of the SDGs, we have set the key performance indicators (KPIs) for our material issues for social value creation based on the SDG targets, which comprises 169 items.

P.16 What Sumitomo Chemical Group Strives to Be
P.17 Material Issues to Be Addressed as Management Priorities
P.23 Key Performance Indicator (KPI)

Specific SDGs for Each Business Sector to Focus on

The Sumitomo Chemical Group is working on various efforts in order to help realize a sustainable society through innovation and business and by leveraging its strengths as a diversified chemical company.

Business Sector		Primary Focus SDGs
Petrochemicals & Plastics		7 Affordable and Clean Energy; 9 Industry, Innovation and Infrastructure; 12 Responsible Consumption and Production
Energy & Functional Materials		7 Affordable and Clean Energy; 8 Decent Work and Economic Growth; 13 Climate Action
IT-related Chemicals		8 Decent Work and Economic Growth; 9 Industry, Innovation and Infrastructure; 11 Sustainable Cities and Communities; 12 Responsible Consumption and Production; 17 Partnerships for the Goals
Health & Crop Sciences		2 Zero Hunger; 3 Good Health and Well-Being; 9 Industry, Innovation and Infrastructure; 12 Responsible Consumption and Production; 13 Climate Action; 17 Partnerships for the Goals
Pharmaceuticals		3 Good Health and Well-Being; 8 Decent Work and Economic Growth; 9 Industry, Innovation and Infrastructure; 12 Responsible Consumption and Production; 16 Peace, Justice and Strong Institutions; 17 Partnerships for the Goals

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https://www.sumitomo-chem.co.jp/english/ir/library/annual_report/files/docs/ar2021e_14.pdf

The Sumitomo Chemical Group's Contribution to the SDGs

The SDGs as the International Community's Shared Goals and the Sumitomo Chemical Group's Global Project

In an effort to promote group-wide engagement in promotion of sustainability, we have organized the "Sumitomo Chemical Group Global Project," an annual in-house initiative using a dedicated website. This provides an opportunity for each Group officer and employee in Japan and overseas to think about issues facing society and post on the website their ideas about efforts to help resolve them. We made the SDGs a central theme for the project for a period of fiscal 2016 to fiscal 2018 to deepen our understanding of the connection between the common goals set by the international community and what each one of us do at work.

The Sumitomo Chemical Group (SCG) Global Project in the past

https://www.sumitomo-chem.co.jp/english/sustainability/management/promotion/globalproject/archive/

Recognition of the Company's Efforts toward Achieving the SDGs

Sumitomo Chemical was granted the Award of Deputy Chief (the Minister for Foreign Affairs) at the first Japan SDGs Award ceremony held in 2018. The Japan SDGs Award is conferred by the Sustainable Development Goals (SDGs) Promotion Headquarters—a body established in Japan's Cabinet and comprising all Ministers of the country—in recognition of those companies and organizations engaged in important initiatives toward achieving the SDGs. The Award recognized that our efforts could serve as a role model in Japan and overseas, hoping that they would be duplicated by other companies. It also highly valued the Company's contribution over many years to Africa and its advancement in terms of economy, society and the environment through its Olyset™ Net business, including creating job opportunities by local production of the mosquito net, improving the working environment for women, and constructing schools to support education.

Sumitomo Chemical Receives the Deputy Chief's Award (by Minister for Foreign Affairs) of the First Japan SDGs Award

https://www.sumitomo-chem.co.jp/english/news/detail/20180105.html

Governance

Contributing to
the SDGs through Governance

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Corporate Governance

Sumitomo Chemical has long dedicated itself to improving its corporate governance, and has undertaken a number of initiatives to further that end, including implementing the Corporate Governance Code. The company also makes continual improvements to ensure that the company's governance structures serve their appropriate functions, including with respect to executive nomination and remuneration, and that the Board of Directors is highly effective, with the aim of further improving corporate governance.

Basic Stance

Sumitomo Chemical cherishes deeply the Sumitomo Spirit which has been passed down through generations over nearly 400 years, the basic teaching of which is, among others, not to seek its own interests alone, but to contribute to society through its business activities. In accord with this business credo, the company strives to take on challenges constantly of creating new value by capitalizing on its proprietary technologies toward achieving the company's sustained growth while at the same time cultivating corporate culture full of vigor and growing as a company that earns trust from the public at large. Recognizing that highly effective corporate governance is vital to attaining these ends, the company keeps working to further enhance its corporate governance in accordance with the following policies and principles, centering particularly on closer cooperation with shareholders and various other stakeholders, faster decision-making, proper oversight of business execution, enhanced systems of compliance and internal control, and active dialogue with stakeholders.

- Sumitomo Chemical not only shall respect the rights of shareholders, but shall endeavor to provide an environment where shareholders can exercise their rights smoothly and also to ensure the effectively equal treatment of shareholders.
- Recognizing that cooperation with various stakeholders, including shareholders, employees, customers, business partners, creditors, and local communities, is essential to sustained growth, Sumitomo Chemical shall proactively work to fulfill its corporate social responsibility and strive to cultivate the corporate culture of a company that can be trusted by society.
- As part of efforts to build a foundation for constructive dialogue with stakeholders, Sumitomo Chemical shall endeavor to provide information that is highly reliable and useful to recipients.
- Sumitomo Chemical's Board of Directors shall fulfill its role and mission properly, based on their fiduciary responsibilities and accountability to shareholders and recognizing the important role of Independent Outside Directors & Auditors, through such measures as presenting appropriate corporate management policies and business strategies that have taken into account changing socioeconomic conditions, and conducting highly effective oversight over the execution of business.
- Sumitomo Chemical shall endeavor to promote constructive dialogue with shareholders with the aim of seeking to attain the company's sustained growth and to enhance corporate value in the medium to long term.

Sumitomo Chemical Corporate Governance Guidelines

https://www.sumitomo-chem.co.jp/english/company/files/docs/governance_pdf_01.pdf

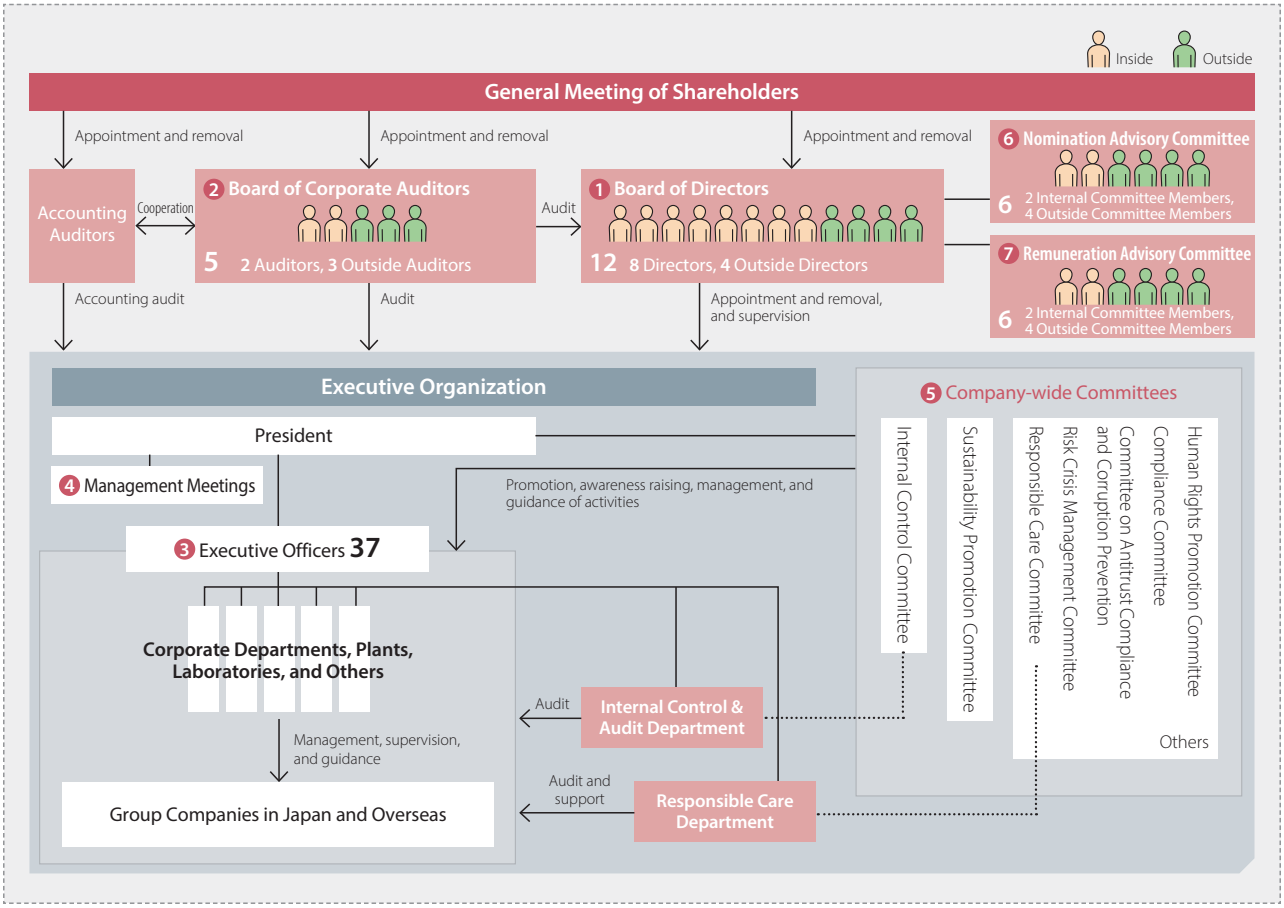
Measures to Date for Strengthening Corporate Governance

Date		Major Initiatives	Board Composition	Appointment of Board Members	Executive Remuneration	Other
2003	June	Introduced Executive Officer system (reduced number of Directors from 25 to 10)	●			●
	July	Established Compliance Committee				●
2004	June	Eliminated system of retirement benefits for Directors and Corporate Auditors			●	
2007	May	Established Internal Control Committee				●
	September	Established Remuneration Advisory Group			●	
2010	September	Established Nomination Advisory Group		●		
2011	November	Drew up standards for appointment of independent outside directors	●	●		
2012	June	Appointed 1 outside director	●			
2015	June	Selected 3 outside directors (increased by 2)	●			
	October	Established Remuneration Advisory Committee in place of Remuneration Advisory Group			●	
		Established Nomination Advisory Committee in place of Director Nomination Advisory Group		●		
2016	December	Formulated Sumitomo Chemical Corporate Governance Guidelines				●
2018	June	Selected 4 outside directors (including one woman) (increased by 1)	●			
2021	June	Board of Directors consisting of more than 1/3 Outside Directors	●			

Corporate Governance

Current Corporate Governance Organization

■ Corporate Governance Organization (As of July 1, 2021)



Structure

1 Board of Directors

The Sumitomo Chemical Board of Directors decides important matters concerning the company's management, including management policy and business strategies, in accordance with the law, the Articles of Incorporation, and the Board of Directors' own rules. It also receives reports from Directors and others on the performance of duties, the financial situation, and operating results, and oversees the performance of duties by each Director.

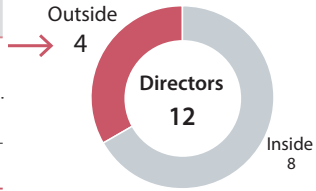
It also analyzes and assesses the effectiveness of the Board of Directors, and follows up on the results to ensure and improve effectiveness. In accordance with the Nomination Advisory Committee's advice, candidates for Director are nominated by the Board of Directors and are elected once a year at the General Meeting of Shareholders.

■ Overview of the Board of Directors

Chairperson	Chairman of the Board	The Chairman of the Board does not concurrently serve as Executive Officer.
Number of Persons	12	Outside Directors make up one third or more of the Board of Directors.
Frequency	Monthly in principle	Special meetings of the Board of Directors are convened as needed.
The Term of Office of Directors	One year	The term of office of Directors is one year, in order to establish clear administrative responsibility and roles for Directors.

■ Breakdown of 12 Directors

	Male	Female	Total
Inside	8	0	8
Outside*	3	1	4
Total	11	1	12



* Independent Outside Directors having no conflicts of interest with general shareholders

Corporate Governance

Major Agendas Discussed at Meetings of the Board of Directors in Fiscal 2020

- Financial results, dividends, financing
- Management strategy, sustainability, assessment of the effectiveness of the Board of Directors
- R&D, digital innovation, IT promotion
- Internal controls, responsible care, risk management, compliance
- Nomination, remuneration, important personnel changes, recruitment and training of human resources
- Auditors, accounting auditors
- Important investments
  - Acquisition of the South American business of Nufarm
  - Strategic alliance with Roivant
  - Projects relating to Petro Rabigh etc.
- Other
  - Important matters for operating businesses of listed subsidiaries
  - Carbon neutral strategies
  - Plastic resource circulation, etc. etc.

② Board of Corporate Auditors

We have a Corporate Auditor system, with a Board of Corporate Auditors consisting of five Corporate Auditors. The Corporate Auditors and the Board of Corporate Auditors play a vital role in our corporate governance by auditing the performance of duties by Directors in accordance with the law and the Articles of Incorporation. The Board of Corporate Auditors meets monthly as a rule and strives to obtain timely information, including important compliance-related information.

Standing Corporate Auditors and Outside Auditors attend meetings of the Board of Directors and the Board of Corporate Auditors. In conducting their audits, they receive reports and explanations as needed from the Internal Control & Audit Department, operating divisions, and accounting auditors. In addition, Standing Corporate Auditors attend meetings of the Internal Control Committee and other important company meetings.

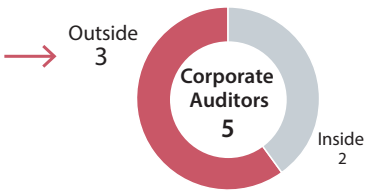
The results of audits and the objective views of Outside Auditors are appropriately reflected in internal audits, corporate auditors' audits, and accounting audits, so as to raise the effectiveness and efficiency of auditing.

The Corporate Auditors' Office has been established with staff dedicated to providing assistance in auditing functions under the direction of Corporate Auditors.

Breakdown of 5 Corporate Auditors

Inside	2
Outside*	3

* Independent Corporate Auditors having no conflicts of interest with general shareholders



Management Organizations for Decision-making, Execution, and Auditing

③ Executive Officers

We have appointed Executive Officers to expedite the implementation of business operations. Executive Officers are responsible for carrying out operations in accordance with the policies adopted by the Board of Directors. The term of office for Executive Officers is one year.

Breakdown of 37 Executive Officers

	Male	Female	Total
Japanese	32	1	33
Non-Japanese	4	0	4
Total	36	1	37

Corporate Governance

4 Management Meetings

Management Meetings support decision making by management as an institution for debating such important issues as corporate strategy and capital investment, including matters to be deliberated in the Board of Directors and reports to be made to the Board. Management Meetings consist of the Executive Officers who are in charge of or who supervise key management functions, the Standing Corporate Auditors, and the Chairman of the Board. In principle, the meetings are held 24 times a year.

5 Company-wide Committees

We have established internal meetings (committees) to deliberate on important matters concerning the management of the Company and the Group from a broad and diverse range of viewpoints. The content of these meetings is reported to the Board of Directors as needed, and the committees receive instructions from the Board of Directors in an effort to enhance business execution and oversight functions. Several of these committees are attended by the Standing Corporate Auditors, who serve as observers, including the Internal Control Committee, the Compliance Committee, and the Responsible Care Committee.

We regard the promotion of sustainability as a core issue for the entire Group. In 2018, we established the Sustainability Promotion Committee to further strengthen our sustainability initiatives. The Responsible Care Committee also examines specific measures to address climate change and other environmental issues. To further promote initiatives related to respect for human rights, the Human Rights Promotion Committee was established in fiscal 2019.

Overview of Committees and Number of Meetings

Name	Details	Number of Meetings Held in FY2020
Internal Control Committee	By debating various measures to build or expand internal control systems, and monitoring their implementation status, this committee is intended to continually improve the internal control systems of the Sumitomo Chemical Group.	3
Sustainability Promotion Committee	This committee suggests measures to accelerate the Sumitomo Chemical Group's contributions to sustainability, taking in a comprehensive perspective on risks and opportunities with regard to medium- to long-term issues in the environment and society.	2
Responsible Care Committee	This committee formulates annual policies, medium-term plans, and specific measures concerning responsible care (safety, health, environment, and quality), including climate change issues.	1
Risk and Crisis Management Committee	This committee deliberates on policies for specific risks and crises, such as earthquakes, wind and flood damage caused by extreme weather, pandemics, and breakdowns in public security.	7*
Compliance Committee	This committee deliberates on the Group's compliance policies and action plans, and the status of the operation of the compliance system, including responses to internal reports and the results of activities.	1
Human Rights Promotion Committee	This committee promotes increasing awareness of human rights issues, and drafts and executes policies to respect human rights in the entire value chain including Sumitomo Chemical Group.	1

Note: Each committee separately held subcommittee meetings on specific important topics and secretariat meetings.
* The number of meetings increased as we deliberated on preventive measures for the Covid-19 pandemic.

Corporate Governance

Executive Nomination and Remuneration

6 Nomination Advisory Committee

The Nomination Advisory Committee was established in October 2015 to act as an advisory body to the Board of Directors on the selection of senior management* and on the appointment of directors and auditors. The committee is made up of Outside Directors, the Chairman of the Board, and the President. Regular meetings are held annually and ad hoc meetings are convened as needed. With a majority of members being Outside Directors, the committee advises the Board of Directors on the appointment of officers, with the aim of ensuring more transparency, fairness, and openness in the process of appointing officers and bringing greater clarity to the process.

* Senior management means Executive Officers above Senior Managing Executive Officer, and Managing Executive Officers who are immediately under the President, supervising certain functions.

7 Remuneration Advisory Committee

The Remuneration Advisory Committee was established in October 2015, as an advisory body to the Board of Directors on the remuneration system, remuneration levels, and other related matters, for Directors and Executive Officers. The committee is made up of Outside Directors, the Chairman of the Board, and the President. It holds regular meetings annually and convenes ad hoc meetings as needed. With a majority of members being Outside Directors, the committee advises the Board of Directors in deciding the executive officer remuneration system and levels, with the aim of further increasing transparency and fairness.

Directors' and Corporate Auditors' Remuneration in Fiscal 2020

(Millions of yen)

Title	Number of people	Amount of Remuneration and Other Compensation	Amounts of Remuneration and Other Compensation by Type	
			Basic Compensation (Fixed Remuneration)	Bonuses (Performance-linked Remuneration)
Directors (Of which, Outside Directors)	14 (4)	702 (68)	606 (60)	96 (8)
Corporate Auditors (Of which, Corporate Outside Auditors)	5 (3)	116 (37)	116 (37)	—
Total	19	818	722	96

Note: The numbers of people and the amounts of remuneration and other compensation listed above include one Director who retired during this fiscal year.

Composition of the Nomination Advisory Committee and the Remuneration Advisory Committee and Attendance Status (Meetings Attended / Meetings Held) in Fiscal 2020

		Nomination Advisory Committee	Remuneration Advisory Committee
Chairman of the Board	Masakazu Tokura (Chairman)	2/2 time (100%)	3/3 times (100%)
Representative Director & President	Keiichi Iwata	2/2 time (100%)	3/3 times (100%)
Outside Director	Koichi Ikeda	2/2 time (100%)	3/3 times (100%)
Outside Director	Hiroshi Tomono	2/2 time (100%)	3/3 times (100%)
Outside Director	Motoshige Itoh	2/2 time (100%)	3/3 times (100%)
Outside Director	Atsuko Muraki	2/2 time (100%)	3/3 times (100%)

Activities of the Advisory Committees in Fiscal 2020

Nomination Advisory Committee	• Deliberation on officers for fiscal 2021
Remuneration Advisory Committee	• Deliberation on basic remuneration • Deliberation on the bonuses of officers

Corporate Governance

Policies and Procedures for Reshuffling Senior Management and Nominating Candidates for Directors and Corporate Auditors

Appointment Policy

- Performance, knowledge, experience, personality, and the insight of a candidate are comprehensively considered from the standpoint of having "the right person in the right place," as well as ensuring a proper and prompt decision-making process, so as to select a person suitable for the respective duties.
- According to the criteria set forth by the company, the person who has reached a certain age set for retirement will resign, in principle, upon completion of his or her tenure.
- For the nomination of candidates for outside directors and outside auditors, if a candidate also serves as an executive officer of other listed companies, the number of these companies must be less than five, including our company. This rule is to ensure that the candidate can properly fulfill his/her responsibility as our Director or Corporate Auditor.

Appointment Procedures

Candidates Selected by Representative Directors	● Representative Directors select candidates suitable for the positions of senior management, Directors and Corporate Auditors in accordance with the above Policies.
Discussion by the Nomination Advisory Committee	● The results of the nomination will be deliberated at the Nomination Advisory Committee, and recommended to the Board of Directors.
Decision by the Board of Directors	● The Board of Directors will deliberate based on the advice and make a decision.

Dismissal Policy and Procedures

- The Board of Directors will deliberate and decide on its response if senior management commits a wrongful, inappropriate, or treasonous act, or if there is a cause that is deemed unsuitable to be committed by a member of senior management.

Remuneration*

1. Basic Policy for Remunerations of Directors, etc.

(1) The remunerations of senior management and directors (hereinafter "Directors, etc.") shall consist of basic compensation and bonuses.

(2) Basic compensation is designed to serve as an incentive for the actions of Directors, etc. to contribute to the Company's sustainable growth, rather than aiming for short-term or sub-optimal effects.

(3) The amount of bonuses shall largely reflect the Company's consolidated financial results for a fiscal year in order to heighten incentives to achieve the annual targets of business plans.

(4) The remuneration shall be set at levels which are designed to be objectively competitive to attract and retain outstanding talent while taking into consideration such factors as the scale and content of the Company's business. Based on surveys by a third-party organization and other materials, such levels shall be checked annually whether or not to be objectively appropriate.

2. Mechanisms of Each Remuneration Element

(1) Basic Compensation

The level of basic compensation shall be determined based on the policy described in section 1(4) above. While basic compensation for each year shall be fixed, the Company will adopt a mechanism where the Basic Compensation level would be changed in the event where the Company's position has changed in terms of "the company's size", "earnings capacity", and "outside evaluations" from a comprehensive and medium- to long-term perspective. As main indicators for determining the change in the Company position, the Company will apply the following: ① in terms of "the company's size," sales revenue, total assets and market capitalization, ② in terms of "earnings capacity," net income (attributable to the parent company), ROE, ROI and D/E ratio, and ③ in terms of "outside evaluations," credit ratings and the ESG index selected by the GPIF (Government Pension Investment Fund). The amounts to be paid to each person will be determined in accordance with the base amount set by each position.

(2) Bonuses

Bonuses shall be paid on the condition that performance for that fiscal year exceeds a particular level and shall be determined based on the bonus calculation formula (performance indicator x coefficient). In order to reflect the current earnings capacity of the relevant business year (including financial activities) to the amount of bonuses, the Company will apply the combined value of consolidated core operating profit and financial profit and loss to the performance indicator concerning the bonus calculation formula. In addition, the Company will set the coefficient of the calculation formula so that it will get larger as the position of a person gets higher.

* Remunerations of Executive Officers are determined in the same manner.

Corporate Governance

(3) Percentages of Fixed Remuneration (Basic Compensation) and Performance-linked Remuneration (Bonuses)

The Company will design the bonus calculation formula so that the bonuses of Directors (excluding Outside Directors) accounts for roughly 30% of the remuneration when the consolidated performance goal (core operating profit) for the latest fiscal year of the mid-term management plan (fiscal years 2019 to 2021) is achieved.

■ Conceptual Diagram of the Remuneration of Directors and Remuneration Ratios for FY2020 (Excluding Outside Directors)

	Fixed Remuneration	Performance-linked Remuneration
Corporate Business Plan (FY2019-2021) Composition ratio of Directors' remuneration at the time the goal is achieved in the final year	Basic Compensation About 70%	Bonuses About 30%
Composition ratio of remuneration for FY2020	Basic Compensation 86%	Bonuses 14%

Based on the factors for determination described below, the company will change the amount of remuneration when it is determinable that the company's position has changed from a comprehensive and medium- to long-term perspective.

Factors for Determination	Major Indicators
Company's size	Sales revenue
	Total assets
	Market capitalization
Earnings capacity	Current income (belonging to the parent company)
	ROE
	ROI
	D/E ratio
Outside evaluations	Credit ratings
	ESG index selected by GPIF

Note: The amount to be paid to each person will be determined by each position.

The amount of bonuses will be determined by the calculation formula based on the following consolidated performance indicator.

Consolidated performance indicator	Core operating profit plus financial profit and loss
Calculation formula	Consolidated performance indicator × Coefficient*

* The Company will arrange so that the higher the position, the larger the coefficient will be.

Note: If a consolidated performance indicator does not exceed a particular level, bonuses will not be paid.

3. Procedures for Determining Remuneration of Directors, etc.

The remuneration amount of Directors shall be set at a level not higher than the upper limit of a total remuneration prescribed by resolution of the 125th General Meeting of Shareholders, held on June 23, 2006 (i.e. 1 billion yen or less per year).

The Board of Directors shall deliberate on and decide the method of determining remunerations of Directors, etc., based on the advice from the Remuneration Advisory Committee. Furthermore, the specific amount of remuneration for each Directors etc. shall be determined by the Director and Chairman, Masakazu Tokura, authorized by the Board of Directors, based on the standard advised from the Remuneration Advisory Committee, which is a consultative body of the Board of Directors. This is because the Company believes that determining the specific amount of remuneration for each Director, etc. does not fit into the discussions and deliberations of the Board of Directors, and it is more appropriate for Director and Chairman, who serves as the chairman of the Remuneration Advisory Committee and the chairman of the Board of Directors and is in a position to overview the entire Company, to make decisions based on the purpose of policies for determining compensation, etc. and deliberations and opinions of the Remuneration Advisory Committee. To ensure that the authority to determine the amount of remuneration for each Director, etc. is appropriately exercised by Director and Chairman, the Board of Directors' policies provide that Director and Chairman shall determine the amount of individual remuneration for Directors based on the standard suggested by the Remuneration Advisory Committee as being consistent with the Company's policy for determining remuneration, etc. As Director and Chairman determines the individual remuneration amount based on this standard, the Board of Directors has concluded that the content of the individual remuneration is in line with the determination policy.

Corporate Governance

Efforts to Substantively Strengthen Corporate Governance

Changes in the Method of Operation of the Board of Directors

In FY2015, Sumitomo Chemical drastically reconsidered its various policies relating to the method of operation for the Board of Directors and corporate governance with the major aims of further strengthening the monitoring functions of the Board and further improving the transparency and objectivity of management, among other goals. At the time, a great deal of emphasis was placed on maximizing the use of the functions of Outside Directors and Auditors, so a variety of measures were considered to achieve this, centered on the thought that it would be essential to address the information asymmetry between internal executives and Outside Directors and Auditors. As a result of the numerous improvements made each year since then, meetings of the Board of Directors, as well as the operation of various related meetings before and afterwards, follow the procedures laid out in the table below.

A few days prior to the Board of Directors meeting

Advance briefing

Expanded Advance Briefings for Outside Directors and Auditors, Organic Coordination with the Board of Directors
- The roles of advance briefings and meetings of the Board of Directors have been clarified, ensuring sufficient time for discussion in the Board of Directors meeting
- The content of advance briefings, including points of discussion, are reflected in the deliberations of the Board of Directors

Day of the Board of Directors meeting

Board of Directors <Standard flow>

9:00	Resolutions
10:00	Reports • Head office monthly report • Business sector monthly report • Report on important proposals
11:15	Rotation report
12:00	End

More than 2/3 of the time in meetings of the Board of Directors is used for discussions.

Report on the Summary of Internal Discussion at a Management Meeting
- Report the summary of discussions held in internal meetings for important agenda items and how the views expressed in those discussions are reflected in the agenda items

Report to BOD before Deciding on a Major Proposal
- For important agenda items, such as the management direction, M&A, and other major projects, reports (including progress reports) are made to the Board of Directors from the early stages of consideration so that they can reflect the Board's intentions

Each Sector Sets Aside a Block of Time to Make Comprehensive and Systematic Reports
- Assign a sector to make a report on the overview of business, strategy, and the progress of various measures and R&D. (Main sectors of the Head Office are also subject to the assignment.)

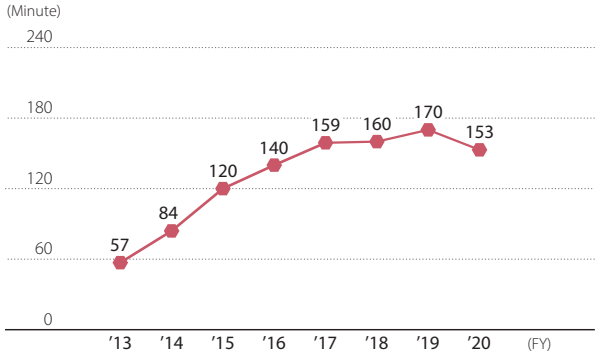
Upon completion of the Board of Directors meeting

Meetings

Opportunities for Informal Discussions
- Meetings for Outside Directors and Auditors only (twice a year)
- Social meetings of Outside Directors and Auditors with internal executives (several times a year)
- Meetings for Outside Directors and Auditors and main sectors (6 times a year)

Through this sort of efforts for improvement, the Board of Directors has grown more active each year, and the amount of time required for their meetings is steadily increasing.

■ Average Length of Board of Directors Meetings



Note: Meeting length decreased in FY2020 due to streamlined and efficient operations to prevent the spread of COVID-19

Corporate Governance

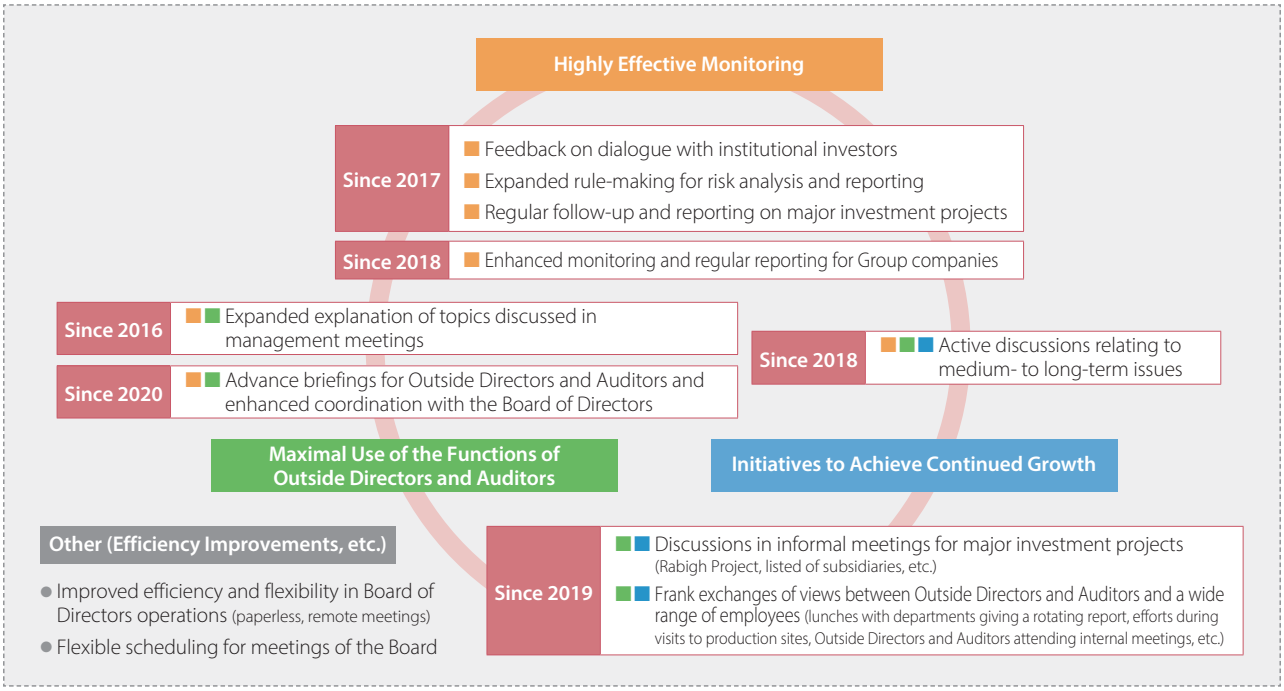
Utilizing the Oversight and Advisory Functions of Outside Directors and Corporate Auditors

Outside Directors and Auditors have expressed the view that meetings of Sumitomo Chemical's Board of Directors feature free, frank, constructive, and lively debates. In the meeting of Board of Directors as well as informal meetings of Outside Directors and Auditors relating to the assessing the effectiveness of the Board of Directors, Outside Directors and Auditors pointed out a number of issues, and made recommendations on topics such as the method of operation for the Board of Directors, the support system for Outside Directors and Auditors, and a range of policies to improve corporate governance. Some specific examples are described below.

Case 1	Discussions in Informal Meetings	Once, when a particular project required important decisions to be made, Outside Directors and Auditors had expressed a desire to hear the honest views of management, so an informal meeting was set up. As a result of unreserved exchanges of views in this meeting, Outside Directors and Auditors were able to align their views with those of company executives with respect to the project, which also made discussions at the subsequent meeting of the Board even more lively, leading to appropriate management decisions. Since this project, opportunities have been created for discussions in informal meetings as necessary.
Case 2	Follow-up on Major Projects and Monitoring of Group Companies	When the Board of Directors received a report that an investment project that had been decided on by the Board was not proceeding according to plan, Outside Directors and Auditors pointed out the importance of more timely reporting and of discussing such issues. Since then, the company has adopted a stance of reporting negative information as soon as possible, strengthening efforts to follow-up on major projects and monitor Group companies.
Case 3	Improving the Efficiency of Meetings of the Board of Directors	Outside Directors and Auditors who also serve as executives for other companies provided members of the Board with information on efforts to enhance IT for the Boards of Directors of other companies, which led to a reconsideration of operational methods for the Board of Directors, resulting in the deployment of a paperless meeting system and the creation of an environment for remote attendance. This has not only improved the efficiency of tasks such as preparing for meetings of the Board, it has also made it possible to hold meetings more flexibly.
Case 4	Interaction with Employees	In light of a desire of Outside Directors and Auditors for dialogue with employees across a wide range of levels, the company has taken a variety of measures, including informal meetings with business units, and creating opportunities for presentations from young employees during visits to production sites. By listening to the unfiltered voices of employees, this not only has the effect of providing Outside Directors and Auditors with an even deeper understanding of the company, it also leads to increased motivation on the employee side, among other effects.

There are any number of other cases where the company's efforts were advanced by explicit or implicit suggestions from Outside Directors and Auditors, and their monitoring and advisory functions has been a driving force for continually strengthening corporate governance at Sumitomo Chemical.

Example Initiatives Based on Recommendations from Outside Directors and Auditors



Corporate Governance

Visit to Production Sites by Outside Directors and Auditors

To gain a better understanding of the current situation, every year Outside Directors and Auditors at Sumitomo Chemical visit production sites located in and outside of Japan. In October 2020, they visited the Chiba Works. Outside Directors and Auditors considered the visit to be very significant, as it deepened their understanding of the business of the Company.

Note: A previously scheduled visit to a group company overseas was postponed due to the Covid-19 pandemic.

Record of Recent Visits

In November 2017, Oita Works
In March 2018, a group company in South Korea
In September 2018, Ehime Works
In February 2019, a group company in Saudi Arabia
In November 2019, Misawa Works
In October 2020, Chiba Works

Visit to Chiba Works (in October 2020)

Assessing the Effectiveness of the Board of Directors

Improvements over Fiscal 2019 and Assessment of Fiscal 2020

The effectiveness of the Board of Directors is assessed in terms of its composition, operational status, deliberation/reports at its meetings, auditing status on its business execution, and the operations of the non-mandatory Nomination Advisory Committee and Remuneration Advisory Committee. The company conducts surveys of each Director and Auditor about their assessing the effectiveness of the Board of Directors. At the end of fiscal 2020, we confirmed steady yearly improvement in its effectiveness, which was at a favorable level in general. We also confirmed that various initiatives will continue to be implemented in different ways to further enhance the effectiveness of the Board of Directors going forward while maintaining an awareness of changes in the surrounding environment and trends in corporate governance.

Initiatives in Response to the Fiscal 2019 Evaluation Results

- In light of the results of the effectiveness evaluation for FY2019, discussions focused on improvements were held in meetings of the Board and in informal meetings, held in FY2020, with respect to the following major topics.
  - Accelerating initiatives aimed at digital transformation and creating innovation
  - Creating structures for formulating carbon neutral strategy and for promoting the plastic recycling business
  - The current status of major investment projects, such as the Rabigh Project and the acquisition of crop protection businesses in South America, and future initiatives
  - The state of operations at listed subsidiaries, and a rethinking of diversity and ways of working

Corporate Governance

Initiatives for the Future

Sumitomo Chemical is undertaking the following initiatives with the aim of further increasing the effectiveness of the Board of Directors going forward.

1. Further Stimulating Deliberations of the Board of Directors

From the perspective of fully utilizing the supervisory and advisory functions of Outside Directors and Auditors, we ardently promote improvements based on the guidance and suggestions of Outside Directors and Auditors. As a result of this long-standing practice ensures that opinions are exchanged freely and actively for significant lengths of time at Board of Directors meetings, informal discussions, and other meetings. In fiscal 2021, which is the year for the formation of a new corporate business plan to begin from fiscal 2022, we continually strive to contribute to the realization of a sustainable society through our business as well as to achieve our own sustainable growth, based on discussions held at the Board of Directors meetings covering important topics like those listed on page 62. To this end, in order to encourage discussions centered on the Company's medium- to long-term direction, we will work on: a) allocating time to put greater weight on important topics, b) further enhancing advance briefings for Outside Directors, c) encouraging discussions of the progress updates for major investment projects to date, and d) planning visits to production sites, including the use of online meetings.

2. Further Strengthening Group Governance

The percentages of net sales and staff accounted for by overseas operations is rising. The number of businesses that have joined the Group as subsidiaries, including a South American crop protection company, has also increased. Due to the COVID-19 pandemic, travel to and from overseas locations has been restricted. In light of this, in addition to the initiatives launched up to fiscal 2020—as listed under major topics on page 62—we will continue working to further strengthen Group-wide governance by reinspecting systems, including those for internal controls, compliance, and responsible care, and by utilizing digital technologies to ensure more precise responses attuned to the characteristics of each subsidiary.

3. Strengthening Dialogue with Stakeholders and Enhancing Disclosure

In the Sumitomo Chemical Corporate Governance Guidelines, we advocate maintaining active dialogue with stakeholders and appropriate disclosure. In fiscal 2020, we actively strove to promote communication with shareholders and investors in part by holding our first ESG briefing and IR Day as well as collaborative dialogue with major institutional investors in Japan through the institutional investor collaborative dialogue forum. In addition, we have endeavored to enhance disclosure through Sumitomo Chemical Report (Annual Report), Sustainability Data Book, websites, and more. As a result, we received the award for excellence at the Nikkei Annual Report Awards 2020, were selected by the CDP for the Climate Change A List 2020 and Water Security A List 2020, and acquired a Gold evaluation for the second consecutive year in the EcoVadis Sustainability Assessment. This has helped us garner acclaim from stakeholders. In fiscal 2021, we will continue proactively disclosing our status and initiatives moving forward, holding dialogues with shareholders and investors, and ensuring that our corporate value is more accurately evaluated.

P.47 Communication with Stakeholders

Corporate Governance

Listed Company with Listed Subsidiaries

Our Thinking Regarding Listed Companies with Listed Subsidiaries

For a publicly listed subsidiary, the advantages of being publicly listed include better employee morale, enhanced ability to recruit employees, greater trust from customers, and greater influence within the industry. In addition, the parent company can expect to benefit from synergies in collaboration and cooperation with its subsidiaries. Because of these benefits, in seeking to maximize the overall corporate value of the Sumitomo Chemical Group, we think that holding listed subsidiaries is one of the effective options on premise of preserving each subsidiary's autonomy and respecting the rights of minority shareholders.

For the publicly listed subsidiaries in Japan of the Sumitomo Chemical Group, because they play an important role in our management strategy, we are not thinking of selling them at present. On the other hand, as for converting them into wholly owned subsidiaries, while we always keep it in mind as one option, it is not a high priority because, in addition to not being able to enjoy the benefits of having listed subsidiaries, the financial burden of buying out the holdings of minority shareholders would be significant. Accordingly, at the present time, we think that, from an overall perspective, keeping these subsidiaries as publicly listed subsidiaries is the optimal position. We are constantly monitoring our relationship with each listed subsidiary and, in accordance with the Sumitomo Chemical Group's management strategy and changes in our operating environment, considering changes, including in our shareholdings.

■ The Significance of Being a Listed Companies with Listed Subsidiaries

Company Name	History	Position in Group	Synergies
Sumitomo Dainippon Pharma Co., Ltd.	Sumitomo Chemical's pharmaceutical business began with the acquisition of the Japan Dyestuff Manufacturing Company in 1944. After being spun off as the subsidiary Sumitomo Pharmaceuticals in 1984, it merged with Dainippon Pharmaceutical in 2005 to become Sumitomo Dainippon Pharma.	The company's core pharmaceuticals business is a pillar of Sumitomo Chemical's life sciences business, along with the agricultural chemicals business, and is a source of innovation. In the current Corporate Business Plan, it has positioned "healthcare" as one of the priority areas in making efforts for acceleration the development of next-generation businesses, and further innovation is expected in this area in the future.	● Research at the Bioscience Research Laboratory, which consolidates and integrates parts of the research organizations of the company and Sumitomo Chemical ● Contract Development and Manufacturing Organization in regenerative medicine and cell therapies (combines the company's expertise in regenerative medicine and cell therapy with Sumitomo Chemical's expertise in the CMO business) ● Theranostics (combines the company's antibody design technology with Sumitomo Chemical's biological mechanism analysis technology and the radioactive isotope technology of Nihon Medi-Physics) ● Having locations on Sumitomo Chemical's premises enables close collaboration in such areas as quality and production management, reducing indirect expenses
Koei Chemical Co., Ltd.	Sumitomo Chemical invested capital in 1951 for relationship-building because the company was Sumitomo Chemical's largest customer for methanol. Thereafter, when the company ran into a financial crisis, the collaboration was strengthened in order to rebuild the company, including dispatching executives from Sumitomo Chemical.	Through production outsourcing in both directions for such items as catalysts and electronic materials based on the unique organic synthesis technologies of the company, the company has contributed to the expansion of the Sumitomo Chemical Group's business in the field of fine chemicals.	● Optimization of the Sumitomo Chemical Group's production of active pharmaceutical ingredient and intermediates through a new multi-purpose manufacturing equipment (multi-plants) approach ● Joint research from the earliest stage into such areas as battery materials and additive agents ● Having locations on Sumitomo Chemical's Works enables close collaboration in such areas as quality and production management, reducing indirect expenses
Taoka Chemical Co., Ltd.	In 1955 Sumitomo Chemical invested capital in the company, a leader in the dye business, to strengthen its own dye business.	Through production outsourcing in both directions for such items as electronic materials and pharmaceutical and agrochemical intermediates based on the various organic synthesis technologies and numerous multi-plants held by the company, the company has contributed to the expansion of the Sumitomo Chemical Group's business in the field of fine chemicals.	● Expanded contract manufacturing of pharmaceutical and agrochemical intermediates with numerous multi-plants of the company
Tanaka Chemical Corporation	Sumitomo Chemical invested capital in the company in 2013 and began joint development of high-capacity cathode materials for automobiles. Afterwards, in light of the smooth progress in joint development work, and in light of expectations that, in line with the future growth of the environmentally friendly vehicles market, there would be significant medium- to long-term growth in the market for lithium-ion secondary batteries, the company was converted to a majority-owned subsidiary in 2016.	Through integration of the technologies relating to precursors held by the company and the findings related to cathode materials held by Sumitomo Chemical, the company accelerates joint development of new products and contributes to the full-scale market entry and expansion of the Sumitomo Chemical Group's cathode materials business.	● Contribute to a drastic rationalization of the manufacturing process and optimization of research and development through integration of the technologies of both companies. ● Sumitomo Chemical's capital investment and guidance has improved the company's management level in such areas as labor accidents and internal control

Corporate Governance

Building an Effective Governance System

When Sumitomo Chemical and its listed subsidiaries jointly work on maximizing group synergy, Sumitomo Chemical respects independent decision making by listed subsidiaries and, at the same time, makes its best efforts to establish an effective governance system in order to avoid any conflicts of interests with minor shareholders.

With respect to the listed subsidiaries, we are taking the following measures to ensure appropriate supervision of such areas as transactions with the parent company and nomination of officers and remuneration of officers, from an independent and objective position.

- Electing sufficient number of Independent Outside Directors
- Establishing committees for nomination of officers and remuneration of officers, the majority of the members of which are Independent Outside Directors.
- Establishing and reliably operating committees, which aim to monitor and supervise transactions conducted between subsidiaries and the parent company and which is composed of Independent Outside Directors only.

■ Design of the Organization, Composition of Independent Outside Directors and Establishment of Non-mandatory Committees in Each Company

Company Name	Design of Organization	Composition of the Board	Non-mandatory Committees Established	
		Ratio of Outside Directors	Nomination/Remuneration	Monitoring and Supervision of Such Areas as Transactions with the Parent Company
Sumitomo Dainippon Pharma Co., Ltd.	Company with Board of Corporate Auditors	44% (4/9)	Nomination Remuneration	Supervising for Conflict of Interests Arising from Transactions Conducted among Group Companies
Koei Chemical Co., Ltd.	Company with Audit and Supervisory Committee	33%(3/9)	Nomination Remuneration	Supervising for Conflict of Interests Arising from Transactions Conducted among Group Companies
Taoka Chemical Co., Ltd.	Company with Audit and Supervisory Committee	33% (4/12)	Nomination Remuneration	Supervising for Conflict of Interests Arising from Transactions Conducted among Group Companies
Tanaka Chemical Corporation	Company with Audit and Supervisory Committee	57% (4/7)	Nomination Remuneration	Supervising for Conflict of Interests Arising from Transactions Conducted among Group Companies

Engagement with Investors on the Topic of Listed Companies with Listed Subsidiaries

Date: Wednesday, January 13, 2021

Presenter: President

Participated Investors: 7 companies (organized by the Institutional Investors Collective Engagement Forum)

- Sumitomo Mitsui Trust Asset Management Co., Ltd
- Mitsubishi UFJ Trust and Banking Corporation
- Pension Fund Association
- Meiji Yasuda Asset Management Company Ltd.
- The Dai-ichi Life Insurance Company, Limited
- Resona Asset Management Co., Ltd.
- Sumitomo Mitsui DS Asset Management Company, Limited

We held a meeting to engage with the seven institutional investors listed above on the topic of listed companies with listed subsidiaries. Prior to that meeting, we met with outside directors and auditors to exchange views on this topic. We think this meeting was an important opportunity to deepen our understanding of our respective views on listed companies with listed subsidiaries. We will continue to fulfill our responsibility for accountability.

Corporate Governance

Cross-Shareholdings

We strategically hold shares in other companies only when judged necessary for ensuring smooth business operation or maintaining and enhancing mutual business relations, after such factors as medium- to long-term economic rationality and prospects of future business developments have been considered as a whole. Also, at the Board of Directors meeting, each year, we shall assess its shareholding policy for all listed shares it owns, in light of mid- to long-term economic rationality and significance to hold such shares for each individual issuer. According to such review, if it becomes less necessary to hold a share by reason of changes in the business environment, etc., we shall sell such shares, as appropriate, taking into consideration such factors as the share price and market trends.

In accordance with a rise in the Nikkei Stock Average*1, the value of our cross-shareholdings rose, resulting in an increase in the balance of cross-shareholdings at the end of the fiscal year in comparison with the prior fiscal year, but as can be seen in the table on the right, continuing from the prior year, we sold a portion of these shareholdings in fiscal 2020.

*1 The Nikkei Stock Average: 18,917 yen on March 31, 2020, versus 29,179 yen on March 31, 2021

Trend in Sales of Cross-Shareholdings*2

(Billions of yen)

	FY2019	FY2020
Number of shares*3	7	11
Value of shares sold	5.1	13.0

Balance of Cross-Shareholdings*2 at End of Period

(Billions of yen)

	FY2019	FY2020
Number of shares	58	54
Total value recorded on the balance sheet	85.5	97.8

*2 Excluding shares of unlisted companies
*3 Including partial sales of cross-shareholdings

Corporate Governance

Directors & Senior Management (As of July 1, 2021)

■ Number of shares held (as of March 31, 2021) ■ Number of attendances at Board of Directors meetings for fiscal 2020

Position/Name	Career/ ◆ Reasons for Appointment
 Masakazu Tokura Chairman of the Board Birth Date: July 10, 1950 ■ 262,300 ■ 13/13 times (100%)	1974 Joined Sumitomo Chemical Co., Ltd. 2000 General Manager, Corporate Planning & Coordination Office 2003 Executive Officer 2006 Managing Executive Officer 2008 Representative Director & Managing Executive Officer 2009 Representative Director & Senior Managing Executive Officer 2011 Representative Director & President 2019 Chairman of the Board (current) 2021 Chairman of KEIDANREN (Japan Business Federation) (current) ◆ He assumed office as a Director & Executive President in 2011. He has formulated Corporate Business Plans three times, including the current Corporate Business Plan (from April 2019 to March 2022) and has been focusing on the operations of the Board of Directors of the Company as a Director, Chairman since April 2019.
 Keiichi Iwata Representative Director & President Birth Date: October 11, 1957 ■ 145,700 ■ 13/13 times (100%)	1982 Joined Sumitomo Chemical Co., Ltd. 2004 General Manager, Planning & Coordination Office, IT-related Chemicals Sector 2010 Executive Officer 2013 Managing Executive Officer 2018 Senior Managing Executive Officer 2018 Representative Director & Senior Managing Executive Officer 2019 Representative Director & President (current) ◆ Since joining the Company, he has mainly engaged in business planning in the Fine Chemicals Sector and the IT-related Chemicals Sector and has worked abroad in Belgium. After his appointment as an Executive Officer, he experienced planning and administration as well as sales management and was in charge of the Energy & Functional Materials Sector in 2018. He has been working to promote the current Corporate Business Plan (from April 2019 to March 2022) as a Director & Executive President since April 2019.
 Noriaki Takeshita Representative Director & Senior Managing Executive Officer Birth Date: July 23, 1958 ■ 83,200 ■ 13/13 times (100%)	1982 Joined Sumitomo Chemical Co., Ltd. 2005 Rabigh Refining and Petrochemical Company 2010 Executive Officer 2013 Managing Executive Officer 2016 Deputy Chairman, Rabigh Refining and Petrochemical Company (current) 2017 Representative Director & Managing Executive Officer 2018 Representative Director & Senior Managing Executive Officer (current) Current charge : Petrochemicals & Plastics Sector, Business Development for a Circular System for Plastics ◆ Since joining the Company, he has mainly engaged in business planning and production planning in the Petrochemicals & Plastics Sector and has worked abroad in Singapore and Saudi Arabia (the Rabigh Project). After his appointment as an Executive Officer, he experienced planning and administration as well as sales management and has been in charge of the Petrochemicals & Plastics Sector since 2017.
 Masaki Matsui Representative Director & Senior Managing Executive Officer Birth Date: August 3, 1960 ■ 61,221 ■ 13/13 times (100%)	1985 Joined Sumitomo Chemical Co., Ltd. 2011 General Manager, Planning & Coordination Office, IT-related Chemicals Sector 2013 Executive Officer 2017 Managing Executive Officer 2019 Representative Director & Managing Executive Officer 2021 Representative Director & Senior Managing Executive Officer (current) Current charge : IT-related Chemicals Sector ◆ Since joining the Company, he has mainly engaged in business planning and sales/marketing in the Fine Chemicals Sector and the IT-related Chemicals Sector. When he was responsible for business planning for optical products, he contributed to significantly expanding the business not only in Japan but also in South Korea, Taiwan, and China. He has been in charge of the IT-related Chemicals Sector since 2019.
 Kingo Akahori Representative Director & Senior Managing Executive Officer Birth Date: August 2, 1957 ■ 46,200 ■ 13/13 times (100%)	1983 Joined Sumitomo Chemical Co., Ltd. 2009 General Manager, Battery Materials Division 2015 Associate Officer 2016 Executive Officer 2018 Managing Executive Officer 2019 Representative Director & Managing Executive Officer 2021 Representative Director & Senior Managing Executive Officer (current) 2021 Representative Director & President of Kaseihin Kaikan Co., Ltd. (current) Current charge : Energy & Functional Materials Sector ◆ Since joining the Company, he has engaged in a wide range of operations such as research and development, production technology, planning, and sales, in addition to being dispatched to the Swiss Federal Institutes of Technology and working overseas in the United States. After his appointment as an Executive Officer, he was responsible for the newly established Quality Assurance Office and divisions in the Energy & Functional Materials Sector, contributing to the growth and expansion of the sector. He has been in charge of the Energy & Functional Materials Sector since 2019.
 Nobuaki Mito Representative Director & Senior Managing Executive Officer Birth Date: August 4, 1960 ■ 49,500 ■ 10/10 times (100%)	1985 Joined Sumitomo Chemical Co., Ltd. 2013 General Manager, Intellectual Property Dept. 2014 Associate Officer 2015 Executive Officer 2018 Managing Executive Officer 2020 Chairman, Valent U.S.A. LLC (current) Chairman, Valent BioSciences LLC (current) 2020 Representative Director & Managing Executive Officer 2021 Representative Director & Senior Managing Executive Officer (current) Current charge : Health & Crop Sciences Sector ◆ Since joining the Company, he has mainly engaged in research and development in the Health & Crop Sciences Sector and experienced being dispatched to University of California, Davis in the United States. After his appointment as an Executive Officer, he was responsible for the pharmaceutical business and other areas in the Corporate Business Development Dept., working on the development of next-generation businesses. He has been in charge of the Health & Crop Sciences Sector since 2020.

Corporate Governance

■ Number of shares held (as of March 31, 2021) ■ Number of attendances at Board of Directors meetings for fiscal 2020

Position/Name	Career/ ◆ Reasons for Appointment
 Hiroshi Ueda Director & Executive Vice President Birth Date: August 5, 1956 ■ 122,400 ■ 13/13 times (100%)	1982 Joined Sumitomo Chemical Co., Ltd. 2006 Director, Process & Production Technology Center 2008 Associate Officer 2009 Executive Officer 2011 Managing Executive Officer 2016 Senior Managing Executive Officer 2016 Representative Director & Senior Managing Executive Officer 2018 Director & Senior Managing Executive Officer 2019 Director & Executive Vice President (current) Current charge : Research Planning and Coordination, Digital and Data Science Innovation, Process & Production Technology & Safety Planning, Production & Safety Fundamental Technology Center, Engineering, Intellectual Property, Responsible Care, Industrial Technology & Research Laboratory, Environmental Health Science Laboratory, Advanced Materials Development Laboratory, Bioscience Research Laboratory ◆ Since joining the Company, he has mainly engaged in manufacturing and industrial research. In addition to them, he was responsible for business development, business planning, and safety/environment/hygiene-related operations at each plant after his appointment as an Executive Officer. He was in charge of the Energy & Functional Materials Sector since 2016 and is currently in charge of Research Planning and Coordination, Digital and Data Science Innovation, Process & Production Technology & Safety Planning, Responsible Care, and corporate research facilities as a Director & Executive Vice President.
 Hiroshi Niinuma Director & Senior Managing Executive Officer Birth Date: March 5, 1958 ■ 94,200 ■ 13/13 times (100%)	1981 Joined Sumitomo Chemical Co., Ltd. 2009 General Manager, General Affairs Dept. 2010 Executive Officer 2013 Managing Executive Officer 2018 Senior Managing Executive Officer 2018 Director & Senior Managing Executive Officer (current) Current charge : General Affairs, External Relations, Legal, Human Resources ◆ Since joining the Company, he has mainly engaged in the operations of administrative departments, such as general affairs and human resources. After his appointment as an Executive Officer, he was also responsible for Legal, CSR, Internal Control and Audit and worked on ensuring compliance, developing and improving a corporate governance structure. As a Director & Senior Managing Executive Officer since 2018, he has been in charge of General Affairs, Legal, Sustainability, Internal Control and Audit, Human Resources, Osaka Office Administration, Corporate Communications, Procurement and Logistics.
 Koichi Ikeda Outside Director Birth Date: April 21, 1940 ■ 0 ■ 13/13 times (100%)	1963 Joined Asahi Breweries, Ltd. 2002 Representative Director & President & COO, Asahi Breweries, Ltd. 2006 Representative Director & Chairman & CEO, Asahi Breweries, Ltd. 2010 Advisor, Asahi Breweries, Ltd. 2011 Outside Corporate Auditor, Sumitomo Chemical Co., Ltd. 2011 Advisor, Asahi Group Holdings, Ltd. 2015 Outside Director, Sumitomo Chemical Co., Ltd. (current) 2021 Senior Alumni, Asahi Group Holdings, Ltd. (current) ◆ He can be expected to make decisions on important management matters at the Board of Directors of the Company, appropriately oversee business execution, provide well-balanced advice based on an extensive view on overall management, make recommendations based on his expertise in sales, marketing and other areas, and support appropriate risk-taking, by making use of his abundant experience and extensive knowledge as a management executive of a business corporation.
 Hiroshi Tomono Outside Director Birth Date: July 13, 1945 ■ 0 ■ 13/13 times (100%)	1971 Joined Sumitomo Metal Industries, Ltd. 2005 Representative Director & President, Sumitomo Metal Industries, Ltd. 2012 Representative Director & President & COO, Nippon Steel & Sumitomo Metal Corporation 2014 Representative Director & Vice Chairman, Nippon Steel & Sumitomo Metal Corporation 2015 Director & Advisor, Nippon Steel & Sumitomo Metal Corporation 2015 Outside Director, Sumitomo Chemical Co., Ltd. (current) 2015 Advisor Nippon Steel & Sumitomo Metal Corporation 2016 Outside Director, Japan Nuclear Fuel Limited (current) 2020 Senior Advisor, Nippon Steel Corporation (current) 2020 Outside Director, The Kansai Electric Power Co., Inc. (current) ◆ He can be expected to make decisions on important management matters at the Board of Directors of the Company, appropriately oversee business execution, provide well-balanced advice based on an extensive view on overall management, make recommendations based on his expertise in research, technology, manufacturing and other areas, and support appropriate risk-taking, by making use of his abundant experience and extensive knowledge as a management executive of a business corporation.
 Motoshige Itoh Outside Director Birth Date: December 19, 1951 ■ 0 ■ 13/13 times (100%)	1993 Professor, Faculty of Economics, The University of Tokyo 1996 Professor, Graduate School of Economics, The University of Tokyo 2007 Dean, Graduate School of Economics, Faculty of Economics, The University of Tokyo 2015 Outside Director, East Japan Railway Company (current) 2016 Professor, Faculty of International Social Sciences, Gakushuin University (current) 2016 Professor Emeritus, The university of Tokyo (current) 2016 Outside Corporate Auditor, Hagoromo Foods Corporation (current) 2018 Outside Director, The Shizuoka Bank, Ltd. (current) 2018 Outside Director, Sumitomo Chemical Co., Ltd. (current) ◆ He can be expected to make decisions on important management matters at the Board of Directors of the Company, appropriately oversee business execution, and provide advice and recommendations based on his advanced expertise, by making use of his expert knowledge of economics, etc. through his long experience as a university professor and his wealth of experience and extensive knowledge of economic, social and other issues from his track record as a member of various government deliberative committees.
 Atsuko Muraki Outside Director Birth Date: December 28, 1955 ■ 0 ■ 13/13 times (100%)	1978 Joined Ministry of Labour (Currently Ministry of Health Labour and Welfare) 2005 Counsellor for Policy Evaluation, Minister's Secretariat of Ministry of Health Labour and Welfare 2006 Deputy Director-General, Equal Employment, Children and Families Bureau of Ministry of Health Labour and Welfare 2008 Director-General, Equal Employment, Children and Families Bureau of Ministry of Health Labour and Welfare 2010 Director-General for Policies on Cohesive Society, Cabinet Office 2012 Director-General, Social Welfare and War Victims' Relief Bureau of Ministry of Health Labour and Welfare 2013 Vice Minister, Health Labour and Welfare of Ministry of Health Labour and Welfare 2015 Retired from Ministry of Health Labour and Welfare 2016 Outside Director, ITOCHU Corporation (current) 2018 Outside Director, Sumitomo Chemical Co., Ltd. (current) ◆ She can be expected to make decisions on important management matters at the Board of Directors of the Company, appropriately oversee business execution, and provide advice and recommendations based on her advanced expertise, by making use of her wealth of experience and extensive knowledge in legal, social and other issues deriving from her employment over many years at administrative bodies as a civil servant as well as her expertise especially in human resources.

Corporate Governance

■ Number of shares held (as of March 31, 2021) ■ Number of attendances at Board of Directors meetings for fiscal 2020 ○ Number of attendances at Corporate Auditors meetings for fiscal 2020

Position/Name	Career/ ◆ Reasons for Appointment
 Kunio Nozaki Standing Corporate Auditor Birth Date: October 29, 1956 ■ 87,500 ■ 13/13 times (100%) ○ 14/14 times (100%)	1979 Joined Sumitomo Chemical Co., Ltd. 2002 General Manager, Finance & Accounting Office 2007 Executive Officer 2009 Managing Executive Officer 2014 Senior Managing Executive Officer 2014 Representative Director & Senior Managing Executive Officer 2018 Director & Senior Managing Executive Officer 2019 Director 2019 Corporate Auditor (current) ◆ Since joining the Company, he has worked mainly in accounting and finance operations, and has deep knowledge and experience related to these areas. He was also appointed as Director & Senior Managing Executive Officer in 2014, and has worked in the management of the Company. He will make use of this abundant knowledge and experience related to accounting and finance, and his experience and extensive knowledge as a management executive in auditing the Company in future.
 Hiroaki Yoshida Standing Corporate Auditor Birth Date: March 2, 1956 ■ 18,600 ■ 13/13 times (100%) ○ 14/14 times (100%)	1980 Joined Sumitomo Chemical Co., Ltd. 2012 General Manager, Planning & Coordination Office, Rabigh Project & General Manager, Planning & Coordination Office, Petrochemicals & Plastics Sector 2015 Corporate Auditor (current) ◆ Since joining the Company, he has experience of operations in planning, legal, and other administrative sectors, and has also worked in an overseas posting in Saudi Arabia, in addition to serving as General Manager of the Internal Audit Dept. and General Manager of the Planning & Coordination Office, Petrochemicals & Plastics Sector. He will make use of his abundant knowledge and experience regarding the Company's business in auditing the Company.
 Mitsuhiro Aso Outside Corporate Auditor Birth Date: June 26, 1949 ■ 0 ■ 13/13 times (100%) ○ 14/14 times (100%)	1975 Prosecutor 2010 Superintending Prosecutor of the Fukuoka High Public Prosecutors Office 2012 Retirement as Prosecutor 2012 Registration of Attorneys (current) 2013 Outside Corporate Auditor, Sumitomo Chemical Co., Ltd. (current) 2019 Outside Director, Sumitomo Mitsui Trust Holdings, Inc. (current) ◆ He will make use of his expert knowledge and abundant experience as an attorney and prosecutor over many years for the Company's audits.
 Yoshitaka Kato Outside Corporate Auditor Birth Date: September 17, 1951 ■ 0 ■ 13/13 times (100%) ○ 14/14 times (100%)	1978 Registered as a certified public accountant (current) 2008 CEO of Ernst & Young ShinNihon LLC 2014 Left Ernst & Young ShinNihon LLC 2015 Outside Corporate Auditor, Sumitomo Chemical Co., Ltd. (current) 2015 Outside Corporate Auditor, Mitsui Fudosan Co., Ltd. (current) 2016 Outside Corporate Auditor, Sumitomo Corporation (current) ◆ He will make use of his expert knowledge and abundant experience as a certified public accountant over many years in auditing the Company.
 Michio Yoneda Outside Corporate Auditor Birth Date: June 14, 1949 ■ 2,000 ■ 13/13 times (100%) ○ 14/14 times (100%)	1973 Joined Bank of Japan 1998 General Manager, Sapporo Branch of Bank of Japan 2000 Resigned as General Manager, Sapporo Branch of bank of Japan 2000 Executive Director, Osaka Securities Exchange 2003 President & CEO, Osaka Securities Exchange Co., Ltd. 2013 Director & Representative Executive Officer, Group COO, Japan Exchange Group, Inc. Director, Tokyo Stock Exchange, Inc. 2015 Resigned as Director & Representative Executive Officer, Group COO, Japan Exchange Group, Inc. Resigned as Director, Tokyo Stock Exchange, Inc. 2018 Outside Director, Asahi Broadcasting Group Holdings Corporation (current) 2018 Outside Corporate Auditor, Sumitomo Chemical Co., Ltd. (current) 2020 Outside Director, Toyo Tire Corporation (current) ◆ He will make use of his wealth of experience and extensive knowledge of industry and social and other issues through his long career in financial and securities market management in Japan for the Company's audits.

Corporate Governance

Position/Name	In Charge
Takashi Shigemori Senior Managing Executive Officer	Corporate Planning, IT Innovation
Marc Vermeire Managing Executive Officer	Sumitomo Chemical Agro Europe S.A.S., Sumitomo Chemical Europe S.A./N.V.
Keiichi Sakata Managing Executive Officer	Sumitomo Chemical Asia Pte Ltd
Motoyuki Sakai Managing Executive Officer	Inorganic Materials Div., Specialty Chemicals Div., Advanced Polymers Div., Battery Materials Div.
Seiji Takeuchi Managing Executive Officer	Planning & Coordination Office, Petrochemicals & Plastics Sector, Responsible Care Dept., Petrochemicals & Plastics Sector, Basic Materials Div., Industrial Chemicals Div., Petrochemicals Research Laboratory
Naoyuki Inoue Managing Executive Officer	Rabigh Refining and Petrochemical Company
Keigo Sasaki Managing Executive Officer	Corporate Communications, Accounting, Finance
Kenji Ohno Managing Executive Officer	Sustainability, Internal Control and Audit, Legal Dept.
Shinichiro Nagata Managing Executive Officer	Ehime Works
Yoshizumi Sasaki Managing Executive Officer	Business Development Office for a Circular System for Plastics, Resin-related Business Development Dept., Polyolefins Div., Automotive Materials Div.
Ichiro Kosaka Managing Executive Officer	Planning & Coordination Office, Energy & Functional Materials Sector, Quality Assurance Office, Energy & Functional Materials Sector
Takanari Yamaguchi Managing Executive Officer	Planning & Coordination Office, IT-related Chemicals Sector, Quality Assurance Office, IT-related Chemicals Sector
Andrew Lee Executive Officer	Valent U.S.A. LLC, Valent BioSciences LLC
Masaya Naito Executive Officer	Procurement Dept., Logistics Dept.
Akira Iwasaki Executive Officer	Planning & Coordination Office, Energy & Functional Materials Sector, Quality Assurance Office, Energy & Functional Materials Sector

Position/Name	In Charge
Hirokazu Murata Executive Officer	Oita Works, Misawa Works
Isao Kurimoto Executive Officer	Research Planning and Coordination Dept., Digital and Data Science Innovation Dept., Intellectual Property Dept., Industrial Technology & Research Laboratory
Koichi Ogino Executive Officer	Chiba Works
Inho Rha Executive Officer	Dongwoo Fine-Chem Co., Ltd
Akira Nakanishi Executive Officer	Planning & Coordination Office, IT-related Chemicals Sector, Electronic Materials Div.
Masao Shimizu Executive Officer	Human Resources Dept., Osaka Office Administration Dept.
Hiroaki Fujimoto Executive Officer	AgroSolutions Div. – Japan
Kanako Fukuda Executive Officer	Sumitomo Chemical Europe S.A./N.V.
Juan Ferreira Executive Officer	Sumitomo Chemical do Brasil Representações Ltda
Hiroyoshi Mukai Executive Officer	Planning & Coordination Office, Health & Crop Sciences Sector, Quality Assurance Office, Health & Crop Sciences Sector
Shinsuke Shojima Executive Officer	AgroSolutions Div. – International
Takanori Ito Executive Officer	Process & Production Technology & Safety Planning Dept., Production & Safety Fundamental Technology Center, Responsible Care Dept.
Yoshihiro Ino Executive Officer	IT Innovation Dept.
Tetsuo Takahashi Executive Officer	Planning & Coordination Office, Petrochemicals & Plastics Sector
Tomoyuki Hirayama Executive Officer	General Affairs Dept., External Relations Dept.

Corporate Governance

Expertise and Experience of Directors and Corporate Auditors

	Corporate Management	Business Strategy/ Marketing	Technology/ Research	Global	ESG/ Sustainability	Finance/ Accounting	Human Resources and Labor	Legal/ Compliance/ Internal Control	Knowledge of Other Specialized Fields
Directors									
Masakazu Tokura	●	●		●					
Keiichi Iwata	●	●		●					
Noriaki Takeshita		●		●		●			
Masaki Matsui		●				●			
Kingo Akahori		●	●	●					
Nobuaki Mito		●	●						● (Intellectual Property)
Hiroshi Ueda		●	●						● (IT/DX)
Hiroshi Niinuma					●		●	●	
Koichi Ikeda	●	●			●				
Hiroshi Tomono	●		●		●				
Motoshige Itoh				●					● (International Economics) ● (IT/DX)
Atsuko Muraki					●		●	●	
Corporate Auditors									
Kunio Nozaki				●		●			
Hiroaki Yoshida		●		●				●	
Mitsuhiro Aso				●	●			●	
Yoshitaka Kato				●		●		●	
Michio Yoneda	●				●				● (Financial Markets)

Note: In the table above, each person's main areas of expertise and experience, up to a maximum of three areas, are designated with a ●.

Internal Control

Status of the Development of the Internal Control System

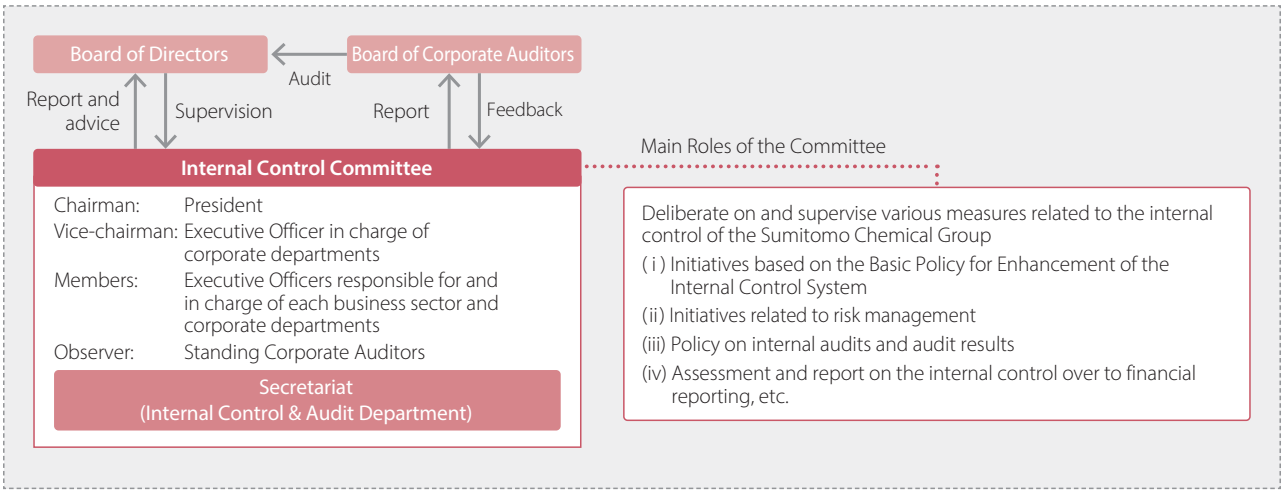
Sumitomo Chemical established its Basic Policy for the Enhancement of the Internal Control System by a resolution of the Board of Directors, creating a system to ensure the appropriateness of its operations as stipulated in the Companies Act.

As stated in the basic concept of this policy, we recognize that the development of an internal control system is a necessary process for maintaining a sound organization and should be actively utilized to achieve business objectives. To continuously enhance our internal control system, we have formed the Internal Control Committee, which is chaired by the President and consists of Executive Officers responsible for and in charge of each business sector and corporate department. Regular meetings of the committee are held three times a year.

At Sumitomo Chemical, the Internal Control Committee plays a central role in discussing various measures based on the basic policy described above. The committee also operates a PDCA (plan-do-check-act) cycle by monitoring the implementation status of those measures, and constantly inspects and strengthens the Group's internal control system in response to changes in the Group's business and operating environment, so that the Group's internal control system can function effectively.

The Standing Corporate Auditors attend the committee as observers, and the committee's operations are conducted by the Internal Control & Audit Department, independent of other business activities. Summaries of the matters covered in the committee are reported to the Board of Corporate Auditors after each meeting. These summaries are then reported to the Board of Directors for deliberation.

■ Organization of the Internal Control Committee



Basic policy for Enhancement of the Internal Control System

https://www.sumitomo-chem.co.jp/english/company/files/docs/InternalControlSystem_20190329_e.pdf

Internal Control

The Internal Structure regarding Timely Disclosure

The Corporate Communications Department is in charge of working in conjunction with other relevant departments to continually disclose necessary information in a timely manner. In addition to items requiring disclosure under Japan's Financial Instruments and Exchange Act and under stock exchange regulations, we also actively disclose information that may be considered material to the decisions of investors. We endeavor to build stronger relationships of trust with society and capital markets by publishing documentation in accordance with the rules stipulated by the security exchanges in Japan, including reports on the company's corporate governance philosophy and system, and notifications showing that Outside Directors and Corporate Auditors have no existing conflicts of interest with general shareholders. These documents are available on the website of Japan Exchange Group Inc.

Corporate Governance Report

https://www.sumitomo-chem.co.jp/english/company/files/docs/governance_report_e.pdf

Internal Audits

As part of its internal control monitoring activities, Sumitomo Chemical has established a dedicated organization within the company to conduct internal audits, in addition to audits by the Corporate Auditor and Financial Statement auditors. The Internal Control & Audit Department conducts internal audits for all matters related to the execution of operations by the company and its Group companies, and dedicated audit teams for the Responsible Care Department conduct Responsible Care auditing from the perspective of safety, environment, and quality throughout the life cycle of chemical products. Internal audits and Responsible Care audits are coordinated with each other as needed. In case any serious matter relating to internal controls is found, the matter will be promptly reported to Executive Officers and Standing Corporate Auditors on the reporting line.

① Internal Audits

Department Conducting the Audits	Internal Control & Audit Department
Objective of Internal Audit	Evaluate whether internal controls are in place, operating, and functioning appropriately from various perspectives, including maintaining the effectiveness and efficiency of operations, ensuring the reliability of financial reporting, and complying with relevant laws and statutes in all business activities
Audit Cycle	In principle, once every 2-5 years* for each separately audited unit
Sharing of Audit Results and Status of Improvements	• Reported to the Internal Audit Liaison Meeting (Held regularly, four times a year, attended by Standing Corporate Auditors and a number of departments, including the Legal Department, the Human Resources Department, the Accounting Department, and the planning & coordination offices of each business sector) • Reported to the Internal Control Committee (Held regularly, three times a year)

② Responsible Care Audits

Department Conducting the Audits	Teams of dedicated auditors from the Responsible Care Department
Objective of Internal Audit	Evaluate whether internal controls relating to securing safety, the environment, and health, as well as maintaining and improving quality for all chemical products over their lifecycle, are in place, operating, and functioning appropriately.
Audit Cycle	In principle, once every 1-3 years* for each separately audited unit
Sharing of Audit Results and Status of Improvements	• Reported internally as necessary • Reported to the Responsible Care Committee (Held regularly, once a year)

* In cases where in-person audit fieldwork was difficult due to COVID-19, the company endeavored to maintain the auditing cycle using remote audits.

Risk Management

To achieve sustainable growth, Sumitomo Chemical makes an effort to detect, at an early stage, various risks that may hinder the achievement of its business objectives, and takes proper measures. We focus on building and expanding a system relating to risk management so that we can promptly and properly address risks when they emerge.

Systems for Promoting Risk Management

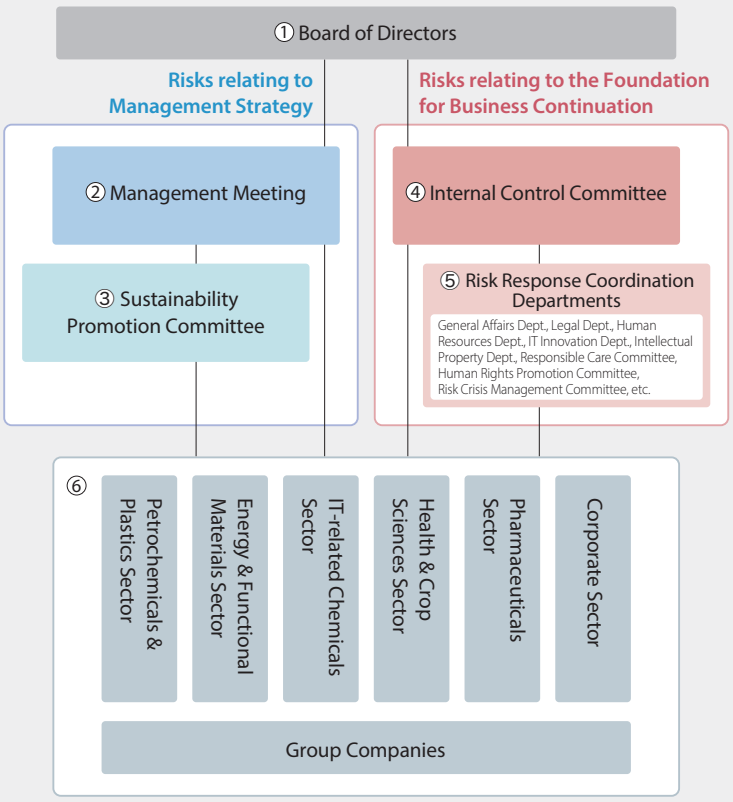
At Sumitomo Chemical, as part of its standard duties, each of the Group's organizations is taking various measures to properly manage risks associated with its business operations. In addition to this, a variety of committees coordinate to promote risk management from the perspective of the Group as a whole, aiming to thoroughly support the efforts of each organization within the Group.

The Internal Control Committee sets policies relating to risk management for the Group as a whole and monitors the efforts of each organization in accordance with those policies, collecting risk-related information and evaluating it, among other tasks. This committee creates a risk map for the Group as a whole each year, aiming not only to comprehensively capture the status of risks relating to management strategy and the foundation for business continuation, but also to coordinate with risk response coordination departments, promoting countermeasures for important risks relating to the foundation for business continuation, such as earthquakes, workplace accidents, and product-related accidents, on a Group-wide level.

On the other hand, Management Meetings are held as appropriate to deliberate important topics relating to management (refer to page 33), particularly management strategy for the company and the Group, capital expenditure, and other investments, from the perspectives of both risks and opportunities. Furthermore, the Sustainability Promotion Committee makes necessary recommendations to various organizations in the Group so as to ensure that the various management activities of the Group contribute to achieving sustainability for the company and society (refer to page 35), evaluating medium- to long-term environmental and societal issues from the perspectives of both risks and opportunities.

Summaries of the matters covered in the Internal Control Committee and important matters deliberated in the Management Meetings are reported to the Board of Directors.

■ Diagram of Systems for Promoting Risk Management



① Board of Directors
The Board ensures the effectiveness of risk management by deliberating and supervising the activities of the Internal Control Committee and important matters deliberated in the Management Meetings.

② Management Meeting
Concerning important matters for management, including management strategy and capital spending for each organization of the Group, it deliberates in terms of risks and opportunities.

③ Sustainability Promotion Committee
This committee makes necessary recommendations to various Group organizations in order to achieve sustainability for both the company and society, taking into consideration the perspectives of both risks and opportunities with respect to medium- to long-term environmental and societal issues.

④ Internal Control Committee
This committee deliberates policies relating to risk management for the Group as a whole, and audits the efforts of various organizations based on these policies. It also promotes risk countermeasures relating to the foundation for business continuation.

⑤ Risk Response Coordination Departments
Each organization plans and promotes Group-wide countermeasures for the risks assigned to it, in cooperation with each department and Group company.

⑥ Each Department and Group Company
The main bodies for promoting risk management. The organizations develop and implement countermeasures for the risks affecting their own organization or company.

Risk Management

Promotion of Group-wide Priority Risk Assessment and Countermeasures

Every year, approximately 120 major organizations within both Sumitomo Chemical and Group companies around the world conduct risk evaluations using a list of risks compiled by the Company to assess the probability of occurrence and the potential impact of various risks that could hinder the achievement of business objectives to create risk maps. These maps are then aggregated by the Internal Control & Audit Department to create a Group-wide priority risk map.

The department uses this Group-wide risk map to assess important risks that require Group-wide countermeasures and create risk management policies. As listed under the Systems for Promoting Risk Management (refer to page 74), each meeting body collaborates to promote the Group's risk management.

In addition, each organization within the Group considers risk countermeasures based on their own risk map and with reference to the Group-wide risk map. As necessary, they take countermeasures in collaboration with the Company's sectors and Risk Response Coordination Departments. In this way, they conduct efficient and effective risk management.

Evaluating Risks and Promoting Countermeasures

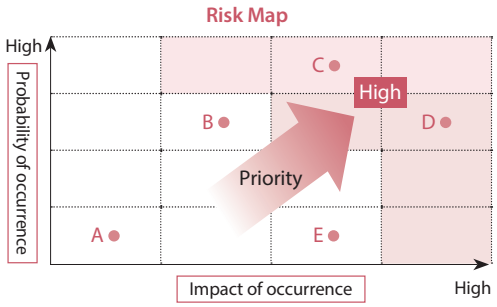
Risk Maps Created by Each Internal Department and Group Company

Each organization identifies risks critical to its own execution of duties and advances countermeasures.

Consolidation

Group-wide Risk Map

The Internal Control Committee identifies priority risks that require Group-wide countermeasures and advances them across the Group.



Identify priority risks (C, D) using risk maps that lay out the results of assessments of the probability of occurrence and degree of impact for various risks.

List of Risk Items

To evaluate Group-wide risks, the Risk Response Coordination Departments have cooperated to create a list of risk items that broadly encompasses the Group's business activities, from management strategies to risks related to the fundamental drive to remain a going concern.

The list of risk items has been divided into seven fields with accompanying case studies and a detailed explanation of the assessment standards to be used when evaluating each risk item. Moreover, in line with changes in the Group's business activities and social conditions, the items will be amended as appropriate, for example by adding risk items or revising case studies.

Field	Example of Risks Included in the List
Business risks	Interruptions in the supply of raw materials or products, industrial reforms, price competition, technological innovations, digital innovations, extreme weather events, changes in standards and rules
Political and social risks	GHG problems, plastic waste problems, country risks, terrorism, changes to legal systems and policies
Accident and disaster risks	Earthquakes, tsunamis, volcanic eruptions, typhoons, tornadoes, floods, fires, explosions, product-related accidents, environmental pollution, ground subsidence, interruptions in or restrictions of the supply of electricity, gas, water, or other utilities
Legal violation and compliance risks	Bribery, collusion, scandals, criminal behavior, antitrust violations, infringement of intellectual property rights, insider trading
Personnel and labor risks	Workplace accidents, human rights problems, mental health, harassment, spread of infectious or contagious diseases
Information security risks	Cyberattacks, system failures, confidential information leaks, personal information leaks
Taxation and financial risks	Tax transparency, volatility of managed assets, interest volatility

Risk Factors

https://www.sumitomo-chem.co.jp/english/ir/policy/risk_factors/

Risk Management

Cross-organizational Risks and Crisis Response

We established the Risk Crisis Management Committee to deliberate risks and crisis response policies that affect multiple business sites, departments, and Group companies, such as large-scale disasters (earthquakes, storms, floods, etc.), pandemics, deterioration of security in Japan or overseas (terrorism, riots, wars, etc.), and other issues.

Compliance

Basic Policy

The Sumitomo Chemical Group places compliance at the bedrock of its corporate management. As we engage in business in many parts of the world, all of the companies in the Sumitomo Chemical Group are devoting earnest efforts to stay in strict compliance with not only laws and regulations, but also ethical principles in a business environment. Both the spirit and the letter of ensuring compliance in business activities have consistently been enshrined at Sumitomo Chemical ever since the company was founded. This unwavering resolve towards compliance is embodied succinctly in the "Sumitomo Chemical Charter for Business Conduct," which serves as the guideline of conduct for every employee to abide by and constitutes the backbone of our day-to-day compliance activities. In recent years, in particular, companies are expected to fulfill their societal responsibilities more than ever before. Given the circumstances, all companies in the Sumitomo Chemical Group are making concerted efforts to further compliance activities, under the strong leadership of top management, to further enhance compliance in the Group's business activities on a global basis.

The Sumitomo Chemical Charter for Business Conduct and Code of Ethics Embody the Sumitomo Spirit and Business Philosophy

Sumitomo Chemical has established the Sumitomo Chemical Charter for Business Conduct (refer to page 15) to embody the Sumitomo Spirit, Business Philosophy, and Basic Principles for Promoting Sustainability. In addition, to better define the Charter for Business Conduct and more clearly explain it to employees, we established the Sumitomo Chemical Code of Ethics (hereinafter, "the *Compliance Manual*") as corporate rules and distributed them to employees.

Sumitomo Chemical Charter for Business Conduct

https://www.sumitomo-chem.co.jp/english/company/principles/charter/

Compliance Manual

https://www.sumitomo-chem.co.jp/english/sustainability/governance/compliance/rules_society/

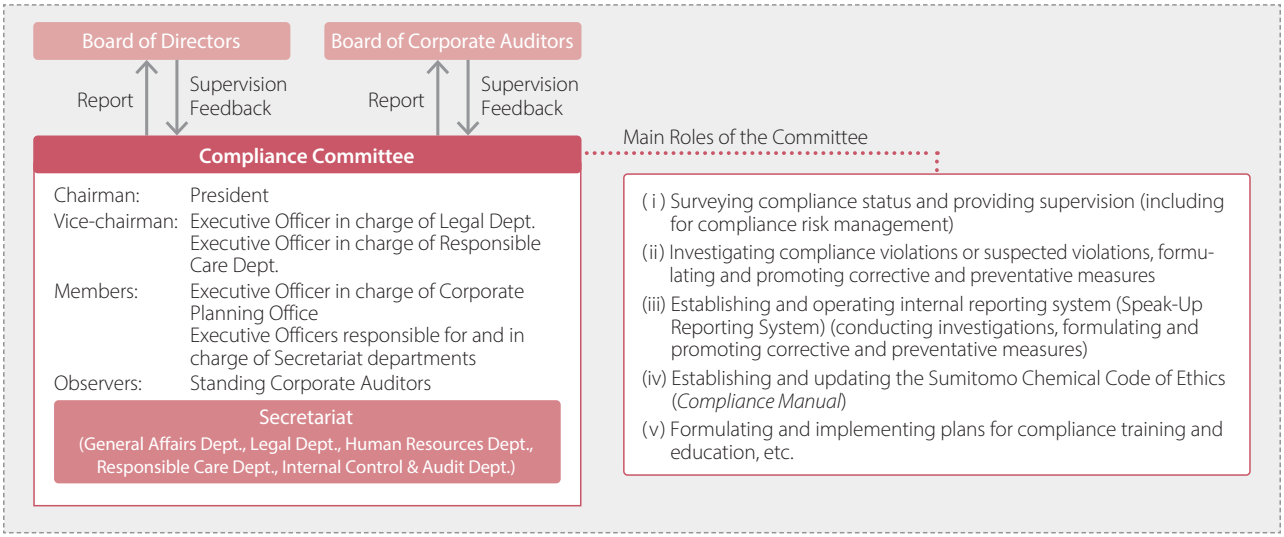
Compliance

Compliance System at the Sumitomo Chemical Group

(1) Compliance Committee

Sumitomo Chemical has established a Compliance Committee chaired by the President and holds a Compliance Committee meeting at least once a year (or more frequently as needed). Details discussed by the committee are reported to Board of Directors and Board of Corporate Auditors, and the committee then receives feedback from them. The committee establishes overarching principles of compliance from a global perspective, and then works with each business sector and Group company, both in Japan and abroad, to build and operate their compliance systems locally in the required manner, according to those global principles.

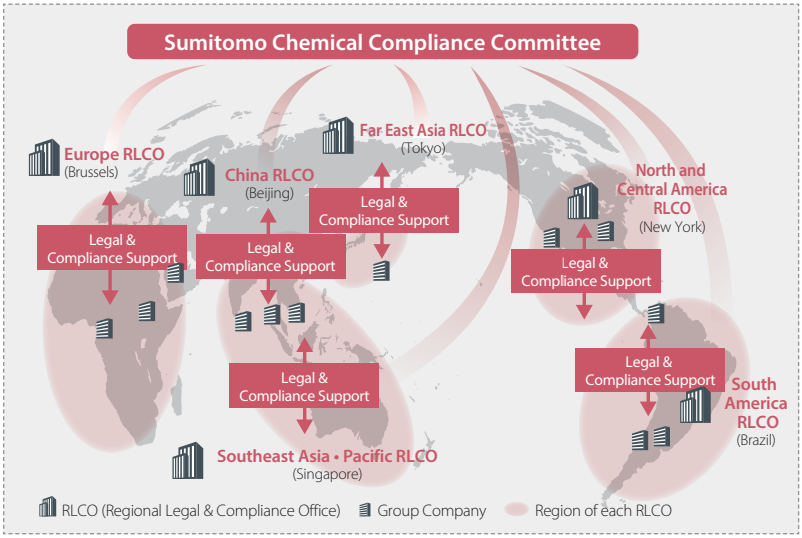
■ Compliance Committee



(2) Group Compliance Structure Focused on Effectiveness "Think globally, Manage regionally, Act locally"

As business globalizes, it becomes more important that the operation of a corporation's compliance system be fine-tuned to situations specific to individual countries or companies. In light of this, we have established Regional Legal & Compliance Offices (RLCOs) in Sumitomo Chemical's major business regions. The RLCOs, grasping the concrete needs and tasks of their respective Group companies, provide hands-on support and guidance to them, such as helping to set and implement necessary internal rules and procedures, building a company's compliance system, and assisting in its operations.

■ Compliance System at Sumitomo Chemical Group



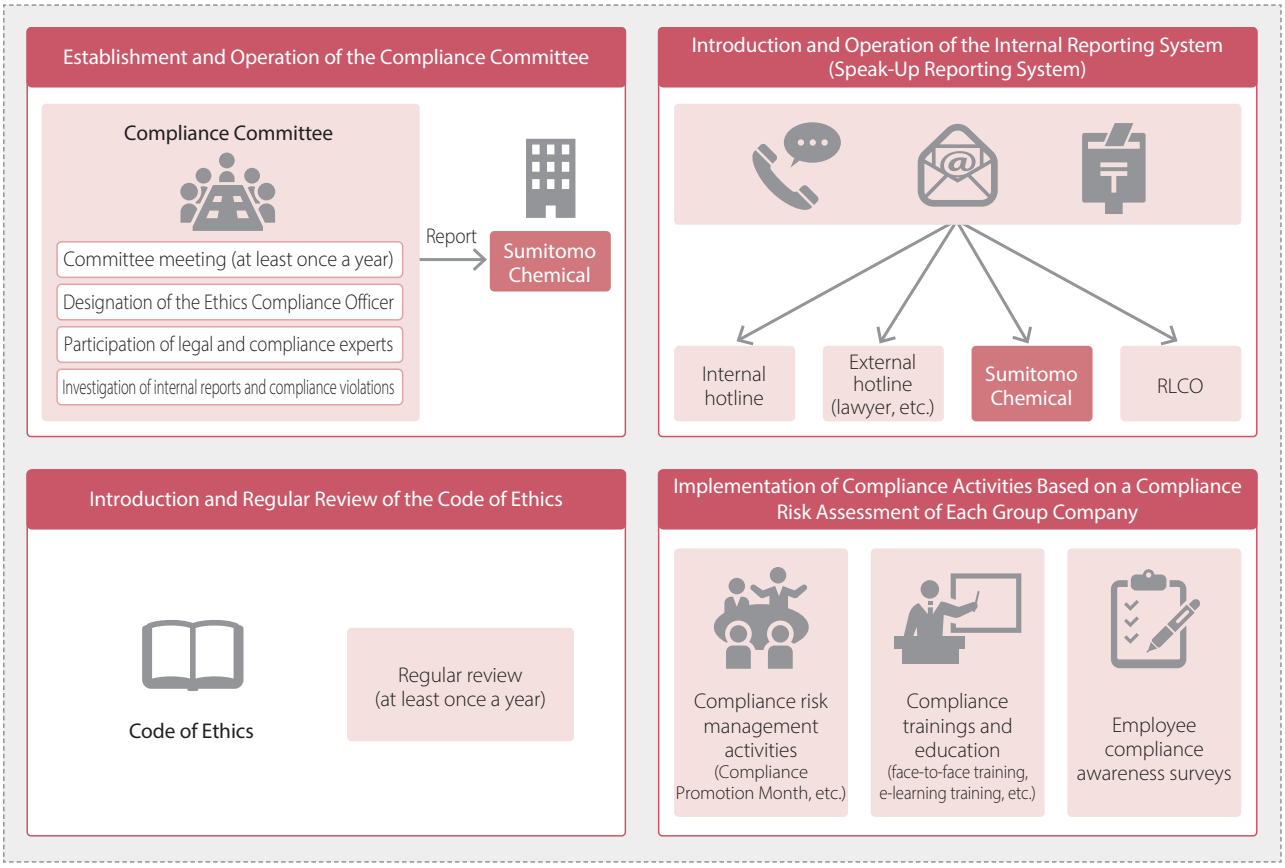
Compliance

(3) Introducing and Operating a Compliance System for the Company and its Group Companies

To ensure thorough compliance throughout the entire Sumitomo Chemical Group, it is important that Sumitomo Chemical and its Group companies establish and operate their own compliance systems. Accordingly, we established the Sumitomo Chemical Group Compliance Standards, which outlines the compliance systems and activities that serve as our standards. In line with these standards, Sumitomo Chemical and its Group companies are engaged in the following main initiatives.

(i) Establishing and operating the Compliance Committee (including responding to internal reports and conducting compliance violation investigations)
(ii) Introducing and regularly reviewing the Code of Ethics
(iii) Introducing and operating the Internal Reporting system (the Speak-Up Reporting System)
(iv) Implementation of compliance activities (education, training, etc.) based on a compliance risk assessment of each Group company

■ Compliance System Operations



Compliance

Internal Reporting System (Speak-Up Reporting System)

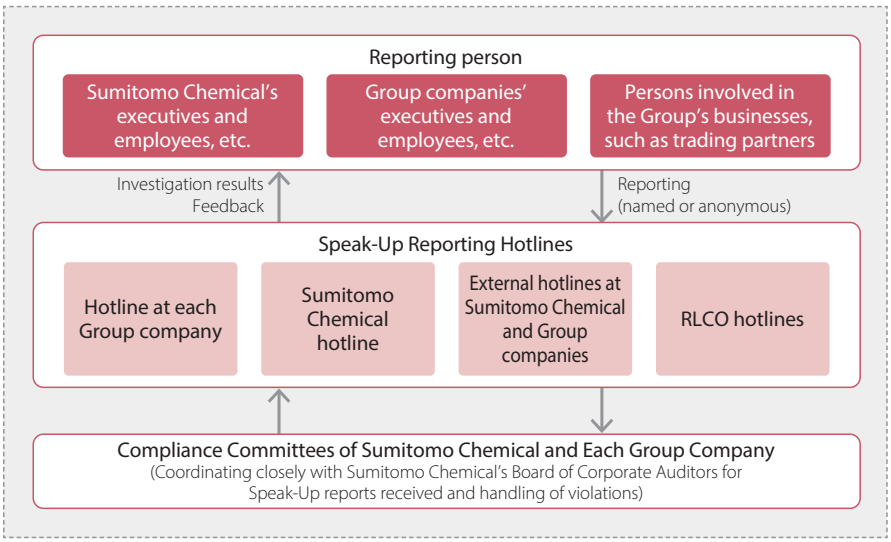
(1) The Internal Reporting System Is the Key to Ensuring Compliance

In order to detect any compliance violations as early as possible or to prevent them from occurring in the future, the Sumitomo Chemical Group has introduced an internal reporting system (the Speak-Up Reporting System) that allows company employees, etc. to report a compliance violation or a suspected violation directly to the Compliance Committee or to external lawyers, either. The Speak-Up Reporting System may be used by Sumitomo Chemical's executives and employees (including contract employees) and their families, Group companies' executives and employees and their families, retirees from the Company or Group companies, and anyone involved in the Group's businesses (including trading partners).

Furthermore, to receive a Speak-Up report without fail, Sumitomo Chemical have set up Speak-Up Reporting Hotlines to receive reports at (i) the Compliance Committees of each Group company, (ii) RLCOs, (iii) the Compliance Committee of Sumitomo Chemical, and (iv) external lawyers designated by these committees. The person reporting can choose the hotline they think most appropriate. In addition, anonymous reports are also accepted and responded to.

Note: Regarding reporting within the European Union, we act in compliance with the various laws and regulations of the European Union or its individual member countries.

■ How a Report is Processed under the Internal Reporting System (Speak-Up Reporting System)



(2) Guidance and Oversight by the Board of Corporate Auditors, Including Outside Corporate Auditors

On the grounds that Speak-Up reports given to the Compliance Committees of Sumitomo Chemical and the Group companies, as well as compliance violation incidents at each company, are also important from a governance perspective, the Board of Corporate Auditors will regularly, or as needed for important issues, receive reports on these reports and violations, and will provide guidance and oversight.

(3) Promoting Use of the Internal Reporting System (Speak-Up Reporting System)

In its *Compliance Manual*, Sumitomo Chemical Group makes clear that the company carries out investigations based on the Speak-Up report with utmost consideration to protecting the privacy of a reporting person and maintaining confidentiality of information provided and that the company doesn't put the truthful reporting person at any disadvantage, such as dismissal, transfer, or discrimination, on the grounds of having made the report. The manual also states that if someone commits a compliance violation but reports it to the company of their own volition and cooperates with the Compliance Committee's investigation, the person is eligible for leniency regarding the disciplinary action that would ordinarily be proscribed. We are raising awareness of these facts among employees. Moreover, to ensure that the Speak-Up Reporting System functions in a truly effective manner, Sumitomo Chemical's Compliance Committee takes every opportunity to explain to employees that Speak-Up reporting will never disadvantage a reporting person. In this regard, the Committee has been working to help employees understand clearly that confidentiality about the reporting is maintained, any disadvantageous treatment to a reporting person is strictly prohibited, and leniency is possible. In addition, the Committee shares with employees information about how far the Speak-Up Reporting System is in use by employees.

Compliance

(4) Latest Results of the Internal Reporting System

As a result of initiatives promoting use of the reporting system, in fiscal 2020, the total number of reports made to the Compliance Committees of Sumitomo Chemical and its Group companies (including listed companies in which the Company holds a stake of 50% or more) was 135, a year-on-year decrease of 16 reports. Upon its receipt, each report was worked on, and an investigation was conducted promptly and cautiously into a reported incident. If compliance violations were found or if a situation that might eventually develop into an incident of violation was recognized, corrective measures were taken properly. In addition, information on a violation incident and corrective measures actually taken was shared, as necessary, by other companies of the Group so that they could prevent similar incidents from occurring in their workplace in the future.

■ Number of Reports (Sumitomo Chemical Group*)

	FY2018	FY2019	FY2020
Number of reports	149	151	135

* Includes those listed companies in which the Company holds a stake of 50% or more

(5) Acquired registration under the Whistleblowing Compliance Management System

Sumitomo Chemical has become a registered company under Japan's Whistleblowing Compliance Management System certification ("WCMS Certification") regime, through the regime's "self-declaration of conformity" process, effective as of December 11, 2020.

Through this WCMS Certification and registration, Sumitomo Chemical will continue to strengthen its compliance systems—including its Speak-Up System—to contribute to the sustainable development of the Sumitomo Chemical Group.

Whistleblowing Compliance Management System

Response to Compliance Violations

At Sumitomo Chemical, when a compliance violation or suspected violation is discovered within a department, the compliance supervisor in the department promptly reports to the relevant department and the Compliance Committee. After submitting a report, an investigation is carried out, and if any compliance violation is discovered, corrective and preventative measures are formulated and rolled out not just to the offending department but to the entire Sumitomo Chemical Group to ensure a recurrence is thoroughly prevented. In addition, the Internal Control & Audit Department and the Responsible Care Department conduct audits from the perspective of compliance. When compliance violations are discovered through these audits, corrective action is taken directly at that time. In fiscal 2020, there were no major compliance violations related to the Sumitomo Chemical Group's business continuity.

■ FY2020 Number of Compliance Violations (Sumitomo Chemical Group)

	Number of Compliance Violations
Number of significant compliance violations	0
Significant violations of antitrust and monopoly legislations	0
Significant violations of anti-corruption legislations	0
Significant violations of laws or regulations in the social and economic area besides those mentioned above	0

Compliance

Results of Main Compliance Activities in the Sumitomo Chemical Group

(1) Compliance Committee Meetings

Sumitomo Chemical and its Group companies have established Compliance Committees, which convene either regularly (at least once a year) or as appropriate. Sumitomo Chemical's Compliance Committee convened on April 19, 2021, and reported its results to the Board of Directors and Board of Corporate Auditors, from which it received feedback.

(2) Review and Update of the Code of Ethics

Sumitomo Chemical and its Group companies regularly consider revisions to the Code of Ethics (at least once a year). After conducting a review, if there is need for an update, it is made promptly. Sumitomo Chemical conducted a review of the Code of Ethics at relevant departments. In light of these results, we updated the Code of Ethics in April 2021.

Sumitomo Chemical Code of Ethics (*Compliance Manual*)

https://www.sumitomo-chem.co.jp/english/sustainability/governance/compliance/rules_society/

(3) Compliance Promotion Activities

(i) Compliance Risk Management Activities (Compliance Promotion Month, etc.)

Sumitomo Chemical and some of its Group companies have designated October as Compliance Promotion Month. During this month, all employees in each workplace, including manufacturing, research, sales, and various intermediate departments, participate in discussions to examine and identify all conceivable compliance risks, major or minor, that might arise in each workplace. They then go on to select those risks that need to be specifically addressed and formulate concrete measures to prevent the risks from occurring in the future. For those preventive measures that are already in place, they review once again whether or not the measures are sufficiently effective when implemented. Continuous implementation of these measures not only reduces specific compliance risks in the workplace but also helps in raising employees' compliance consciousness.

Regarding the Compliance Promotion Month initiatives of fiscal 2020, environmental changes caused by the COVID-19 pandemic were the essential topics of discussion. All major compliance risks were examined and identified in each department and concrete preventive measures were then formulated and implemented. Reports on these activities were submitted by each department, and an evaluation team that includes outside legal counsel objectively evaluated them. With the goal of further raising the level of compliance, we shared information on departments with positive evaluations and the details of their initiatives within the Company.

■ List of Essential Topics of Discussion during the Compliance Promotion Month

Fiscal Year	Essential Topics of Discussion
2016	Fraud risks
2017	Collusion and harassment
2018	Information leaks and management of company assets
2019	Compliance with business laws
2020	Environmental changes caused by the COVID-19 pandemic

(ii) Compliance Training

In line with its firm belief that strict compliance can only be achieved with each employee having high awareness of compliance, Sumitomo Chemical places importance on carrying out compliance education on a continual basis. This includes training programs geared to management executives at Sumitomo Chemical and Group companies as well as class-based training when someone is promoted. In addition, we conduct face-to-face lecture-style training courses and e-learning training, depending on each company's specific needs and situation. In fiscal 2020, we conducted compliance e-learning training for all Sumitomo Chemical employees (around 7,000 people), and all employees received the training. In addition, Group companies in Japan conduct compliance training.

Compliance

■ FY2020 Compliance Training Status

	Status of Implementation
Sumitomo Chemical	Compliance e-learning training (including Speak-Up Reporting System, Anti-corruption) Participation rate: 100% (conducted at all worksites and departments) (already conducted training for promoted employees and individual training related to corruption prevention, quality assurance, safety, logistics, information security, etc.)
Sumitomo Chemical Group*	Percentage of employees who received training related to compliance (attendance rate) Attendance rate at Group companies in Japan: 77.9% Attendance rate at Group companies overseas: 86.6%

* Does not include Sumitomo Chemical

(iii) Employee Compliance Awareness Survey

In order to measure the effect of the initiatives listed above, including compliance activities and training, Sumitomo Chemical and Group companies in Japan and overseas regularly conduct employee compliance awareness surveys. In fiscal 2019, Sumitomo Chemical conducted its sixth employee compliance awareness survey. In the fiscal 2019–fiscal 2020 period, 37 Group companies in Japan and overseas conducted similar surveys. Analyses are conducted comparing Sumitomo Chemical with Group companies and Group companies with each other, a process that leads to the discovery of issues and the setting forth of measures aimed at the further improvement of compliance at each Group company.

(4) Initiatives to Respect Human Rights and Prevent Corruption

An area of our recent focus is to strengthen those initiatives which lead to respect human rights (refer to page 151), and initiatives will more effectively serve to maintain sound business practices in companies' entire supply chains, through implementing measures to prevent corruption, such as bribes and collusion with business partners (including bribery and collusion with operators; refer to page 87).

(5) Initiatives to Comply with Competition Laws

To fully ensure compliance with competition laws, Sumitomo Chemical has established the Committee on Antitrust Compliance and Corruption Prevention (chaired by the company's President) to establish and manage competition law compliance systems for the entire Sumitomo Chemical Group under the guidance and supervision of the Board of Directors and Board of Corporate Auditors. In addition, we issued the *Competition Law Compliance Manual*, and we intend to promote the introduction of the manual by Group companies in Japan and overseas going forward. Furthermore, we are actively providing training using this *Competition Law Compliance Manual*.

Moreover, as a general rule, we prohibit executives and employees of business sectors from interacting with rival operators. We introduced an operator consultation system to permit such interactions only in the event that it is necessary for operations and, in such exceptional cases, that approval has been given in advance. In addition, product sales prices must always be independently set based on our own standards. To ensure this, when revising product sales prices and price formulae, the Company convenes the price deliberation committee, which determines the revisions after thorough deliberation.

■ Status of Implementation for Training Related to Competition Laws (Including Awareness Raising Activities)

	Status of Implementation
Sumitomo Chemical	Already implemented at eligible worksites and business sectors (cumulative total of 20 times since FY2018)
Sumitomo Chemical Group*1	Group companies in Japan*2: 69.6% Group companies overseas*2: 69.4%

*1 Does not include Sumitomo Chemical
*2 Percentage of companies that conducted training

Compliance

(6) Compliance Audit

As it is also important to conduct audits of whether the operations of the compliance structure and various compliance activities are being appropriately carried out in each department of Sumitomo Chemical, and in each Group company, the Internal Control and Audit Department and the Responsible Care Department conduct compliance audits. (For more details on the Responsible Care Department's audits, refer to page 95.) Regarding matters discovered during the compliance audits, appropriate corrective measures are taken.

Sumitomo Chemical Group Compliance Action Policy (FY2021)

Under the Corporate Business Plan, ensuring strict compliance for the entire Sumitomo Chemical Group is a basic policy, Sumitomo Chemical vigilantly monitors and addresses issues in the following areas.

- Appropriately response to Speak-Up and compliance violation investigations
- Compliance training and educational activities
- Compliance audits

We will steadily implement compliance promotion activities across the Group, further enhance Group compliance, fully respond to the amendment of the Whistleblower Protection Act, and focus our efforts on responding to new SDG and ESG trends. In this way, Sumitomo Chemical will strengthen and improve the Group's compliance system operations and continue to further enhance its effectiveness.

■ FY2021 Sumitomo Chemical Compliance Action Goals

Items	FY2021 Goals	FY2020 Results	FY2019 Results	FY2018 Results
Internal Reporting (Speak-Up reporting)	Regarding the number of employees per report, maintain 100% compared to the previous fiscal year (316 people per report)	316 people per report	280 people per report	283 people per report
Compliance Training	Conduct compliance training at 95% of Group companies	Sumitomo Chemical*1: 100% Group companies in Japan*2: 95.7% Group companies overseas*2: 93.9%	Sumitomo Chemical*1: 100% Group companies in Japan*2: 97.4% Group companies overseas*2: 83.6%	Sumitomo Chemical*1: 100% Group companies in Japan*2: 97.4% Group companies overseas*2: 89.6%

*1 Attendance rate (percentage of employees)
*2 Percentage of companies that conducted training

Looking Ahead

Being a global enterprise, Sumitomo Chemical's Compliance Committee, RLCOs, and Group companies are deeply committed to fulfilling their corporate citizenship responsibilities as a global corporation by carrying out the Sumitomo Chemical Group Compliance Basic Policy.

Anti-corruption

Basic Policy

As corporations expand activities across national boundaries, promoting fair competition becomes increasingly important in the supply of goods and services in the international marketplace. As is evident from the ever tightening laws and regulations in the world designed to prevent corruption, such as the FCPA in the U.S. and the Bribery Act of 2010 in the U.K., there is a growing awareness globally that corrupt conduct, such as bribery, should be eliminated by any means necessary. Under the circumstances, Sumitomo Chemical has positioned the prevention of corruption in all its forms, including bribery of public officials, excessive business entertainment and gift-giving, collusion, embezzlement, and breaches of trust as one of the most important issues in ensuring thorough compliance. We are striving to ensure a sustainable and sound corporate climate by enhancing our internal organization to appropriately respond to corruption risks to prevent the occurrence of corruption.

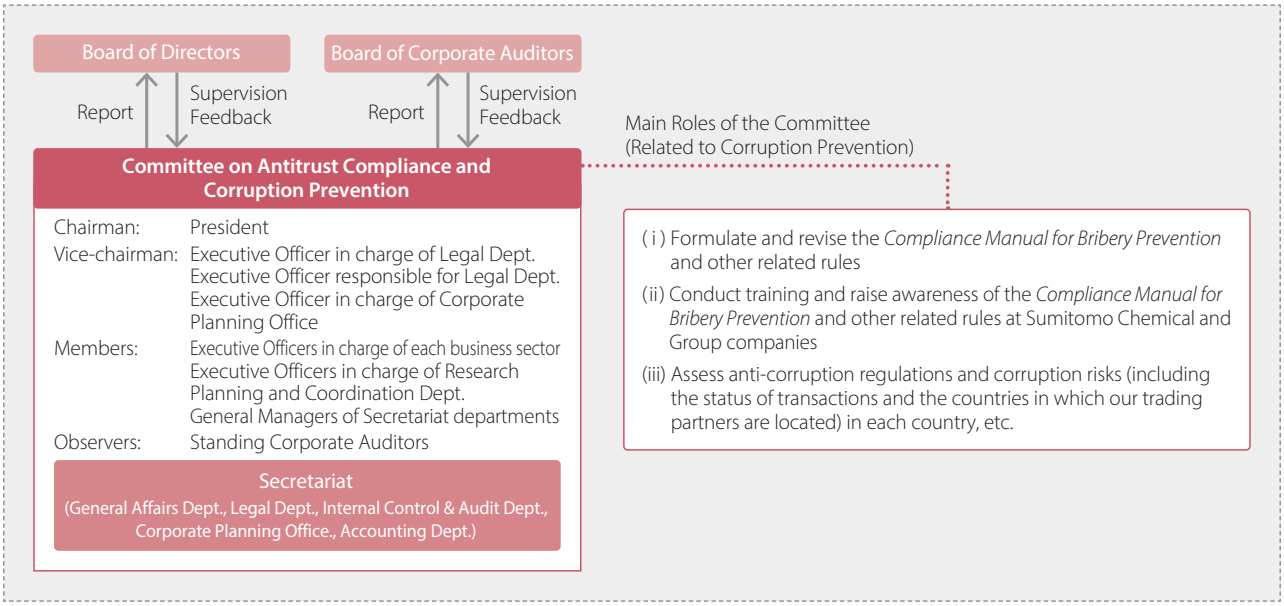
Committee on Antitrust Compliance and Corruption Prevention

Sumitomo Chemical has established the Committee on Antitrust Compliance and Corruption Prevention (chaired by the company's President) to establish and manage anti-corruption systems for the entire Sumitomo Chemical Group under the guidance and supervision of the Board of Directors and Board of Corporate Auditors.

In the President's own messages, the committee states its policy and commitment to prohibit all forms of corruption, including bribery of public officials by management executives or employees, excessive entertainment and gift-giving, collusion, embezzlement, and breaches of trust. In addition, we have formulated a Compliance Manual for Bribery Prevention that contains detailed anti-corruption rules. The manual has been disseminated to all Group companies in Japan and overseas, and has been posted on the company intranet, and periodic training sessions are conducted to ensure thorough compliance among the employees of the company and its Group companies.

Further, we conduct assessments of anti-corruption regulations and corruption risks in each country, such as the status of transactions and the countries in which our trading partners are located. Based on the results of these assessments, we decide on policies to strengthen measures to prevent corruption, and apply them to the company and all Group companies.

■ Committee on Antitrust Compliance and Corruption Prevention



Anti-corruption

Compliance Manual for Bribery Prevention (Outline)

Chapter 1: General Principles

1. Prohibition of Giving Bribes
   It is prohibited to give bribes to a government official or to any other person or entity, including private trading partners.
2. Prohibition of Accepting Bribes
   It is prohibited to accept a bribe. In addition, it is prohibited to request a bribe or gift, entertainment, or other benefit from a third party.
3. Prohibition of Giving or Accepting Excessive Gifts or Entertainment
   It is prohibited to give or accept excessive gifts or entertainment. All forms of gifts or entertainment that may harm the Company's reputation are always impermissible.

Chapter 2: Prohibition of Bribing Government Officials

The provision of any form of improper benefit to a government official may be considered a bribe. Furthermore, various rules are put in place, including those related to the circumstances where any type of gift and entertainment to a governmental official is prohibited, procedures for sponsoring site visits by governmental officials, procedures for giving donations and political contributions, and compliance with local regulations.

Chapter 3: Rules For and During Engagement of Business Partners

It is required to conduct due diligence when the Company engages new business partners or renews engagement of existing business partners, such as agents, distributors and consultants who could interact with government officials in the course of services for the Company. It is also required to fix the appropriate compensation and to take necessary internal procedures when concluding contracts with business partners.

Chapter 4: Proper Keeping of Books and Records

It is required to prepare and maintain appropriate and accurate books and records related to entertainment, gifts, payments to business partners, and other transactions.

Chapter 5: Monitoring Legal Compliance

It is required for each department to ensure thorough compliance, for the Internal Control & Audit Department to conduct audits, and the Committee on Antitrust Compliance and Corruption Prevention to take initiatives. In addition, the Company's executives and employees are obligated to file a report when a violation (or a suspicion of one) is detected.

Chapter 6: Violations

The Company's executives and employees who commit violations of this manual are subject to disciplinary action.

Anti-corruption

Initiatives in the Supply Chain

In order to prevent corruption in the Group's supply chain, we are making our agents, consultants, distributors, and other business partners aware of our anti-corruption policy by holding regular training sessions when initially engaging or renewing a contract, or at business meetings and other occasions. We also ask our partners to pledge to comply with the policy. In addition, as part of our due diligence procedures, we ask business partners to submit written responses detailing their company's profile and any past corruption problems, and assess the risk of corruption based on these responses. Moreover, when we engage a business partner for business with a high risk of corruption, such as in a public tender transaction or in a developing country, a more detailed risk assessment is carried out, including on-site interviews with the business partner conducted by an outside expert. If it is judged that there is a risk of corruption as a result of the assessment, we conduct awareness-raising activities concerning the prevention of corruption for such business partners, asking them to implement corrective measures such as strengthening the internal rules and organization to prevent corruption, and offering our support for such efforts. (The company does not engage business partners if the implementation of remedial measures is refused or if there is a strong concern about corruption detected through the assessment process.)

Other Measures

In addition to the above-mentioned measures, we are striving to prevent corruption through the application of internal rules on business entertainment and gift-giving, and the strict application of approval procedures for business decisions and payment.

We have also established and operate an internal reporting system (the Speak-Up Reporting System, which allows anonymous reporting) that can be used by anyone involved in our business, including business and trading partners, in order to quickly identify corruption or the threat of corruption, to prevent compliance violations from occurring, and to rectify them as soon as possible. We also inform management executives or employees of Group companies, and business and trading partners, about the use of this system.

Management executives and employees whose corrupt conduct has been confirmed are subject to disciplinary action in light of internal rules. Business and trading partners are requested to rectify such actions, and other measures are taken, such as the suspension of transactions.

Looking Ahead

The Sumitomo Chemical Group will continue actively promoting various initiatives across its entire supply chain going forward to prevent bribery and all other forms of corruption.

Tax Transparency

Basic Policy

The Sumitomo Chemical Group considers paying taxes one of the most fundamental and important social responsibilities of a company. We comply with the tax laws applicable to each country and properly pay taxes in accord with that spirit.

The Group understands that using exceedingly beneficial tax systems in regions or countries with no or low taxes (so called tax havens) hinders the collection of proper taxes in each country. By not using tax havens with the purpose of avoiding taxes and by paying appropriate taxes in the countries and regions where it does business, the Group aims to help spur economic development in those countries and regions.

The Sumitomo Chemical Group has established the Sumitomo Chemical Group Tax Policy to ensure tax transparency and enhance tax compliance.

Sumitomo Chemical Group Tax Policy

Sumitomo Chemical Group conducts business in a wide range of countries and regions based on the Sumitomo Spirit which has been passed down through generations for over 400 years, the basic teaching of which is to contribute to society through its business activities. The Sumitomo Chemical Group recognizes that tax payment is one of the most fundamental and important social responsibilities that companies should fulfil. In accordance with the below fundamental policies, the group complies with the respective tax laws in each country in which it operates, ensuring correct tax payment in the spirit of its business philosophy. Through this, the group strives to build relationships of trust with various stakeholders and contribute to the economic development of each country and region.

Legal Compliance

The Sumitomo Chemical Group will comply with all tax laws and regulations applicable to all countries and regions in which business activities are conducted, and will file and pay taxes accordingly.

Tax Planning

The Sumitomo Chemical Group considers and implements tax planning measures in order to improve the cash flow of the business, but such tax planning is done fully in compliance with the laws of each country, ensuring proper consideration of the business circumstances, and does not carry out tax planning for the purposes of tax avoidance.

Tax Havens

The Sumitomo Chemical Group understands that the use of countries or regions with low tax rates or no tax payable (known as "tax havens") will be to the detriment of appropriate tax payments in each country. Therefore, the Group does not use tax havens for the purposes of avoiding taxes but instead wishes to contribute to each country's economic development by appropriate payment of taxes.

Transfer Pricing

The Sumitomo Chemical Group sets transaction prices so that cross-border related-party transactions are carried out based on the arm's length principle, in accordance with the OECD Transfer Pricing Guidelines, in order to ensure the appropriate tax payment in each country and region. The group also ensures regular review of the appropriateness of its profit allocation based on the functions, risks and assets of each group company and the respective contribution each group company makes to the group business. The group also prepares transfer pricing documentation in accordance with the relevant tax laws and regulations.

Uncertain Tax Positions

The Sumitomo Chemical Group conducts business globally, and in addition to conducting various types of transactions, there may be cases where taxation related matters and tax positions may be unclear due to increasingly complex tax systems. For such cases, the group will carefully consider each situation and strive to make decisions that will minimize tax risk, such as by consulting with independent experts and utilizing advance consultation procedures with tax authorities.

Relations with the Tax Authorities

In addition to the group ensuring appropriate filing and payment of tax in each country and region, the Sumitomo Chemical Group will also endeavor to build and maintain good relationships with tax authorities by responding in good faith to their requests.

Tax Transparency

Management System

The Sumitomo Chemical Group Tax Policy was established to diligently implement initiatives aimed at ensuring tax compliance and transparency, and it is shared with Group companies in Japan and overseas. We comply with the tax laws of each country and region where we do business and strictly and appropriately pay taxes.

Goals and Results

■ Corporate Income Taxes Paid (Sumitomo Chemical Group)

(Billions of yen)

	FY2016	FY2017	FY2018	FY2019	FY2020
Amount of tax paid	64.3	28.7	50.2	48.7	54.4

Responsible Care

Basic Stance

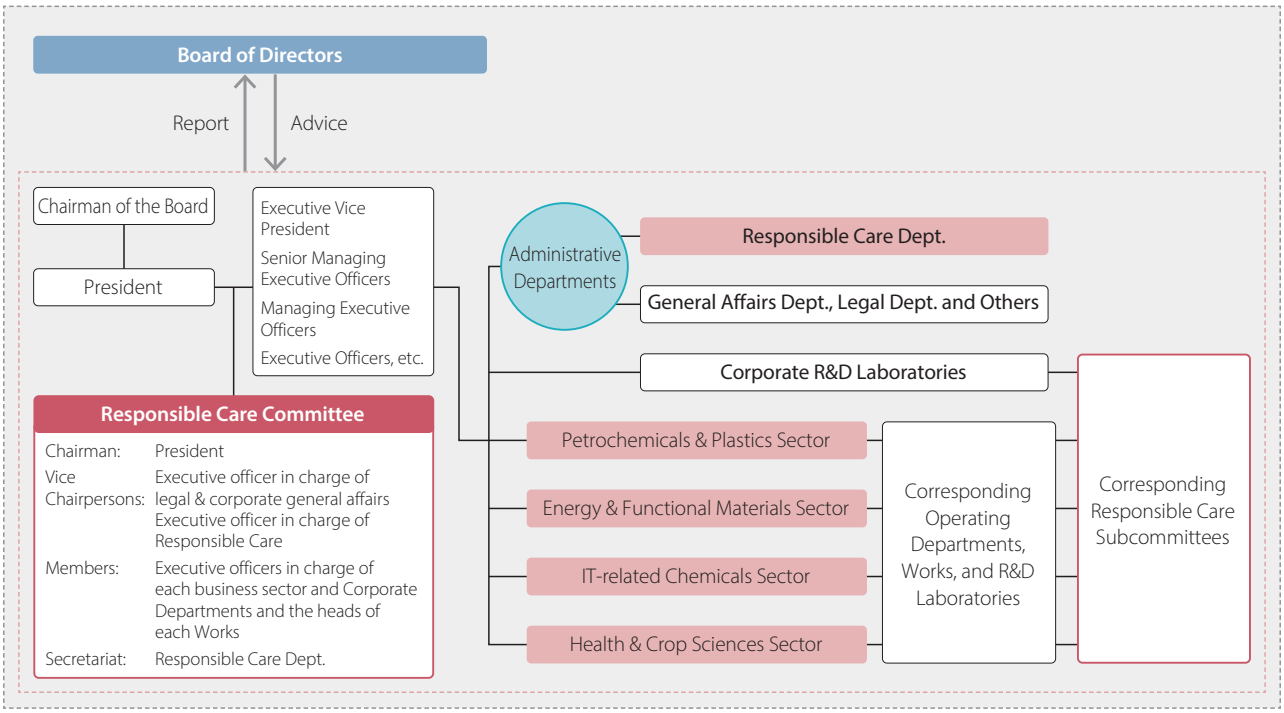
Responsible Care (RC) activities refer to the voluntary initiatives undertaken by business operators in the chemical industry, with the goals of ensuring safety, health and the environment throughout the life cycle of chemical products, from development through to the manufacture, sales, use, and disposal after final consumption, maintaining and improving the quality of those products. These activities also strive to gain the further trust of society through continuous dialogue.

The Sumitomo Chemical Group has positioned Responsible Care activities as one of its most important management pillars. Based on the core principle of "Making safety our first priority," the Group has set goals for each of the following fields: occupational safety and health; industrial safety and disaster prevention; environmental protection; addressing climate change; product stewardship, product safety, and quality assurance; Responsible Care audits; and logistics. The Group is working to achieve the goals it has set.

Management System

As the body for deliberating and approving Sumitomo Chemical's RC activities, the Responsible Care Committee is chaired by the president and comprises executive officers responsible for and in charge of the administrative departments and the four business sectors of the Company, and the General Manager of each Works. The Committee puts in place annual policies on activities, medium-term plans, and specific measures as they relate to Responsible Care. The committee also analyzes and assesses the results of Responsible Care activities. The Committee then reports the content of its meetings to the Board of Directors as appropriate and receives necessary guidance in an effort to enhance its supervisory functions and the execution of its duties.

■ Organization of Responsible Care



Responsible Care

Policies and Goals

Corporate Policy on Responsible Care (Safety, Health, the Environment and Product Quality)

Sumitomo Chemical has set forth safety, the environment, and product quality as top priorities for all phases of its business activities in its Corporate Policy on Responsible Care (Safety, Health, the Environment and Product Quality). This policy has been communicated to all employees of Sumitomo Chemical and its Group companies to ensure that each and every employee is fully aware of it.

To ensure that we, in accordance with our Basic Principles for Promoting Sustainability and the Sumitomo Chemical Charter for Business Conduct, contribute to the sustainable development of society and achieve our own sustained growth by gaining society's trust, we declare our commitment to addressing, together with Group companies, the following matters as the highest priority tasks with respect to safety, health, the environment, and product quality:

1. We will maintain safe and stable operations by realizing zero-accident, zero-injury performance and "Making safety our first priority."
2. We will ensure the safety of our employees, neighboring communities, and other stakeholders through risk-based continual improvement of our performance in occupational safety and health, industrial safety and disaster prevention, and other related areas, as well as the security of our facilities, processes and technologies.
3. We will work to ensure environmental and human health and safety throughout the life cycle of our products by promoting continual improvement in chemicals safety and product stewardship across the supply chain, and enhancing our chemicals management system.
4. We will work to protect the environment through continual improvement of our environmental performance throughout the life cycle of our products, from development to disposal, and address climate change and related.
5. We will provide safe and reliable products and services that our customers can use safely and with confidence.
6. We will not only comply with all domestic and international laws, regulations, and ordinances but also work to use best practices through our voluntary initiatives.
7. We will disclose information and engage in dialogue with society to ensure we meet society's expectations, respond to its interests, and remain accountable to the same.
8. We will contribute to sustainable development of society by improving our performance, expanding business opportunities, as well as developing and providing innovative technologies and other solutions to address social challenges.

Established: April 1, 2020

Note: Combined "Corporate Policy on Safety, the Environment and Product Quality (Established: April 1994)" and "Policy on Responsible Care Activities (Established: January 1995)"

Responsible Care

Promoting Responsible Care Activities

Sumitomo Chemical shares policies and targets regarding RC across the entire Group. We are working to maintain stable operations with zero accidents and zero injuries as the foundation of our business, which is one of the basic policies outlined in the Responsible Care medium-term plan. We are also striving to ensure safety, health and the environment throughout the life cycle of products as well as to improve the quality of chemical products the Company manufactures.

	Medium-term Plan (FY2019 – FY2021)
Occupational Safety and Health	• Assess the level of safety culture and safety infrastructure at each workplace and constantly strive for improvement. • Promote safety and health activities based on international standards and adapt to a society where people can choose from a variety of flexible working styles
Industrial Safety and Disaster Prevention	• Strive to strengthen safety infrastructure by introducing advanced technologies to improve management technologies, training highly skilled process safety personnel, and carefully managing facilities and construction projects. • Strengthen our response to intensifying natural disasters and new threats, such as terrorism
Environmental Protection	• Work to rapidly respond to environmental laws and regulations and continually reduce our environmental impact • Actively work to disclose environmental information to help steadily improve our standing in society
Addressing Climate Change	• Work to formulate and implement action plans aimed at achieving our science based targets (SBTs) • Consider medium- to long-term policies for Sumika Sustainable Solutions
Product Stewardship, Product Safety, and Quality Assurance	• Use the regulation data collection systems in cooperation with Group companies and establish a long-term system • Strive to increase use of the Company's systems, including the comprehensive chemical management system (SuCCESS) • Promote activities to prevent quality-related problems and reduce losses arising from flaws
RC Audits	• Conduct audits to ensure thorough operation of the Responsible Care management system, steady improvements to its operation, and compliance with related laws and regulations
Logistics	• Work to reduce the number of logistics safety- and quality-related incidents

Note: More details on the key activities and initiative results for each field can be found in the following sections.

At present, we have stationed Responsible Care specialists at regional headquarters in Europe and the Americas as well as China and the wider Asia Pacific region. This has enabled us to develop RC activities rooted in each area. We established the Sumitomo Chemical Group's Safety Ground Rules in 2016 as a measure to further secure safety at all Group locations. We have since been working to promote awareness of the rules among all Group employees while further raising the level of Groupwide safety activities and eliminating work-related accidents. Moreover, we strive to ensure the safety of community residents and protect their environment while promoting mutual understanding by providing residents with information concerning our initiatives and engaging in dialogue.

Also, we continually work to develop human resources that are capable of implementing Responsible Care, for example, through training and practice at each production site and regional headquarters as well as regular meetings attended by the Responsible Care managers of Group companies in Japan and overseas. In addition, we publish a newsletter that covers various topics and information on accidents and disasters that have occurred within the Group in the hope of preventing similar occurrences. We also promote various kinds of RC activities through RC awards for excellent RC activities of Group companies.

Looking Ahead

As global-scale issues pile up, including the response to climate change, the creation of a circular economy, and considerations for biodiversity, we, as people engaged in the chemical industry, duly regard the society's trust in us as the starting point to continue our business. To ensure continued growth together with customers, regional neighbors, and employees, we will continue to promote Responsible Care activities throughout the Group.

Responsible Care

Eco-First Commitments

In March 2012, Sumitomo Chemical reported the progress and results of its efforts to fulfill the Eco-First Commitments to the Japanese Minister of the Environment while announcing its Eco-First Commitments, Updated Version.

Note: The content was updated in November 2016. From fiscal 2016, measures are being taken in line with the updated content.

ECO FIRST

Eco-First Commitments

Updated Version

November 30, 2016

To Koichi Yamamoto
Minister of the Environment

President of
Sumitomo Chemical Co., Ltd.
Masakazu Tokura

As a leader in the chemical industry, Sumitomo Chemical Co., Ltd. considers the appropriate management of chemical substances to be fundamental and not only observes strict compliance with all relevant laws and regulations, but also works to ensure safety, environmental protection, health and product quality throughout the life cycle of chemical products. The Company also strives to gain the further trust of society through continuous dialogue and undertakes voluntary initiatives (Responsible Care activities) to contribute to the sustainable development of society.

1 We will promote the management of chemical substances and the risk communication in an appropriate and proactive manner using proprietary technology.

- We will review the information on the safety for all our products manufactured and sold in annual amounts of one ton or more by fiscal 2016, and we will conduct the appropriate risk assessments based on the results by fiscal 2020 using our proprietary technology. In addition we will make the results available to the general public as Safety Summaries.
- We will collaborate with chemical companies in the world on studies of the impact of chemical substances on human health and the environment (Long-range Research Initiative) in order to improve the safety of chemical substances.
- All the offices and facilities at Sumitomo Chemical will strive to communicate effectively with and promote information disclosure to local residents and other stakeholders in creative and voluntary ways that suit the needs of the local community.

2 We will develop and apply management technologies that help reduce environmental impacts to realize safe and secure water treatment.

- To make it easier to select the more appropriate water treatment method (either activated sludge or incineration), we will work to more uniformly standardize methods for evaluating the various kinds of process water expelled from plants.
- We will use microbiota analysis, microbial immobilization and other proprietary technology to increase the sophistication of activated sludge treatment and thereby achieve the following goals:
  1. Ensure stable water treatment by checking and managing the health of the sludge biota
  2. Improve our treatment capabilities
  3. Switch over a portion of the treatment of wastewater for which activated sludge treatment had been deemed too difficult from incineration to such treatment

3 We will proactively contribute to build a sustainable society.

- To contribute to society through the power of chemistry (and related businesses) and encourage reductions in CO_2 emissions through the widespread adoption of low-carbon products and technologies, we internally designate products and technologies that help address climate change, actively promote the development and widespread adoption of these products and technologies, and make available to the public quantitative information on emission reductions.
- We strive to improve the unit energy consumption of all plants by an annual average of 1%. We will switch to energy sources with low emission factors, introduce cogeneration systems and promote the installation of LED lighting at worksites. Through these and other efforts, we will improve CO_2 emission intensity from energy sources 15% relative to fiscal 2005 by fiscal 2020. As a result, total CO_2 emissions in fiscal 2020 will be 15%, or around 3.2 million tons, lower than those in fiscal 2005.
- We promote internal education and environmental education activities in different regions to deepen understanding of the importance of environmental protection.

The Company will monitor the progress made in
the above initiatives, make the results publicly available,
and report them to the Ministry of the Environment on a regular basis.

SUMITOMO CHEMICAL

Responsible Care

Progress in Fulfilling Eco-First Commitments

Sumitomo Chemical has participated in the Eco-First Program of Japan's Ministry of the Environment since November 2008. As a leading company in the chemical industry, Sumitomo Chemical is committed to fulfilling its Eco-First commitments to the Japanese Minister of the Environment while ensuring legal compliance and enhancing RC activities.

Results ◉ Very favorable/ ◐ Generally favorable

Management of Chemical Substances and the Promotion of Risk Communication

◉

Reviewing Safety Information on Chemicals and Conducting Risk Assessments
- Performed risk assessments for 749 products to date and publicly released safety summaries for 58 substances. (https://www.jcia-bigdr.jp/jcia-bigdr/en/material/icca_material_list)

LRI*1 Initiatives
- Promoted research by actively participating in the LRI program implemented by the Japan Chemical Industry Association as a member of the steering committee and research strategy planning group. Furthermore, we participate in the microplastics task force, which has close ties to the LRI program, and provide feedback.

Enhancing Information Disclosure and Risk Communication
- Published the *Annual Report*, *Sustainability Data Book*, the *Report on the Environment and Safety (at all worksites)*, local PR newsletters, etc., made information publicly available on the official website, made school visits, accepted student interns, and engaged in dialogue with local residents.

Realizing Safe and Secure Water Treatment by Developing and Applying Management Technology that Helps Reduce Environmental Impact

◉

Considering Appropriate Water Treatment Methods and Standardizing Methods for Assessing Various Process Waste Water Expelled from Works
- In light of current operating conditions, we finished considering the standardization of each Works' methods for assessing and treating effluent from new manufacturing processes. We have prepared manuals and are promoting the adoption of standardized methods at each Works.

Using Microbiota Analysis, Microbial Immobilization, and Other Proprietary Technology to Increase the Sophistication of Activated Sludge Treatment
- We perform biota analyses on activated sludge used for water treatment using molecular biology methods that employ cutting-edge equipment. From this, we have gained data on microbial community structures. Using this data, we are now able to fully grasp the relationship of microbial communities in sludge to water treatment. In addition, we are working to enhance operational management and improve the effectiveness of treatment by mining this data within various parameters for active sludge treatment. One such result of this is the use of an active sludge treatment utilizing microbial immobilization for process wastewater that contains substances that are difficult to break down through the conventional incineration methods that formerly were the only viable option. This has allowed us to stabilize water treatment and reduce treatment costs. We also established a method for managing the microbes that help break down the sludge using polymerase chain reaction (PCR). Going forward, we will continue working to uncover and resolve relevant issues to ensure safety and stability.

Helping Create a Sustainable Society

◉

Promoting Sumika Sustainable Solutions
- We are promoting Sumika Sustainable Solutions, which are initiatives to internally designate products and technologies that contribute to global warming countermeasures and environmental impact reduction. A total of 57 products and technologies have been designated, with combined sales of ¥463.3 billion in fiscal 2020 (consolidated). They are estimated to have contributed to a collective 62 million tons CO_2 equivalent reduction in greenhouse gases throughout their life cycles in fiscal 2020.*2

Improving Energy Efficiency
- Unit energy consumption in fiscal 2020 improved 15% compared with fiscal 2005 but worsened 2.7% year on year. (Goal: Improve unit energy consumption 15% by fiscal 2020 compared to fiscal 2005 levels (Improve 1% per year on average))
- Unit CO_2 emissions from energy in fiscal 2020 improved 13% compared with fiscal 2005 but worsened 2.2% year on year. (Goal: Improve unit CO_2 emissions from energy use 15% by fiscal 2020 compared to fiscal 2005 levels (Improve 1% per year on average))

Holding Dialogues with Internal and External Stakeholders
- Explained to internal and external stakeholders the importance of the Company helping to create a sustainable society and the Company's related measures, thereby deepening mutual understanding through dialogue.

*1 Long-range Research Initiative: Long-term support for research into the effects of chemical substances on human health and the environment
*2 This value represents the amount contributed to the reduction of greenhouse gases over the life cycles of designated products expected to be sold in fiscal 2020, based on the guidelines of the Japan Chemical Industry Association and the ICCA.

Responsible Care

<Responsible Care (RC) Audits>
Basic Stance

The RC audit is a management system for verifying that RC activities, such as ensuring safety and environmental protection, and maintaining and improving the safety and quality of chemical products, are properly implemented. It also promotes process enhancement if areas for improvement are found in those activities.

To promote the Sumitomo Chemical Group's RC global management, RC audit activities are used to study and evaluate duties executed in the course of business and the status of management and supervision from the perspectives of compliance, effectiveness, efficiency, and credibility of financial reporting. By offering advice and proposals for improvement and rationalization, we can prevent compliance violations, corruption, and errors as well as protect corporate assets and enhance operational efficiency. RC audits fulfill the functions of improving management at the Company and Group companies and aid in building, maintaining, and improving the internal control system (responsible audit rules) through the following four-step approach.

Step 1: Sharing Sumitomo's Business Principles and Philosophy
Step 2: Promoting an understanding of and sharing in the Corporate Policy on Responsible Care (Safety, Health, the Environment and Product Quality); RC management systems; and Group Responsible Care Standards
Step 3: Establishing and developing RC management systems at each Group company
Step 4: Carrying out modifications to the direction and adjusting levels of RC activities by undergoing RC audits

Through face-to-face communication through each of the aforementioned steps, we have successfully provided assistance so that the RC management system is set in place by taking the scale, type of business, and attributes of each Group company into consideration. Relationships built on trust with Group companies that have been nurtured through these RC audits are utilized in various initiatives including individual support and the lively exchange of opinions aimed at resolving a wide range of issues at the Group companies.

Responsible Care

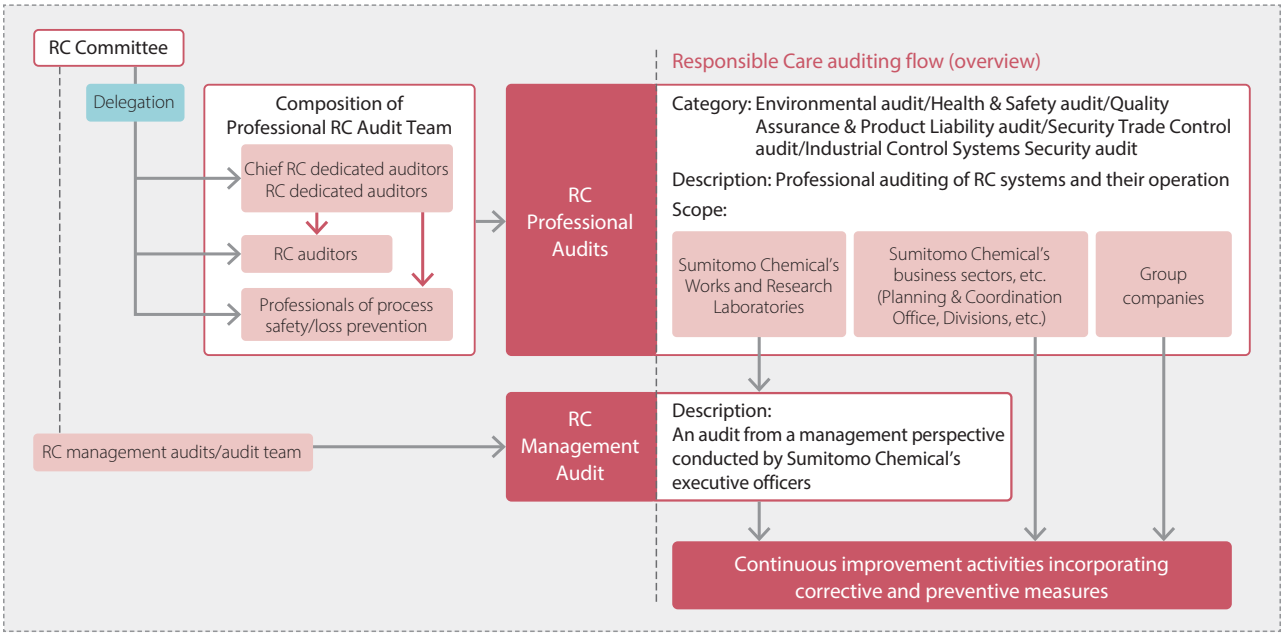
Management System

Sumitomo Chemical has an independent RC audit team. The auditors specially designated by the executive officers in charge of RC have a wealth of knowledge, experience, and technical expertise. Based on the RC audit policies and plans approved by the Responsible Care (RC) Committee every year, these auditors directly visit and conduct audits of internal organizations as well as Group companies in Japan and overseas (consolidated business companies that have been determined to need auditing, Group business companies for which auditing has been requested, and listed Group companies (including their subsidiaries)). However, audits were conducted remotely in fiscal 2020 because in-person visits were not possible due to the pandemic. In addition, RC audits of internal Works and research labs are conducted from a management perspective by an audit team comprising Sumitomo Chemical's executive officers in charge of RC. In line with the important direction provided during an RC audit, the Works and labs report their methods for advancing corrective and preventive measures, the status of their Responsible Care activities, and important issues to the audit team for discussion.

The Scope and Cycle

In principle, RC audits are conducted every one or two years at Sumitomo Chemical's Works and business sectors, and every three years at Group companies.

■ Responsible Care Auditing Framework



Responsible Care

Goals and Results

Responsible Care Audit Results (Sumitomo Chemical Group)

Facilities		FY2018	FY2019	FY2020
Professional audits*1	Works and research laboratories	9	10	9
	Independent laboratories	1	3	0
	Logistics centers	0	0	0
	Business sectors	4	5	4
	Group companies in Japan	14	18	11*3
	Group companies overseas	13	9	2*3
Management audits*2	Works, research laboratories, and independent laboratories	6	7	5
Total		47	52	31

Note: Refer to Responsible Care Auditing Framework on page 96 for more details.

*1 Audits of systems and operations by specialists in each field
*2 Audits from a management perspective by Sumitomo Chemical officers
*3 Companies subject to audit comprised 31 domestic companies (54 facilities) and 33 overseas companies (38 facilities). Domestic audits were conducted according to plan, including the provision of remote support. Because in-person visits are crucial for overseas companies, except for 2 remote audits, the audits were postponed to fiscal 2021.

FY2020 Professional Audits for Facilities and Business Sectors (Sumitomo Chemical)

Area	Facilities (Works, Research Laboratories)	Business Sectors (Head Office Business Sectors)	Total
Good	12	1	13
Needs improvement	18	2	20
Needs to be examined	67	9	76
Total	97	12	109

Looking Ahead

We continually work to prevent compliance violations, corruption, and errors as well as to improve the management of both Sumitomo Chemical and Group companies while building, maintaining, and improving their internal control systems as needed.

Information Security

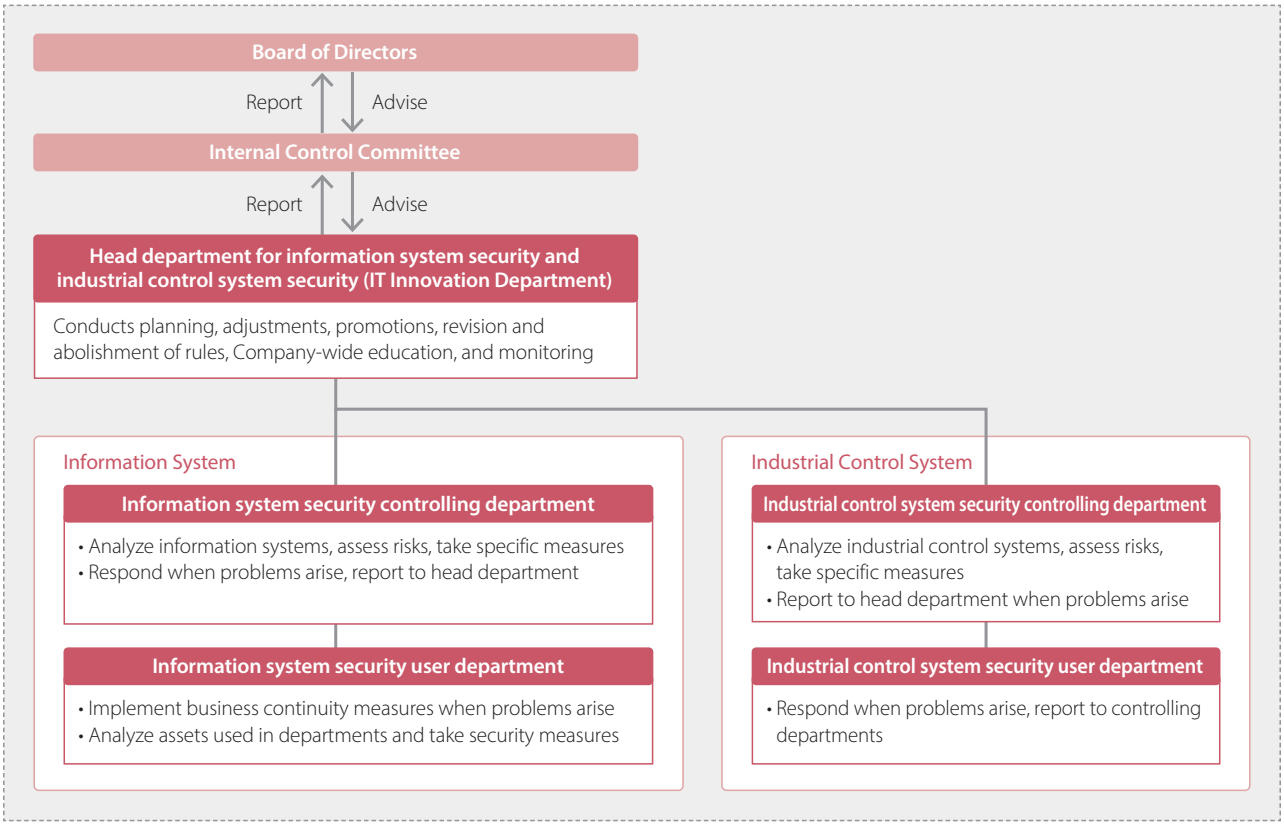
Basic Policy

Through the utilization of IT, the digital revolution, entailing the pursuit of improved productivity, competitive advantages, and the creation of new business models, is accelerating. This has been accompanied by a rise in impacts, such as an increase in remote working opportunities and more sophisticated cyberattacks. The purpose of information security is to properly manage information, prevent leaks and loss, and minimize the effectiveness of threats to data integrity. We have therefore taken an approach that is multifaceted from the organizational, systems, personnel, technological, and physical points of view.

Management System

Sumitomo Chemical has built the following framework for information system and industrial control system security and implements PDCA cycles.

■ Security Framework for Information System and Industrial Control System



Information Security

Goals and Results

Based on the concept of an information security management system (ISMS), we established a security policy and took necessary measures.

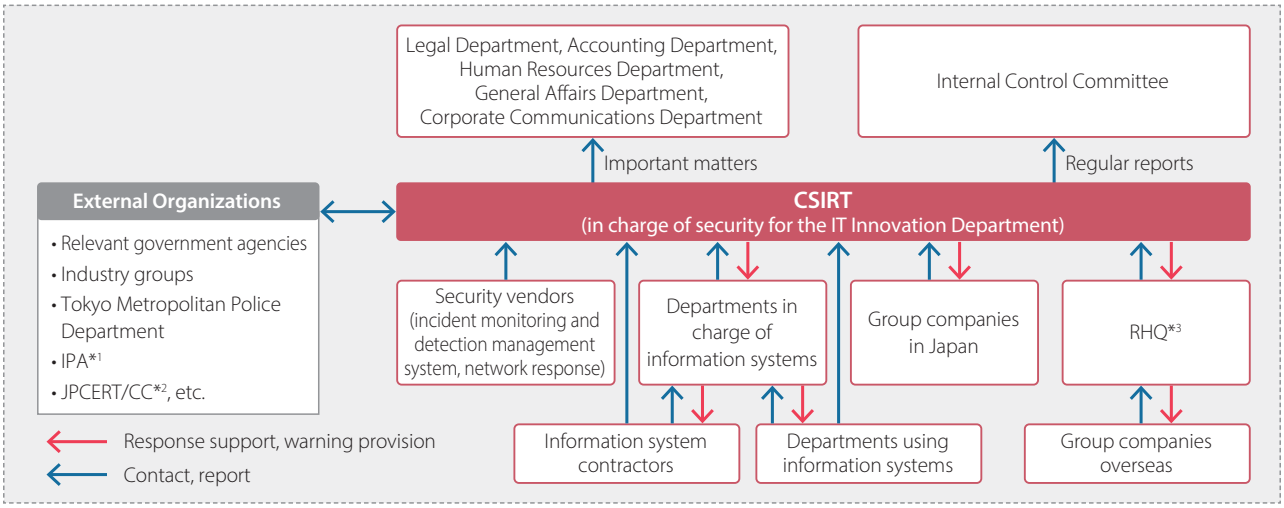
Our basic policy comprises multifaceted security measures (multilayered incident prevention and disaster mitigation), such as those outlined below.

Type of measure	Content of measure
Organizational measures	• Constructed an information system and industrial control system security framework • Constructed an information-sharing framework with inside and outside organizations to ensure preparedness against security incidents
Systematic measures	• Establish general standards and standards related to security, including for Group companies • Periodically conduct security self inspections and conduct IT security internal audits that encompass Group companies
Personnel measures	Carry out various security education programs using e-learning systems and conduct drills for security incidents
Technological measures	Implement a range of measures, including access restriction, malware measures, and vulnerability measures, for individual servers and computers as well as networks
Physical measures	Use cloud servers complete with entry/exit controls and other security features

Examples of Initiatives

We have established a Computer Security Incident Response Team (CSIRT) in information system security head department (IT Innovation Department). The team analyzes security information from external organizations, provides warnings to the Group, gathers information on security incidents that occur within the Group, and comprehensively manages the Group's response.

■ Security Incident Response Framework



*1 IPA: Information-Technology Promotion Agency, Japan
*2 JPCERT/CC: Japan Computer Emergency Response Team Coordination Center
*3 RHQ: Regional headquarters

Looking Ahead

As an critical infrastructure operator, Sumitomo Chemical considers cyber security to be an essential management issue and will continue responding to growing threats. By taking appropriate system security measures, we will continue to create more value with the aim of supporting the global expansion of business, solving issues in the international community, and enhancing quality of life.

Intellectual Property

Basic Policy

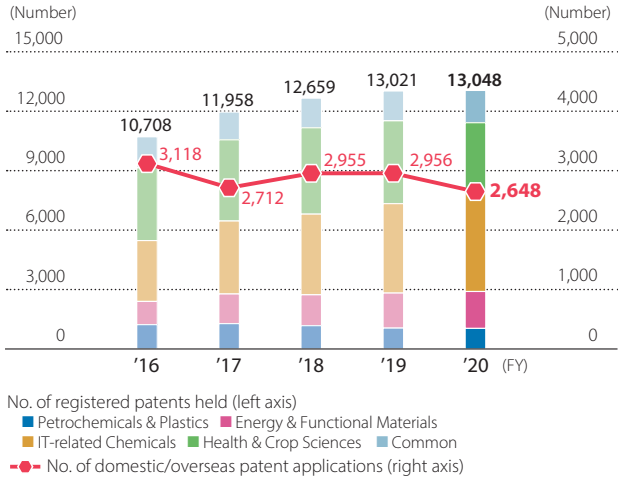
Sumitomo Chemical engages in intellectual property (IP) activities in accordance with the following basic policies:

IP Activities:

1. Be in line with the business strategy
2. Create global business value
3. Strive for the thorough utilization of results of research and technology development
4. Respect rights and observe the law

While respecting the valid patents of third parties, we are working to acquire and protect wider, stronger, faster-registered, and longer-lasting patents globally for the results of our research and technology development, and we then strategically promote our business activities as well as those of our Group companies and ultimately maximize our business value.

■ Number of Registered Patents Held by Sector (Sumitomo Chemical) / Number of Patent Applications in Japan and Overseas (Sumitomo Chemical)



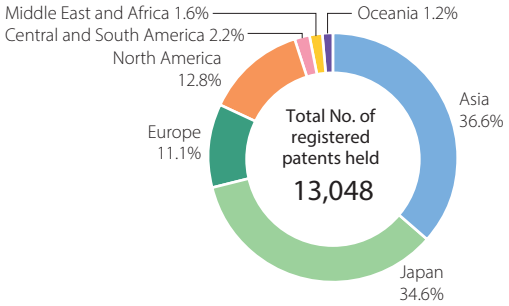
Performing IP Activities

The Intellectual Property (IP) Department is tasked not only with submitting patent applications and conducting IP prosecution, but also with making recommendations as necessary for research sectors and business sectors by properly investigating and analyzing IPs, as needed, at each stage of R&D and commercialization. When searching for new themes and customer and industry candidates, Sumitomo Chemical conducts IP landscape surveys that comprehensively analyze IP and business information. We then use those surveys to draft R&D strategies, business strategies, and IP strategies. In addition, we conduct analyses of other companies' rights at each stage and strive to minimize and rapidly address IP risks. We actively use rapidly advancing IP search software and AI technologies to efficiently find and analyze relevant technologies suitable for each stage, as well as trends in other companies' patents. These searches help us build and reinforce our patent portfolio.

Amid increasingly complex and intensified competition, our Group businesses are globalizing, and hence, it is ever more important for Group companies in and outside Japan to search for and analyze IP, including patents, and to build their patent portfolios, in a manner suitable for each business's strategy and operational systems. Sumitomo Chemical carries out these activities in close contact with its business sectors and Group companies in Japan and overseas. We continue to work on filing applications and acquiring rights of IP in Asia, the Americas, and the EU to fortify the foundation of our overseas business activities.

Intellectual Property

■ Registered Patents Held by Region in FY2020 (Sumitomo Chemical)



Joined in the "IP Open Access Declaration against COVID-19"

Sumitomo Chemical joined in the "IP Open Access Declaration against COVID-19" as a supporter in June, 2020.

The gist of the Declaration is that participants will not assert any intellectual property rights under certain conditions against any activities whose sole purpose is stopping the spread of COVID-19. Respecting this Declaration, the Sumitomo Chemical Group will consider ways to stop the spread of the coronavirus, including a possibility of cooperation with the government and industry groups.

Environment

Contributing to the SDGs through Environmental Activities

Contents

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Environmental Activity Goals and Results

Goal achieved or steadily progressing: ○ Goal not achieved: △

Items		Boundary	Goals	Fiscal 2020 Results	Evaluation	Page
Addressing Climate Change	Greenhouse gas emissions Scope 1+2*1	Sumitomo Chemical Group Consolidated	Reduce 30% compared to fiscal 2013 levels by fiscal 2030	Reduced 22% relative to fiscal 2013	○	Pages 105–116
			Reduce more than 57% compared to fiscal 2013 levels by fiscal 2050			
	Scope 3*2	Sumitomo Chemical's major suppliers*3	Reduce overall GHG emissions by fiscal 2024 Conduct engagement to set goals	Held Supplier briefing online due to the COVID-19 pandemic	○	
	Unit energy consumption*4	Sumitomo Chemical Group Consolidated	Improve more than 3% over the three years of the Corporate Business Plan (fiscal 2019–2021)	Increased 3% relative to fiscal 2018	△	
	Unit energy consumption in the logistics division	Sumitomo Chemical and Group companies in Japan*5	Improve over 1% per year on average over five years	Improved by an annual average of 0.9% over five years	△	

Note: Further details on goals based on the Act on the Rational Use of Energy and results are provided in the supplementary data (pages 126–127).

*1 Scope 1: Direct emissions from factory operations, such as fuel use in manufacturing processes
Scope 2: Indirect emissions from purchases of power and heat from outside the factory
*2 Scope 3: Emissions from the manufacturing and transportation of purchased raw materials
*3 Covers suppliers accounting for 90% of procured raw materials and other items based on weight
*4 Energy consumption divided by consolidated net sales
*5 Within the scope of specified shippers according to the definition stipulated under the Act on the Rational Use of Energy

Environmental Activity Goals and Results

Goal achieved or steadily progressing: ○ Goal not achieved: △

Items		Boundary	Fiscal 2020 Goals	Fiscal 2020 Results	Evaluation	Fiscal 2021 Goals	Page
Environmental Protection	Severe environmental accidents	Sumitomo Chemical and Group companies in Japan	0	0	○	0	
	Laws and regulations, etc.	Sumitomo Chemical	Properly respond to more stringent laws and regulations and proactively address trends in new environmental regulations	Studied and responded to amendments to the PRTR Act, the Act on Rational Use and Proper Management of Fluorocarbons, and the Air Pollution Control Act (asbestos). Thoroughly discussed legislation to ease or tighten regulations with the National government.	○	Properly respond to more stringent laws and regulations and proactively address trends in new environmental regulations	
	Environmental protection management methods, etc.	Sumitomo Chemical and Group companies in Japan	Provide individual support to Group companies for responding to environmental regulations	Provided individual support related to the Waste Management and Public Cleansing Law, the Soil Contamination Countermeasures Act, the Act on Rational Use and Proper Management of Fluorocarbons and the PRTR Act.	○	Provide individual support to Group companies for responding to environmental regulations	
	Prevention of air and water pollution	Sumitomo Chemical	Meet voluntary management criteria*1	There were three instances of the legal standard limit being exceeded etc. We have investigated the causes and taken countermeasures.	△	Meet voluntary management criteria	
	Effective use of water resources	Sumitomo Chemical	Promote effective and efficient use of water resources	Water usage reduced by 6.7% relative to fiscal 2019	○	Promote effective and efficient use of water resources	
		Group companies overseas	Improve unit water consumption by at least 1% on average per year	Unit water consumption worsened by 4.9% relative to fiscal 2015	△	Improve unit water consumption by at least 1% on average per year	
	Response to PRTR	Sumitomo Chemical	Maintain 60% lower total emissions relative to fiscal 2008	Reduced emissions by 90.2% relative to fiscal 2008	○	Maintain 60% lower total emissions relative to fiscal 2008	
		Sumitomo Chemical and Group companies in Japan	Maintain total emissions of air and water pollutants at below fiscal 2015 levels to fiscal 2020	Reduced emissions by 24.3% relative to fiscal 2015		Maintain total emissions of air and water pollutants at below fiscal 2015 levels to fiscal 2021	
	Reduction of VOC emissions	Sumitomo Chemical	Maintain VOC emissions reductions at 30% relative to fiscal 2000	Reduced emissions by 55.8% relative to fiscal 2000	○	Maintain VOC emissions reductions at 30% relative to fiscal 2000	Pages 117–125
	Prevention of soil and groundwater contamination	Sumitomo Chemical and Group companies in Japan	Keep hazardous materials strictly within Company premises*2	Continued to keep hazardous materials strictly within Company premises	○	Keep hazardous materials strictly within Company premises	
	Prevention of ozone layer depletion	Sumitomo Chemical and Group companies in Japan	• Eliminate the use of refrigeration units that use CFCs as coolants by fiscal 2025 • Eliminate the use of refrigeration units that use HCFCs as coolants by fiscal 2045	Systematically replaced refrigeration units that use CFCs and HCFCs as coolants	○	• Eliminate the use of refrigeration units that use CFCs as coolants by fiscal 2025 • Eliminate the use of refrigeration units that use HCFCs as coolants by fiscal 2045	
	Conservation of Biodiversity	Sumitomo Chemical	Ensure compliance with "Sumitomo Chemical's Commitment to the Conservation of Biodiversity"	Ensured compliance with "Sumitomo Chemical's Commitment to the Conservation of Biodiversity" and promoted detailed initiatives	○	Ensure compliance with "Sumitomo Chemical's Commitment to the Conservation of Biodiversity"	
	Reduce the amount of industrial waste sent to landfills	Sumitomo Chemical	Maintain 80% reduction compared to fiscal 2000 levels	Reduced by 93% relative to fiscal 2000	○	Maintain 80% reduction compared to fiscal 2000 levels	
		Sumitomo Chemical and Group companies in Japan	Maintain waste volume at below fiscal 2015 levels to fiscal 2020	Increased by 1.5% relative to fiscal 2015	△	Maintain waste volume at below fiscal 2015 levels to fiscal 2021	
	Properly treated PCB waste	Sumitomo Chemical and Group companies in Japan	• (High concentrations of PCB*3) Work toward appropriate storage and recovery of waste containing high concentrations of PCBs and complete PCB waste treatment at an early stage • (Minute amounts of PCB*4) Work toward appropriate storage and recovery of waste containing minute amounts of PCBs and complete PCB waste treatment by March 2025	• (High concentrations of PCB) Sumitomo Chemical: Completed treatment Group companies in Japan: Continuing treatment; continued to promote the storage and recovery of untreated waste • (Minute amounts of PCB) Implemented the treatment of waste containing minute amounts of PCBs at certain factories; continuing to promote the storage and recovery of untreated waste	○	• (High concentrations of PCB) Work toward appropriate storage and recovery of waste containing high concentrations of PCBs and complete PCB waste treatment at an early stage • (Minute amounts of PCB) Work toward appropriate storage and recovery of waste containing minute amounts of PCBs and complete PCB waste treatment by March 2025	

Note: Further details are provided in the supplementary data (pages 128–147).

*1 Voluntary management targets that are stricter than the mandated levels and criteria of relevant laws and regulations, including agreements reached with local authorities.
*2 Keep hazardous materials strictly within Company premises: Controlled on the premises.
*3 High concentrations of PCB: Polychlorinated biphenyl (PCB) intentionally used as insulation oil in such items as electric appliances
*4 Minute amounts of PCB: PCB unintentionally mixed in as insulation oil in such items as electric appliances (over 0.5 mg/kg)

Addressing Climate Change

Basic Stance

Sumitomo Chemical considers climate change a pressing challenge facing society. To address this problem, we are actively working to respond to risks and to seize opportunities by utilizing the technology we have cultivated as a diversified chemical company. In addition, regarding disclosure related to climate change, we will continue gaining the trust of society by actively raising awareness of our initiatives using the framework of the TCFD recommendations.

Furthermore, with movements aimed at achieving carbon neutrality picking up steam in recent years, the chemical industry is being strongly called upon to create innovation and contribute to the achievement of carbon neutrality for society at large through its businesses. Through the newly established Carbon Neutral Strategy Council and the Carbon Neutral Strategy Cross-functional Team, our company will formulate and implement a carbon neutrality strategy that address both our obligation to bring our own greenhouse gas (GHG) emissions close to zero, and the contribution we can make to promoting carbon neutrality for society as a whole through our technologies and products.

Sumitomo Chemical Carbon Neutral Strategy Perspectives

Sumitomo Chemical aims to take a range of multifaceted approaches unique to a diversified chemical company, in our initiatives to achieve carbon neutrality by 2050 from the following four perspectives.

1. To minimize greenhouse gas (GHG) emissions associated with the Group's production activities through innovation, and provide and deploy new technologies across the world.
2. To drive innovations for GHG emissions reduction regarding materials used in society, and provide products and solutions that contribute to carbon neutrality from a Life Cycle Assessment* perspective.
3. To actively engage in the development of technologies for recovery, separation, use and storage of GHGs emitted from other industries and from communities, and help the process by becoming part of a system that implements such technologies in society.
4. To take on the long-term challenge of developing carbon negative technologies to reduce the absolute volume of GHG in the atmosphere.

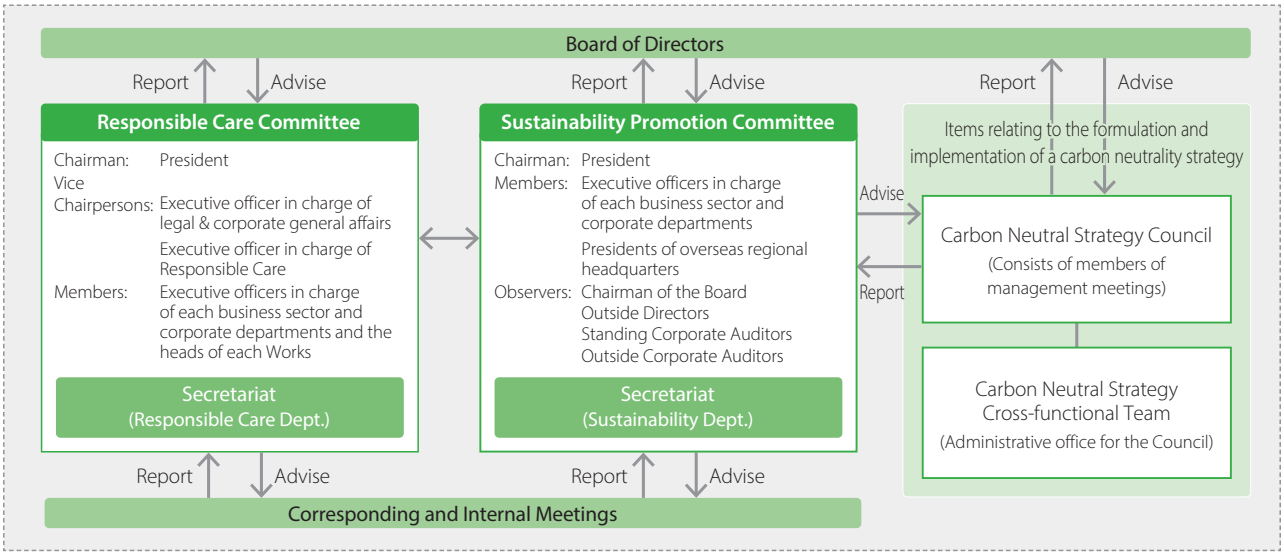
* Life Cycle Assessment (LCA): A method for quantitatively assessing the environmental impact of a certain product or service across its entire life cycle, from the procurement of raw materials to its use and disposal.

Addressing Climate Change

Management System

In order to achieve carbon neutrality by 2050 for the Sumitomo Chemical Group, and also to contribute to the achievement of carbon neutrality in society at large, Sumitomo Chemical established the Carbon Neutral Strategy Council (February 2021) to formulate and promote an integrated strategy, with the goal of publishing a strategy during 2021. Previously, the Sustainability Promotion Committee and the Responsible Care Committee, which consisted of members gathered from a wide range of related departments and were both chaired by the company's president, would analyze information and risks relating to climate change, make decisions on important issues, and push forward specific responses, but since the establishment of the Strategy Council, these two committees have also taken on the role of supporting the council in formulating its strategy, and then promote the implementation of that strategy as well.

Organization of Addressing Climate Change



A wide range of specific issues related to energy and greenhouse gases (GHGs) are taken up for detailed discussion at Company-wide Science Based Targets (SBTs) GM Meetings, SBT Promotion Working Groups, Company-wide Energy Manager Meetings, Department Liaison Meetings on Global Warming, Group Company Information Exchange Meetings, and other gatherings. Through the establishment of these various meetings, we have created a system capable of steadily and swiftly sharing important information in addition to managing energy and GHGs for Works, research laboratories, business sectors, and Group companies.

Meeting	Coordinator	Members	Content
Company-wide SBTs GM Meeting	Executive officer responsible for Responsible Care	General managers in charge of SBTs at individual worksites	Discussing various measures aimed at achieving SBTs
SBT Promotion Working Group	Process & Production Technology & Safety Planning Department general manager	Corporate Planning Office, Research Planning and Coordination Department, Process & Production Technology & Safety Planning Department, Responsible Care Department, and Environmental Burden Reduction Technology Development Group	Proposing various multi-faceted measures to achieve SBTs
Company-wide Energy Manager Meeting	Responsible Care general manager	Section managers in charge of Energy and GHGs at their worksites	Sharing and spreading information on initiatives at each worksite
Department Liaison Meeting on Global Warming	Responsible Care general manager	Section managers in charge of climate change action at the departmental and corporate levels	Sharing Company-wide policies and ESG issues
Group Company Information Exchange Meeting	Executive officer responsible for Responsible Care	Managers in charge of climate change action for Group companies	Sharing Group policies and issues and promoting best practices

Addressing Climate Change

★: Assured by an independent assurance provider

Goals and Results

For goals and results for Addressing Climate Change, refer to Environmental Activity Goals and Results.

P.103 Addressing Climate Change

Energy Consumption and Greenhouse Gas Emissions

The Group's greenhouse gas emissions for fiscal 2017 onward are calculated in accordance with the GHG Protocol (refer to page 225 "Calculation Standards for Environmental and Social Data Indicators"). The boundary of calculation has been expanded to include principal consolidated Group companies, which account for up to 99.8% of consolidated net sales.

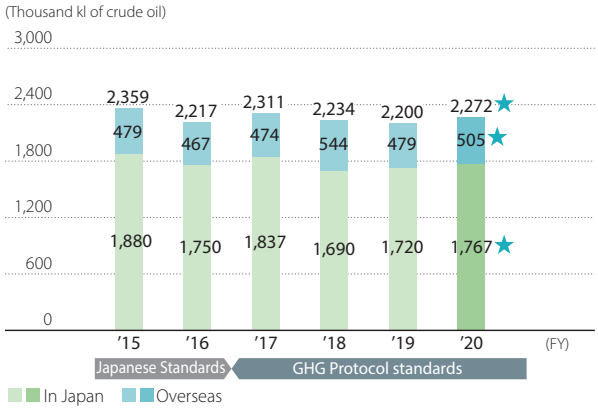
Greenhouse Gas Emissions ★

(Thousand tons of CO_2e)

	Sumitomo Chemical and Group Companies in Japan	Overseas Group Companies	Total
Scope 1	5,811	536	6,346
Scope 2	261	815	1,076
Total	6,072	1,350	7,422

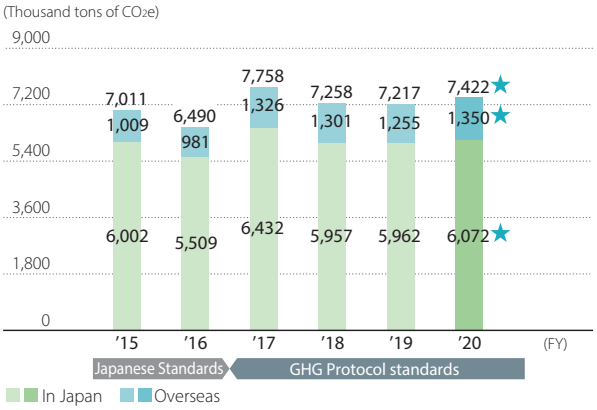
Note: Biomass-derived emissions were 55,000 tons of CO_2e

Energy Consumption



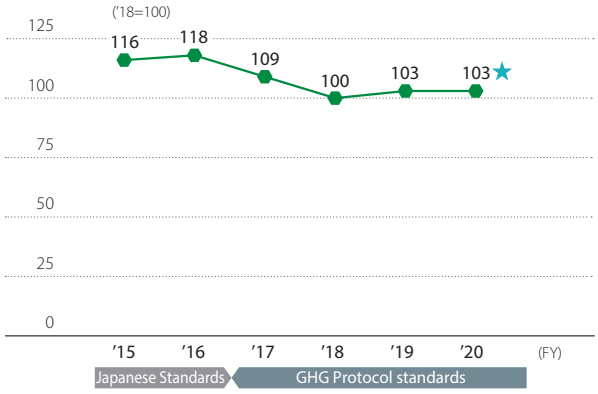
Notes: • Japanese Standards: Calculated based on the Act on the Rational Use of Energy.
• Having adopted the GHG Protocol standards for our GHG emission disclosures, we now include the following data previously excluded from calculations: amount of energy consumed in the production of power and steam sold to external parties by Sumitomo Chemical Group (the portion attributable to energy provider subsidiaries was included in years prior to fiscal 2016). The amount of energy consumed by Sumitomo Chemical's non-production sites and the Group's non-production sites is included from fiscal 2017 and fiscal 2018, respectively.

Greenhouse Gas Emissions



Notes: • Japanese Standards: Calculated based on the Act on the Rational Use of Energy and the Act on Promotion of Global Warming Countermeasures.
• Having adopted the GHG Protocol standards for our GHG emission disclosures, we now include the following data that was not included in previous calculations: CO_2 emissions from energy sold to external parties by the Group (the portion attributable to energy provider subsidiaries was included prior to fiscal 2016); CO_2 emissions from energy use attributable to Sumitomo Chemical's non-production sites; CO_2 emissions from non-energy sources not included in the scope of the Act on Promotion of Global Warming Countermeasures. CO_2 emissions from energy use attributable to Sumitomo Chemical's non-production sites and the Group's non-production sites is included from fiscal 2017 and fiscal 2018, respectively.

Unit Energy Consumption Index



Notes: • The figures are indexed to energy consumption (GJ) per sales
• The figures are indexed to fiscal 2018 at 100 because we aim to improve at least 3% over the three years of our Corporate Business Plan (FY2019–2021)

Addressing Climate Change

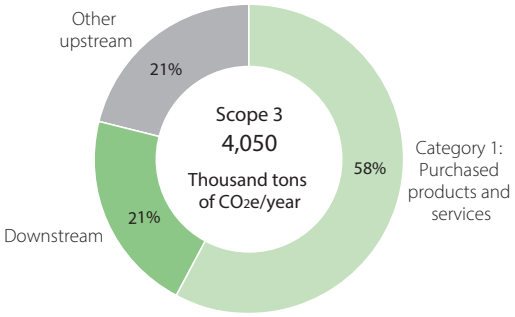
★: Assured by an independent assurance provider

Status of Scope 3 GHG Emissions

(Thousand tons of CO_2e/year)

Category	Emissions		
	FY2018	FY2019	FY2020
1. Purchased goods and services	2,132	2,276	2,346★
2. Capital goods	394	151	164
3. Fuel- and energy-related activities not included in Scopes 1 and 2	298	581	585★
4. Upstream transportation and distribution	61	60	53★
5. Waste generated in operations	30	35	41★
6. Business travel	7	10	2
7. Employee commuting	9	11	11
8. Upstream leased assets	<1	<1	<1
9. Downstream transportation and distribution	<1	<1	<1
10. Processing of sold products	—	—	—
11. Use of sold products	44	40	42★
12. End-of-life treatment of sold products	780	879	806
13. Downstream leased assets	—	—	—
14. Franchises	—	—	—
15. Investments	—	—	—

Notes:
- For Scope 3 data, indirect greenhouse gas emissions from business activities throughout the supply chain are calculated separately by category and then added together.
- Calculated for Sumitomo Chemical and Group companies listed on stock indices in Japan (Sumitomo Dainippon Pharma Co., Ltd.; Koei Chemical Co., Ltd.; Taoka Chemical Co., Ltd.; and Tanaka Chemical Corporation).
- Category 4 does not include Taoka Chemical Co., Ltd., but includes Nippon A & L Inc.
- Category 11 figures are N_2O converted into CO_2



Addressing Climate Change

Examples of Initiatives

Addressing Risks and Seizing Opportunities

We identify risks and opportunities related to climate change problems and analyze their magnitude and the scope of their impact on the Group. As for risks, we are mainly taking measures to achieve our Science Based Targets (SBTs), while as for opportunities, we are primarily focusing on the development and promotion of our Sumika Sustainable Solutions (SSS)-designated products and technologies.

Risks

Transition risks
- Increases in tax burden due to the introduction and increase of carbon prices
- Increases in manufacturing costs associated with the increase in energy taxes
- Higher logistics costs due to higher energy prices

Physical risks
- Damage to production facilities due to intensified climate disasters caused by temperature rise
- Decline in sales of related businesses due to changes in crop cultivation in various regions worldwide amid abnormal weather

Opportunities

- Increasing demand for products that contribute to reducing green house gas (GHG) emissions
- Increasing demand for products that adapt to the impacts of climate change
- Growing market for low-carbon processes
- Development of new businesses in the area of climate change measures through research and development and digital innovation

Responding to Risk

- Initiatives for achieving our SBTs
  - Revision of the internal carbon price system to enhance energy saving and promote investment in reducing of GHG emissions
  - Switching fuel for power generation (including the establishment of the Niihama LNG Station and the use of renewable energy)
  - Introduction of innovative low-carbon technologies
  - Initiatives for raising awareness and building momentum in the Group
  - Calling on major suppliers to set GHG emission reduction targets
- Strengthening measures against wind and flood damage at production sites

Initiatives for Seizing Opportunities

- Sales expansion for SSS-designated products
  - Products that contribute to reducing GHG emissions
  - Products, components, and materials used for the creation of new energy sources
  - Products that contribute to adapting to the impacts of climate change
- Expansion of revenue from licensing low-carbon process technologies
- Acquisition of investment capital through information disclosure

Scenario Analysis

Scenario analysis, with regard to climate change, is a method in which we consider multiple scenarios, predict the impact of climate change and changes in the business environment due to long-term policy trends, and study the potential impact of these changes on our business and management. Currently, Sumitomo Chemical analyzes both risks and opportunities with respect to both a scenario in which a variety of measures are taken to limit average global temperature increase to 1.5°C above the pre-industrial revolution levels, and a scenario in which countermeasures are not taken and temperatures increase by 4°C, evaluating both the impacts on our businesses and future actions that need to be taken.

Addressing Climate Change

Summary of the Scenario Analysis

● In blue: positive impact ● In red: negative impact

Scenario	Risks / Opportunities	Anticipated Situation (Example)	Impact Assessment	Action
Common for All Scenarios*1	Increasing Demands for Disclosure of Information	● Expansion of ESG investment ● Increased demands for disclosure of the results of life cycle assessment ● Legalization of disclosure of climate change-related information, and introduction of new environmental accounting standards	● Increased opportunity to get access to ESG investment capital by enhancing information disclosure ● Improved rating in stakeholder assessments with regard to the disclosure of the amount of GHG emissions reduction calculated by life cycle assessment ● Increased cost of compliance	● Enhance information disclosure ● Promote life cycle assessment evaluations of our products ● Respond to trends in regulations and movements by related institutions
1.5°C Scenario (Reduced GHG Emissions)	Opportunities Increased Demand for Products and Technologies Contributing to the Mitigation of Climate Change	● Increasing investment and growing market for products and technologies contributing to the reduction of GHG emissions and for products and technologies related to recycling [Examples] • Growing markets for EVs and fuel cell vehicles (2020 to 2050) • Growing markets for components and materials for high-efficiency communication, due to change in consumer behavior (including expansion of the sharing economy and more efficient logistics with the use of IT) • Shift to low-carbon energy sources • Expansion of CCUS*2 (2030 onward) • Expansion of the circular economy, with the aim of reducing CO_2 derived from fossil fuels (2020 to 2050) • Growing markets for energy-saving homes and building materials	● Increased demand for SSS*3-designated products ● Increasing need for technological development for future SSS-designated products [Examples] • Components and materials for EVs and fuel cell vehicles • Increased sophistication in IT devices, demand for electronic components necessary to reduce energy consumption, demand for related products and technologies necessary for distributed power systems and semiconductor control devices • Technology that contributes to reducing GHG emissions • Products and technologies for CO_2 recovery, on the back of the expansion of CCUS • Carbon negative technologies • Recycling-related products and technologies • Energy-saving building materials such as heat storage materials	● Enhance development and production systems for products such as light-weight materials, battery materials, and materials for optical products and electronic components ● Enhance development and production systems for products such as materials for power devices and high-efficiency communication components ● Promote licensing of technologies that contribute to reducing GHG emissions ● Develop technologies relating to CO_2 recovery ● Develop products that contribute to carbon neutrality (agricultural materials utilizing fungi, etc.) ● Develop recycling technology and build business models for it ● Develop technology for and expand sales of heat storage material products
	Risks Increased Regulation on GHG Emissions	● Higher carbon prices (in developed countries, USD 135/ton for 2030, USD 245/ton for 2050)*4 ● Stronger requirements for GHG emissions reductions and making energy-saving performance mandatory ● Phased abolishment of subsidies for fossil fuels (in India and Southeast Asia, etc.) ● Accelerating transition to a circular society and increased regulation ● Increase in calls to promote use of renewable energy from customers	● Increased operation costs due to higher energy taxes including carbon prices (Assuming a volume of GHG emissions that will have an impact on the Group's operating costs in fiscal 2050 is about 7.4 million tons/year (Scope 1+2), the same level as in fiscal 2020, and a carbon price is between 13,500–24,500 yen per ton of CO_2, our expense burden will increase by about 100–180 billion yen per year.) ● Lower utilization of high-energy consumption production facilities ● Increase in utility expenses due to an increased proportion of renewable energy	● Switch to highly efficient equipment by actively utilizing government subsidies ● Switch to renewable energy ● Rationalization research for manufacturing processes ● Develop technologies to capture, separate, and utilize GHG, and deploy them in society ● Promote the deployment of GHG emission removal equipment ● Promote the utilization of CO_2-free hydrogen and ammonia
	Risks Increased Cost of Raw Materials	● More use of resources from circular systems and progress in the transition to lower environmental impact processes ● Increased costs due to more use of recycled materials ● Increase in calls for green procurement	● More difficult to procure raw materials ● Lower profitability of the existing businesses	● Diversify raw material sources ● Evaluate the use of recycled raw materials ● Shift to a local production, local consumption model (for products where raw material procurement costs make up a relatively high proportion of the price)
4°C Scenario (Business as Usual)	Opportunities Increased Demand for Products and Technologies Contributing to the Mitigation of Climate Change	● Growing market for crops resistant to environmental changes such as temperature rise and drought ● Spread of infectious diseases due to the impact of climate change	● Increased demand for SSS-designated products ● Increased need for technological development for future SSS-designated products [Examples] • Biorationals • Agrochemical products adaptable to the change in crop growth • Agents for prevention and treatment of infectious diseases	● Develop products such as biorationals ● Provide solutions that respond to global changes in the environment for agriculture and infectious diseases ● Enhance sales and marketing structures and new product development structures with an eye on changes in demand in targeted markets
	Risks Intensified Climate Disasters due to Temperature Rise	● More impact on plant operations ● Rising sea level, damage from storm surges and floods, and heat waves ● Damage to farmland due to droughts and soil degradation	● Facilities located on seashores and river banks cease operations ● Decreased cost competitiveness of plants due to increased costs for measures to be prepared for disasters ● Decreased demand due to lower agricultural productivity	● Manage and respond to risks from a business continuity planning perspective ● Expand and diversify the regions in which we do business

*1 Common for all scenarios: Situations that can be expected in both 1.5°C scenario (reduced GHG emissions) and 4°C scenario (business as usual)
*2 Carbon dioxide capture, utilization and storage
*3 Sumika Sustainable Solutions
*4 Assumptions based on the IPCC Special Report on "Global Warming of 1.5°C"

Addressing Climate Change

Initiatives Toward Achieving Science Based Targets (SBTs)

Sumitomo Chemical has identified major risks of climate change problems impacting the Group's businesses. These include a cost increase in the event that countries around the world introduce carbon pricing or raise the price for carbon, as well as damage to its production facilities due to intensified climate disasters caused by a rise in temperature. To address these risks, we are taking various group-wide measures to help mitigate climate change. For example, in October 2018, we at the Sumitomo Chemical Group were certified by the Science Based Targets (SBT) initiative for our targets for the reduction of greenhouse gas (GHG) emissions, becoming the first diversified chemical company to receive this certification. Toward the achievement of these targets, we have included the Group's Scope 1+2 GHG emissions in our KPIs. We are also working on various initiatives, such as switching to LNG fuel for our plants, employing the latest highly efficient equipment, and cutting back on energy consumption across the board. In addition, in order to reduce Scope 3 emissions, from 2019 we began engaging with our major suppliers to ask them to set their own reduction targets.

Furthermore, in recent years, various countries, including Japan, have declared that they will achieve carbon neutrality by 2050, and as the Japanese government announced to reduce GHG emissions by 46% by fiscal 2030* this April, we are considering setting challenging goals in line with this target, and having them once again certified by the SBT initiative.

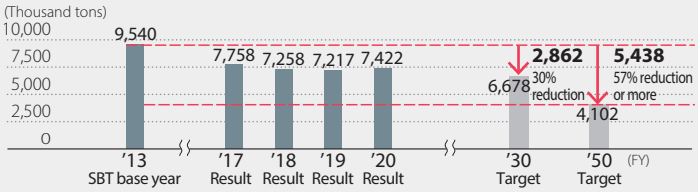
* Compared to fiscal 2013

GHG Emission Reduction Targets Certified under the Science Based Targets initiative (SBTi)

Scope 1 + 2*1

By FY2030	A reduction of 30% (vs. FY2013)
By FY2050	A reduction of 57% or more (vs. FY2013)

GHG emissions and reduction targets

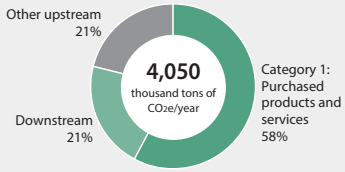


Scope 3*2

By FY2024	Setting GHG emission reduction targets for major suppliers*3

(Reference) Scope 3 GHG emissions (FY2020)

Calculated for Sumitomo Chemical and its listed group companies in Japan.



*1 Scope 1: Direct emissions from our production plants, including the use of fuel in the manufacturing process
Scope 2: Indirect emissions, including the purchase of electricity and heat from outside our production plants

*2 Scope 3: Emissions from the manufacturing and transportation of purchased raw materials

*3 Major suppliers account for 90% of our purchased raw materials by weight

Contributing to Reducing GHG Emissions by Switching Fuel for Thermal Power Generation

Sumitomo Chemical is working to reduce GHG emissions as an SBT-certified company. At plants in Japan, we are introducing highly efficient gas turbine generators and decommissioning a number of existing boilers. Aiming to reduce carbon emissions, we are considering switching from using conventional high CO_2 emission intensity fuels like coal, petroleum coke, and heavy oil to using low CO_2 emission intensity fuels like liquefied natural gas (LNG).

One of Japan's Largest LNG Tanks under Construction
(At the Ehime Works Site)

Currently, at Ehime Works, Niihama LNG Co., Ltd.* is constructing the Niihama North Gas-Fired Power Plant, which uses LNG instead of the conventional coal or heavy oil. Plans call for this LNG-fired power plant to start operations in July 2022 through the Group company Sumitomo Joint Electric Power Co., Ltd., and the switchover to this power source is expected to result in a 650,000-ton annual reduction in CO_2 emissions. In addition, we plan to construct highly efficient gas turbine power generation equipment at Chiba Works that uses LNG instead of the existing petroleum coke, looking to complete construction in autumn 2023. With the construction of this equipment, we expect to reduce annual CO_2 emissions by over 240,000 tons (equivalent to around 20% of the CO_2 emitted by Chiba Works). It will also enable the supply of power to neighboring Group companies as we work hard to reduce GHG emissions across the entire Group.

* Funded by Tokyo Gas Engineering Solutions Corporation, Shikoku Electric Power Co., Inc., Shikoku Gas Co., Ltd., Sumitomo Joint Electric Power Co., Ltd., and Sumitomo Chemical

Addressing Climate Change

★ : Assured by an independent assurance provider

Initiatives Aimed at Reducing GHG Emissions at Each Worksite

Each Sumitomo Chemical worksite helps reduce GHG emissions, including in the following ways: installing the latest highly efficient equipment; introducing rationalization and energy-saving measures in production processes; switching to lower-carbon fuels and other forms of energy; installing LED lighting; and soliciting employee suggestions on how to further improve our energy-saving efforts. Furthermore, regarding cleanrooms and other facilities that are highly specialized and difficult to manage, we have launched initiatives in cooperation with experts. Information on the state of these activities is exchanged at Company-wide Energy Manager Meetings, at which representatives from each worksite gather in one location to work on reducing the GHG emissions of the Company as a whole.

State of Installing LED Lighting

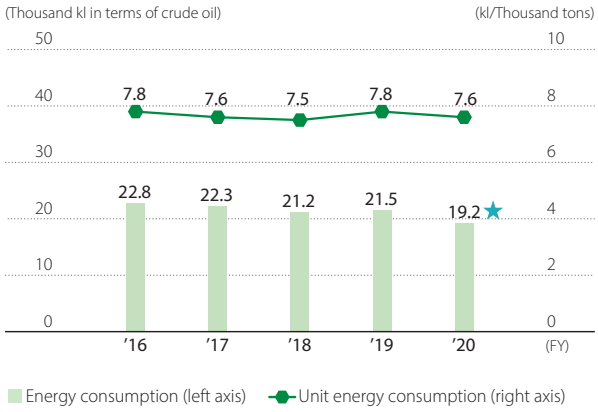
In fiscal 2020, over 50% of the lighting at all Sumitomo Chemical worksites was converted to LEDs, and we achieved the Japan Lighting Manufacturers Association's target of an SSL rate of 50% in 2020. Going forward, we will continue increasing the percentage of LEDs with the aim of achieving the government target of a 100% SSL rate in 2030 as a Company-wide initiative.

Logistics Initiatives

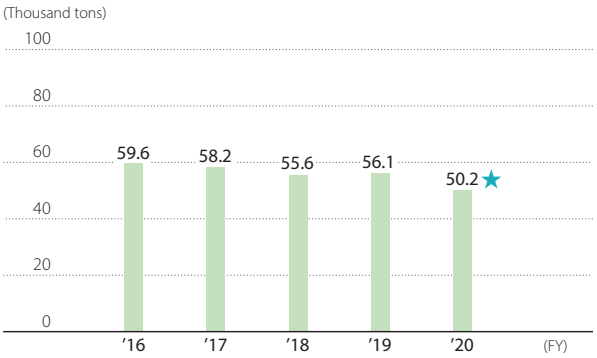
Sumitomo Chemical continues to promote modal shift, or transportation by more efficient and environmentally friendly modes, such as rail and ship instead of trucks. In fiscal 2020, energy consumption (crude oil equivalent) and carbon dioxide emissions decreased compared with fiscal 2019 due to a decrease in the volume of cargo transported. Unit energy consumption fell 2.5%, for an average 0.9% improvement over the past five years, because we no longer needed long-distance shipping by chemical tankers in response to the scheduled maintenance and repair of Works, which had contributed to an increase in fiscal 2019. We will continue aiming to improve unit energy consumption by our target of 1% or more.

■ Reduction of Environmental Impact in Logistics Operations (Sumitomo Chemical and Group companies in Japan)

Energy Consumption and Unit Energy Consumption



CO_2 Emissions



Note: Calculated for Sumitomo Chemical and a Group company in Japan (specified consigner: Nippon A&L Inc.)

Supplier Engagement—Briefing Session

In February 2021, we held an online briefing session for 15 major suppliers of ours in Japan to present our initiatives toward achieving our SBTs, and to ask our suppliers to set their own GHG emission reduction targets. Going forward, we will organize follow-up meetings and briefing sessions with our suppliers individually, with the aim of having their reduction targets set by fiscal 2024.

Addressing Climate Change

Promoting Sumika Sustainable Solutions

Through the initiative of Sumika Sustainable Solutions, which began in 2016, the Group has been working to develop and promote its products and technologies that help mitigate climate change*1 and facilitate adaptation to climate change.*2

*1 Reducing and absorbing GHGs
*2 Working to stem or lessen the current effects of climate change as well as harnessing the new climatic conditions

Sumika Sustainable Solutions

https://www.sumitomo-chem.co.jp/english/sustainability/management/promotion/sss/

Measures for Adaptation

Understanding that climate change must be addressed, people are paying more attention to the development of products and technologies that can facilitate adaptation to the changes. Under the banner of Sumika Sustainable Solutions, the Sumitomo Chemical Group has certified many of its products and technologies that promote adaptation. These include vector control products (to ward off infectious disease-carrying pests whose spread correlates with climate change), mycorrhizal fungi for use as a soil amendment product (to extend growing periods during droughts by 30% and improve crop yields), and clear acrylic windows for seawalls that protect against high tides and tsunami.

Of these products, the Company's malaria prevention mosquito net Olyset™ Net was introduced as a tool for helping prevent a rise in malarial infections due to climate change on the side event of COP22, which was held in Morocco in November 2016, and on the side event of COP23, which was held in Germany in November 2017. It was also introduced at Japan's National Institute for Environmental Studies' Climate Change Adaptation Information Platform, Japan's Ministry of Economy, Trade and Industry's Climate Change Adaptation Good Practices by Japanese Private Sector, and other venues.

Japan's National Institute for Environmental Studies' Climate Change Adaptation Information Platform

http://www.adaptation-platform.nies.go.jp/en/index.html

Japan's Ministry of Economy, Trade and Industry's Climate Change Adaptation Good Practices by Japanese Private Sector (PP.51-52)

https://www.meti.go.jp/policy/energy_environment/global_warming/adaptation_goodpractice_FY2020ENG.pdf

R&D Initiatives for Addressing Climate Change

One of the basic policies established by Sumitomo Chemical under the Corporate Business Plan (FY2019–2021) is accelerating the development of next-generation businesses. One priority area of that policy is reducing environmental impact. Sumitomo Chemical has identified energy storage, energy conservation, and carbon recycling as areas of strength that are indispensable to helping solve climate change problems and for which the Company can use the technologies it has cultivated to date.

In the field of energy storage, we are developing next-generation batteries and fully solid state battery materials that help reduce GHG emissions. In the field of energy conservation, we strive to develop water treatment processes with low environmental impact and CO_2 separation membranes to enhance energy efficiency. In the field of carbon recycling, we are currently working to develop bioprocesses that use synthetic biology and chemical production processes that use carbon capture and utilization (CCU).

In addition, as an initiative to ensure next-generation energy, we are conducting a survey related to CO_2-free hydrogen manufacturing technologies that do not emit CO_2 during the manufacturing stage and their effective implementation.

In these fields, we are promoting research and development while actively installing external technologies in collaboration with academia and startup companies.

Addressing Climate Change

Moreover, Sumitomo Chemical newly established a Research and Development (R&D) Group, named "Technological Development Group of Environmental Initiatives" in the Petrochemicals Research Laboratory (Sodegaura City, Chiba) on April 1, 2020. The new R&D group's mission is to develop a process to reduce the environmental impact related to the carbon cycle and GHG emission reduction by making the best use of core technologies, including catalyst design and chemical processing design, which the company has cultivated in the Petrochemical & Plastic business. By concentrating research projects currently dispersed across several research laboratories into the Petrochemicals Research Laboratory and by beefing up the number of researchers to about 30, Sumitomo Chemical will accelerate its development exponentially while also focusing on new projects. In addition, the new R&D group will actively collaborate with academia and companies that have advanced technologies, and promote activities to make environmental impact reduction technology into a new business in the Petrochemicals & Plastics Sector.

Sumitomo Chemical has identified environmental impact mitigation as one of the material issues to be addressed by its management. The company will continue to create solutions for social issues, such as carbon cycling technology and GHG emission reduction technology.

Examples of development projects at the R&D group (Technological Development Group of Environmental Initiatives)

- Polyolefin manufacturing technology using waste-derived ethanol as a raw material
- Chemical recycling technology for waste plastics
- Chemicals manufacturing technology using CO_2
- Innovative energy-saving technology for chemical manufacturing processes
- Development of energy-saving wastewater processing systems

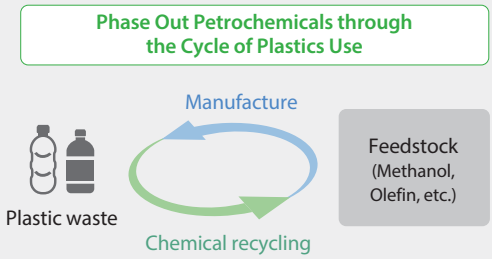
Addressing Climate Change

Technology Development Aimed at Generating Innovation

Achieving carbon neutrality by 2050 will not only require the maximal use of the best available technology, such as fuel conversion and current energy-saving technologies, but also the generation of innovation going forward. Sumitomo Chemical aims to develop a wide range of technologies aimed at achieving carbon neutrality for society as a whole, and then deploy them in society.

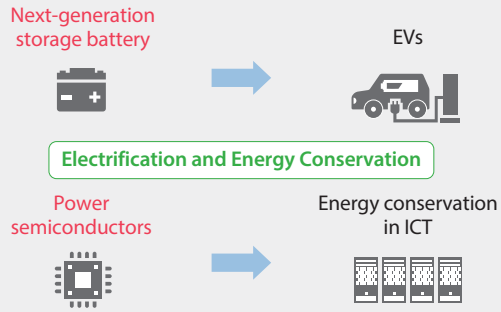
Carbon Resources Recycling System

We are developing chemical recycling technology that can convert garbage and plastic waste products into basic raw materials for chemical products, such as methanol, ethanol, and olefins, and then use those materials to create new plastics.



Highly Efficient Energy Infrastructure

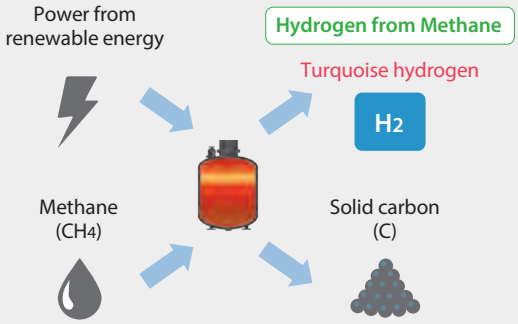
One issue in the Society 5.0 concept is the increase in CO_2 emissions from the electricity necessary for transmitting massive volumes of data. In light of this, our company is contributing to creating energy-saving power supplies by providing compound semiconductor materials for next-generation power semiconductors. In addition, in response to the spread of electric vehicles, which is expected to accelerate going forward, we are working to develop next-generation storage batteries, such as solid-state batteries.



Manufacturing and Utilizing CO_2-free Hydrogen

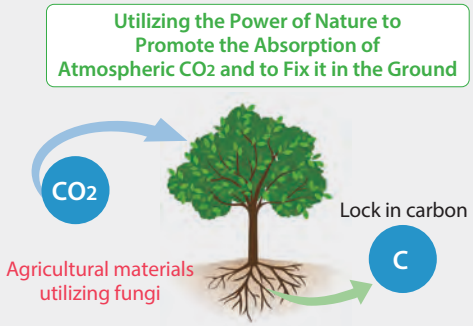
We are developing manufacturing technology to create a method for generating hydrogen at low costs and without creating CO_2 using methane as a raw material. In addition, we are also considering developing "turquoise" hydrogen* technology, which, despite using petroleum as a raw material, does not generate CO_2.

* "Turquoise" hydrogen: Hydrogen that falls in between "green" hydrogen and "blue" hydrogen
"Green" hydrogen : Hydrogen manufactured from non-petroleum-based raw materials without generating CO_2
"Blue" hydrogen: Hydrogen manufactured from petroleum in a way that generates CO_2, but where the CO_2 is captured and not released into the atmosphere



Carbon Negative

We are developing a technology whereby attaching certain types of fungi that exist in nature to the roots of plants and allowing them to coexist, we not only promote the absorption of CO_2 by plants through photosynthesis, we also fix CO_2 in the ground in the form of carbon compounds. This will enable ordinary fields, forests, and other natural spaces to absorb and fix even greater amounts of CO_2, contributing a net negative amount of carbon to the atmosphere.



Addressing Climate Change

The BioCarbon Fund*

Sumitomo Chemical finances afforestation projects in developing countries and poverty-stricken countries through the World Bank's BioCarbon Fund. These projects are geared to contribute to the restoration of abandoned land, the conservation of water resources, biodiversity conservation, and the reduction of GHGs. Since participating for the first time in 2005, Sumitomo Chemical has been involved in multiple afforestation projects, which have led to a combined total of 239 thousand tons in reductions in CO_2 emissions.

* BioCarbon Fund:
This fund was established by the World Bank to finance projects to plant trees and preserve forests with the objective of acquiring CO_2 credits (emissions rights issued based on the volume of CO_2 reduced or absorbed as a result of projects designed to reduce GHGs).

CDP Climate Change A List 2020

Sumitomo Chemical has been included in CDP's "Climate A List 2020," its highest rating, for the third consecutive year as a company recognized for undertaking particularly excellent activities to address climate change. Of 9,500 companies that disclosed their climate change information to CDP, 270 global companies and 66 Japanese companies were named on the A List.

Sumitomo Chemical received the highest evaluation in the CDP's climate change action and water security survey.

https://www.sumitomo-chem.co.jp/english/sustainability/news/detail/?key=8076

JCIA Responsible Care Award

The Japan Chemical Industry Association awarded the Sumitomo Chemical Group the Examiner's Special Award at the 13th JCIA Responsible Care Awards (Japanese only) for the Group's initiatives aimed at realizing a low-carbon society (June 2019) and the Excellence Award at the 14th JCIA Responsible Care Awards (Japanese only) for the Group's initiatives to promote sustainability, with the Misawa Works RC activities used as a case study (May 2020).

Maintained ISO 50001 Certification

In February 2020, Sumitomo Chemical acquired third-party ISO 50001 certification for energy management systems, the first diversified chemical manufacturer in Japan to do so, for its Responsible Care Department and the Ehime Works' methionine and electrolysis plants. In February 2021, the first surveillance audit* conducted since the third-party certification found no non-conformity or problem points and we were approved for maintaining certification.

* Conducted online due to the COVID-19 pandemic

Looking Ahead

The Sumitomo Chemical Group will continue actively working to solve climate change problems using the technological capabilities it has cultivated as a diversified chemical company.

Environmental Protection

Basic Stance

The Sumitomo Chemical Group is working in unison to reduce its environmental impact. Specifically, we have set out goals in each field, including protecting the atmosphere and aquatic environments, conserving resources and managing waste, properly managing chemical substances, protecting biodiversity, and protecting soil environments. Each worksite and Group company is striving to enhance its initiatives aimed at achieving these goals.

Over the course of the Corporate Business Plan (FY2019–2021) we aim to continue strengthening and enhancing our initiatives based on voluntary control and further enhance the level of activity undertaken by the consolidated Group. We also strive to more accurately and quickly disclose environmental performance indicators.

We are focusing on the following specific measures.

1. Appropriate Response to Laws and Regulations
   (1) By maintaining careful control of the execution and management of construction plans, we ensure appropriate response to notifications when changing the soil type of specified facilities that use hazardous substances and an expansion of opportunities for soil contamination surveys. (Soil Contamination Countermeasures Act)
   (2) We have enhanced the evaluation and management of environmental risks related to specified chemical substances expected to be selected under the PRTR Act. (PRTR Act)
   (3) Regarding refrigeration units using CFCs and HCFCs, we are systematically upgrading to equipment that uses lowGWP HFCs or non-fluorocarbon refrigerants (Ozone Layer Protection Law). We are also steadily disposing of the fluorocarbons from refrigeration and air conditioning equipment to be thrown away. (Act for Rationalized Use and Proper Management of Fluorocarbons)
   (4) We will remove all electronic equipment that uses PCBs (in storage or in operation) ahead of the deadline of March 2025. (Act on Special Measures against PCB Waste)
2. Reducing Environmental Impact
   Going forward, we will keep working to achieve our medium- to long-term voluntary management targets in the fields of air, water, soil, and waste, focusing our response on production bases.
3. Responding to Biodiversity Preservation
   We will promote initiatives unique to each worksite in line with the particular characteristics of their location.

Management System

The president serves as the chief coordinator and the executive officer in charge of Responsible Care serves as the coordinator of the Environment and Climate Change Action Group of the Responsible Care Department. This group is responsible for matters related to environmental protection for the Company as a whole and supports the environmental protection activities of Group companies.

Our worksites (head offices, Works, research laboratories, etc.) have established sections in charge of environmental protection operations, appointed coordinators and managers, and execute specific duties. Regarding the execution of duties, the corporate department (Responsible Care Department) formulates Company-wide annual policies and Company-wide medium-term (three-year) policies. Then each worksite, in light of these policies and in consideration of its own characteristics and regional situation, formulates an action policy and undertakes specific activities from the new fiscal year.

Regarding amendments to laws and regulations, the Responsible Care Department vigilantly pays attention to trends related to the enactment and amendment of environmental laws and, as appropriate, provides feedback through national specialized committees and other organizations. All people addressing the problems also establish targets (details of the amendments, possible impacts, visualization of countermeasures, etc.) and commit the Company to addressing the issue being targeted.

Furthermore, with regard to amendments that have a large impact on business, we access the necessary information in advance and notify worksites to prepare for meeting compliance requirements.

P.90 Organization of Responsible Care

Environmental Protection

★: Assured by an independent assurance provider

Goals and Results

The Sumitomo Chemical Group has established key environmental protection items as common goals. By following up on the results of each Group company, we are working to reduce our environmental impact in a systematic way.

P.104 Environmental Protection

Environmental Performance

Sumitomo Chemical collects and totals environmental data for the Company and Group companies in Japan, including data on energy and resource consumption, production quantities, and environmental impact (e.g., release of pollutants into the air and water).

PP.128–130 FY2018–2020 Environmental Performance

■ FY2020 Primary Environmental Performance (Sumitomo Chemical and Group companies in Japan)

Figures in black: Sumitomo Chemical and Group companies in Japan
Figures in green: Sumitomo Chemical

INPUT Energy and Resources

Water ★

		(Million tons)
Industrial water	63.4	60.1
Drinking water, etc.	0.8	0.5
Seawater	878.1	161.9
Groundwater	26.8	23.6
Other water	2.6	2.6

Energy ★
Calculated as kl of crude oil

		(Thousand kl)
Fuel, heat, and electricity*1	1,767	1,033

Exhaustible Resources

		(Thousand tons)
Hydrocarbon compounds	1,704	1,449
Metals (excluding minor metals)*2	90.2	86.3
Minor metals*3	12.5	0.1

PCB/CFCs under Secure Storage

No. of electrical devices containing high concentrations of PCBs*4	11 units	0 units
PCB volume*4	0.1 kl	0 kl
No. of refrigeration units using specified CFCs as a coolant	37 units	16 units
No. of refrigeration units using HCFCs as a coolant	255 units	97 units

OUTPUT Product Manufacturing and Environmental Impact

Products ★

		(Thousand tons)
(Calculated on the basis of ethylene production)*5	2,526	1,353

Water Pollutant Emissions ★

			(Tons)
COD	Coastal waters/waterways	874	805
	Sewer systems	168	89.0
Phosphorus	Coastal waters/waterways	34.7	31.3
	Sewer systems	4.9	4.5
Nitrogen	Coastal waters/waterways	1,281	1,204
	Sewer systems	48.1	26.4
Substances subject to the PRTR Act		11.7	9.6

Waste Materials ★

		(Thousand tons)
Waste emissions*6	248	53.5
Landfill*6	25.1	1.8
(Breakdown)		
On-site landfill	0	0
External landfill	25.1	1.8

Atmospheric Emissions ★

		(Thousand tons of CO_2e)
Greenhouse gases (seven gases)*1	6,072	3,474
Emissions from energy use (CO_2)	5,312	2,830
CO_2 emissions from other than energy use	661	620
N_2O	94	20
HFC	4	4
CH_4, PFC SF_6, NF_3 *7	—	—

		(Tons)
Others		
NOx	4,359	1,761
SOx	4,584	1,145
Soot and dust	211	105
Substances subject to the PRTR Act	419	230

*1 The energy (calculated as kl of crude oil) and greenhouse gas (all seven gases) indices were calculated in accordance with the GHG Protocol (refer to page 225 "Calculation Standards for Environmental and Social Data Indicators") for principal consolidated Group companies in Japan, which account for up to 99.8% of consolidated net sales.
• Having adopted the GHG Protocol standards for our GHG emission disclosures, we now include the following data that was not included in previous calculations: amount of energy used to produce electricity and steam sold to external parties by the Group and the resultant CO_2 emissions; amount of energy used by Sumitomo Chemical and Group companies in Japan non-production sites and the resultant CO_2 emissions; CO_2 emissions from non-energy sources not included in the scope of the Act on Promotion of Global Warming Countermeasures.
*2 Calculations include the following 12 metals: iron, gold, silver, copper, zinc, aluminum, lead, platinum, titanium, palladium, gallium, and lithium.
*3 Calculations include the following seven minor metals: nickel, chromium, tungsten, cobalt, molybdenum, manganese, and vanadium. The supply structure for each of these minor metals is extremely fragile. These minor metals are subject to national stockpiling.
*4 Fluorescent lamps and mercury lamp ballast as well as contaminated substances (wastepaper, etc.), including PCB waste, are not included in unit and volume data.
*5 Certain assumptions were made in calculations due to the difficulty of obtaining weight-based figures for some products.
*6 The amount of coal ash generated at Sumitomo Joint Electric Power, which is included in "Waste emissions" and "Landfill" (Sumitomo Chemical and Group companies in Japan) is calculated on a dry-weight basis.
*7 In reference to the Act on Promotion of Global Warming Countermeasures, companies that emit less than 3,000 tons of CO_2-equivalent per year for each type of greenhouse gas are outside the scope of calculation.

Environmental Protection

Examples of Initiatives

Protecting the Atmospheric Environment

By strengthening our measures for fixed emission sources, we are working on reducing our various environmental impacts, including emissions of soot and dust mainly from boilers and gas turbines, leaks of fluorocarbons from refrigeration equipment, emissions of mercury from industrial waste incinerators, emissions of chemicals and VOCs from manufacturing plants, and airborne asbestos from the demolition of buildings.

1. Reining in PM2.5* Emissions

We conduct detailed surveys of boilers, gas turbines, heating furnaces, dry furnaces, cracking furnaces, waste incinerators, and other such equipment, testing for emissions of VOCs and other gaseous atmospheric pollutants, soot, SOx, NOx, and hydrogen chloride, which are also the source of secondary particles and PM2.5. We strive to further reduce emissions for each source by taking measures to switch to alternative fuels.

* Particulate matter of up to 2.5 μm in diameter

P.133 Environmental Activities: Supplementary Data

2. Managing Fluorocarbon Refrigeration Equipment

As part of efforts to protect the ozone layer and combat global warming, we are systematically upgrading fluorocarbon refrigeration equipment (units that use CFCs, HCFCs, HFCs) employed in production processes to equipment that uses HFCs with a low global warming potential (GWP) or non-fluorocarbon refrigerants. Our goal is to complete these upgrades within the upgrade deadlines for the equipment.

Fluorocarbon cooling equipment

P.136 Environmental Activities: Supplementary Data

<Upgrade Deadlines for Each Type of Equipment>

- CFC equipment: Eliminate use of these units by fiscal 2025 (currently a total of 37 units held by the Group)
- HCFC equipment: Eliminate use of these units by fiscal 2045 (currently a total of 255 units held by the Group)

We aim to dutifully adhere to this plan, which, following the revision of the Act for Rationalized Use and Proper Management of Fluorocarbons, includes regularly examining the fluorocarbons used in industrial refrigeration and air conditioning equipment, devising ways of minimizing leaks identified in equipment designated as needing attention based on leakage history categorized by equipment type, as well as thoroughly conduct management to steadily dispose of residual fluorocarbons inside waste equipment.

3. Emissions of Mercury into the Atmosphere from Waste Incinerators

We measured concentrations of mercury (both gas and particles) emitted into the atmosphere by our waste incinerators, which we own, and completed a study of the impact of these emissions. The results have confirmed that mercury is being effectively removed by emission gas removal equipment, including bag filters and scrapers installed at incinerators, and that the concentration of mercury released into the atmosphere from all of the incinerators we own is within the emission guideline value set under the Air Pollution Control Act.

Environmental Protection

★: Assured by an independent assurance provider

Protecting the Aquatic Environment

In addition to our initiatives aimed at reducing overall water use, we have realized thorough purification of wastewater from worksites by operating stable and sophisticated wastewater treatment facilities.

1. Responding to Increasing Sophistication of Activated Sludge Treatment

At all Works, we are striving to develop management technologies for water treatment that will further reduce our environmental impact and apply these technologies to realize safe and secure wastewater treatment.

At Works, for process wastewater that is difficult to break down, which was conventionally incinerated for treatment, we have developed an activated sludge treatment utilizing microbial immobilization technology to stabilize the process water and reduce treatment costs. We are still considering applying this treatment to a wider scope of water.

2. Responding to Water Quality Standards

We are strengthening our voluntary management to continually reduce the COD, nitrogen, and phosphorus in wastewater emitted into the ocean and waterways from wastewater treatment facilities. In addition, we have realized stable treated water quality by enhancing the management technologies used in water treatment facilities. We are continually working to reduce the impact of water emissions from our plants on Tokyo Bay and other closed coastal waters where systems have been implemented to regulate the total water emissions of COD, nitrogen, and phosphorus.

3. Promoting the Effective Use of Water

We investigate water risks related to intake and effluence at each worksite and Group companies in Japan and overseas. We uncover various issues related to the use of fresh water on the worksite level and assess and manage the associated risks. In addition, we strive to reduce the amount of water we use by examining more effective ways to use water by application, while continuing to maintain and improve the quality of water released from our business sites into public water resources such as the ocean and waterways.

■ Water Usage (Sumitomo Chemical Group)

(Million tons)

	FY2018	FY2019	FY2020
Sumitomo Chemical Group	950	1,017	980
(Breakdown 1)			
Sumitomo Chemical	255	267	249★
Group companies in Japan	688	743	723★
Overseas Group companies	7.34	7.40	7.99
(Breakdown 2)			
Seawater	848	918	878
Fresh water	102	99.4	102

Notes: • Water usage volume includes seawater
• At Sumitomo Chemical Works, we determined that industrial water and groundwater intake is not partially included, and we revised the figures for Sumitomo Chemical and the Sumitomo Chemical Group in fiscal 2018 and 2019.

Wastewater Detoxification Initiatives (Misawa Works)

Wastewater from the Misawa Works goes through general activated sludge treatment, then, after finishing tertiary treatment of activated carbon absorption and the removal of floating substances through coagulation and sedimentation, analysis equipment does quality checks and the water is released into public waterways.

Activated sludge treatment facility

Environmental Protection

Evaluating Water-Related Problems

The Sumitomo Chemical Group is evaluating water-related risks at each production base from the perspective of water supply and demand risks and water pollution susceptibility risks.

Evaluating Water Supply and Demand Risks

The Group evaluates the baseline water stress in communities where a plant is located as well as underground water stress, the severity of droughts caused by seasonal changes in the water supply, the water storage capacity of the drainage basin, projected changes in water stress, and the percentage of water resources in the drainage basin that are protected.

Evaluating Water Pollution Susceptibility Risks

The Group evaluates water supply and demand and its fragility in terms of access to drinking water, water pollution, protected downstream areas, and the presence of endangered species in bodies of fresh water identified by the International Union for Conservation of Nature (IUCN).

As a result of the evaluation results, we are taking specific actions to reduce risks going forward for plants evaluated to have high water-related risks.

Measures to Continue Production in High Water-Related Risk Areas (Sumitomo Chemical India)

The Sumitomo Chemical Group conducts business activities in many places around the world, and some of its Group companies engage in production activities in countries and regions designated as having a high baseline with regard to water stress (physical risk) according to the Aqueduct Water Risk Atlas. Sumitomo Chemical India's Bhavnagar plant is one example.

To secure water for its production operation needs, the Bhavnagar plant purchases river water from the local municipality. Recently, however, there has been an increase in the surrounding population and demand for water for farms. This, coupled with a decrease in annual rainfall, has made it difficult for the plant to secure the water needed for production operations.

The Bhavnagar plant then decided to purchase a portion of the household wastewater that the surrounding municipalities are responsible for treating, and treating the wastewater itself to use in its production operations. First, the plant laid down two kilometers of pipe to transport the household wastewater to the plant. A unique aspect of this plan is that to treat the wastewater, the plant does not use the general activated sludge method but rather uses the pollutants contained in the wastewater as nutrients to farm worms (vermiculture).

Through this initiative, the plant was able to reduce its purchasing of river water by more than 70% while solving the plant's long-standing issue of securing a stable water supply for production activities. As an added bonus, its water purchase costs were cut to around half.

Wastewater being purified through earthworm farming

CDP Water Security A List 2020

Sumitomo Chemical was selected by CDP to receive the highest rating in its Water Security A List 2020 for the first time as a company taking especially excellent actions for water security. Among the roughly 3,000 companies that disclosed water security data, such as water-related risks and biodiversity action, the ones that were selected for the A List totaled 106 worldwide and only 30 in Japan.

Sumitomo Chemical Receives CDP's Highest Rating in Corporate Climate Action and Water Security Action

https://www.sumitomo-chem.co.jp/english/news/detail/20201209.html

Environmental Protection

Resource Saving and Waste Reduction

We are systematically working to reduce the amount of exhaustible raw materials used, quickly and properly dispose of PCB waste, and reduce the amount of industrial waste sent to landfills.

1. Promoting Resource Saving

We are striving to enhance the economic benefits gained from resource saving activities, such as improving the throughput yield of exhaustible raw materials and product yield.

■ Exhaustible Raw Material Use (Sumitomo Chemical and Group Companies in Japan)

(Thousand tons)

	FY2018		FY2019		FY2020	
	Sumitomo Chemical and Group Companies in Japan	Sumitomo Chemical	Sumitomo Chemical and Group Companies in Japan	Sumitomo Chemical	Sumitomo Chemical and Group Companies in Japan	Sumitomo Chemical
Hydrocarbon compounds	1,676	1,383	1,829	1,545	1,704	1,449
Metals (excluding minor metals)	121	117	109	105	90.2	86.3
Minor metals	13.54	0.07	11.20	0.02	12.5	0.1

Note: Economic effects are detailed in the supplementary data (page 132)

2. Thoroughly Managing Waste and Promoting Increased Recycling Internally and Externally

We have achieved a major reduction in industrial landfill waste by reducing the amount of industrial waste generated and promoting recycling. In addition, as a specified resource industry identified by the Act on Promotion of Effective Use of Resources, we are also working to reduce the generation of industrial byproducts (sludge).

3. Moving up the Schedule for the Treatment of Waste with Minute Amounts of PCBs before Legal Disposal Deadline Set by the PCB Special Measures Law

We winnowed the external operators jointly contracted to dispose of waste by Group companies in Japan down to just one. Regarding the waste with minute amounts of PCBs (transformers, condensers, etc.) being stored or used by each company, we formulated and are carrying out a plan to treat the waste over multiple years. We plan to treat all applicable equipment by March 2025.

Environmental Protection

Biodiversity Preservation Initiatives

Working to preserve biodiversity is one of Sumitomo Chemical's most important pillars as it strives toward building a sustainable society. Since formulating Sumitomo Chemical's Commitment to the Conservation of Biodiversity, Sumitomo Chemical has strengthened its initiatives, including setting ISO 14001 activity goals for biodiversity preservation aligned with the Commitment at each worksite. The Company has been actively participating in a private-sector biodiversity partnership and promoting initiatives through business while giving considerable thought to what we should be mindful of as a chemical company.

(Japanese only)

Sumitomo Chemical's Commitment to the Conservation of Biodiversity

1. We position the conservation of biodiversity as one of our most important management issues and strive to help protect the global environment.
2. We work to continuously reduce environmental impact in our production operations and our development and supply of products and services and in cooperation with third parties in the supply chain and thereby contribute to the conservation of biodiversity.
3. By regularly implementing education programs, we ensure that employees fully recognize and understand the importance of biodiversity and promote our commitment to its conservation.
4. We continuously engage in corporate social responsibility activities that contribute to environmental protection and lead to greater trust and confidence from society.
5. We disclose the results of these efforts and maintain effective communication with the general public.

Sumitomo Chemical's Biodiversity Preservation Initiatives

1. Reducing our environmental burden

Considering the environment in business activities

- Surveying benthic river organisms
- Monitoring emitted water and gas, installing autonomous measuring equipment, and combatting odors through activated sludge treatment and activated carbon absorption
- Undertaking environmental impact assessments at the planning stage for new plant construction and implementing countermeasures
- Promoting the 3Rs and managing waste
- Undertaking proper management of chemical substances
- Complying with internal safety management regulations pertaining to the use of genetically modified organisms

Promoting "Sumika Sustainable Solutions"

- Developing and promoting products with low environmental burden

Relevant SDG targets

7. a, 13.3

2. Encouraging conservation of habitable environments

Improving habitable environments and creating scenic views

- Conserving reservoirs and using them to promote biodiversity
- Promoting the greening of each worksite's premises and neighboring areas
- Greening and environmental conservation in Thailand (Sumitomo Chemical Forest)
- Taking countermeasures for white smoke (To render invisible the gas emitted after incineration to reduce, recycle, and detoxify waste and wastewater onsite (white smoke), we have installed cooling equipment to condense the vapor.)

Relevant SDG targets

6.3, 6.6, 14.1, 15.1, 9.4, 12.2, 12.4, 12.5, 11.6

3. Mainstreaming initiatives and alliances with stakeholders

Alliances with stakeholders

- Participating in private partnerships for biodiversity
- Incorporating marine plastic waste collection initiatives into management programs based on ISO 14001
- Supporting green curtain businesses
- Supporting the Osaka plastic zero declaration
- Participating in volunteer cleanup activities

Relevant SDG targets

13.3, 15.1, 15.2

4. Preventing climate change and effectively using resources

Saving energy, saving resources, and reducing greenhouse gases

- Conducting energy-saving activities based on ISO 50001
- Reducing CO_2 emissions (switching fuels, installing gas cogeneration systems, etc.)

Relevant SDG targets

11.6, 14.1, 14.2, 15.1, 15.2

Environmental Protection

Biodiversity Preservation Initiatives

<Preserving the Environment of Sakuragaike (Misawa Works) >

To prevent damage from heavy rains at Misawa Works, we created a retention pond that can store 50,000 tons of water. The pond (*ike*) was named Sakuragaike because of the cherry trees (*sakura*) planted in the surrounding area. Platanus, Sakhalin fir, double cherry, Sargent's cherry and other trees have been planted along its banks. Many different wild animals live around the pond, such as foxes, tanukis, and serows as well as a wide variety of birds, including ducks and cormorants.

To maintain Sakuragaike, we do not use synthetic chemical insecticides or germicides and instead regularly prune the trees of withered and diseased branches every three years.

Sakuragaike

Double cherry

Left: Grey heron Right: Cormorants

Left: Rabbit Right: Bat

<Water Area Surveys Conducted around Works (Misawa Works)>

To confirm the impact of business activities on water areas, we conduct aquatic wildlife surveys of the Sabishiro River, into which process water from the Works flows.

In the Sabishiro River, we confirmed 10 species of precious aquatic benthic organisms, such as a vulnerable species of Stenothyra and the endangered species Cottus reinii. We determined that we were maintaining ecosystems with extremely good water quality.

Stenothyra

Cottus reinii

Dugesia japonica

A subspecies of *Tubifex tubifex*

<Initiatives at Works in Japan (Oita Works, Gifu Plant)>

At the Gifu Plant, so as not to infringe upon the scenery of the surrounding areas, we are promoting the greening and beautification of the plant's premises and borders. At the Oita Works, as part of greening efforts, we planted Asiatic jasmine along about 250 meters of the wall north of the front gate.

The area surrounding the Gifu Plant's fish pond

Oita Works' green belt

<Greening and Environmental Conservation in Thailand (Sumitomo Chemical Forest)>

From 2008, we had partnered with OISCA to conduct mangrove planting activities in Ranong Province in southern Thailand. The initiative ended in March 2019, but the local residents currently continue to manage the area supported by the activities in the area, which has been dubbed the Sumitomo Chemical Forest.

The Sumitomo Chemical Forest helps create jobs in the area and improve the lives of the local residents.

Sumitomo Chemical Forest

P.209 Matching Gift Program

Environmental Protection

Appropriate Management of Chemical Substances

Regarding Class I designated chemical substances (PRTR Act) and VOCs, we conduct environmental risk analyses regardless of the amount emitted into the environment. We are also taking measures to reduce use and emissions.

1. Meeting Voluntary Environmental Targets

   At the boundaries of plant premises and at final drainage exits, we have set voluntary environmental targets for the concentration of pollutants in air and water and work to meet those targets. Utilizing METI-LIS provided by the Ministry of the Economy, Trade and Industry, we simulate the atmospheric dispersion concentration of Class I designated chemical substances (PRTR Act) of plant premises and identify fixed emission sources that would effectively reduce concentrations.

2. Reducing Atmospheric Emissions (FY2020 results: atmospheric emissions accounted for around 96% of total emissions (air and water))

   We are, of course, taking measures to reduce emissions mainly by sealing facilities and improving operation methods. But we are also working to intently and systematically reduce atmospheric emissions primarily by additionally taking such disposal measures as recovering emissions through absorption, purification, and stronger cooling; incinerating emissions; and suppressing emissions through internal floating roofs for tanks.

3. Operating Company-wide PRTR Calculation Systems

   Using the Company's proprietary calculation system, Sumitomo Chemical is striving to increase the accuracy and level of detail of the data on emission amounts and transfer amounts for each substance.

Protecting the Soil Environment

We quantify the soil environments of worksites, strictly prevent the diffusion of pollutants, and actively work to prevent contamination.

1. Regularly Monitoring Groundwater

   We analyze the groundwater at the boundaries of our worksites to confirm that levels of hazardous materials are below those stipulated by standards.

2. Preventing Soil Contamination

   We have established rules regarding the construction standards and the content of regular inspections for various equipment, including the gutters, floors, plumbing, and bund walls of facilities handling chemical substances. We are working to prevent soil contamination from leaks by thoroughly complying with these rules and to prevent the dispersal of hazardous substances outside of plant premises.

Looking Ahead

The focus of Sumitomo Chemical Group's basic policy on protecting the environment has shifted since the early 2000s from responding to laws and regulations toward strengthening voluntary management. As pressure increases to protect the environment on a global scale and to improve the efficacy of the measures taken at each worksite, we think it is necessary to understand trends (such as international environmental protection and resource recycling, biodiversity preservation, action on water risks) better than ever and take forward-looking action.

From the perspective of continued risk management, we are focusing our efforts on issues that are assessed as being high risk over the medium to long term and take appropriate action that enhances voluntary management.

Environmental Activities: Supplementary Data

1 Addressing Climate Change

Reducing Greenhouse Gas Emissions

■ Greenhouse Gas Emissions (All Seven Gases) (Sumitomo Chemical (All worksites))

(Thousand tons of CO_2e)

		FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
CO_2	Energy sources	3,347	2,559	2,405	2,454	2,543	2,722	2,645
	From other than energy use	65	55	50	93	155	142	157
Methane (CH_4)		—	—	—	—	—	—	—
Nitrous oxide (N_2O)		76	65	45	35	23	15	20
Hydrofluorocarbon (HFC)		—	—	—	—	—	4	4
Perfluorocarbon (PFC)		—	—	—	—	—	—	—
Sulfur hexafluoride (SF_6)		—	—	—	—	—	—	—
Nitrogen trifluoride (NF_3)		—	—	—	—	—	—	—

Note: Calculated based on the Act on the Rational Use of Energy and the Act on Promotion of Global Warming Countermeasures.

Environmental Activities: Supplementary Data

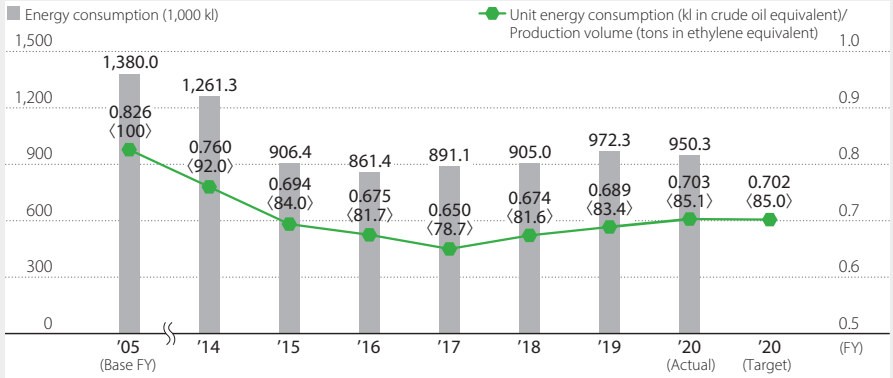
Energy Saving

FY2020 Breakdown of Unit Energy Consumption (Sumitomo Chemical)

	Energy consumption (1,000 kl in crude oil equivalent) (a)	Production (1,000 tons in ethylene equivalent) (b)	Unit energy consumption (a/b)
Ehime Works	480.2	762.3	0.630
Chiba Works	341.2	380.1	0.898
Osaka Works	22.9	16.2	1.415
Oita Works*	62.1	67.0	0.927
Misawa Works	10.4	9.2	1.127
Ohe Works	33.6	117.8	0.285
Total	950.3	1,352.6	0.703 <85.1% compared with FY2005>

Note: Calculated based on the Act on the Rational Use of Energy and the Act on Promotion of Global Warming Countermeasures.
* Data for the Oita Works includes data for the Gifu and Okayama plants.

Energy Consumption and Unit Energy Consumption (Sumitomo Chemical)



Note: Calculated based on the Act on the Rational Use of Energy and the Act on Promotion of Global Warming Countermeasures.

Target	Improve unit energy consumption 15% by fiscal 2020 compared to fiscal 2005 levels (Improve 1% per year on average) Improve unit CO_2 emissions from energy use 15% by fiscal 2020 compared to fiscal 2005 levels (Improve 1% per year on average)
Results	Energy consumption totaled 950.3 thousand kl in crude oil equivalent in fiscal 2020. In fiscal 2020, unit energy consumption worsened 2.7% compared with fiscal 2019 and improved 15% compared with fiscal 2005. Unit CO_2 emissions from energy use worsened 2.2% compared with fiscal 2019 and improved 13% compared with fiscal 2005.

FY2020 Energy Consumption and CO_2 Emissions (Sumitomo Chemical and Group Companies in Japan (All worksites))

	Energy consumption (1,000 kl in crude oil equivalent)	CO_2 emissions from energy use (1,000 tons)
Sumitomo Chemical	963	2,645
Works	950	2,620
Non-manufacturing sites including the Head Offices and Research Laboratories	13	24
Sumitomo Chemical and Group companies in Japan	1,767	5,312
Works	1,737	5,257
Non-manufacturing sites including the Head Offices and Research Laboratories	30	55

Notes: • Calculated based on the Act on the Rational Use of Energy and the Act on Promotion of Global Warming Countermeasures.
• The boundary of calculation covers the same participating companies listed on page 3.

Environmental Activities: Supplementary Data

★: Assured by an independent assurance provider

2 Environmental Protection

Environmental Performance

Sumitomo Chemical collates and totals environmental data for the Company and Group companies in Japan and overseas, including data on energy and resource consumption, production quantities, and environmental impact (e.g., release of pollutants into the air and water).

■ FY2018–2020 Environmental Performance (Sumitomo Chemical and Group Companies in Japan)

INPUT Energy and Resources

Water

(Million tons)

	FY2018	FY2019	FY2020★
Industrial water*1	63.1	63.7	63.4
Drinking water	0.8	0.8	0.8
Seawater	848	918	878
Groundwater*1	28.3	25.3	26.8
Other water	2.4	2.2	2.6
Total*1	943	1,010	972

Energy
Calculated as kl of crude oil

(Thousand kl)

	FY2018	FY2019	FY2020★
Fuel, heat, and electricity*2	1,690	1,720	1,767

Exhaustible Resources

(Thousand tons)

	FY2018	FY2019	FY2020
Hydrocarbon compounds	1,676	1,829	1,704
Metals (excluding minor metals)*3	121	109	90.2
Minor metals*4	13.5	11.2	12.5

PCB/CFCs under Secure Storage

	FY2018	FY2019	FY2020
No. of electrical devices containing high concentrations of PCBs*5	10	13	11
PCB volume (pure equivalent) (kl)*5	0.1	0.1	0.1
No. of refrigeration units using specified CFCs as a coolant	32	32	37
No. of refrigeration units using HCFCs as a coolant	272	260	255

Note: The number of companies included in the boundary of calculation for the environmental performance data on page 128 is as follows for each year.
FY2018: Sumitomo Chemical and Group companies in Japan: 21 companies
FY2019: Sumitomo Chemical and Group companies in Japan: 21 companies
FY2020: Sumitomo Chemical and Group companies in Japan: 22 companies

*1 At Sumitomo Chemical's Works, it became apparent that some of the industrial water and groundwater withdrawal had not been included in the calculations, so industrial water in fiscal 2019 has been retrospectively revised by 0.2 million tons while groundwater in fiscal 2018 has been revised by 5.6 million tons and in fiscal 2019 by 3.5 million tons. Totals have also been revised accordingly.
*2 From fiscal 2017, the energy (calculated as kl of crude oil) indices were calculated in accordance with the GHG Protocol (refer to page 225 "Calculation Standards for Environmental and Social Data Indicators").
• Having adopted the GHG Protocol standards for our GHG emission disclosures, we now include the following data previously excluded from calculations: amount of energy used to produce power and steam sold to external parties by Sumitomo Chemical and Group companies in Japan (the portion attributable to energy provider subsidiaries was included in years prior to fiscal 2016). In addition, the amount of energy used by Sumitomo Chemical's non-production sites is included from fiscal 2017, and the amount of energy used by the Group companies in Japan non-production sites is included from fiscal 2018. From fiscal 2018, the boundary of calculation has been expanded to include principal consolidated Group companies in Japan, which account for up to 99.8% of consolidated net sales.
*3 Calculations include the following 12 metals: iron, gold, silver, copper, zinc, aluminum, lead, platinum, titanium, palladium, gallium, and lithium.
*4 Calculations include the following seven minor metals: nickel, chromium, tungsten, cobalt, molybdenum, manganese, and vanadium. The supply structure for each of these minor metals is extremely fragile. These minor metals are subject to national stockpiling.
*5 Fluorescent lamps and mercury lamp ballast as well as contaminated substances (wastepaper, etc.), including PCB waste, are not included in unit and volume data.

Environmental Activities: Supplementary Data

★: Assured by an independent assurance provider

OUTPUT Product Manufacturing and Environmental Impact

Products

(Thousand tons)

	FY2018	FY2019	FY2020★
(Calculated on the basis of ethylene production)*1	2,490	2,521	2,526

Water Pollutant Emissions

(Tons)

		FY2018	FY2019	FY2020★
COD	Coastal waters/waterways	998	887	874
	Sewer systems	216	197	168
Phosphorus	Coastal waters/waterways	35	30.5	34.7
	Sewer systems	5	4.7	4.9
Nitrogen	Coastal waters/waterways	1,488	1,457	1,281
	Sewer systems	96	53.3	48.1
Substances subject to the PRTR Act		13	8.0	11.7

Water Discharge

(Million tons)

	FY2018	FY2019	FY2020
Total amount of water discharge	911	980	947

Note: Includes seawater emissions of Sumitomo Joint Electric Power Co., Ltd.

Waste Materials

(Thousand tons)

	FY2018	FY2019	FY2020★
Waste emissions*2	244	232	248
Landfill*2	23	22	25.1
(Breakdown)			
On-site landfill	0	0	0
External landfill	23	22	25.1

Note: The number of companies included in the boundary of calculation for the environmental performance data on page 129 is as follows for each year.
FY2018: Sumitomo Chemical and Group companies in Japan: 21 companies
FY2019: Sumitomo Chemical and Group companies in Japan: 21 companies
FY2020: Sumitomo Chemical and Group companies in Japan: 22 companies

*1 Certain assumptions were made in calculations due to the difficulty of obtaining weight-based figures for some products.
*2 The amount of coal ash generated at Sumitomo Joint Electric Power, which is included in "Waste emissions" and "Landfill" (Sumitomo Chemical and Group companies in Japan) is calculated on a dry-weight basis.

Environmental Activities: Supplementary Data

★: Assured by an independent assurance provider

Atmospheric Emissions

(Thousand tons of CO_2e)

	FY2018	FY2019	FY2020★
Greenhouse gases (seven gases)*1	5,957	5,962	6,072
Emissions from energy use (CO_2)	5,172	5,209	5,312
CO_2 emissions from other than energy use	684	659	661
N_2O	101	89	94
HFC*2	—	4	4
PFC*2	—	—	—
CH_4*2	—	—	—
SF_6*2	—	—	—
NF_3*2	—	—	—

(Tons)

	FY2018	FY2019	FY2020★
Others			
NOx	4,326	4,208	4,359
SOx	5,152	4,621	4,584
Soot and dust	222	192	211
Substances subject to the PRTR Act*3	458	438	419

Note: The number of companies included in the boundary of calculation for the environmental performance data on page 130 is as follows for each year.
FY2018: Sumitomo Chemical and Group companies in Japan: 21 companies
FY2019: Sumitomo Chemical and Group companies in Japan: 21 companies
FY2020: Sumitomo Chemical and Group companies in Japan: 22 companies

*1 From fiscal 2017, the greenhouse gas (all seven gases) indices were calculated using the GHG Protocol for greenhouse gas emissions (refer to page 226 "Calculation Standards for Environmental and Social Data Indicators") for principal consolidated Group companies in Japan, which account for up to 99.8% of consolidated net sales.
- Having adopted the GHG Protocol standards for our GHG emission disclosures, we now include the following data that was previously excluded from calculations: CO_2 emissions from energy sold to external parties by Sumitomo Chemical and Group companies in Japan (the portion attributable to energy provider subsidiaries was included in years prior to fiscal 2016); CO_2 emissions from energy use attributable to Sumitomo Chemical's non-production sites; and CO_2 emissions from non-energy sources not included in the scope of the Act on Promotion of Global Warming Countermeasures. In addition, from fiscal 2018, we include energy use attributable to the Group companies in Japan non-production sites.

*2 Outside the scope of reporting under the Act on Promotion of Global Warming Countermeasures.
*3 Calculated based on the amount released into water/the air of each substance subject to the PRTR Act.

Compliance with Environmental Laws and Regulations

(Yen)

	FY2018	FY2019	FY2020
Total fines	0	0	0

Note: **Sumitomo Chemical and Group companies in Japan are included in the boundary of calculation.**
[The production sites of the 22 Group companies in the boundary are listed below]
Sumika-Kakoushi Co., Ltd.; Sumika Color Co., Ltd.; Sumika Plastech Co., Ltd.; Nippon A&L Inc.; Asahi Chemical Co., Ltd.; Ceratec Co., Ltd.; Sumika Assembly Techno Co., Ltd.; SanTerra Co., Ltd.; Sumika Agro Manufacturing Co., Ltd.; SC Environmental Science Co., Ltd.; Sumika Agrotech Co., Ltd.; Sumika Polycarbonate Limited; Nihon Medi-Physics Co., Ltd.; Sumitomo Joint Electric Power Co., Ltd.; Koei Chemical Co., Ltd.; Taoka Chemical Co., Ltd.; Tanaka Chemical Corporation; SCIOCS COMPANY LIMITED; Sumitomo Dainippon Pharma Co., Ltd.; SN Kasei Co., Ltd.; SANRITZ CO.,LTD.; and Sumika High-Purity Gas Co., Ltd.

Environmental Activities: Supplementary Data

Evaluation of Environmental Protection Costs and Economic Effects through Environmental Accounting

Sumitomo Chemical continuously gathers and evaluates data on environmental protection-related expenses, investments, and economic results in line with the Company's environmental accounting system introduced in fiscal 2000.

◆ Items Pertaining to Environmental Accounting

(1) Period: April 1, 2020 to March 31, 2021
(2) Boundary: Sumitomo Chemical and 21 major consolidated subsidiaries (16 in Japan and 5 overseas)*
(3) Composition (Classification): Based on Ministry of the Environment (Japan) guidelines
(4) Outline of the results (investment and expenses): Consolidated investment increased year on year by 1.3 billion yen, and consolidated expenses decreased by 0.6 billion yen.

* Sumitomo Dainippon Pharma Co., Ltd.; Koei Chemical Co., Ltd.; Taoka Chemical Co., Ltd.; Asahi Chemical Co., Ltd.; Sumitomo Joint Electric Power Co., Ltd.; Sumika Color Co., Ltd.; Nihon Medi-Physics Co., Ltd.; Nippon A&L Inc.; SanTerra Co., Ltd.; Sumika-Kakoushi Co., Ltd.; Sumika Agrotech Co, Ltd.; Ceratec Co., Ltd.; SC Environmental Science Co., Ltd.; SN Kasei Co., Ltd.; Sumika Agro Manufacturing Co., Ltd.; Sumika Plastech Co., Ltd.; Dongwoo Fine-Chem Co., Ltd.; Sumitomo Chemical Asia Pte Ltd; The Polyolefin Company (Singapore) Pte. Ltd.; Sumika Technology Co., Ltd.; and Sumika Electronic Materials (Wuxi) Co., Ltd.

■ Environmental Protection Cost

(Billion yen)

Classification		Details of Major Initiatives	FY2019				FY2020			
			Non-Consolidated		Consolidated		Non-Consolidated		Consolidated	
			Investment	Expenses	Investment	Expenses	Investment	Expenses	Investment	Expenses
Facility Area Costs			0.7	20.4	1.9	32.7	1.0	19.2	3.2	31.2
Breakdown	Pollution Prevention Costs	Prevention of air pollution, water pollution, soil contamination, noise pollution, odors, ground subsidence, etc. (pages 133–134)	(0.5)	(15.2)	(1.3)	(19.6)	(0.6)	(13.8)	(2.3)	(18.1)
	Global Environmental Protection Costs	Energy saving, prevention of global warming, ozone layer depletion, and other measures (pages 127, 136)	(0)	(0.2)	(0.4)	(4.3)	(0)	(0.2)	(0.4)	(4.1)
	Resource Recycling Costs	Resource saving, water saving and rainwater usage, waste reduction/disposal treatment, recycling, etc. (pages 122, 140)	(0.2)	(5.0)	(0.2)	(8.8)	(0.4)	(5.2)	(0.5)	(9.0)
Upstream/ Downstream Costs		Green purchasing, recycling, recovery, remanufacturing and appropriate treatment of products, recycling costs associated with containers and packaging, environmentally friendly products and services, etc.	0	0	0	0.3	0	0	0	0.4
Administrative Costs		Costs associated with environmental education, environmental management systems, the monitoring and measuring of the environmental impact of business activities and products, environmental organization operations, etc. (page 146)	0	0.8	0	1.4	0	0.8	0	1.5
R&D Costs		Development of products with attention to environmental safety, research into energy-saving processes, etc. (pages 36–40)	0.1	7.4	0.1	7.5	0.1	8.1	0.1	8.2
Social Activities Costs		Protection of the natural environment and enhancement of its scenic beauty and greenery, support for community initiatives aimed at environmental protection, support for environmental preservation groups, environment-related paid contributions and surcharges, etc.	0	0.5	0	0.8	0	0.6	0	0.8
Environmental Remediation Costs		Environmental rehabilitation of contaminated environments and other environmental damage, reserve funds to cover environmental recovery, etc.	0	0	0	0	0	0	0	0
Total			0.8	29.1	2.0	42.7	1.1	28.7	3.3	42.1

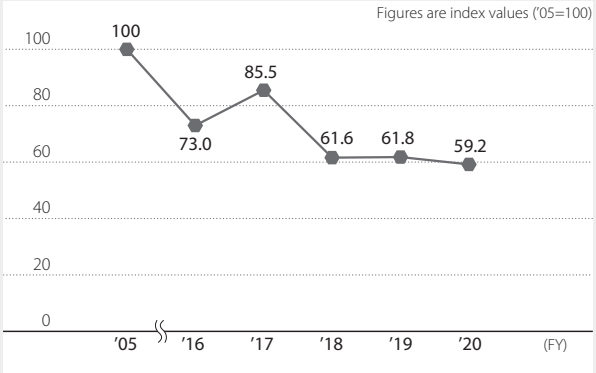
Environmental Activities: Supplementary Data

Economic Effects

(Billion yen)

Results	FY2019		FY2020	
	Non-Consolidated	Consolidated	Non-Consolidated	Consolidated
Reduced costs through energy saving	0.2	0.3	0.2	0.3
Reduced costs through resource saving	0.3	0.4	0.4	0.6
Reduced costs through recycling activities	2.8	3.0	2.4	2.6
Total	3.3	3.7	3.0	3.5

Cost Efficiency of Environmental Protection Measures (Sumitomo Chemical (All Worksites))



In fiscal 2005, we began implementing measures to improve the cost efficiency of our environmental protection measures by making sure that all activities were as cost effective as possible. We will implement more effective measures by analyzing and studying the breakdown of our environmental protection costs and reviewing each item to determine its importance. We calculate the cost efficiency of our environmental protection as the ratio of annual total production value to total environmental protection costs, in order to better reflect actual production activities in the calculation.

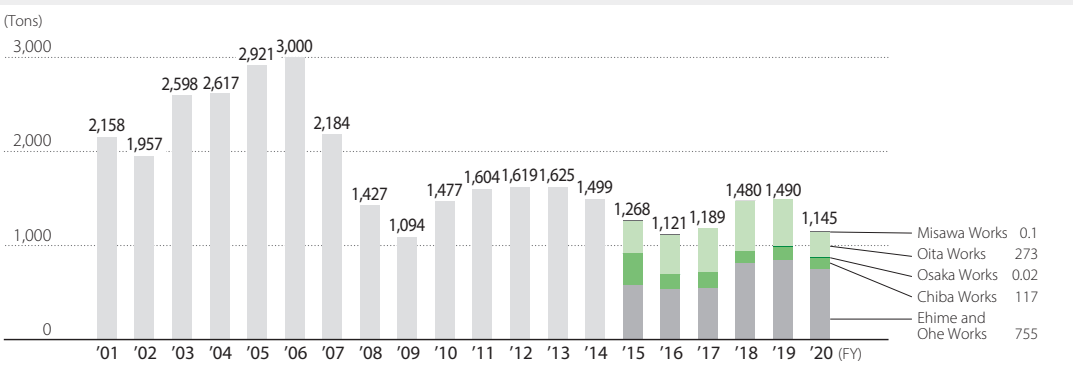
Environmental Activities: Supplementary Data

Preventing Pollution: Atmospheric Emissions of SOx, NOx, Soot, and Dust

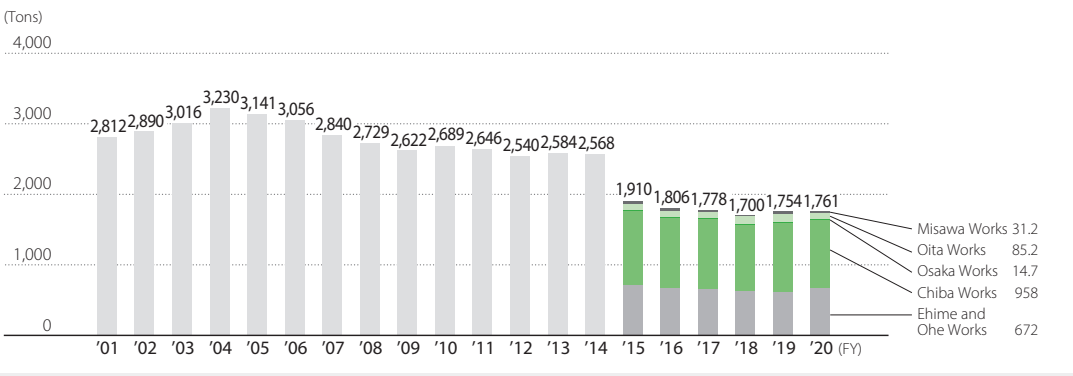
In 1970, Sumitomo Chemical achieved a marked reduction in the release of SOx, NOx, soot, and dust into the atmosphere, and continued to maintain low levels of emissions from 1980 to the present. Furthermore, the Company has concluded cooperative agreements with local municipal governments at each of its Works, establishing voluntary control levels that are stricter than the standards given under applicable laws and regulations.

Note: Data for the Gifu Plant and Okayama Plant from fiscal 2004 to fiscal 2012 is included in Osaka Works.
Data for the Gifu Plant and Okayama Plant from fiscal 2013 is included in Oita Works.

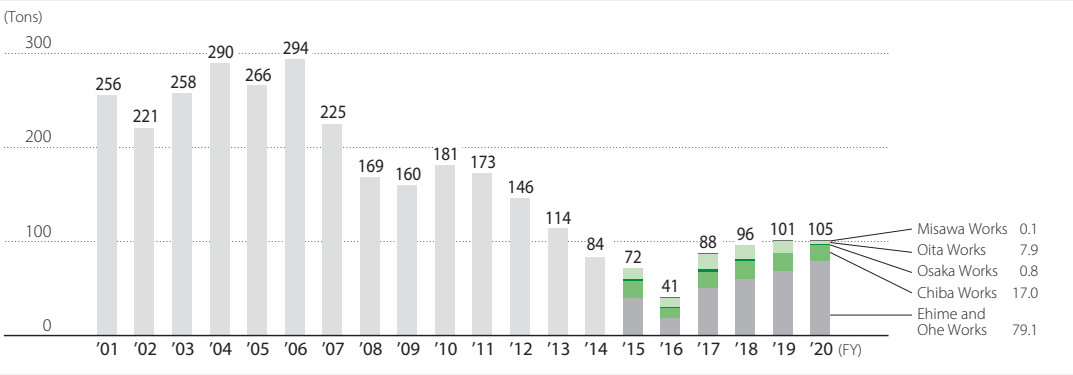
SOx Emissions (Sumitomo Chemical)



NOx Emissions (Sumitomo Chemical)



Soot and Dust Emissions (Sumitomo Chemical)



Target	Continue to sustain levels below voluntary control standard values.

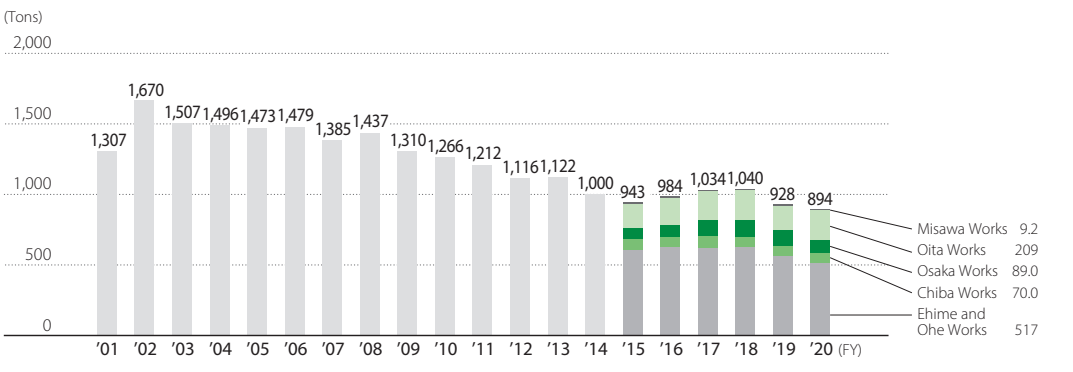
Environmental Activities: Supplementary Data

Water Emissions of COD, Nitrogen, and Phosphorus

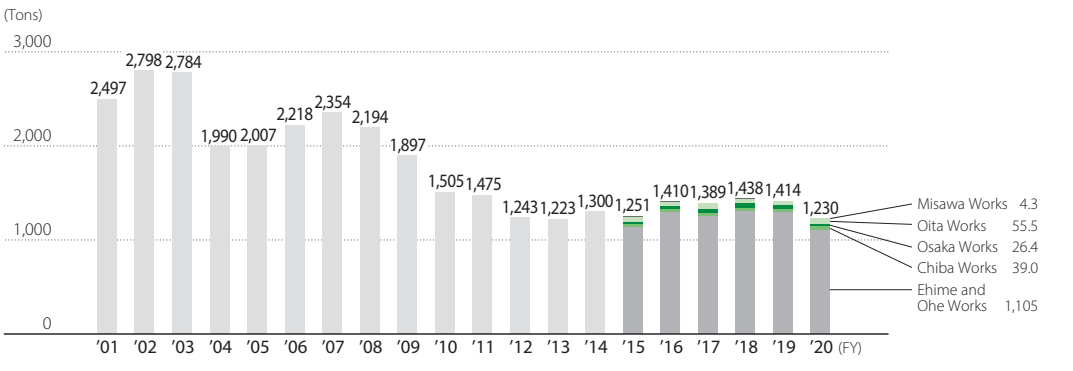
A number of measures have been implemented to cut emissions, in line with fifth-generation Water Quality Standards, and emissions of COD, nitrogen, and phosphorus into waterways have been significantly reduced since fiscal 2004. Sumitomo Chemical has also concluded cooperative agreements with local municipal governments to establish voluntary control levels for COD, nitrogen, and phosphorus released into waterways at each Works. These standards are also stricter than those established under applicable laws and regulations.

Note: Data for the Gifu Plant and Okayama Plant from fiscal 2004 to fiscal 2012 is included in Osaka Works.
Data for the Gifu Plant and Okayama Plant from fiscal 2013 is included in Oita Works.

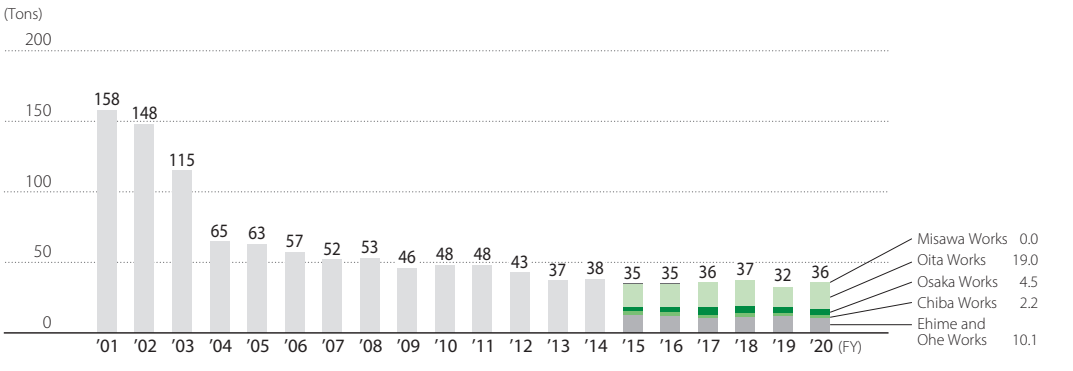
COD Emissions (water emissions include water discharge to sewage systems) (Sumitomo Chemical)



Nitrogen Emissions (Sumitomo Chemical)



Phosphorus Emissions (Sumitomo Chemical)



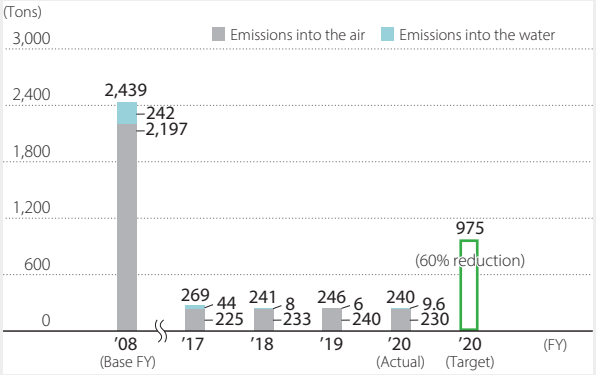
Target	Continue to sustain levels below voluntary control standard values.

Environmental Activities: Supplementary Data

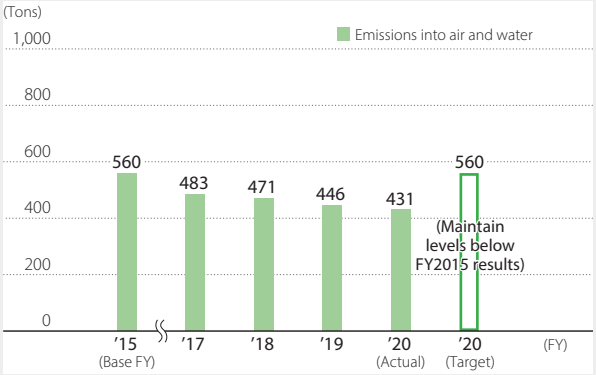
Addressing PRTR and VOCs

Trends in Emissions of Substances Subject to the PRTR Act

Sumitomo Chemical



Sumitomo Chemical and Group Companies in Japan

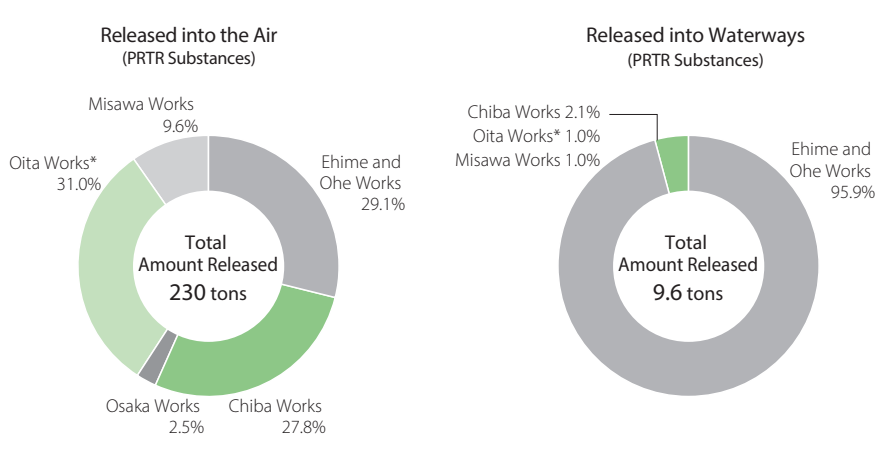


FY2020 Release and Transfer of PRTR Substances (Sumitomo Chemical and Group Companies in Japan)

(Tons)

	Released			Transferred		
	Air	Water	Subtotal	Sewage	Waste	Subtotal
PRTR substances						
Sumitomo Chemical (123 substances)	230	9.6	240	4.0	4,956	4,960
Sumitomo Chemical and Group companies in Japan	419	11.7	431	7.3	7,764	7,771

FY2020 PRTR Substances Released by Works (Sumitomo Chemical)

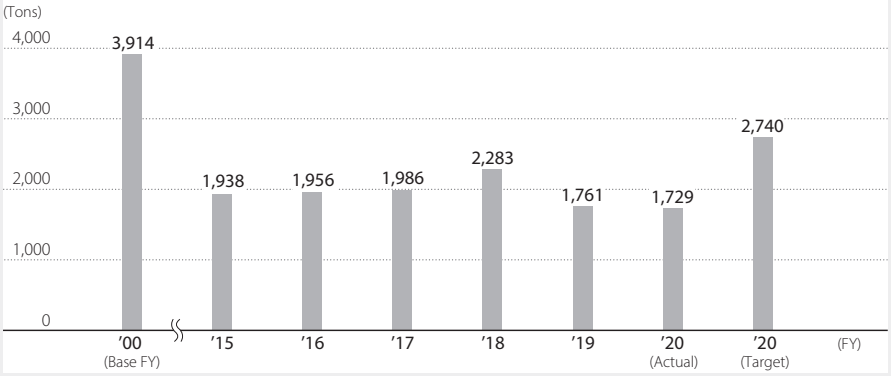


* Data for the Oita Works includes data for the Gifu and Okayama plants.

Target	Reduce the total release of PRTR substances by 60% compared with fiscal 2008 by fiscal 2020
Results	Reduced the total release of PRTR substances to 240 tons, by 90.2%, compared with fiscal 2008 by fiscal 2020, achieving the target.

Environmental Activities: Supplementary Data

Initiatives to Reduce Emissions of Volatile Organic Compounds (VOCs) (Sumitomo Chemical)



Target	Maintain a 30% reduction in VOC emissions compared with fiscal 2000.
Results	Reduced emissions by 1,729 tons, or 55.8%, compared with fiscal 2000 by fiscal 2020, achieving the target.

Prevention of Ozone Layer Depletion

Number of Refrigeration Units That Use Specified CFCs and HCFCs as Coolants (Sumitomo Chemical and Group Companies in Japan) as of the End of Fiscal 2020

(Number of units)

	Sumitomo Chemical	Sumitomo Chemical and Group Companies in Japan
CFC11	8	8
CFC12	6	26
CFC13	0	1
CFC115	2	2
HCFC22	71	222
HCFC123	26	33

Target	• Eliminate the use of refrigeration units that use specified CFCs as coolants by fiscal 2025. • Eliminate the use of refrigeration units that use HCFCs as coolants by fiscal 2045.

Environmental Activities: Supplementary Data

Response to the Pollutant Release and Transfer Register Ordinance(Issued on November 21, 2008)

(Tons, Dioxins: mg-TEQ)

No.	Name of Chemical Compound	Amount Released					Amount Transferred		
		Air	Water	Soil	Landfill	Total	Sewage	Waste	Total
1	Zinc compounds (water-soluble)	0.0	3.1	0.0	0.0	3.1	<0.1	81.6	81.7
2	Acrylic acid and its water-soluble salts	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
3	Methyl acrylate	0.6	0.0	0.0	0.0	0.6	0.0	0.0	0.0
4	Acrylonitrile	3.9	0.0	0.0	0.0	3.9	0.0	0.0	0.0
5	Acrolein	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	<0.1
6	Sodium azide	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
7	Acetaldehyde	<0.1	<0.1	0.0	0.0	<0.1	0.0	0.0	0.0
8	Acetonitrile	1.1	0.0	0.0	0.0	1.1	0.0	39.4	39.4
9	o-Anisidine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	Aniline	0.7	0.0	0.0	0.0	0.7	0.0	6.9	6.9
11	2-Aminoethanol	<0.1	0.2	0.0	0.0	0.2	0.0	28.2	28.2
12	5-amino-1-[2,6-dichloro-4-(trifluoromethyl) phenyl]-3-cyano -4-[(trifluoromethyl) sulfinyl]pyrazole (also known as fipronil)	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	<0.1
13	m-Aminophenol	0.0	<0.1	0.0	0.0	<0.1	0.0	11.7	11.7
14	Allyl alcohol	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
15	Antimony and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	Isobutyraldehyde	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0
17	O-ethylO-6-nitro-meta-tolyl-sec-butylphosphoramidothioate (also known as Butamifos)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	O-ethylO-4-nitrophenyl phenylphosphonothioate (also known as EPN)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	Ethylbenzene	3.4	<0.1	0.0	0.0	3.4	0.1	17.0	17.1
20	Epichlorohydrin	0.6	0.0	0.0	0.0	0.6	0.0	0.0	0.0
21	1,2-Epoxypropane (also known as propylene oxide)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	Cadmium and its compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
23	ε-Caprolactam	0.2	1.5	0.0	0.0	1.7	0.0	0.0	0.0
24	Xylene	3.0	<0.1	0.0	0.0	3.0	0.1	20.0	20.1
25	Quinoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	Cumene	9.1	<0.1	0.0	0.0	9.1	0.0	0.0	0.0
27	Cresol	0.2	0.0	0.0	0.0	0.2	0.0	<0.1	<0.1
28	Chromium and chromium(III) compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
29	Chromium(VI) compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
30	Chloroacetic acid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	Chlorodifluoromethane (also known as HCFC-22)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	2-chloro-4,6-bis (ethylamino)-1,3,5-triazine (also known as simazine or CAT)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
33	3-Chloropropene (also known as allyl chloride)	1.6	0.0	0.0	0.0	1.6	0.0	17.8	17.8
34	Chlorobenzene	4.6	<0.1	0.0	0.0	4.6	0.0	158.5	158.5
35	Chloroform	<0.1	0.0	0.0	0.0	<0.1	0.0	266.4	266.4
36	Cobalt and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	Vinyl acetate	37.2	<0.1	0.0	0.0	37.2	0.0	0.0	0.0
38	Salicyl aldehyde	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	(RS)-α-Cyano-3-phenoxybenzyl 2,2,3,3-tetramethylcyclopropanecarboxylate (also known as fenpropathrin)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	Inorganic cyanide compounds (excluding complex salts and cyanates)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1

Environmental Activities: Supplementary Data

(Tons, Dioxins: mg-TEQ)

No.	Name of Chemical Compound	Amount Released					Amount Transferred		
		Air	Water	Soil	Landfill	Total	Sewage	Waste	Total
41	S-4-chlorobenzyl N,N-diethylthiocarbamate (also known as thiobencarb or benthiocarb)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
42	Tetrachloromethane	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
43	1,4-Dioxane	<0.1	0.0	0.0	0.0	<0.1	<0.1	129.0	129.0
44	Cyclohexylamine	0.0	<0.1	0.0	0.0	<0.1	0.0	1.1	1.1
45	1,2-dichloroethane	0.0	0.0	0.0	0.0	0.0	<0.1	<0.1	<0.1
46	1,1-Dichloroethylene (also known as vinylidene chloride)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
47	Cis-1,2-dichloroethylene	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
48	2,2-Dichloro-1,1,1- trifluoroethane (also known as HCFC-123)	1.6	0.0	0.0	0.0	1.6	0.0	0.0	0.0
49	1,2-Dichloropropane	0.0	0.0	0.0	0.0	0.0	0.0	426.0	426.0
50	1,3-Dichloropropene (also known as D-D)	0.4	0.0	0.0	0.0	0.4	<0.1	71.0	71.0
51	Dichlorobenzene	0.0	0.0	0.0	0.0	0.0	0.0	82.0	82.0
52	Dichloromethane (also known as methylene chloride)	2.4	0.0	0.0	0.0	2.4	0.0	47.7	47.7
53	Dicyclopentadiene	<0.1	0.0	0.0	0.0	<0.1	0.0	5.9	5.9
54	O,O-dimethyl S-(N-methylcarbamoyl)methyl phosphorodithioate (also known as dimethoate)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	2,4-Dinitrophenol	0.0	0.0	0.0	0.0	0.0	0.0	27.5	27.5
56	1,3-Diphenylguanidine	0.0	0.3	0.0	0.0	0.3	0.0	7.5	7.5
57	2,6-Di-tert-butyl-4-cresol (also known as BHT)	0.0	<0.1	0.0	0.0	<0.1	0.0	0.0	0.0
58	2,4-Di-tert-butylphenol	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
59	N,N-Dimethylacetamide	0.0	0.0	0.0	0.0	0.0	0.0	9.5	9.5
60	2,4-dimethylaniline	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6
61	N,N-Dimethylaniline	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9
62	Dimethylamine	0.0	<0.1	0.0	0.0	<0.1	0.0	2.2	2.2
63	N,N-Dimethylformamide	0.2	<0.1	0.0	0.0	0.2	0.0	230.8	230.8
64	Mercury and its compounds	<0.1	0.0	0.0	0.0	<0.1	<0.1	0.0	<0.1
65	Styrene	2.0	0.0	0.0	0.0	2.0	0.0	0.4	0.4
66	Selenium and its compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
67	Dioxins	<0.1	<0.1	0.0	0.0	<0.1	<0.1	<0.1	<0.1
68	O,O-dimethyl O-3-methyl-4-nitrophenyl phosphorothioate (also known as fenitrothion or MEP)	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
69	Tetrachloroethylene	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
70	Tetramethylthiuram disulfide (also known as thiuram or thiram)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
71	Terephthalic acid	0.0	0.0	0.0	0.0	0.0	0.0	415.8	415.8
72	Water-soluble copper salts (excluding complex salts)	0.0	<0.1	0.0	0.0	<0.1	<0.1	0.0	<0.1
73	Triethylamine	0.6	0.4	0.0	0.0	1.0	0.5	57.6	58.1
74	1,1,1-trichloroethane	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
75	1,1,2-trichloroethane	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
76	Trichloroethylene	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
77	2,4,6-Trichloro-1,3,5-triazine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	Trichlorofluoromethane (also known as CFC-11)	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
79	1,2,3-Trichloropropane	<0.1	0.0	0.0	0.0	<0.1	0.0	2.2	2.2
80	1,2,4-Trimethylbenzene	0.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0
81	Toluidine	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8
82	Toluene	119.3	0.1	0.0	0.0	119.4	0.3	2,445.3	2,445.6
83	Naphthalene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Environmental Activities: Supplementary Data

(Tons, Dioxins: mg-TEQ)

No.	Name of Chemical Compound	Amount Released					Amount Transferred		
		Air	Water	Soil	Landfill	Total	Sewage	Waste	Total
84	Lead compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
85	Nickel compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8
86	Nitrobenzene	0.5	3.5	0.0	0.0	4.1	0.0	32.1	32.1
87	Vanadium compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	Arsenic and its inorganic compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
89	Hydrazine	<0.1	<0.1	0.0	0.0	<0.1	0.0	12.5	12.5
90	Hydroquinone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	4-Vinyl-1-cyclohexene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	Biphenyl	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	Pyridine	0.0	<0.1	0.0	0.0	<0.1	0.0	0.5	0.5
94	Phenylenediamine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	1,3-Butadiene	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
96	Bis(2-ethylhexyl)phthalate	0.0	0.0	0.0	0.0	0.0	0.0	5.2	5.2
97	tert-Butyl hydroperoxide	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	2-tert-Butyl-5-methylphenol	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
99	Hydrogen fluoride and its water-soluble salts	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
100	2-Propyn-1-ol	<0.1	0.0	0.0	0.0	<0.1	0.0	94.8	94.8
101	Hexadecyltrimethylammonium chloride	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
102	n-Hexane	21.8	<0.1	0.0	0.0	21.9	0.0	145.1	145.1
103	Water-soluble salts of peroxydisulfuric acid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104	Benzyl chloride	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
105	Benzaldehyde	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106	Benzene	0.3	0.1	0.0	0.0	0.4	<0.1	0.0	<0.1
107	Boron compounds	0.0	0.0	0.0	0.0	0.0	<0.1	1.2	1.2
108	Polychlorinated biphenyls (also known as PCBs)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
109	Poly (oxyethylene) alkyl ether (alkyl C=12–15) and its mixture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110	Formaldehyde	<0.1	<0.1	0.0	0.0	<0.1	2.4	14.5	16.9
111	Manganese and its compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
112	Phthalic anhydride	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113	Maleic anhydride	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114	Methacrylic acid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115	2,3-Epoxypropyl methacrylate	1.8	0.0	0.0	0.0	1.8	0.0	0.0	0.0
116	Methyl methacrylate	8.7	0.0	0.0	0.0	8.7	0.0	33.4	33.4
117	(Z)-2′-Methylacetophenone= 4,6-dimethyl-2-pyrimidinyl hydrazone (also known as Ferimzone)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118	Methylamine	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0
119	3-Methylthiopropanal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120	Methylnaphthalene	2.5	0.0	0.0	0.0	2.5	0.0	0.0	0.0
121	Molybdenum and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122	Morpholine	0.0	<0.1	0.0	0.0	<0.1	0.0	0.0	0.0
123	Triphenyl phosphate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total		230	9.6	0.0	0.0	240	4.0	4,956	4,960

Environmental Activities: Supplementary Data

Industrial Waste Reduction

PCB Waste (Sumitomo Chemical and Group Companies in Japan)

Storage and Control of High Concentrations of PCB Waste as of the End of Fiscal 2020

	Number of units of PCB waste			Volume of PCBs (kl)
	Total	Storage	Usage	
Sumitomo Chemical	0	0	0	0
Sumitomo Chemical and Group Companies in Japan	11	0	11	0.1

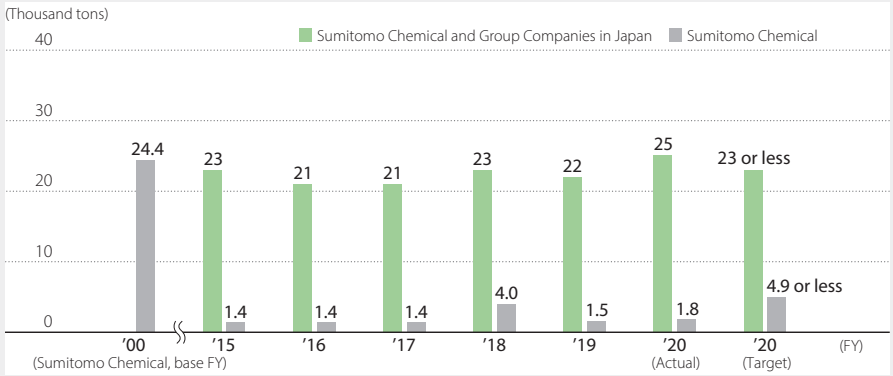
Note: The volume of PCBs does not include minute amounts of PCB waste in the PCB net conversion amount. High concentrations of PCBs in such classes of materials as fluorescent lamps, mercury lamp ballast, and contaminated substances (wastepaper, etc.) fall outside the scope of collation.

Target	Properly collect and store high-concentration PCB-containing waste and complete treatment of this waste at an early date.
Results	Sumitomo Chemical: As of March 31, 2021, the treatment of all high-concentration PCB-containing waste that had been stored and used has been completed. Group companies in Japan: Untreated high-concentration PCB-containing waste is still being collected and stored.

In accordance with the Act on Special Measures against PCB Waste, Sumitomo Chemical properly collects high-concentration polychlorinated biphenyl (PCB)-containing waste.* The Company then stores this industrial waste, which is subject to special controls, in specified areas within the Company's waste storage facilities, subsequently ensuring strict control of this waste. Sumitomo Chemical completed treatment of all of its PCB-containing waste ahead of the legally prescribed deadline.

* Transformers, capacitors, and other electronic devices that contain PCB insulating oil.

Landfill Disposal Amount (Sumitomo Chemical and Group Companies in Japan)



Target	Maintain landfill disposal amount of no more than 4.9 thousand tons, 80% less than the fiscal 2000 levels.
Results	The total amount in fiscal 2020 was reduced by 93% compared with fiscal 2000 to 1.8 thousand tons, achieving the target.

Environmental Activities: Supplementary Data

Digitization of Manifests to Be Prepared Pursuant to the Waste Management and Public Cleansing Act (Sumitomo Chemical)

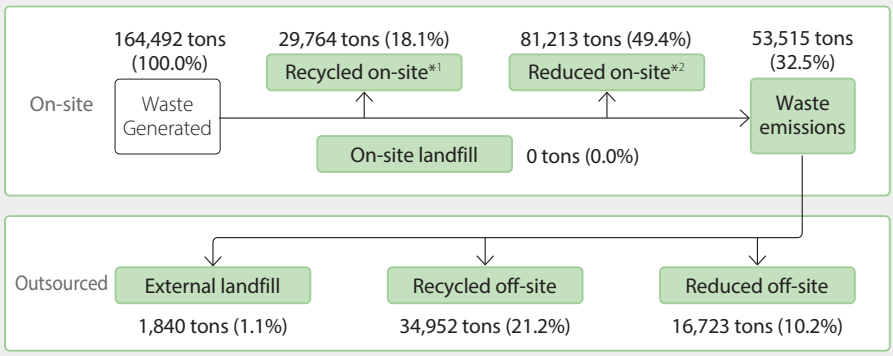
	Number of manifests issued	Number of manifests digitized	Digitization rate (%)
FY2014	18,662	14,930	80
FY2015	18,973	16,337	86
FY2016	19,868	19,594	99
FY2017	19,858	19,585	99
FY2018	20,598	20,355	99
FY2019	19,835	19,726	99
FY2020	20,735	20,675	99

Sumitomo Chemical has been fostering the digitization of manifests to improve operational efficiency and ensure compliance with the law and transparency of data.

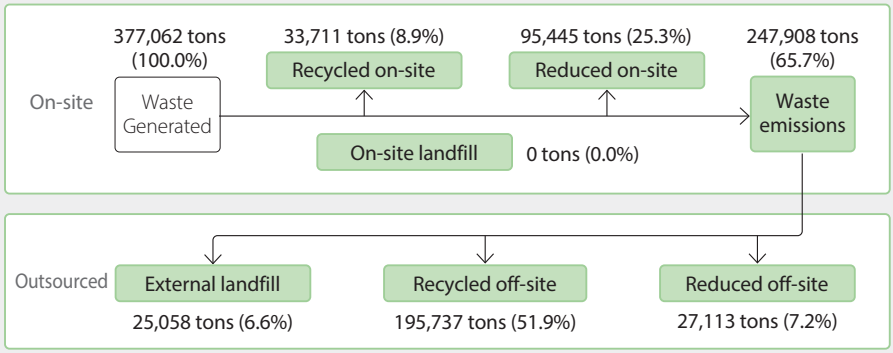
Environmental Activities: Supplementary Data

Waste Disposal Flow Chart and FY2020 Results

(Sumitomo Chemical)



(Sumitomo Chemical and Group Companies in Japan)



Note: The waste amount for Sumitomo Chemical and Group companies in Japan accounts for around 80% of the entire Group total, which includes overseas Group companies.

*1 Recycled waste: Total amount of waste that was reused, recycled, or thermally recycled

*2 Reduced waste: Total amount of waste reduced through incineration, etc.

List of FY2020 Results by Item in connection with the Disposal of Waste (Sumitomo Chemical)

(Tons)

Type	Waste Generated	Recycled on-site		Reduced on-site		Waste emissions	On-site landfill	Reduced off-site	Recycled off-site		External landfill
		Reused, recycled	Thermally recycled	Incineration	Other				Reused, recycled	Thermally recycled	
Burnt residue	5,284.5					5,284.5			4,885.8		398.7
Sludge	48,671.4		10,468.1	21,348.7	2,835.7	14,018.9		3,495.1	10,315.8	1.9	206.2
Oil waste	42,811.0	3,791.7	12,567.3	12,553.4		13,898.6		5,505.0	6,382.7	1,935.5	75.6
Waste acid	8,458.8		0.9	6,311.4	582.7	1,563.8		1,430.8	120.4		12.6
Waste alkali	49,902.0	2,590.9	22.4	35,810.9		11,477.8		4,939.2	5,131.5	1,235.3	171.9
Waste plastic	5,294.7		273.4	837.0		4,184.3		421.6	2,923.2	46.9	636.4
Waste paper	975.3		47.0	834.0		94.3		25.8	68.4		0.1
Wood waste	1,020.7			93.0		927.7		48.1	462.0	397.9	19.7
Textile waste	13.7					13.7		11.7	2.1		
Animal and plant residues	12.8					12.8		12.8			
Metal waste	701.6			6.5		695.1		155.3	681.1		14.9
Glass and pottery waste	507.6					507.6		84.2	361.3	0.0	62.1
Slag											
Debris	799.6					799.6		581.4			218.2
Soot and dust	38.6		2.7			35.9		12.0			23.9
Total	164,492.3	6,382.6	23,381.8	77,794.9	3,418.4	53,514.6	0.0	16,723.0	31,334.3	3,617.5	1,840.3

Environmental Activities: Supplementary Data

Categories of Hazardous* and Non-Hazardous Waste (Sumitomo Chemical)

(Tons)

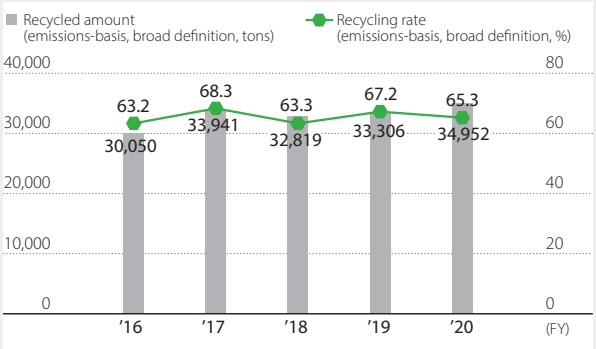
Type	Waste Generated	Recycled on-site		Reduced on-site		Waste emissions	On-site landfill	Reduced off-site	Recycled off-site		External landfill
		Reused, recycled	Thermally recycled	Incineration	Other				Reused, recycled	Thermally recycled	
Non-Hazardous Waste	63,320	0	10,791	23,119	2,836	26,574	0	4,848	19,700	447	1,580
Hazardous Waste	101,172	6,383	12,591	54,676	583	26,940	0	11,875	11,635	3,171	260

* Waste oil (including waste organic solvents), alkaline waste, acidic waste

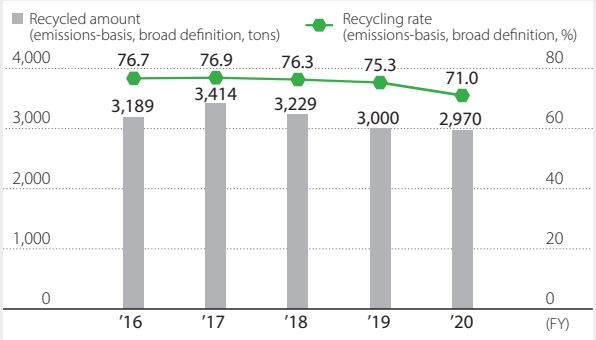
Initiatives to Recycle and Reuse Plastic and Other Waste

Sumitomo Chemical is proactively working to recycle and reuse plastic and other waste.

Results of Recycling and Reusing Waste (including heat recovery)*1



Results of Recycling and Reusing Plastic Waste (including heat recovery)*1,2

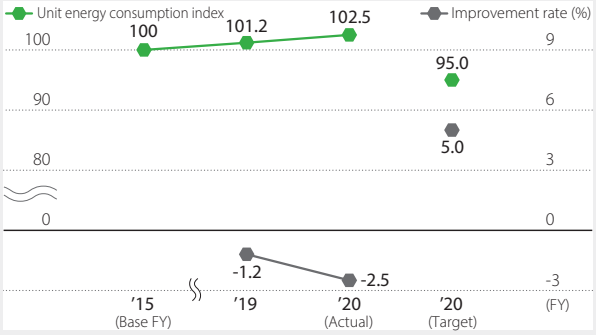


*1 Recycling and reuse of plastic and other waste is calculated based on waste emissions.
*2 Figures for the emission, recycling and reuse of plastic waste are also included in figures for the emission, recycling and reuse of general waste.

Environmental Activities: Supplementary Data

Sharing Environmental Protection and Management Targets (Japan)

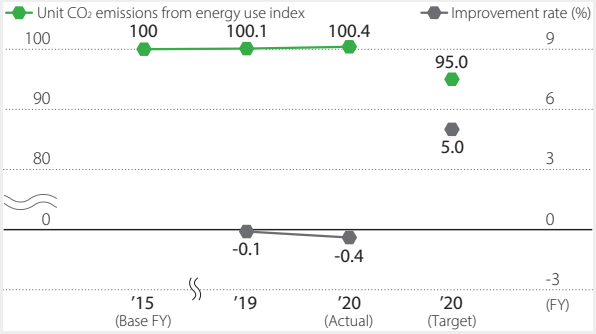
Unit Energy Consumption Indices (2015 = 100)



Improvement in Unit Energy Consumption Indices

Target	Improve unit energy consumption Indices by at least 1% annually on average.
Results	Unit energy consumption indices in fiscal 2020 worsened by 2.5% compared with fiscal 2015, failing to achieve the target.

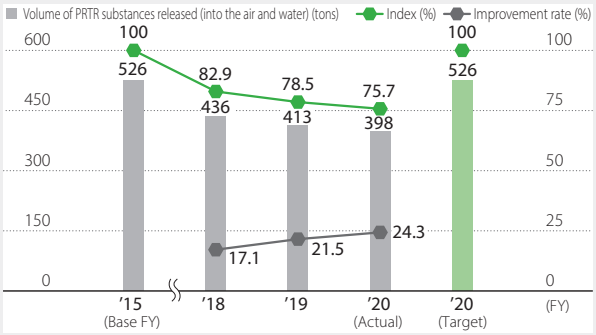
Unit CO_2 Emissions from Energy Use Indices (2015 = 100)



Improvement in Unit CO_2 Emissions from Energy Use Indices

Target	Improve unit CO_2 emissions Indices by at least 1% annually on average.
Results	Unit CO_2 emission indices in fiscal 2020 worsened by 0.4% compared with fiscal 2015, failing to achieve the target.

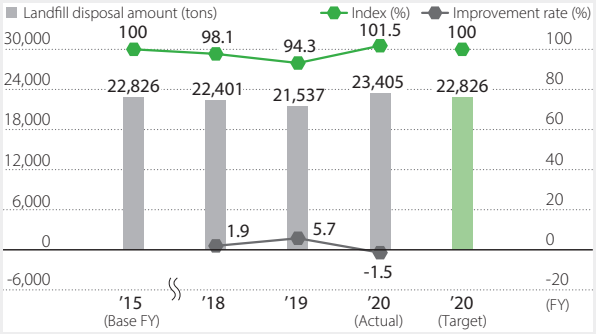
Volume of PRTR Substances Released (into the Air and Water) and PRTR Substance Emissions Indices (2015 = 100)



Reduction of Volume of PRTR Substances Released

Target	Maintain the total volume of PRTR substances released (into the air and water) at or below fiscal 2015 levels.
Results	The total volume in fiscal 2020 was reduced by 24.3% compared with fiscal 2015, achieving the target.

Landfill Disposal Amount and Landfill Disposal Indices (2015 = 100)



Reduction of landfill disposal amount

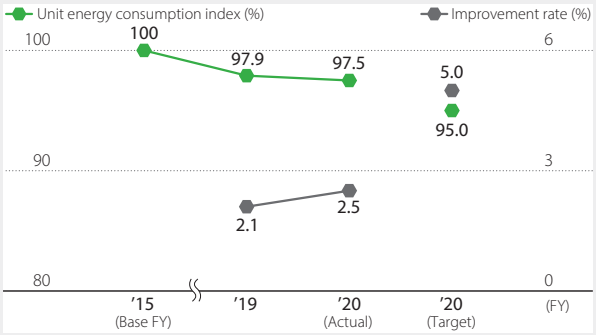
Target	Maintain landfill disposal amount at or below fiscal 2015 levels.
Results	The amount in fiscal 2020 was increased by 1.5% compared with fiscal 2015, failing to achieve the target.

Note: **Sumitomo Chemical and the 13 Group companies in Japan listed below are included in the boundary of calculation.**
Sumika-Kakoushi Co., Ltd.; Sumika Color Co., Ltd.; Sumika Plastech Co., Ltd.; Nippon A&L Inc.; Asahi Chemical Co., Ltd.; Ceratec Co., Ltd.; Sumika Assembly Techno Co., Ltd.; SanTerra Co., Ltd.; Sumika Agro Manufacturing Co., Ltd.; SC Environmental Science Co., Ltd.; Sumika Agrotech Co., Ltd.; Nihon Medi-Physics Co., Ltd.; Sumitomo Joint Electric Power Co., Ltd.

Environmental Activities: Supplementary Data

Sharing Environmental Protection and Management Targets (Overseas)

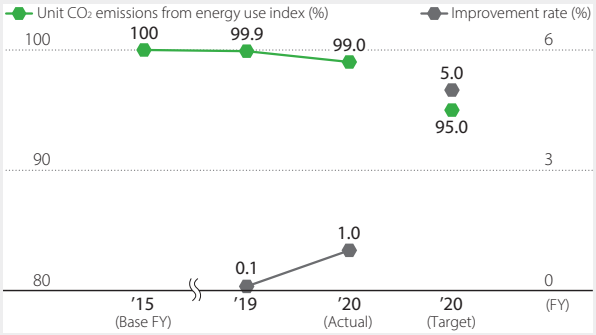
Unit Energy Consumption Indices (2015 = 100)



Improvement in Unit Energy Consumption Indices

Target	Improve unit energy consumption Indices by at least 1% annually on average.
Results	Unit energy consumption indices in fiscal 2020 improved by 2.5% compared with fiscal 2015, failing to achieve the target.

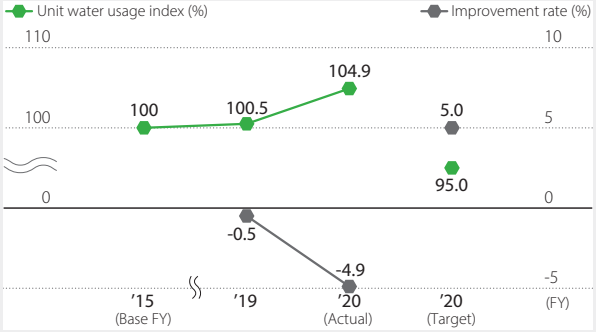
Unit CO_2 Emissions from Energy Use Indices (2015 = 100)



Improvement in Unit CO_2 Emissions from Energy Use Indices

Target	Improve unit CO_2 emissions Indices by at least 1% annually on average.
Results	Unit CO_2 emission indices in fiscal 2020 improved by 1.0% compared with fiscal 2015, failing to achieve the target.

Unit Water Usage Indices (2015 = 100)



Improvement in Unit Water Usage Indices

Target	Improve unit water usage Indices by at least 1% annually on average.
Results	Usage in fiscal 2020 worsened by 4.9% compared with fiscal 2015, failing to achieve the target.

Note: **The following 20 Group companies overseas are included in the boundary of calculation:**

Singapore	• The Polyolefin Company (Singapore) Pte. Ltd. • Sumitomo Chemical Asia Pte Ltd
Thailand	• Sumipex (Thailand) Co., Ltd. • Bara Chemical Co., Ltd. • Sumika Polymer Compounds (Thailand) Co., Ltd.
China	• Dalian Sumika Chemphy Chemical Co., Ltd. • Sumika Electronic Materials (Wuxi) Co., Ltd. • Sumika Electronic Materials (Hefei) Co., Ltd. • Sumika Huabei Electronic Materials (Beijing) Co., Ltd. • Sumika Electronic Materials (Shanghai) Co., Ltd. • Sumika Electronic Materials (Xi'an) Co., Ltd. • Sumika Polymer Compounds Dalian Co., Ltd. • Zhuhai Sumika Polymer Compounds Co., Ltd. • Dalian Sumika Jingang Chemicals Co., Ltd.
Taiwan	• Sumika Technology Co., Ltd. • Sumipex Techsheet Co., Ltd.
India	• Sumitomo Chemical India Private Limited
South Korea	• Dongwoo Fine-Chem Co., Ltd. • SSLM Co., Ltd.
United States	• Sumitomo Chemical Advanced Technologies LLC

Environmental Activities: Supplementary Data

Environmental Management System

Between 1997 and 2001, ISO 14001:1996 certification was obtained at all Works and continually maintained thereafter. Updated ISO 14001 certification was obtained later and all Works have been inspected on a continual basis to ensure the certification does not expire.

Acquisition of ISO 14001 Certification

1. Sumitomo Chemical (Acquisition Rate: 100%)

Works	Certificate Number	Certification Date
Ehime Works (including Ohe Works)	JCQA-E-0018	April 12, 2022
Chiba Works (including the SCIOCS Chiba Facility)	KHK-97ER, 004	December 25, 2021
Osaka Works	JQA-E-90072	November 27, 2021
Oita Works (Gifu Plant)	JCQA-E-0206	December 24, 2021
Oita Works (Okayama Plant)	JCQA-E-0218	January 21, 2022
Oita Works	JQA-E-90152	March 30, 2022
Misawa Works	JQA-EM0355	December 12, 2022

2. Group Companies In Japan

Companies	Certificate Number	Certification Date
Sumika-Kakoushi Co., Ltd.	JCQA-E-0532	January 12, 2022
Sumika Color Co., Ltd.	JUSE-EG-680	May 8, 2024
Nippon A&L Inc.	10157569	January 3, 2022
Asahi Chemical Co., Ltd.	JUSE-EG-717	February 26, 2024
Ceratec Co., Ltd.	JCQA-E-0018	April 12, 2022
Sumika Assembly Techno Co., Ltd	JCQA-E-0018	April 12, 2022
Sumika Agro Manufacturing Co., Ltd.	13ER, 925	August 5, 2021
Koei Chemical Co., Ltd.	JCQA-E-0969	March 11, 2023
Taoka Chemical Co., Ltd.	JQA-EM3938	November 27, 2021
Tanaka Chemical Corporation	4526844	July 25, 2023
SCIOCS COMPANY LIMITED	EC15J0024	March 24, 2024
Sumitomo Dainippon Pharma Co., Ltd. (Suzuka Works)	00ER-094	December 21, 2021
Sumitomo Dainippon Pharma Co., Ltd. (Oita Works)	JQA-E-90152	March 30, 2022

3. Overseas Group Companies

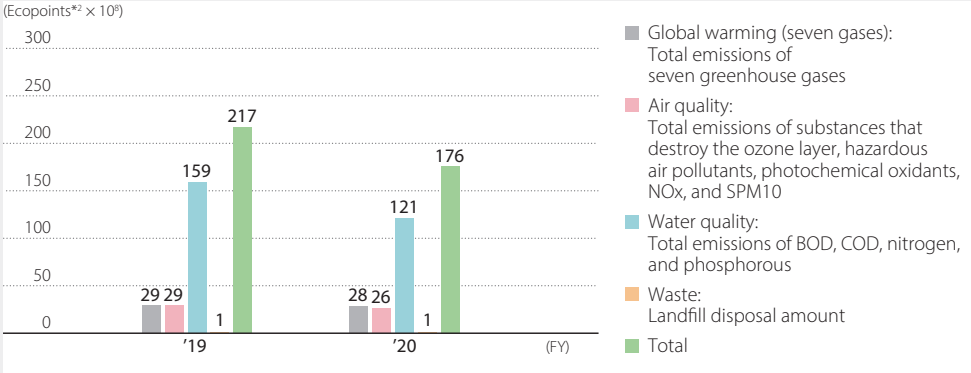
Companies	Certificate Number	Certification Date
BARA CHEMICAL CO., LTD.	24120907002	August 29, 2021
SSLM CO., LTD.	EAC-06178	May 7, 2021
SUMITOMO CHEMICAL INDIA PRIVATE LIMITED (ECC)	99 104 00704/02	December 26, 2021
SUMITOMO CHEMICAL INDIA PRIVATE LIMITED (SCIL)	IND.20.3082/IM/U	April 2, 2023
SUMITOMO CHEMICAL ADVANCED TECHNOLOGIES LLC	43631-2008-AE-USA-ANAB	June 2, 2023
SUMIKA TECHNOLOGY CO., LTD.	EMS 89814	December 26, 2021
Dongwoo Fine-Chem Co., Ltd. (Pyongtaek)	EAC-06003	July 9, 2021
Dongwoo Fine-Chem Co., Ltd. (Iksan)	KR15/02363	July 14, 2023
Dongwoo Fine-Chem Co., Ltd. (Samki)	KR20/81826429	August 22, 2022
SUMIKA ELECTRONIC MATERIALS (XI'AN) CO., LTD.	CN15/10718	November 21, 2021
SUMIKA HUABEI ELECTRONIC MATERIALS (BEIJING) CO., LTD.	19919E00003ROM	January 3, 2022
SUMIKA ELECTRONIC MATERIALS (HEFEI) CO., LTD.	268157-2018-AE-RGC-RvA	August 24, 2021
SUMIKA ELECTRONIC MATERIALS (SHANGHAI) CO., LTD.	11718EU0067-08 ROS	June 22, 2021
SUMIKA ELECTRONIC MATERIALS (WUXI) CO., LTD.	64188-2009-AE-RCG-RVA	October 30, 2021
SUMIKA POLYMER COMPOUND (THAILAND) CO., LTD.	66 104 130035	September 10, 2022
SUMIPEX (THAILAND) CO., LTD.	TH10/4097	November 30, 2023
Sumitomo Chemical Asia Pte Ltd (MMA plant)	10105637	June 30, 2021
Sumitomo Chemical Asia Pte Ltd (S-SBR plant)	ISO14001-0052710	June 30, 2021
THE POLYOLEFIN COMPANY (SINGAPORE) PTE. LTD.	N°CN/16164E	September 8, 2021
ZHUHAI SUMIKA POLYMER COMPOUNDS CO., LTD.	CN13/30779	August 19, 2022
SUMIKA POLYMER COMPOUNDS DALIAN CO., LTD.	CN14/10103	March 25, 2023

Note: Surveys are conducted once per year, and the above list is based on the survey results as of March 31, 2021

Environmental Activities: Supplementary Data

Examining the Practical Use of Environmental Efficiency Indicators and Environmental Management Accounting Methods

■ Breakdown of Aggregate Values for Environmental Impact (Sumitomo Chemical) by JEPIX*1



Assessing the Environmental Impact of Each Group Company Using JEPIX

In fiscal 2020, as in the previous fiscal year, we undertook environmental impact assessments using JEPIX, in order to evaluate the effectiveness of this index as a strategic management indicator, and continued with relevant analyses.

Assessing the Environmental Impact of Each Product by LIME*3

For more practical use of LCA*4 data both internally and externally, we use LCA software (MiLCA) from the Japan Environmental Management Association for Industry to undertake environmental impact assessments of our major products using the LIME method.

Trial Evaluation of Material Flow Cost Accounting (MFCA)*5

We are continuing to evaluate the effectiveness of this tool and also are performing examinations for the simplification and standardization of the method and procedures in order to foster their use. MFCA, which focuses on the loss of energy and resources, helps minimize loss and cost and reduces environmental impact.

*1 Environmental Policy Priorities Index for Japan (JEPIX):
This method, which employs a uniform single indicator called "Ecopoints" to evaluate environmental impact, is derived from the Swiss LCIA Eco Scarcity methodology. The current method evaluates the discrepancy between targets (e.g., laws and environmental policies) and actual conditions based on material flow data.

*2 Ecopoints:
An indicator for total environmental impact—the smaller the value, the lower the environmental impact.

*3 Life-cycle Impact assessment Method based on Endpoint modeling (LIME)
A life-cycle impact assessment method developed in Japan as a cornerstone for measuring Japan's environmental conditions.

*4 Life Cycle Assessment (LCA):
A method for evaluating the environmental impact of products and services throughout their life cycles.

*5 Material Flow Cost Accounting (MFCA):
An environmental cost accounting method that identifies input costs of materials, processing, electricity, fuel, and others, and compares them with the energy and resources lost in manufacturing processes.

Society (Social Activities)

Contributing to the SDGs through Social Activities

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Social Activity Goals and Results

Goal achieved or steadily progressing: ○ Goal not achieved: △

Items		Boundary	Fiscal 2020 Goals	Fiscal 2020 Results	Evaluation	Fiscal 2021 Goals	Page
Procurement		Sumitomo Chemical Group	Thoroughly ensure compliance, maintain and enhance sustainable procurement, and promote initiatives for respecting human rights in the supply chain	Promoted thorough compliance among relevant internal and external parties, promoted initiatives for respecting human rights by studying high-risk raw materials, and promoted sustainable procurement by strengthening collaboration with business partners through monitoring, feedback, and trade briefings (Sumitomo Chemical results)	○	Thoroughly ensure compliance, maintain and enhance sustainable procurement, and promote initiatives for respecting human rights in the supply chain	Pages 160–165
HR Management		Sumitomo Chemical Group	Employ human resources and greatly strengthen recruitment capabilities	Secured personnel by strengthening and updating our recruitment practices	○	Employ human resources and greatly strengthen recruitment capabilities	Pages 166–186
		Sumitomo Chemical Group	Manage global human resources and work on workforce management that is responsive to business expansion	Revamped personnel data-base, appropriately placed personnel in response to business expansion, and systematically conducted global human resources development	○	Manage global human resources and work on workforce management that is responsive to business expansion	
		Sumitomo Chemical Group	Develop personnel and run HR systems to promote employee growth and development	Formulated action plans based on "Sumika 'Take Action' Declaration"	○	Develop personnel and run HR systems to promote employee growth and development	
		Sumitomo Chemical Group	Promote sustainability, diversity and inclusion, and work-life balance	Promoted measures for each Group company by establishing the Group's Basic Principles on the Promotion of Diversity and Inclusion and formulated action plans based on "Sumika 'Take Action' Declaration"	○	Promote sustainability, diversity and inclusion, and work-life balance	
Occupational Safety and Health / Industrial Safety and Disaster Prevention	Lost-workday injuries	Sumitomo Chemical	0	1	△	0	Pages 187–193
		Partner companies*1	0	5	△	0	
	Frequency rate of lost-workday injuries	Sumitomo Chemical Group*2	Less than 0.1	0.45	△	Less than 0.1	
	Severe accidents*3	Sumitomo Chemical Group*2	0	1	△	0	
	Severe industrial accidents*4	Sumitomo Chemical Group*5	0	0	○	0	
	Lost-workday injuries in logistics*6	Logistics	0	1	△	0	

Note: Further details are provided in the supplementary data (pages 214–222).

*1 A partner company injury is defined as one suffered within a Sumitomo Chemical worksite by an employee of a company affiliated with a construction or logistics subcontractor (including others).

*2 For the purposes of occupational safety and health, the Group is defined as Sumitomo Chemical (including its partner companies and others) and consolidated subsidiaries in Japan and overseas.

*3 Severe accidents are defined as those that result in a fatality or those that result in severe lost-workday injuries, including blindness or loss of a limb.

*4 Severe industrial accidents are defined as industrial accidents resulting in any of the below conditions.
- The local residents suffer injuries requiring at least regular hospital visits or treatment.
- Employees at the facility suffer injuries that require at least one lost workday.
- The damage to the facilities totals more than ¥10 million.

*5 For the purposes of industrial safety and disaster prevention, the Group is defined as Sumitomo Chemical (including its partner companies and others) and consolidated Group companies in Japan and overseas.

*6 Lost-workday injuries in logistics are defined as those that are related to logistics and occur within Sumitomo Chemical worksites as well as those that caused by major logistics subcontractors outside of worksites.

Social Activity Goals and Results

Goal achieved or steadily progressing: ○ Goal not achieved: △

Items		Boundary	Fiscal 2020 Goals	Fiscal 2020 Results	Evaluation	Fiscal 2021 Goals	Page
Product Stewardship / Product Safety / Quality Assurance	Laws and regulations	Sumitomo Chemical	Continue to act precisely in accordance with domestic and overseas laws and regulations	Acted precisely in accordance with relevant laws and regulations	○	Continue to act precisely in accordance with domestic and overseas laws and regulations	Pages 194–199
	Chemicals management and information disclosure	Sumitomo Chemical	Continue to promote risk-based chemicals management and information disclosure	Systematically put in place risk assessment methods	○	Continue to conduct risk-based chemicals management and information disclosure	
	Chemical management system	Sumitomo Chemical	Continue to promote utilization of the comprehensive chemical management system (SuCCESS) and develop concrete plans for expansion to Group companies	As part of our efforts to promote utilization of SuCCESS, 14 Group companies in Japan use the system. We use SuCCESS to calculate the manufactured volumes reported to the government under the chemical substances control law via a substance volume tracking (SVT) system as well as to calculate exported volumes in response to overseas regulations	○	Continue to promote utilization of SuCCESS and develop concrete plans for expansion to Group companies	
	Risk assessment	Sumitomo Chemical	Steadfastly perform product safety risk assessments	Performed 82 product risk assessments and completed reassessments of all products	○	Steadfastly perform product safety risk assessments	
	Logistics quality-related incidents	Sumitomo Chemical*	No Rank A or Rank B incidents, two or fewer Rank C incidents	One Rank B incident, no Rank C incidents	△	No Rank A or Rank B incidents, two or fewer Rank C incidents	
Local Communities		Sumitomo Chemical Group	Provide support to achieve the United Nations Sustainable Development Goals	Provided support for tree-planting activities and education through Matching Gift programs (includes support for education in Africa)	○	Provide support to achieve the United Nations Sustainable Development Goals	Pages 205–213
		Sumitomo Chemical Group	Provide prompt and precise support in response to emergencies and disasters in Japan and overseas	Supported areas recovering from the torrential rains in July 2020	○	Provide prompt and precise support in response to emergencies and disasters in Japan and overseas	
		Sumitomo Chemical Group	Promote social contribution activities distinctive to the Sumitomo Chemical Group by leveraging the strengths of each workplace	Participated in and cooperated with local events, held science workshop classes, held plant tours, etc.	○	Promote social contribution activities distinctive to the Sumitomo Chemical Group by leveraging the strengths of each workplace	
		Sumitomo Chemical Group	Continue to expand information disclosure using SDGs and promote interactive dialogue	Continued to expand information disclosure using SDGs and promote interactive dialogue	○	Continue to expand information disclosure using SDGs and promote interactive dialogue	

Note: Further details are provided in the supplementary data (page 223).
* Includes some Group companies in Japan that have Works within a Sumitomo Chemical worksite.

Respect for Human Rights

Basic Stance

Sumitomo Chemical regards respect for human rights as part of the foundation for its business continuity. We are continuing to make a group-wide effort to address this as a material issue for management, and provide disclosures on our measures and progress. In order to accelerate its efforts on human rights, Sumitomo Chemical formulated the Sumitomo Chemical Group Human Rights Policy in April 2019, based on the Universal Declaration of Human Rights, the International Labor Organization Declaration on Fundamental Principles and Rights at Work, the Ten Principles of the United Nations Global Compact, and the United Nations Guiding Principles on Business and Human Rights. At the same time, we established the Human Rights Promotion Committee, a committee tasked with promoting our human rights initiatives. In order to pursue a group-wide effort to respect human rights, we are committed to ensuring that all Group companies in Japan and overseas are fully aware of the Human Rights Policy and take action on these principles.

Sumitomo Chemical Group Human Rights Policy (Effective April 1, 2019)

This policy was formulated based on the advice of outside human rights experts with practical experience.

Sumitomo Chemical Group (Sumitomo Chemical Co., Ltd. and its Group Companies) has put in place this Human Rights Policy ("Policy") to demonstrate its commitment to international standards on human rights. All directors, executive officers and employees ("Personnel") of the Sumitomo Chemical Group will uphold this Policy.

1. Our Position on Human Rights

(1) Compliance with Standards, Laws and Regulations

We support and respect international standards on human rights, such as the Universal Declaration of Human Rights, International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work, and promote respect for human rights in line with the United Nations Guiding Principles on Business and Human Rights. Sumitomo Chemical Co., Ltd. is a signatory to the United Nations Global Compact and supports its Ten Principles, which include human rights and labor.

We comply with applicable laws and regulations in countries and regions where we operate, and where local laws and regulations conflict with international standards, we will seek ways to honor the principles of internationally recognized human rights.

(2) Respect for Human Rights in Our Business Activities

We do not discriminate against individuals based on employment status, age, sex, ethnic or social origin, ancestry, nationality, disability, religion, beliefs, marital status, or any other status. We do not tolerate any form of harassment, including sexual harassment or workplace bullying. We also respect fundamental labor rights including freedom of association and the right to collective bargaining, and prohibit forced labor or child labor.

We are committed to respecting human rights in our business activities and also strive to avoid contributing to infringement of human rights. In order to prevent and mitigate human rights risks related to our business activities, we will take necessary measures, including ensuring compliance with the Compliance Manual (the Sumitomo Chemical Code of Business Conduct) and other relevant policies and guidelines. We are also committed to understanding our impact on local communities and aim for harmonious coexistence with these communities.

We expect our business partners, including our suppliers, and other relevant stakeholders to act in line with the principles in this Policy, and we will seek ways to work with them to promote respect for human rights.

Respect for Human Rights

2. Our Approach to Human Rights Issues

(1) Providing Education and Raising Awareness

We will provide appropriate education and training to our Personnel so that this Policy is understood and effectively implemented.

(2) Human Rights Due Diligence

We will identify adverse human rights impacts, and seek to prevent or mitigate such impacts though our human rights due diligence framework.

(3) Responding to Identified Human Rights Impacts

We will engage with relevant stakeholders in order to address actual or potential adverse human rights impacts.

(4) Remedy

Where we identify that we have caused or contributed to adverse human rights impacts, we will endeavor to remediate such impacts through appropriate processes.

(5) Grievance Mechanisms

We have grievance mechanisms in place in the form of the Speak-Up Reporting System (whistle-blowing channels) in order to address concerns about activities that may adversely impact human rights or any other concerns raised about our business activities. These channels are available for anyone having involvement in Sumitomo Chemical Group's business activities, including their business partners as well as Sumitomo Chemical Group Personnel and their families. We will continuously seek to optimize our grievance mechanisms.

(6) Disclosure

We will report on our efforts to respect human rights including through our website, integrated report, Sustainability Data Book, and other relevant channels.

Announcement of the Group Statement Based on Human Rights Laws and Regulations

We at the Sumitomo Chemical Group, as a globally operating corporation, have announced a group statement on our efforts to address risks related to modern slavery and human trafficking in our business activities and supply chain. This statement is based on laws and regulations in various countries with regard to respect for human rights and the prevention of modern slavery and human trafficking, including the Modern Slavery Act of the United Kingdom, the Modern Slavery Act of Australia, and the California Transparency in Supply Chains Act of the United States.

Responding to Human Rights Laws and Regulations

https://www.sumitomo-chem.co.jp/english/sustainability/society/human_rights/statement/

Respect for Human Rights

Management System

Human Rights Promotion Committee

Sumitomo Chemical has established the Human Rights Promotion Committee as its organization for promoting activities in compliance with the Human Rights Policy. In order to plan and implement measures to respect human rights across the entire value chain, this committee consists of members from a broad range of related departments and functions. The senior executive officer in charge of corporate departments serves as chair, while from the business sectors, executive officers responsible for the Planning & Coordination Offices of their respective departments participate as committee members.

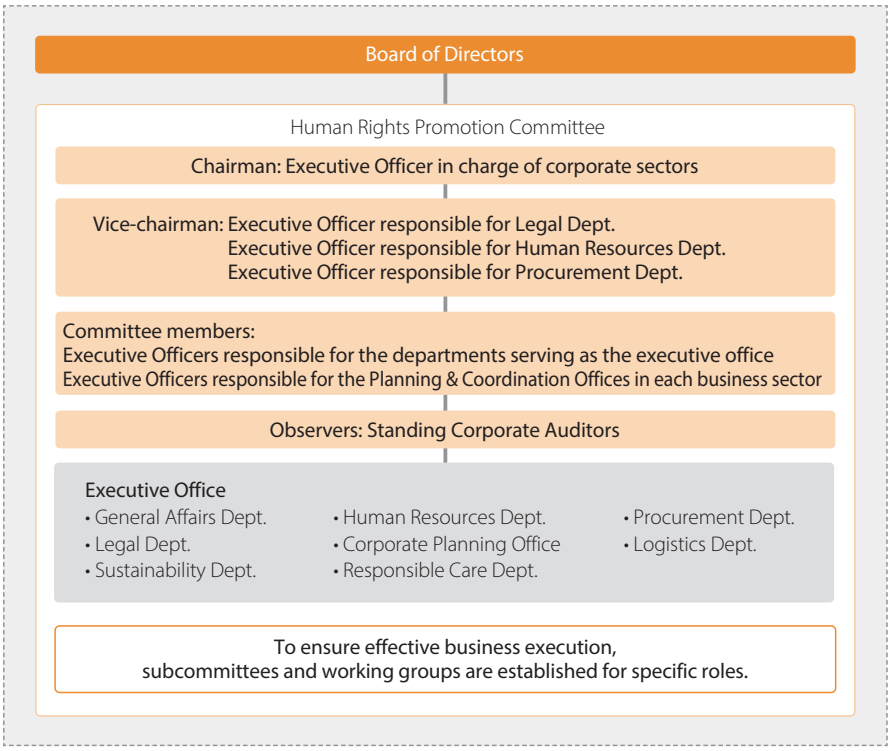
Roles of the Committee

(1) Promotion of awareness of human rights

(2) Formulation and implementation of measures regarding respect for human rights across the Group's value chain, including:

- Formulation and publication of policies required by the Guiding Principles on Business and Human Rights and relevant national laws
- Identification of human rights issues across the value chain, assessment of risks, and implementation of measures, including remedies, that are appropriate for specific issues and their associated risks (human rights due diligence and relief efforts)

■ System and Committee for Promoting Respect for Human Rights



Group-wide Approach

Based on its basic policy for respect for human rights, Sumitomo Chemical continues to take various measures to promote respect for human rights by working closely with its Group companies in Japan and overseas, while also engaging business partners.

Overseas, in particular, we are working with our regional headquarters in Europe, the Americas, China, and the Asia-Pacific region to ensure and promote compliance, including initiatives to protect human rights, based on our compliance system that we have established in accordance with respective local legal systems of the countries where we operate.

Respect for Human Rights

Examples of Initiatives

Our basic policy for respect of human rights is articulated in our *Compliance Manual* (Sumitomo Chemical Code of Business Conduct) and also communicated across through our intranet. In addition, our labor-management agreement makes it clear that an employee who damages the work environment for other employees through sexual speech and behavior, harassment, or other similar actions is considered violating our work regulations and thus subject to disciplinary action.

Under these principles, we value respect for an individual's personality, prohibiting any action to disrespect or disparage an individual's personality taken based on personal emotions or values or any harassment, bullying or similar speech or action.

We also prohibit all kinds of harassment, including power harassment and sexual harassment (including harassment to a person of the same gender and harassment to LGBTQ people regarding sexual orientation and gender identity).

In addition, we prohibit discrimination and does not allow any discriminatory action that is taken for reasons of employment type, age, gender, birthplace, ancestry, nationality, race, disability, religion, beliefs, marital status, or other such attributes and harms an individual's dignity. We particularly make it clear that discrimination based on gender or a difference in sexual orientation or gender identity and discrimination against people with disabilities are prohibited.

Raising Employees' Awareness of Human Rights

To ensure that each employee correctly understands and is fully aware of human rights issues, Sumitomo Chemical incorporates human rights in its employee education. We highlight human rights not only in the introductory training in which all employees participate after joining the Company but also in many other internal training programs, such as those for newly promoted employees (when promoted to a higher grade or a manager position), those for recruiting interviewers, and those for staff seconded from other companies as well as employees rehired after retirement.

In addition, we regularly implement awareness-raising training and initiatives at each site of our operations and each Group company.

■ Initiatives to Raise Awareness of Human Rights for FY2020

Name and format	Purposes	Boundary	Sessions	Participants	Participation rate
Seminars and lectures on human rights Training based on the Sumitomo Chemical Group Human Rights Policy	• Preventing harassment and discrimination on the grounds of gender and against social minorities and human rights violations • Preventing child labor, forced labor, and human trafficking etc.	Sumitomo Chemical	89	5,823 (cumulative total)	92.8
		Sumitomo Chemical Group (42 major Group companies in Japan)	Approximately 180	Approximately 11,450 (cumulative total)	86.9

Respect for Human Rights

In fiscal 2020, we provided opportunities for all Sumitomo Chemical Group employees and executives to learn about business and human rights through a website specifically for the Global Project, which is aimed at helping employees promote sustainability.

A total of 25,000 people took courses offered on the website, where they learn about the Company's policies and initiatives related to human rights issues, such as modern slavery by answering questions.

<Ensuring an accurate understanding of human rights problems and checking employees' understanding by asking questions>

We established three themes: modern slavery and companies' responsibility to respect human rights, initiatives related to sustainable procurement, and resilient organizations. Employees deepen their understanding of human rights as they answer questions on each theme.

Please select the incorrect policy on companies' responsibility to respect human rights.

A	Within the Company, we are required to raise awareness and take various measures to ensure that discrimination, sexual harassment, and power harassment do not occur.
B	When conducting business, we are required to take measures to ensure that the environment is not damaged.
C	The handling of products and industrial waste is outsourced to waste treatment and disposal operators, and, therefore, if a problem arises, the Company bears no responsibility.

The answer is C.

It is important to recognize that human rights violations that occur within the Company's value chain are considered human rights problems for the Company. Even if a human rights problem occurs at a subcontractor, the contracting company also bears responsibility.

Consultation Office

Sumitomo Chemical has established a system in which employees can seek consultation on various kinds of harassment, including power harassment, sexual harassment, and maternity harassment, putting in place its harassment consultation office and consultants and guaranteeing confidentiality. In fiscal 2020, as in the past, there were no confirmed cases of significant negative impact on human rights or discrimination that might affect the continuity of the Sumitomo Chemical Group's business.

Respect for Human Rights

Human Rights Due Diligence and Relief Efforts

With the aim of promoting respect for human rights in its business activities, the Sumitomo Chemical Group has established a system for human rights due diligence in accordance with the United Nations Guiding Principles on Business and Human Rights. Human rights due diligence is a continuous effort to identify potential negative impacts on human rights in the entire value chain that may be generated through the Group's business activities, to prevent and correct the impacts, and to disclose information on these measures and their results. Sustainability Department, Legal Department, Procurement Department, and Logistics Department collectively serve as secretariat office for human rights due diligence, working with business sectors and other relevant departments to ensure that our entire value chain is assessed.

If it is discovered through our human rights due diligence that any negative impacts on human rights are occurring because of our Group's business activities, or have been fostered by the Group's business activities, we will redress or resolve those incidents through the appropriate procedures, in collaboration with related stakeholders.

Approach to Our Human Rights Due Diligence Efforts

Under our approach to evaluating and reducing human rights risks, not only for Sumitomo Chemical itself and its supply chain, but also for Group companies in Japan and overseas and their supply chains, we set priorities based on potential human rights risks, and implement our efforts in steps.

With the collaboration and advice of outside experts, our Group's human rights due diligence is conducted in the following sequence.

Initiatives in Fiscal 2019

In fiscal 2019, we conducted human rights risk assessment (risk mapping) for Sumitomo Chemical and 162 consolidated group companies. With the help of external experts, we estimated potential human rights risks in each company based on their businesses, location (country and region), personnel composition, and the raw materials and products they handle. Then we examined how each company addresses risks, by referring to the results of internal audits and Responsible Care audits that had been conducted for the company. These processes were aimed to make our assessment objective and pertinent to actual situations.

For this risk assessment, we first set the four categories of society, environment, health and safety, and governance as major focal areas, and for each category, we determined items in detail for assessing risks. For example, in the category of "society," we selected such diverse items as forced labor, child labor, discrimination, harassment, freedom of association, indigenous people, and cultural heritage. In other categories, we conducted risk assessment as to those items that we had addressed in audits, by examining them from a human rights perspective.

Respect for Human Rights

Initiatives in Fiscal 2020

We conducted a detailed investigation of 30 Group companies that were rated as having a relatively high risk in the human rights risk assessment (risk mapping) conducted in fiscal 2019 for Sumitomo Chemical and its Group companies.

[Document Inspection – Targets: 26 companies, in locations including China, India, Thailand, and Japan)]

Under the four categories: Society, the Environment, Health & Safety, and Governance, questionnaires were sent and answers were collected. The companies were asked whether they conducted any business activities with high human rights risks and about the implementation status of risk mitigation measures.

[On-site Inspection – Targets: 4 companies total, in China, Thailand, and Tanzania]

For the Group companies identified to have particularly high human rights risks, outside experts were appointed to conduct inspections including reviewing documents such as employment and wage regulation documents, conducting interviews with local employees (including temporary employees), and inspecting the work environment (including the remote investigation).

As a result of these investigations, we learned the following:

- Initiatives designed to mitigate human rights risks implemented at each company
  - Environmental measures are being rolled out at a high level (all 4 companies)
  - The basic procurement principles are translated into local languages and communicated to all primary suppliers (Tanzania)
  - External attorneys are invited every year to conduct training for employees on regulations and the latest trends related to labor problems (China)

- Issues that need improvement
  - Measures are taken as a practical matter, but mandatory matters for suppliers regarding human rights and labor are not specified in evaluation methods or standards (China, Thailand)

Fiscal 2021 Action Plans

The fiscal 2020 investigation did not reveal any issues with a significant negative impact on human rights; however, for the issues that were revealed, we will investigate their relevancy and background and then take preventive and corrective measures. We will also share the insights gained, including with Group companies not within the scope of the most recent detailed investigation, to facilitate the further mitigation of risks. In addition, we have striven to raise awareness of our human rights policy, which is the root of our respect for human rights, and will continue to do so through such activities as training, to ensure each Group employee gains a deeper understanding of our respect for human rights.

Respect for Human Rights

Sustainable Procurement with Respect for Human Rights

The Sumitomo Chemical Group is committed to building mutually-beneficial and sound relationships with its business partners. We ourselves do business in a fair, equitable and transparent way, while also promoting sustainable procurement efforts across the entire supply chain with respect for human rights and a firm commitment to compliance. In order to encourage our business partners to work on sustainability efforts, we have formulated the *Sumitomo Chemical Group Sustainable Procurement Guidebook*. We ask our business partners to respect human rights, prohibit harassment and inhumane treatment, eradicate discrimination in recruitment and employment, ensure equal opportunities and equitable treatment, comply with regulations on working hours, respect the right to organize, prohibit forced labor and child labor, and comply with minimum wage regulations.

Initiatives in Fiscal 2020

In fiscal 2020 in order to have a coherent understanding of the ESG risks in raw material procurement processes throughout our supply chain, we confirmed the status of our initiatives by sharing the Sumitomo Chemical Group Sustainable Procurement Guidebook with our major business partners, and collected the checklist filled out by each company. The results showed that 86% were considered sustainable procurement. (the sustainable procurement ratio), (as of March 31, 2021).

Fiscal 2021 Activity Plans

We will continue our efforts to ensure sustainable procurement, and continue to assiduously check the status of respect for human rights at our business partners, including whether or not they conduct any business activities with high human rights risks and the status of their implementation of risk mitigation measures.

Initiatives Related to High-Risk Raw Materials

The Sumitomo Chemical Group formulated the "Sumitomo Chemical Group Policy for Responsible Procurement of Minerals/Raw Materials" in March 2020 to further promote efforts prohibiting the procurement of conflict minerals. Under the policy, the Group defines high-risk raw materials as those that having a high probability of negatively impacting human rights in the supply chain, including, but not limited to, tantalum, tin, gold, tungsten, cobalt, mica, graphite, and pulp. Depending on the characteristics of the high-risk raw materials, we promote initiatives aligned with the premise of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (the OECD Guidance).

In fiscal 2020, in accordance with the Sumitomo Chemical Group Policy for Responsible Procurement of Minerals/Raw Materials, we began an investigation into the usage status of high-risk raw materials within the Group in order to conduct prioritized due diligence of suppliers of high-risk raw materials.

In fiscal 2021, we will continue to request reports based on the Responsible Minerals Initiative (RMI) from suppliers of high-risk raw materials and steadily promote risk assessments.

P.164 **Procurement:** Initiatives Related to High-Risk Raw Materials

Introducing Human Rights Clauses into Contracts

In fiscal 2020, we have formulated contract provisions that request understanding of and cooperation with our efforts to respect human rights, and have begun including them in our contracts with our business partners, including raw material suppliers, materials and equipments suppliers, logistics providers, and contract manufacturers.

In fiscal 2021, we will not only continue to sign contracts that include these human rights provisions, we will also respond in line with the procedures defined in these human rights provisions when negative impacts on human rights occur in our supply chain, or under the apprehension that such an impact has occurred.

Respect for Human Rights

Signed onto the Declaration of Partnership Building

Sumitomo Chemical supports the premise of the "the Council on Promoting Partnership Building for Cultivating the Future" promoted by Japan's Cabinet Office and the Small and Medium Enterprise Agency and announced our Declaration of Partnership Building. This initiative aims to encourage the collaboration of large companies with small and medium-sized companies, promote measures to enhance productivity across the entire supply chain, and build mutually beneficial relationships between large companies and small and medium-sized companies. In its declaration, Sumitomo Chemical not only clarifies as one of its individual items that it will conduct trade in a manner that ensures fairness and transparency but also clarifies that it emphasizes human rights and compliance and is promoting sustainable procurement initiatives throughout the supply chain to enforce sustainability initiatives at suppliers.

Announcement of our "Declaration of Partnership Building" (Japanese only)

https://www.sumitomo-chem.co.jp/news/detail/20210618_2.html

Engaging in Human Rights Initiatives

1. Stakeholder Engagement Program hosted by Caux Round Table Japan

Since fiscal 2019, Sumitomo Chemical has participated in the Stakeholder Engagement Program hosted by Caux Round Table Japan, a non-profit organization, to better understand what circumstances can cause human rights issues and how business activities are related to human rights, as well as material human rights issues and the importance of considering human rights in business activities.

This program invites companies, non-government and non-profit organizations, and experts to discuss human rights due diligence that is required by the Guiding Principles on Business and Human Rights. The subject for fiscal 2020 was "Human Rights Issues by Sector (v.8)" formulated by the Nippon CSR Consortium in fiscal 2018. Participants engaged in sectoral discussion, referring to the human rights guidance tool created by the United Nations Environment Programme Finance Initiative (UNEP FI). (We participated in the discussion for the chemical, construction material, and manufacturing sectors.)

Fiscal 2020 Stakeholder Engagement Program (Human Rights Due Diligence Workshop) Report

https://crt-japan.jp/files2020/SHE/Final%20Report%20of%20SHE%20in%20English.pdf

2. Human Rights Due Diligence Subcommittee hosted by Global Compact Network Japan

Since fiscal 2019, Sumitomo Chemical has engaged in the Human Rights Due Diligence Subcommittee hosted by the Global Compact Network Japan in order to promote human rights due diligence based on the Guiding Principles on Business and Human Rights.

In fiscal 2020, the subcommittee organized various initiatives such as seminars by experts, workshops for addressing human rights issues in the time of COVID-19, and interviews with leading companies in this area. We will continue to deepen our understanding of human rights by engaging in various initiatives, and leverage the learning in the Group's human rights promotion efforts.

Looking Ahead

We at the Sumitomo Chemical Group will observe our Human Rights Policy and work together as one to continue our efforts led by the Human Rights Promotion Committee to promote respect for human rights.

Procurement

Basic Stance

Policy on Sustainable Procurement

The Sumitomo Chemical Group is committed to building mutually beneficial and sound relationships with business partners. In addition to ensuring fairness, equitability, and transparency in our transactions with business partners, we are promoting sustainable procurement activities throughout the supply chain with an emphasis on compliance and respecting human rights, which will encourage our partners to also engage in sustainability initiatives. Furthermore, Sumitomo Chemical's stance toward and policy on sustainable procurement is clarified in the Basic Procurement Principles and the Group Business Standards of Procurement, which provide guidelines for procurement operations for Group companies in Japan and overseas.

Basic Procurement Principles (Outline)

1. The Procurement Section shall strive to conduct procurement transactions on the basis of fair, equitable, transparent and free competition without involving personal interests or arbitrary considerations.
2. The Procurement Section shall strive to select suppliers to transact with in accordance with the most appropriate and economically rational methods and shall pursue the maintenance of sound business relationships with suppliers, aiming for mutual growth and development.
3. The Procurement Section shall strive to provide corporate services globally throughout the entire Group.
4. In its procurement, the Procurement Section shall give preference to those suppliers that are active in sustainability initiatives, with the aim of fulfilling its corporate social responsibilities and building sound relationships with suppliers.
5. The Procurement Section shall strive always to meet the quality requirements of Sumitomo Chemical's internal sections that request purchases of Goods and Services.
6. In performing Procurement Operations, the highest priority shall be given to safe and stable operations in order to realize zero-accident and zero-injury operations.
7. In performing Procurement Operations, the highest consideration shall be given to customer satisfaction.
8. The Procurement Section shall ensure the transparency of Procurement Operations.

Procurement

Sumitomo Chemical Group Policy for Responsible Procurement of Minerals / Raw Material (Established March 17, 2020)

Recognizing the principles set out in our Sumitomo Chemical Group Human Rights Policy, Sumitomo Chemical Group (Sumitomo Chemical Co., Ltd. and its group companies, hereafter "Sumitomo Chemical Group") defines those raw materials that involve a high risk of having a negative impact on human rights in the supply chain (including but not limited to Tantalum, Tin, Gold, Tungsten, Cobalt, Mica, Graphite, Pulps etc.) as high-risk raw materials ("HRRM"). Sumitomo Chemical Group recognizes the adverse impact against human rights which may be associated with mining, extracting, refining, manufacturing, trading, handling and/or importing/exporting HRRM, and sets out the following Policy for Responsible Procurement of Minerals/Raw Materials. Sumitomo Chemical Group will comply with this policy, and requests all of its suppliers to acknowledge the contents of this policy and comply with it.

Incorporating the essence of the standards set out in the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (the "OECD Guidance") with necessary adjustments, Sumitomo Chemical Group adopts the following 6-step framework in conducting due diligence in respect of HRRM:

1. Establish Strong Company Management Systems

Sumitomo Chemical Group will clearly communicate and explain to suppliers and to the public the contents of this policy, and appoint a senior executive and staff assigned to supply chain management of HRRM. Sumitomo Chemical Group will request HRRM suppliers to comply with this policy by abiding by the standard contract clause or commitment letter.

2. Identify and Assess Risks in the Supply Chain

Sumitomo Chemical Group will establish a system of controls and transparency over the supply chain of HRRM, and will periodically identify and assess risks of HRRM suppliers through an approach consistent with OECD Guidance Annex II. In identifying and assessing the risks, Sumitomo Chemical Group will (i) request HRRM suppliers to map its supply chain to origin and maintain a database of the same, and (ii) conduct additional due diligence procedures against the HRRM supplier, when red-flags of adverse impact on human-rights are discovered in its supply chain, with due attention to the geographical characteristics of conflict-affected and high-risk areas.

3. Design and Implement a Strategy to Respond to Identified Risks

Once risks are identified and mitigation measures are undertaken, the senior executive assigned to HRRM, will compile a risk management plan and will implement either of the following measures:

i) continuing trade throughout the course of measurable risk mitigation efforts;
ii) temporarily suspending trade while pursuing ongoing measurable risk mitigation efforts;
iii) disengaging with the HRRM supplier after failed attempts at mitigation, such as where lack of cooperation, refusal to follow improvement requests etc.

Sumitomo Chemical Group will implement the risk management plan, monitor and trace the risks and progress of risk mitigation efforts, report them to the assigned senior executive of HRRM, and keep record of the same for a designated period. Sumitomo Chemical Group will undertake additional assessments of the identified risks once there is change of circumstance.

4. Sumitomo Chemical Group will request HRRM suppliers who is in a position to more directly and effectively mitigate the adverse impact on human rights in the supply chain to undergo supply chain due diligence audits conducted by Sumitomo Chemical Group or by Sumitomo Chemical Group's designated independent third-party auditor.

5. Sumitomo Chemical Group will report the above HRRM related activities through our web site, annual report, sustainability data book etc. If required, Sumitomo Chemical Group will request HRRM suppliers to report its HRRM related activities periodically to Sumitomo Chemical Group, and to promptly report to Sumitomo Chemical Group any signs of adverse impact on human-rights discovered in their supply chain, and to follow any instructions of corrective measures by Sumitomo Chemical Group.

6. Sumitomo Chemical Group will support relevant industry initiatives in respect of HRRM and respond to changing situations flexibly.

Sumitomo Chemical Group requests all of its suppliers to develop and implement its own initiatives in accordance with the above 6-step framework, and to cause its upstream suppliers to do the same.

Procurement

Management System

In line with the policy on sustainable procurement, we formulate and implement plans related to sustainable procurement, share these plans with Group companies, and carry out these plans in cooperation with Business Sectors. Furthermore, Sumitomo Chemical's stance toward and policy on sustainable procurement is clarified in the Group Business Standards of Procurement, which provide guidelines for procurement operations for Group companies in Japan and overseas. We are promoting relevant initiatives across the entire Group.

Goals and Results

FY2020 Group-wide Initiatives

Main Initiatives	Details
Group purchasing information exchange meeting 2 times	Participating companies: 22 • Sustainability measures, including those related to human rights and the environment; Initiatives for high-risk raw materials; Shared information about BCPs, including those to prevent the spread of COVID-19
Company-wide procurement liaison meetings 2 times	Participants: Representatives responsible for the procurement of Business Sectors • Sustainability measures, including those related to human rights and the environment; Initiatives for high-risk raw materials; Shared information about BCPs, including those to prevent the spread of COVID-19
Procurement staff education	Participants: All procurement staff (including new employees and transferees) • Sustainability measures, including those related to human rights and the environment; Initiatives for high-risk raw materials

FY2020 Initiative for Suppliers

Main Initiatives	Details
Supplier Web Briefings 8 times	Participating companies: 2,331 (suppliers of materials, equipment, and raw materials) • Gave introductions on the Sumitomo Chemical Group's sustainability initiatives during web briefings related to the introduction of new systems
Suppliers Dialogues 2 times	Participating companies: 27 (major suppliers of materials and equipment) • Gave introductions on sustainability initiatives and shared information regarding human rights (child labor, etc.) and occupational safety
Supplier Information Exchange Meeting 1 time	Participating companies: 10 (major raw material suppliers) • Regarding Scope 3*1 GHG emissions, we conducted Supplier Engagement on SBTs*2 (purposeful dialogues) with our major suppliers*3 so they would set science-based GHG emission reduction targets by FY2024. • Provided briefings on and requested cooperation in sustainability initiatives (respect for human rights, including high-risk raw materials, environmental conservation, etc.), gave introductions on internal reporting systems, etc.
Evaluation of Established Suppliers (Sustainable Procurement Rate Survey)	Targeted companies: All established suppliers, who together account for the top 90% of the raw materials purchased Sustainable procurement rate*4: 86% (As of March 31, 2021)
Evaluation of New Suppliers	Due diligence rate for new suppliers: 100% Suppliers who were rated "good" and with whom business began: 100%
Audits	Number of times monitoring was conducted in conjunction with quality audits: 6 (Due to the pandemic, all audits were documentation audits. We confirmed that there were no problems on the sustainable procurement check sheets.)
Initiatives Related to High-Risk Raw Materials	We conduct due diligence in accordance with the Sumitomo Chemical Group Policy for Responsible Procurement of Minerals/Raw Materials. For conflict minerals (gold, tantalum, tungsten, and tin), cobalt, and mica, we request they use the template*5 issued by the Responsible Minerals Initiative (RMI), and, for other high-risk raw materials, we request they use an almost equivalent document. We request replies from all suppliers of raw materials includes these high-risk raw materials. <Reply collection status (as of May 31, 2021) • Conflict minerals: 100% reply collection rate, 0% of suppliers have been determined to have a problem • Cobalt, mica, and other high-risk raw materials: 89% reply collection rate, 0% of suppliers have been determined to have a problem

*1 Emissions from the manufacturing and transportation of purchased raw materials
*2 Science Based Targets (SBTs): Greenhouse gas emission reduction targets set by companies for the next five to 15 years in line with levels sought by the Paris Agreement
*3 Covers suppliers accounting for 90% of greenhouse gas emissions from procured raw materials and other items based on weight.
*4 The percentage of Sumitomo Chemical Group Sustainable Procurement Check Sheets that were returned
*5 Conflict minerals (gold, tantalum, tungsten, tin): Conflict Minerals Reporting Template (CMRT); cobalt: Cobalt Reporting Template (CRT); mica: Mica Reporting Template (MRT)

Procurement

Examples of Initiatives

Sustainable Procurement Activities

Sumitomo Chemical has added a webpage about sustainable procurement to its Procurement Information page on its official website to inform more stakeholders of its sustainable procurement initiatives. The webpage features the *Sumitomo Chemical Group Sustainable Procurement Guidebook*, which is a code of conduct for our suppliers. Moreover, Sumitomo Chemical has formulated the *Sumitomo Chemical Group Sustainable Procurement Check Sheets* to enable suppliers to conduct self-evaluations regarding all items. Suppliers can now download the guidebook and check sheets and report the results of their self-evaluations.

Sumitomo Chemical Group Sustainable Procurement Check Sheets

0 Overall Promotion of Sustainable Procurement

The questionnaire begins with a confirmation of the company's performance regarding: clearly declaring the importance of sustainability as a business policy; designating an organization and manager responsible for sustainability promotion; publicly announcing the status of its sustainability promotion efforts; and deploying its own program regarding sustainability to suppliers.

Ⅰ Compliance with Laws and Ethics

Questions in this chapter focus on whether the company properly: ensures compliance with various business laws (including laws and regulations in Japan and overseas, such as REACH); prohibits impediments to free competition; prohibits abuse of a superior position; prohibits corruption and bribery; prohibits the offering and receiving of inappropriate profits and advantages; ensures respect for intellectual property; detects and prevents injustice promptly; and prevents the leakage of personal information as well as customer and third-party confidential information.

Ⅱ Human Rights and Labor

Questions in this chapter focus on whether the company properly: ensures respect for human rights; prohibits discrimination; regulates working hours; respects the rights to freedom of association; prohibits forced labor; prohibits child labor; and pays appropriate wages.

Ⅲ Accident Prevention and Occupational Health and Safety

Questions in this chapter focus on whether the company properly: ensures proper disaster and accident management; applies safety measures for equipment and instruments; promotes safety in the workplace; promotes hygiene in the workplace; and promotes health maintenance programs for employees.

Ⅳ Environmental Conservation

Questions in this chapter focus on whether the company properly: establishes and implements an environmental management system; controls hazardous chemicals in manufacturing; obtains environmental and government permits; minimizes environmental pollution (water, soil, air); promotes waste reduction; and promotes resource and energy saving by reducing, reusing, and recycling (3Rs).

Ⅴ Product Quality and Safety

Questions in this chapter focus on whether the company properly: establishes and implements a quality management system; controls hazardous chemicals in products; provides accurate information on products and services; and furnishes prior consultation on manufacturing process change and compliance with standards and specifications.

Sumitomo Chemical Group Sustainable Procurement Guidebook

https://www.sumitomo-chem.co.jp/english/sustainability/files/docs/cp_csr_guidebook_e.pdf

Sumitomo Chemical Group Sustainable Procurement Check Sheets

https://www.sumitomo-chem.co.jp/english/sustainability/files/docs/cp_csr_check_list_e.pdf

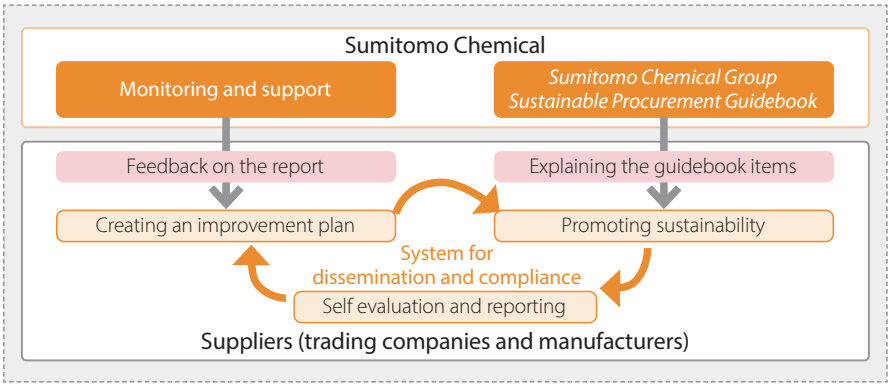
Procurement

Promoting Sustainable Procurement throughout the Supply Chain

We have every new supplier gain a better understanding of Sumitomo Chemical's policies and stances through the *Sumitomo Chemical Group Sustainable Procurement Guidebook*. We also have them fill out and submit the *Sumitomo Chemical Group Sustainable Procurement Check Sheets*. This enables us to do our due diligence regarding their compliance status, and, upon confirmation of satisfactory evaluation results, we begin doing business with them. Following that, we regularly monitor their compliance status and strive to prioritize procurement from those suppliers who are working hard to ensure sustainable procurement. We manage the data from the monitoring and periodically assess the content. For suppliers whose initiatives have been determined to be insufficient according to their replies to the sustainable procurement check sheets, we furnish feedback, such as requesting confirmation of improvement plans, to raise awareness of and cooperation in ensuring sustainable procurement. Furthermore, for suppliers who have not shown improvement over the long term regarding important initiatives related to human rights and other issues, we designate them high-risk suppliers and offer more focused feedback and monitoring.

In addition, we send out and collect the guidebook and check sheets from our main suppliers of raw materials. The collection status is managed as our sustainable procurement rate.

■ System for Promoting Sustainable Procurement throughout the Supply Chain



Initiatives Related to High-Risk Raw Materials

Regarding conflict minerals that have been identified as possibly funding inhumane armed groups in the Democratic Republic of the Congo (DRC) and its neighboring countries, as usual, under the Conflict-Free Procurement Policy, we confirm the minerals in the raw materials we procure, including gold, tantalum, tungsten, and tin, are not contributing to conflict (i.e. are conflict-free). We do this by finding the raw materials containing these substances from an internal database and periodically distributing and collecting CMRTs* to all suppliers of these raw materials.

If we determine there is a problem after confirming the results with the supplier, we take appropriate measures, which could be a request for improvement or the suspension of procurement of conflict minerals.

Going a step further in our efforts to avoid procuring conflict minerals, we formulated the Sumitomo Chemical Group Policy for Responsible Procurement of Minerals/Raw Materials in March 2020. We define high-risk raw materials as those that involve a high risk of having a negative impact on human rights in the supply chain (including but not limited to Tantalum, Tin, Gold, Tungsten, Cobalt, Mica, Graphite, Pulps etc.). In line with the characteristics of each high-risk raw material, we promote initiatives aligned with the content of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (OECD Guidance). In line with this procurement policy, we designate high-risk raw materials and conduct due diligence.

* Conflict Minerals Reporting Template: A reporting template published by the Responsible Minerals Initiative (RMI)

P.158 **Respect for Human Rights:** Initiatives Related to High-Risk Raw Materials

Procurement

Promoting Sustainable Procurement throughout the Group

We periodically hold Group purchasing information exchange meetings that gather together responsible purchasing representatives from each Group company in Japan and overseas to discuss promoting sustainable procurement throughout the Group. In addition, to ensure smooth communication, we set up a website with the Group companies to reciprocally share information as we strive to promote and encourage sustainable procurement as a unified Group.

Looking Ahead

In line with the Basic Principles for Promoting Sustainability, the Sumitomo Chemical Group will continue to strengthen cooperation with business partners and promote sustainability in the spirit of respecting human rights and ensuring compliance.

Human Resources Management

Basic Policy

'People' are a major source of corporate competitiveness, and securing highly motivated and capable personnel is the foundation of business operations.

In addition, our business environment has become more complex and sophisticated due to the recent expansion of our business domains and advances in technological innovation. In these circumstances, it has become extremely important to secure personnel with broad knowledge and diverse skills, and to conduct training so that employees can maximize their abilities.

Against this backdrop, the current Corporate Business Plan sets forth employing, developing and leveraging human resources to support sustainable development as one of its basic policies.

Based on this policy, we are strengthening our recruitment capabilities dramatically and effectively promoting the current personnel and training systems based on the basic philosophy of "development and growth." We are also working to create an environment in which diverse personnel can work healthily and energetically.

Sumika 'Take Action' Declaration

We have set forth a number of important values and views to help our employees find significance and feel pride in working at Sumitomo Chemical in the "Sumika 'Take Action' Declaration," and we are promoting this initiative so that they can lead healthy and fulfilling lives as employees, both mentally and physically. The initiative is divided into a series of five steps, with each step further broken down into five action items, and we are promoting concrete efforts to support progress. In addition, we established a labor-management committee to promote the "Sumika 'Take Action' Declaration" to ensure that information is shared and opinions are exchanged on the progress of initiatives and their direction.

1 Work-life Balance (WLB)

Aiming to harmonize work and private life to lead fulfilling lives

① Stop long working hours!
② Create an environment that makes it easy for employees to fully utilize work-life balance systems.
③ Encourage employees to take at least 80% of paid leave and facilitate effective use of the flex time system.
④ Prohibit business instructions that would require holiday or late-night work.
⑤ Cooperative framework in the workplace.

Joint labor and management declaration

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2 Diversity and Inclusion

Respect and leverage diversity, promote active roles for all, and leave no one behind

⑥ Active roles for both men and women!
⑦ Let's eliminate preconceptions and assumptions!
⑧ Let's build a hybrid human resource group!
⑨ Encourage active roles for people with disabilities.
⑩ No harassment!

Joint labor and management declaration

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3 Development and Growth

Development and growth to help our employees and the company flourish together!

⑪ Invest in growth for everyone.
⑫ Study every day, grow every day.
⑬ Support the desire to learn.
⑭ Use digital technology to accelerate growth!
⑮ Allow people to take on challenges and demonstrate their growth.

Joint labor and management declaration

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4 Healthy Employees

Good health is a prerequisite for good work and a good life!

⑯ Revise eating habits, achieve a healthy weight.
⑰ Exercise a little and stay healthy forever!
⑱ High performance depends on quality sleep.
⑲ Smoking does nothing but harm.
⑳ Don't forget to take care of your mental health.

Joint declaration by company and corporate health insurance association

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Sumika 'Take Action' Declaration

Declaring what we want to cherish

5 How to Proceed with Work

Reasonable, efficient, and creative work by each employee will lead to the improvement of their skills and the growth of the company.

㉑ Always review work goals and methods.
㉒ Make the use of digital technologies the default.
㉓ Eliminate excessive quality, streamline your work.
㉔ Maximize the added value of meetings.
㉕ Put customers first!

Company declaration

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Human Resources Management

Human Resources System Initiatives

Sumitomo Chemical engages with its employees through a human resource system that takes account of the performance individuals achieve in their roles, depending on the scale of their responsibilities, along with the abilities they employed and their actions in the process. The system enables those willing and capable employees to aspire to higher roles at an early stage, and to build their self-motivated desire to grow in their career process.

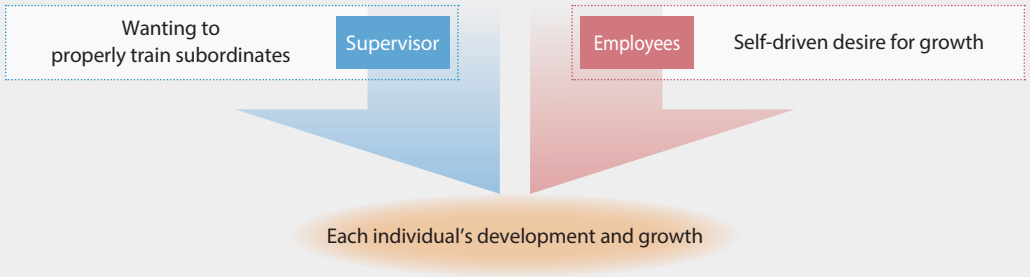
Accordingly, our annual performance evaluations are not limited to evaluating how well each employee fulfills their expected role and their achievements; it evaluates how well said employee demonstrates their ability and acquires the knowledge and skills needed for their role. The system thus encourages individual development and growth without overly focusing on short-term achievements.

Managers talk with all their subordinates on a regular basis to review their performance and objectives and to provide feedback on their behavioral advantages and areas for improvement. In the interviews, they also discuss future job expectations and career paths in an effort to increase their motivation and abilities.

Moreover, we have adopted a similar human resources system for managers at overseas Group companies as for Sumitomo Chemical's managerial employees.

Philosophy and Aims of the Human Resources System

Taking on challenges	The system will enable motivated and skilled employees to take on the challenges of larger roles.
Providing meticulous training	The system will flexibly respond to employees' choice of work style and career and will support meticulous training tailored to each individual's ambitions and suitability.
Supporting employees' desire for growth	The system will furnish employees with clear cut workplace models and help them track their progress.



The Group will achieve sustainable growth through the growth of each individual.

Characteristics of Our HR Systems

(1) Career Development Field (CDF)

To encourage the development and growth of each employee amid a time of diversifying ideas about career trajectories, we have incorporated Career Development Fields (CDF, professional categories) into our HR systems. We decided to do this because we understand the importance of considering from the medium- to long-term perspective the details of placements and training in line with each employee's ability and suitability as well as based on their career goals. From the hiring stage, planned placements and training are considered in line with each employee's career goals, and employees take the reins when thinking about their careers.

CDF

Field X	A career in which the employee takes on a specified role, while also working on tasks that support the maintenance and development of Sumitomo Chemical's business over the medium- to long-term.
Field Y	A career in which the employee works on tasks that contribute to the development of business as a professional, within a role with a defined scope.
Field Z	A career in which the employee works on a variety of tasks supporting things like the development of new technology and the increasing sophistication and complexity of business.

Human Resources Management

(2) Careers for Specialists

We offer more than the conventional path, which assumes a largely vertical progression in rank from manager to general manager, and so on. To reflect the need for complex and advanced knowledge in operational and R&D fields, we have introduced a mechanism that provides appropriate compensation so that personnel with a high degree of specialization can unleash their full potential and rack up accomplishments.

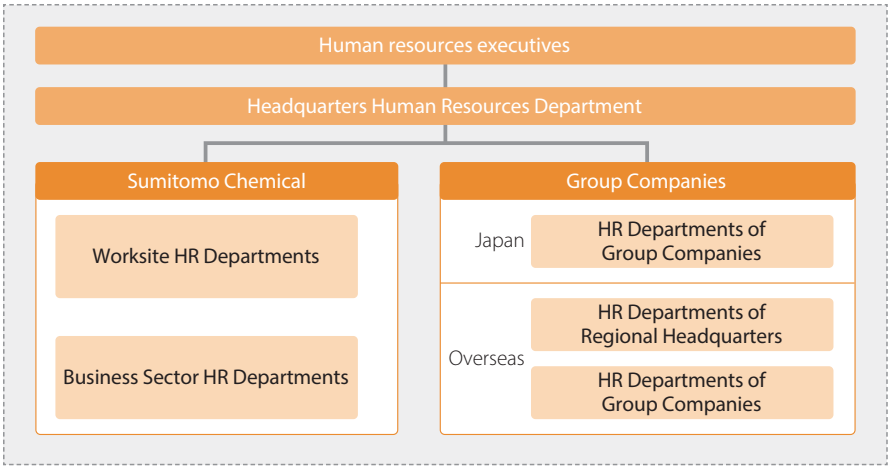
■ Careers for Specialists

Associates	Fellows
Associates refers to those who have particularly outstanding expert knowledge or capabilities, who are hard to replace in specific fields, and who can be expected to continue to make significant contributions in their field using that expertise	Fellows refers to those who, among the Sumitomo Chemical researchers who have produced particularly outstanding research results on the basis of their high-level expertise, and who are also recognized for their achievements outside the company, are expected to contribute significantly to the research activities of Sumitomo Chemical in the future

Management System

Under the direction of human resources executives, the Headquarters Human Resources Department works closely with the HR departments of worksites, business sectors, regional headquarters, and Group companies in Japan and overseas to promote and roll out various programs. In addition, employees are rotated through job assignments based on each person's specific training plans while sharing information with the aforementioned HR departments and other departments with corporate functions, such as production and administration.

■ Human Resources Management System



Human Resources Management

Examples of Initiatives

Initiative to Enhance Productivity

As the fifth number of the 'Take Action' Declaration, labor and management jointly announced the Sumika Workflow Declaration. We are upgrading infrastructure, for example, introducing the new personnel information integration solution called SUMIKA HR-BOX to enhance productivity, and are promoting rational, efficient, and creative work through the use of digital and other tools.

Sumika Workflow Declaration
Five Action Items

㉑ Always review work goals and methods.
Do not rely on old ways of thinking. Constantly think of methodologies aligned with this era and work that is currently in demand.
- Reduce current workload by 10% to be able try new things!

㉒ Make the use of digital technologies the default.
Fully leverage digital technologies to drastically increase the productivity and efficiency of operations.
- Paperless: 50% reduction compared with FY2016 (to under 20 million sheets)
- Double the number of Skype/TV meetings compared with FY2019

㉓ Eliminate excessive quality, streamline your work.
Do not assume too much. Do not hesitate to confirm your partners' intentions and clarify communications in order to stay on track and eliminate excessive quality.
- Superiors clearly point out "what, why, and by when." Subordinates confirm.
- Report when 30% done.

㉔ Maximize the added value of meetings.
Meetings are for discussion and decision making.
- Utilize email and other data infrastructure for simple reports and information sharing.
- Target halving the number of meetings and attendees as well as their duration compared with FY2019

㉕ Put customers first!
Aim to increase by 50% the amount of time spent on customer communication and assessing social needs.
Through action items ㉑ to ㉔, streamline the in-house use of time and labor as much as possible.

Communication with Employees

Sumitomo Chemical and its labor union are working together to solve various issues within a labor-management relationship based on mutual understanding and trust.

We have concluded a labor agreement covering a wide range of topics, including union members' concerns about human resources, work duties, compensation, disaster compensation, welfare facilities, safety and health, labor-management meetings, and collective bargaining. Based on this agreement, as a place for labor and management representatives to exchange opinions, we hold central labor-management meetings twice a year as well as regional labor-management meetings at each worksite twice a year. In addition, we have established Safety and Health Committees at each worksite to ensure and improve the safety and health of union members.

Furthermore, the Company and labor union have concluded a union shop agreement, ensuring that 100% of general employees at the Company are enrolled in the labor union.

Human Resources Management

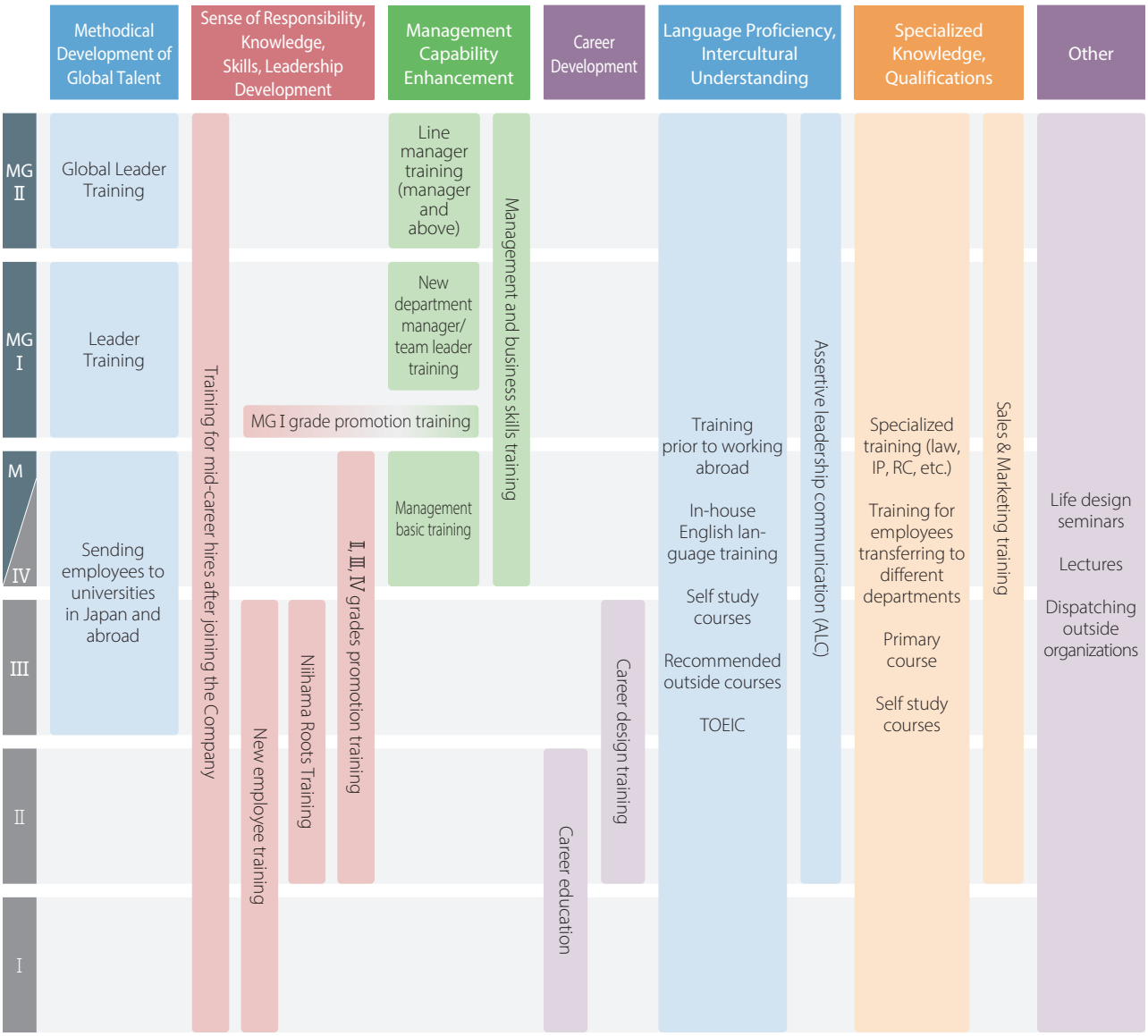
<Human Resources Development>

Basic Policy

We are implementing various training programs and measures for different purposes and employee classes to realize our current human resources system, the basic philosophy of which is "development and growth."

Specifically, we are developing all motivated and skilled employees and enhancing their capabilities by upgrading our training system in a "stepwise" manner in line with our goals. Education includes class-based training aligned with positions and roles, management skills enhancement training for managers, and programs to enhance language skills appropriate to global business development.

■ Organization of Training Programs



Note: The Company conducts in-house training courses in the areas of compliance, human rights, sustainability, and health maintenance and improvement

Human Resources Management

Targets and Results / Examples of Initiatives

As the third number of the 'Take Action' Declaration, labor and management jointly announced the Sumika Development & Growth Declaration. We are promoting various measures aimed at carrying out the following five action items to help the Company and employees flourish together through development and growth.

Sumika Development & Growth Declaration
Five Action Items

⑪ **Invest in growth for everyone.**
We will continue to invest in education, spending over three times the average among listed companies.

⑫ **Study every day, grow every day.**
We aim for 10% of work time to be used for training and work study to cultivate more professionals.

⑬ **Support the desire to learn.**
We support self-driven career development. We provide training programs that employees can select for themselves and learn anywhere, anytime and repeat as many times as they want.

⑭ **Use digital technology to accelerate growth!**
Everyone from top management to regular employees can skillfully use the latest digital technologies and break through to a new phase as an organization or individual.

⑮ **Allow people to take on challenges and demonstrate their growth.**
We allow subordinates looking to grow to take on challenges, for example, to try work designated for personnel one rank above their current rank. Subordinates give their all to tackle these new challenges.

In recent years, in addition to the aforementioned goals and training systems and programs for different employee classes, to support the independent career building of all motivated and skilled employees, we are focusing on online programs that enable learning on smartphones and PCs with the slogan "whenever, wherever, and however many times."

Specifically, we introduced online video content (450 courses and 3,600 books*) that encompasses a comprehensive MBA curriculum, spanning from business basics to practical application. For all employees, we opened an online language learning program for English and eight other languages as well as an online English business writing course. We are also working to raise the level of and strengthen the knowledge, skills, and language abilities of employees in global business development.

*As of July 2021

Investment in Training (Sumitomo Chemical)

FY2020 Results	Target
Approx. **¥320,000** /year per person	Continue to invest at least 3 times the average level for publicly listed companies (approx. ¥110,000*)

* (Source) Annual Report on the Japanese Economy and Public Finance (FY2018)

Time Spent on Training (Sumitomo Chemical)

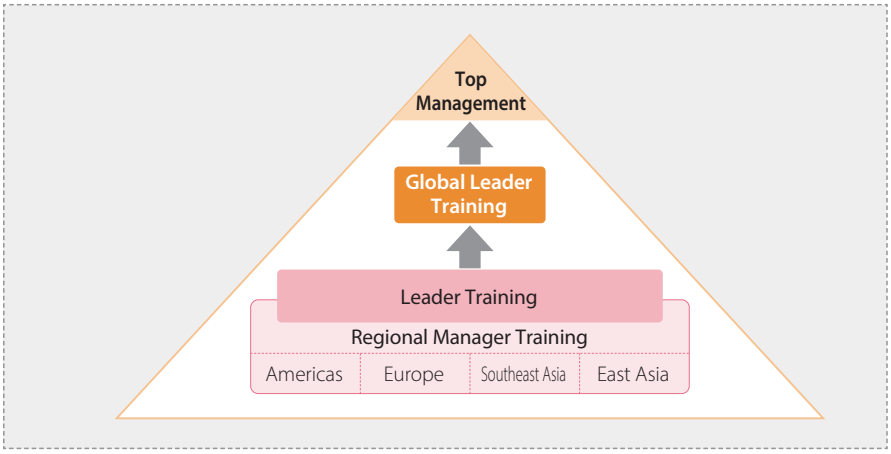
FY2020 Results	Target
Approx. **131** hours/year per person (8% of regular working hours)	Aim to spend 10% of work time on training or studying for work

Human Resources Management

Methodical Development of Global Talent

Sumitomo Chemical is carrying out a staged training program in human resource development for employees both in Japan and at overseas Group companies, in order to discover and develop next-generation leaders in a systematic way, emphasizing the creation of Global Leaders who can take on the role of core management.

Next-Generation Leader Development System



(1) Global Leader Training

In our Global Leader Training for general managers inside and outside of Japan, participants learn about management perspectives and insights through lectures and discussions featuring executive officers and external executives. They decide on their own topics and provide advice on the content of these specific initiatives to the president and others in management.

(2) Leader Training

In Sumitomo Chemical's Leader Training for managerial employees both inside and outside of Japan, Sumitomo Chemical has worked with a graduate school of business to carry out a program held completely in English, with the goal of developing the employees' conceptual strength and abilities to propose strategies for the creation of new value.

Training for Development of Global Talent (for select participants)

(No. of people)

Name	Approach	FY2018	FY2019	FY2020
Development of Global Talent	In order to create global leaders who will play a central role in management and to develop talent that supports our global business operations, we systematically conduct various training programs.			
(1) Global Leader Training	Our global leader training program focuses on action learning.	21	20	—
(2) Leader Training	Held in Singapore and Japan to develop the next generation of leaders, we conduct training programs in English.	27	27	27

FY2020 Results*

Participants
27
(breakdown: 25 men, 2 women)

Average time
141 hours per person

* In fiscal 2020, due to the COVID-19 pandemic, the Global Leader Training was delayed, and only the Leader Training's English skills enhancement training (individuals) was provided.

Human Resources Management

Management Skills Enhancement Training

We are conducting a training program to provide managers with the ability to guide their own organization and thus achieve their goals through the learning of general principles and practical skills needed for workplace management.

■ Management Skills Enhancement Training (required for all eligible employees)

(No. of people)

Name	Approach	FY2018	FY2019	FY2020
Management basic training	Training that promotes the systematic understanding of basic management principles and enables the practice of skills that can be used in the workplace	147	175	213
New department manager/ team leader training	Training covering the knowledge and skills, including risk management, necessary to operate as a workplace manager	87	55	89
MG I grade promotion training	Training for management-level employees aimed at fostering self-awareness regarding their roles and occupational duties along with cultivating strong self-actualization and at changing their mindsets as organizational leaders	74	75	118
Training in communicating with subordinates	Training on feedback methods used to develop subordinates and ensure understanding of basic communication policies	35	240	123
Diversity management training	Training covering management capabilities, including how to influence organizational performance, and the management qualities and skills needed to gather diverse personnel and guide them on teamwork and achieving goals (from FY2020)	—	—	230

FY2020 Results

Participants
773

Average time
7 hours per person

Enrollment rate of all eligible employees:
100%

Enrollment rate of all employees:
12%

System for Passing on Skills and Developing Personnel

We have established a Trainer System and a Senior Training Advisor System with the main aim of steadily passing on skills essential to the manufacturing frontlines and developing future core personnel.

(No. of people)

Name	Approach	FY2018	FY2019	FY2020
Trainer System	Highly skilled employees who have an aptitude for teaching provide instruction and advice to facilitate development.	42	48	62
Senior Training Advisor System	Supervisors and potential supervisors are provided OJT to develop core personnel for manufacturing departments	4	8	9

Looking Ahead

Going forward, Sumitomo Chemical will continue to promote various measures for employee growth to realize a human resources system centered on "development and growth." With the introduction of the new system, we have expanded online options for training programs. We will continue to take measures that let employees choose their own training content and make learning a habit.

Human Resources Management

<Diversity and Inclusion>

Basic Policy

Sumitomo Chemical has raised "promotion of diversity and inclusion" as one of the material issues to be addressed as management priorities based on the Basic Principles for Promoting Sustainability. We have established a Group-wide basic philosophy related to diversity and inclusion and are promoting measures in line with the situation of each Group company.

Group Diversity and Inclusion Policy

We will promote diversity and inclusion across the Sumitomo Chemical Group. We understand that a variety of ideas and values among our employees represents a vital resource that forms the foundation of the Sumitomo Chemical Group's competitiveness. In order to create continuous new value, we will build and enable an inclusive organizational culture that allows us to respect the individuality of each employee and embrace diversity to empower employees in an environment of mutual and close communication.

In addition, labor and management jointly announced the Sumika Diversity & Inclusion Declaration as the second number of the 'Take Action' Declaration. The Company has defined the following five action items and is promoting various measures to implement them in order to enable the Company and employees flourish together through diversity and inclusion.

Sumika Diversity & Inclusion Declaration
Five Action Items

⑥ **Active roles for both men and women!**
We will ensure anyone can thrive in the workplace and enhance employee capabilities regardless of gender.
Relevant KPI: Women accounting for at least 10% of positions equivalent to manager or above by the end of 2022

⑦ **Let's eliminate preconceptions and assumptions!**
We will eliminate assumptions about fixed division of roles and unconscious bias, thinking you have to do something "because I'm a man/woman."
Relevant KPI: At least 70% of male employees taking cessation from work for childcare by the end of 2022

⑧ **Let's build a hybrid human resource group!**
We will flexibly incorporate and leverage the different abilities and ideas of diverse human resources to help invigorate the workplace and grow the organization.

⑨ **Encourage active roles for people with disabilities.**
The Company and Sumika Partners Co., Ltd. have come together to provide an environment where people with disabilities can thrive.

⑩ **No harassment!**
Aiming for complete eradication, we will not tolerate any form of harassment, including power harassment or sexual harassment.

Furthermore, we are promoting various initiatives to prevent physical and mental discrimination and harassment in work environments and to ensure that people of all different backgrounds can thrive.

P.151 Respect for Human Rights

P.30 Key Performance Indicator (KPI)

Human Resources Management

Management System

In 2010, Sumitomo Chemical established a labor-management committee to promote diversity and inclusion as well as work-life balance. To this end, the committee has shared information and exchanged opinions in addition to checking on the progress of efforts undertaken by labor and by management.

From 2020, we delegated these functions to the labor-management committee for promoting the "Sumika 'Take Action' Declaration" as we strive to be more constructive.

Targets and Results

To promote diversity and inclusion, the Group set specific KPIs centered on basic principles related to diversity and inclusion for around 100 of the major Group companies. Moreover, when setting the KPIs, we established the following three points as Critical Success Factors for the promotion of diversity and inclusion.

◆ Critical Success Factors (CSFs)

(1) Employ and develop diverse human resources, including those at senior management level
(2) Implement measures to empower diverse human resources
(3) Enhance diversity and inclusion awareness among managers and employees at all levels, and implement measures to build an inclusive culture that empowers employees

■ Sumitomo Chemical (Non-Consolidated) KPIs

The Company aims to achieve the targets below during 2022:

1. Have women in at least 10% of positions equivalent to managers or above (April 2021: 6.3%)
2. Have 70% or more of eligible male employees take childcare leave (FY2020: 63.8%)
3. For employee opinion survey* statements below, achieve an affirmative response rate of 80% or more
   (1) The Company provides programs and a workplace environment that make it easy to combine work with childbirth, parenting, or caring responsibilities (FY2019: 77.2%)
   (2) The atmosphere in the workplace makes it easy for both men and women to use the programs allowing leave or days off, or reduced working hours, for parenting or caring purposes (FY2019: 69.5%)
   (3) The company enables female employees to demonstrate their full potential (FY2019: 53.4%)

* Conducted once every three years

Progress of Group companies in Japan and overseas in setting KPIs

Many of the KPIs set by Group companies are related to the active promotion and empowerment of women, work-life balance, and diversity regarding nationality, racial background, and age. Going forward, we will continue working with Group companies to promote initiatives aimed at achieving these KPIs.

https://www.sumitomo-chem.co.jp/english/sustainability/files/docs/kpi_diver_group.pdf

Human Resources Management

Examples of Initiatives

Promoting the Active Advancement of Women

We have focused on promoting the active advancement of women as a part of our diversity and inclusion promotion efforts. We are actively taking measures to create an environment where even more women can thrive. Sumitomo Chemical has outlined the following targets in line with the Act on Promotion of Women's Participation and Advancement in the Workplace and is implementing the specific initiatives detailed below.

Sumitomo Chemical Co., Ltd. Action Plan

1. Plan period:
From April 1, 2020 to March 31, 2023

2. Targets, initiative details, and implementation period

Target 1 Women accounting for at least 10% of positions equivalent to manager or above

<Initiative Details>

- Dispatching employees mainly to training programs held by outside groups (since fiscal 2007)
  Regularly dispatch employees mainly to training programs held by outside groups with the purpose of career building, enhancing knowledge and skills, and forming networks with outside groups. (Several employees per year as a general rule.)
  Eligible employees: Young female employees

- Internal lectures to help promote diversity and inclusion (since fiscal 2013)
  We hold lectures related to the significance of diversity and inclusion and the importance of providing growth opportunities through operations.
  Eligible employees: All employees

- Diversity management training (since fiscal 2019)
  We hold diversity management training that helps us practice diversity management (leadership, human relations skills) and comprehend unconscious bias.
  Eligible employees: Managers and team leaders

- E-learning related to unconscious bias (since fiscal 2021)
  We hold e-learning training with the purpose of raising awareness and recognition related to overall unconscious bias.
  Eligible employees: All employees

- Implement initiatives for the "Sumika 'Take Action' Declaration" (since fiscal 2019)
  We have positioned promoting the active advancement of women and eliminating unconscious bias as an action item in the "Sumika 'Take Action' Declaration," in which we proclaim those values and views of importance to us as a company. To this end, we implement various relevant initiatives.

Human Resources Management

Target 2 At least 70% of male employees taking cessation from work for childcare

<Initiative Details>

- Foster an environment that allows the realization of flexible workstyles (continual implementation)

  We foster an environment that allows the realization of flexible workstyles and are further improving the productivity of workplaces and people by realizing a workstyle transformation and operational revolution that employs IoT and promotes work-life balance.

- Release PRs and raise awareness of programs (continual implementation)

  We continually release PRs and raise awareness of the Company's various programs designed to flexibly respond to individual situations and circumstances, such as the need to engage in childcare or caregiving due to life events. In addition, we recommend male employees with newborn children to take work cessation for childcare.

- Take measures to promote use of programs (continual implementation)

  (1) Through labor-management committee meetings and other meetings, we determine specific user needs and ways to improve various programs. We then use this information to help craft and implement measures to promote greater use of the programs.

  (2) As an action item in the "Sumika 'Take Action' Declaration," in which we proclaim those values and views of importance to us as a company, we aim to foster a work environment that makes it is easy for all employees to fully use work-life balance programs, including male employees to take cessation for childcare, effectively use the flextime program, and establish a cooperation system in the workplace. To this end, we have implemented various relevant initiatives.

Internal Lecture Helping Promote Diversity and Inclusion

Since 2019, former Vice Minister of Health, Labour and Welfare Atsuko Muraki has presented an internal lecture on the theme diversity and inclusion. The lectures are for a wide range of people, including upper managers, workplace managers (general managers, manager level employees), and female employees. At the lecture, she spoke about the importance of accepting diverse human resources in the workplace, including women, people with disabilities, seniors, and foreign nationals. She also delivered a message aimed at further promoting diversity and inclusion.

Diversity Management Training

For workplace managers (manager level employees), who play an essential role in promoting diversity and inclusion in the workplace, we conduct training that provides them with necessary management skills in this area. Content includes the management qualities and skills needed to bring together diverse personnel and to foster teamwork and achieve goals as well as how to influence organizational performance.

Encouraging Male Employees to Take Childcare Leave

As a general rule, male employees who have had children plan to take at least two weeks of childcare leave in total and submit plans for such leave. By default, the application assumes that eligible employees will take the childcare leave they are offered; should they decide not to take it, they must state the reason why on the application.

Joining the Ikuboss Corporate Alliance

To support male employees' active participation in childcare, Sumitomo Chemical develops ikubosses.* to support male employees' active participation in childcare. We are actively working to establish workplace environments where employees easily balance work and private life.

* "Ikuboss" refers to a superior (manager level, including women) who gets results and enjoys their work and private life while supporting subordinates' careers and lives.

Hiring Personnel with Diverse Skill Sets and Qualities

To secure diverse personnel who support the sustainable growth of the Sumitomo Chemical Group, we encourage the hiring of foreign nationals who have studied abroad in Japan, experienced professionals, and personnel who possess advanced expertise in specific fields. In addition, we conduct proactive hiring activities in science major fields with a low percentage of female students and are working to raise the percentage of female employees hired.

Human Resources Management

★: Assured by an independent assurance provider

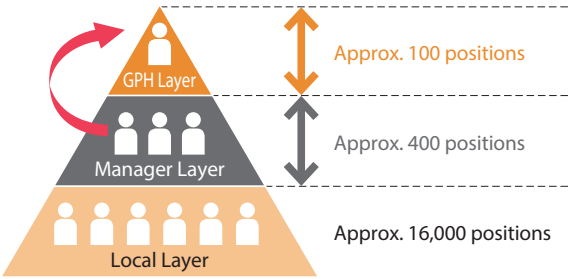
Promoting the Utilization and Advancement of Global Personnel

To enhance personnel who support the global business development of each Group company, Sumitomo Chemical has introduced a personnel system common to Sumitomo Chemical managerial employees for managers at overseas Group companies. In addition, under the same system, we actively hire local employees for major positions at overseas Group companies and systematically develop candidates and hire new personnel externally.

Activities Related to the Women's Empowerment Principles (WEPs)

P.46 Our WEPs Activities

■ Overseas Human Resources Pipeline
(Local employees at overseas Group companies)



Promoting the Hiring of Persons with Disabilities

To help realize a society where the employment of persons with disabilities is normalized, Sumitomo Chemical works to hire such individuals. In August 2017, we established Sumika Partners Co., Ltd.* to support the increased participation of persons with disabilities in society and to provide employment opportunities to persons with disabilities who want to work. This company actively hires persons with intellectual and mental disabilities. It has established a support system to enable employees with disabilities to thrive at work in their own way, such as by assigning one leader for every five persons with disabilities.

Going forward, we will continue working with Sumika Partners to provide an environment where persons with disabilities can thrive.

* In March 1, 2018, the company acquired certification from the Minister of Health, Labour and Welfare as a special subsidiary based on the Handicapped Persons' Employment Promotion Act.

Sumika Partners Co., Ltd. (Japanese only)

https://www.sumika-partners.co.jp/

■ Achievements in Diversity and Inclusion (Sumitomo Chemical)

Name	Concept	FY2018	FY2019	FY2020
Number of women in positions equivalent to manager or above*1	In order to promote the success of female employees, Sumitomo Chemical sets quantitative targets regarding the ratio of women in positions equivalent to sectional manager or above and systematically promotes female employees.	96	99	113★
Percentage of women in positions equivalent to sectional manager or above (%)*1		5.1	5.2	5.8★
Employment rate for people with disabilities (%)*2	Sumika Partners Co., Ltd., a special subsidiary, began operations in April 2018, and we are working to expand employment opportunities for persons with disabilities who are motivated to work, including four of our group companies receiving approval as special affiliated companies as of June 2019.	2.24	2.41	2.56★
Reemployment of retiree rate (%)*3	Sumitomo Chemical has established a retiree reemployment system that enables a variety of work styles while appropriately reflecting the motivation and abilities of each person.	92.6	89.0	95.0

Note: Results include staff assigned to other companies but do not include staff assigned from other companies.
*1 As of April 1 of each fiscal year *2 As of June 1 of each fiscal year *3 As of March 31 of each fiscal year

Sumitomo Chemical Executive Received the SCEJ Award for Outstanding Women's Activity

Kanako Fukuda, an executive officer of Sumitomo Chemical, received the SCEJ Award for Outstanding Women's Activity at the fiscal 2020 SCEJ Awards from the Society of Chemical Engineers, Japan (SCEJ). Ms. Fukuda steadfastly guided Group initiatives aimed at achieving the SDGs and widely disseminated information through lectures and other means, helping to promote the spread of SDG awareness internally and externally. In addition, as a member of the SDG Committee of the SCEJ, she contributed to the formulation of its Sapporo Declaration by proposing a gender-equal viewpoint, drawing on a wealth of experience and knowledge that she has cultivated through participation in such events as committee meetings about the Women's Empowerment Principles (WEPs). This achievement was highly acclaimed and led to the receipt of this award.

Note: The SCEJ Award for Outstanding Women's Activity honors individuals who have accomplished outstanding technical achievements in chemical engineering or chemistry-related industries, or who have delivered excellent performance in chemical engineering research, and contributed to building systems and an environment for the promotion of gender equality.

https://www.sumitomo-chem.co.jp/english/news/detail/20210308e.html

Human Resources Management

<Work-Life Balance>

Basic Policy

We aim to ensure that each employee feels greater motivation and a deeper sense of fulfillment while promoting a better work-life balance. In addition, we are working to foster a workplace environment where it is easy to work, mainly by introducing a flextime program and establishing daycare facilities at worksites.

Under these policies and in line with the Sumika Work-Life Balance Declaration within the 'Take Action' Declaration, the Company has defined the following five action items and is promoting various measures to implement them.

Sumika Work-Life Balance Declaration
Five Action Items

① **Stop long working hours!**
As a general rule, we aim to eliminate long working hours (on average over 45 hours/month worked after regular hours and on weekends and holidays).

② **Create an environment that makes it easy for employees to fully utilize work-life balance systems.**
We are working to encourage employees to fully utilize systems for childcare, caregiving, illness treatment, and more, and to create an environment that makes it easy to use those systems.

③ **Encourage employees to take at least 80% of paid leave and facilitate effective use of flex time system.**
We aim for employees to take at least 80% of paid leave. We also facilitate the effective use of the flextime system for afternoon work (no core time).

④ **Prohibit business instructions that would require holiday or late-night work.**
As a general rule, we do not delegate or carry out tasks that are predicated on working late-night overtime or on days off, such as an email asking for a reply on a day off.

⑤ **Cooperative framework in the workplace.**
Supervisors manage subordinates in a way that burdens are not distributed unevenly. Employees carry out tasks with a genuine feeling of cooperation and support in close communication with each other.

Management System

For management systems for work-life balance, refer to the management systems for promoting diversity and inclusion.

P.175 Diversity and Inclusion: Management System

Targets and Results / Examples of Initiatives

Formulation of the Action Plan to Reform Workstyles

As an action plan to reform workstyles, Sumitomo Chemical established key performance indicators (KPIs) along with three main targets: ① correcting long working hours, ② encouraging employees to take paid annual leave, and ③ promoting flexible workstyles. We then formulated out the following measures to achieve these targets.

Human Resources Management

Action Plan to Reform Workstyles

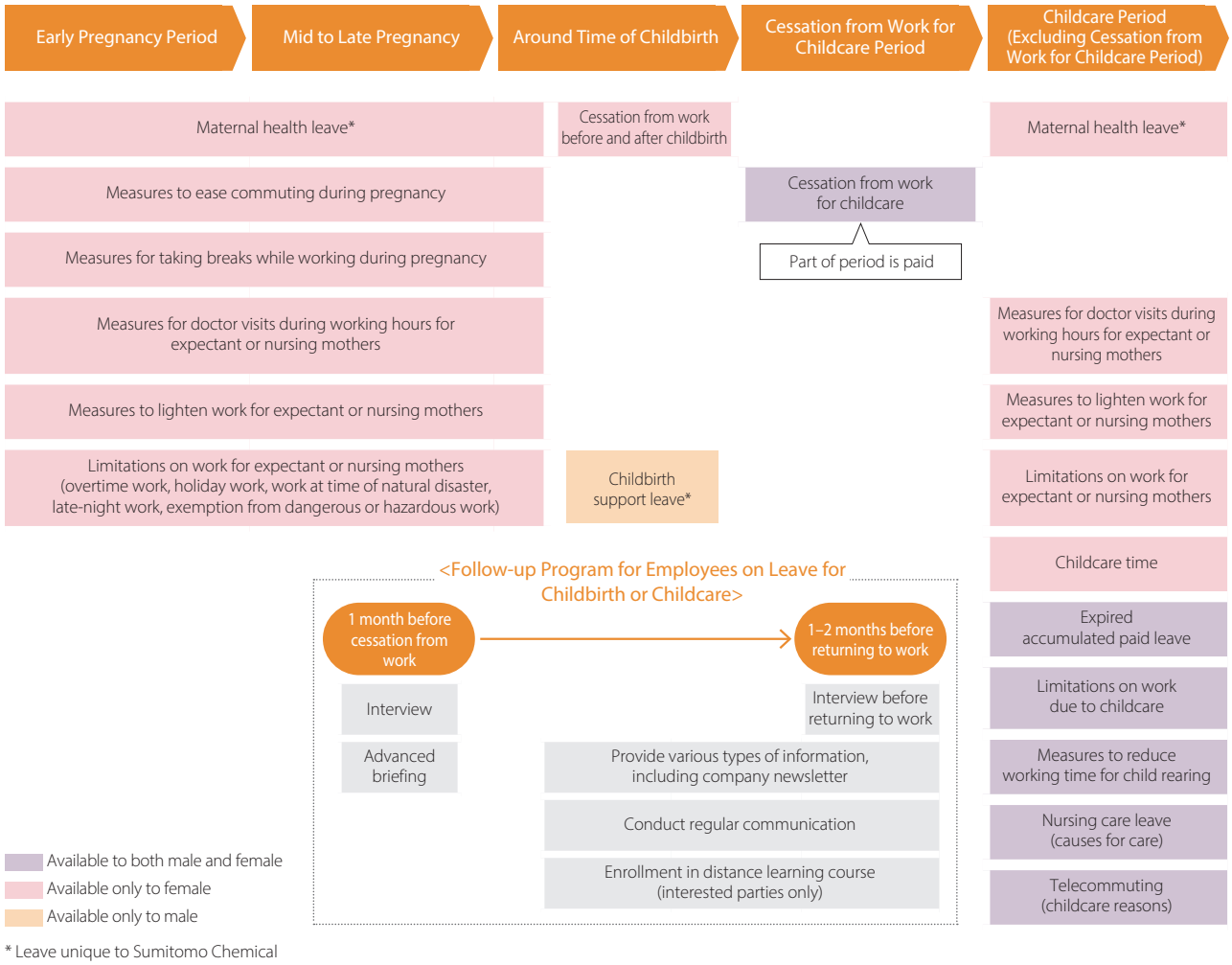
	KPI	Measures
① Correct Long Working Hours	Aim to eliminate long working hours as a general rule (on average over 45 hours/month worked after regular hours and on weekends and holidays) from fiscal 2020.	**A. Employ the Internet of Things (IoT) to reform workstyles and revolutionize operations** Digitize plant-related operational processes and data, make office operations more efficient by actively using cloud sourcing and the latest technologies (including AI and sensors), etc. **B. Improve productivity by promoting a better work-life balance** Regularly convene the Labor-Management Committee consisting of labor and management representatives, take various measures to improve productivity in each workplace, hold lectures to promote better work-life balance, etc. **C. Promote initiatives for the "Sumika 'Take Action' Declaration"** We declared details related to work-life balance in the "Sumika 'Take Action' Declaration," which is an initiative in which we proclaim those values and views that are of importance to us as a company. In addition, we have positioned the elimination of long working hours as an action item.
② Encourage Employees to Take Paid Annual Leave	Realize an average of 80% of paid leave taken annually from fiscal 2020.	**A. Create an annual leave chart that covers several fiscal years** Every year create an annual leave chart that covers several fiscal years to make it easier to plan far into the future and help encourage employees to take paid leave **B. Encourage employees to take paid leave** • Encourage employees to take paid leave during Golden Week and other similar periods • Encourage employees to create four-day weekends by adding days of paid leave to either side of weekends and promote taking time off in the September–November period • Encourage senior employees to take paid leave **C. Continue to systematically provide paid leave** Systematically provide five paid-leave days every year (does not include statutory leave) **D. Promote initiatives under the "Sumika 'Take Action' Declaration"** We declared details related to work-life balance in the "Sumika 'Take Action' Declaration," which is an initiative in which we proclaim those values and views that are of importance to us as a company. In addition, we have positioned the use of 80% of paid leave as an action item.
③ Promote Flexible Workstyles	By the end of 2022, achieve the following targets. • Realize at least 70% of male employees taking cessation from work for childcare. • Regarding the below questions in the employee awareness survey, achieve at least 80% affirmative responses for each question. (1) Are the programs and working environment at the Company conducive to easily working after giving birth, raising children, or caregiving? (2) Is the general consensus in your workplace that both men and women can easily take paid or unpaid leave for childcare or caregiving and use the reduced working-hour system?	**A. Issue PRs and raise awareness about programs** Continually issue PRs and raise awareness about various programs that enable employees to flexibly adjust for their individual needs, including those related to life events like childcare and caregiving. In addition, encourage male employees with newborns to take cessation from work for childcare. **B. Foster an environment that allows the realization of flexible workstyles** By taking the measures outlined above in the action plan for ① Correct Long Working Hours, create an environment where it is easy to improve the productivity of employees and their workplaces and to realize flexible workstyles. **C. Promote initiatives under the "Sumika 'Take Action' Declaration"** We declared details related to work-life balance, diversity and inclusion in the "Sumika 'Take Action' Declaration," which is an initiative in which we proclaim those values and views that are of importance to us as a company. In addition, we have as an action item creating an environment that makes it easy for employees to fully utilize work-life balance systems, facilitating the effective use of the flex time system, establishing a cooperative framework in the workplace, and eliminating unconscious bias (including the assumption of fixed roles for men and women).

Sumitomo Chemical is taking the following actions with regard to the aforementioned target of ① Correct Long Working Hours.

(1)	From April 2017, we reduced the upper limit on overtime work to 80 hours per month and 720 hours per year.
(2)	Regarding the occupational physician interviews for people working long hours mandated by the Industrial Safety and Health Act, we established and are enforcing our own guidelines, which are harsher than the law, requiring interviews for people who work 70 hours or more of overtime in one month or 150 hours or more in a three-month period
(3)	From March 2018, we established an even more appropriate work management system by displaying computer logon and logoff times when reporting work hours in addition to the existing system for reporting work hours.

Human Resources Management

Systems and Measures for Better Work-Life Balance and for Use at Time of Pregnancy, Childbirth and Childcare



* Leave unique to Sumitomo Chemical

Human Resources Management

★: Assured by an independent assurance provider

Results of Systems for Work-Life Balance (Sumitomo Chemical)

(No. of people)

System/Measure			FY2018	FY2019	FY2020
Childcare/Nursing Support	Cessation from work for childcare	Total	336	420	476★
		Male	233	315	374★
		Female	103	105	102★
		Percentage of men*1	37.6	44.7	63.8
	Cessation from work for nursing care		1	2	4
	Nursing care leave		180	181	133
	Childbirth support leave		188	194	171
	Maternal health leave		52	55	41
	Expired accumulated paid leave*2		110	132	136
	Reduced working hours system		162	152	159
	Telecommuting*3		28	30	40
	Reemployment system*4		10	7	7
	In-house childcare facilities*5		171(123)	156(113)	136(101)
	Mutual aid association support money for childcare*6		242	241	112
Other	Suspension from work for special reasons for employees accompanying spouses going on overseas transfer*7		6	4	2
	Employee awareness survey*8		—	Conduct	—

Note: Employee numbers do not include temporary employees, part-time staff, or dispatch employees.

*1 The percentage is the number of people who have taken cessation from work for childcare divided by the number of male employees who have had children in the relevant period.
*2 Only for childcare and nursing care
*3 Number certified in each fiscal year
*4 Number registered as of the end of each fiscal year
*5 Number of users on April 1 each fiscal year. Includes users other than Sumitomo Chemical. The figures in parentheses are the number of Sumitomo Chemical users.
*6 Aggregate number of people at end of each fiscal year
*7 Number of applicants as of the end of each fiscal year
*8 Conducted once every three years

Employee Awareness Survey

Every three years, Sumitomo Chemical conducts an employee awareness survey that covers work, the working environment, career values, diversity and inclusion, and work-life balance with the principle aim of grasping the current situation and uncovering issues in order to enhance work environments and create more satisfying workplaces. Using the results of this survey, we promote measures to further increase people's desire to work at the Company.

FY2019 Employee Awareness Survey

Total of five points. Four points and above is a high rating, and many employees were affirmative in their awareness.

Item	Average employee rating
I am satisfied with working at the Company.	4.0
I am motivated to grow on my own using digital technologies.	4.0
The workplace culture allows people to easily go home.	4.1
The working environment is conducive to easily working while raising children or caregiving.*	4.2
Going forward, I want to work at the Company.	4.3

* Average rating by women who have children of elementary school age or younger

Daycare Facilities at Worksites

With support from the Company, we encourage the use of these facilities by setting a daycare fee that is lower than those of the municipalities. To make it easy for parents to accompany children to the facilities, we consider the commuting method depending on the location, such as allowing employees to commute using their private vehicles in special cases.

Human Resources Management

Support for Childbirth and Childcare

For employees to achieve work-life balance, Sumitomo Chemical operates generous systems, for example, it offers a system that allows for a period far longer than is legally required for cessation from work to provide childcare and a system that offers male employees leave to support their spouses during childbirth.

In addition, to support employees' balance of childcare and work, the health insurance association and mutual aid association provide various forms of monetary support for childbirth and childcare, subsidies for home aides, and other help.

Kurumin Mark

In September 2015, Sumitomo Chemical was certified for the third time as a company that supports childcare and received the next-generation Kurumin certification mark. Under this system, business operators who successfully carry out action plans based on the Act on Advancement of Measures to Support Raising Next-Generation Children and meet all the certification criteria receive certification from the Minister of Health, Labour and Welfare.

This certification was in recognition of our third round of initiatives covering the period between June 2012 and March 2015. The first certification covered the period between April 2005 and May 2007, and the second one covered the period between June 2007 and May 2012. The Company was commended for its initiatives to help promote work-life balance, such as expanding in-house childcare facilities and encouraging employees to take various forms of leave. (We are currently applying for our fourth certification.)

Next-generation Kurumin certification mark

Looking Ahead

Regarding the KPIs set so that the Sumitomo Chemical Group works together to promote diversity and inclusion and work-life balance, we will check progress made under the Corporate Business Plan and actively work to achieve the goals laid out.

Human Resources Management

<Healthcare>

Basic Policy

In order to ensure that employees can live healthy and active lives both physically and mentally, Sumitomo Chemical is promoting a variety of health support programs under the company-wide supervision of industrial physicians, including health guidance by medical staff.

In addition, the Company and its health insurance association present the Sumika Healthy Employee Declaration as the fourth "Sumika 'Take Action' Declaration." We have put forward the slogan of "Good health is a prerequisite for good work and a good life!," and we are working on specific action plans in five areas: food, exercise, sleep, quitting smoking, and mental health.

Sumika Healthy Employee Declaration
Five Action Items

⑯ Revise eating habits, achieve a healthy weight.
To prevent lifestyle diseases, all employees should maintain an appropriate BMI (18.5–24.9).
- 100% of employees received specified health guidance and cured their metabolic syndrome through careful guidance
- Introduced dishes full of vegetables at the employee cafeteria

⑰ Exercise a little and stay healthy forever!
Use down time to exercise regularly every day.
Goal: 10,000 steps per day
- Establish or enhance training facilities at each worksite
- Everyone should work out together after lunch.

⑱ High performance depends on quality sleep.
Improve the quality of your sleep to ensure energy for the next day.
- Implementing sleep improvement programs.
- Thoroughly practice the dos and don'ts of sleep improvement

⑲ Smoking does nothing but harm.
We ban smoking for the health of ourselves and those around us.
- As a general rule, smoking is banned during work hours and on the Company's premises (including on business trips).
- Participate in programs to support smoking cessation

⑳ Don't forget to take care of your mental health.
Fostering fuller workplace communication and eliminating stress in your own way
- Supervisors and subordinates should directly communicate with each other at least once a day
- Practice mindfulness 10 minutes per day

Management System

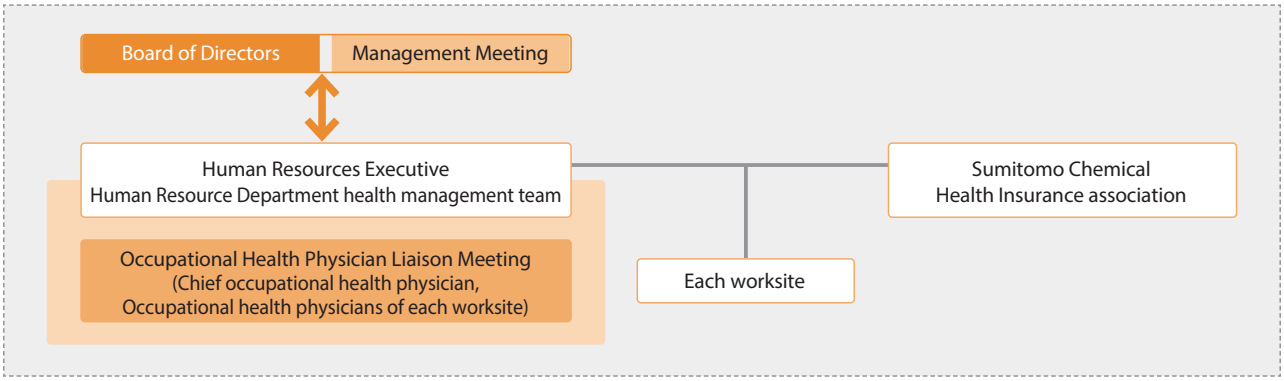
The Board of Directors and the Management Meeting seize opportunities to receive reports and hold discussions on the status of employee health and the direction of initiatives addressing various issues. At the annual occupational health physician liaison meeting, the chief occupational health physician and the occupational health physicians of each worksite hold discussions and solicit opinions when deciding on Company-wide measures and targets. In addition, the occupational health physicians, medical staff (public health nurses, registered nurses, etc.), and health managers of each worksite work together to implement measures to maintain and promote health in collaboration with the Company and its health insurance association.

Furthermore, at Health Manager Meetings, the progress of Company-wide measures at each worksite and the measures taken at each worksite are shared and the results are assessed. The Health Management Promotion Committee shares financial information, including that related to medical fees and the healthcare business of the health insurance association.

As for Group companies, through liaison meetings attended by executive offices in charge of human resources at Group companies, we circulate such information as key points regarding legal amendments related to health management and raise employee awareness to ensure appropriate responses.

Human Resources Management

■ Promotion System for Health Maintenance and Promotion Measures



Targets and Results / Examples of Initiatives

To maintain the health of employees' bodies and minds, we are taking the following initiatives.

Physical Health

Regarding employees of Group companies in Japan, we are working to improve their health by enrolling them in health insurance based on the Health Insurance Act. In addition, we are appropriately implementing regular health checkups based on the Occupational Safety and Health Act.

<Initiatives Aligned with the Health Insurance Association>

(1) Specified health checkups and specified health guidance
- We expanded the eligible age range for specified health guidance to include all ages as we work to prevent lifestyle diseases with the goal of ensuring 100% of employees receive such guidance.
- We analyze results and questionnaire responses to study employee health.

(2) Smoking cessation support programs
- We have banned smoking as a general rule during work hours and on the Company's premises, and are supporting employees' smoking cessation efforts through specialized programs in conjunction with the Group's health insurance association.

<Initiatives Promoted by Sumitomo Chemical (Non-Consolidated)>

(1) Sleep improvement programs
- We introduced programs to improve sleep quality under the guidance of experts who use sleep monitoring devices to observe employees while sleeping and apps to visualize their sleeping issues. Ensuring employees get better sleep leads to improved health outcomes and helps employees give their best performance.

(2) Overseas health tours
- The Company dispatches its chief occupational health physician to provide overseas medical counseling and evaluate medical service environments to support employees working overseas and their accompanying families.
- In fiscal 2020, medical counseling and environmental evaluations were implemented online in coordination with local staff due to overseas travel restrictions imposed in consideration of the COVID-19 pandemic.

Human Resources Management

Mental Health

We have been cooperating with medical staff to properly implement the stress checks required by law for companies. We are working to prevent mental health problems by encouraging employees to take care of themselves and encouraging superiors to look after their subordinates. Employees are able to receive counseling from the Company's medical staff.

We are involved in employees' mental healthcare. We conduct group analyses of stress checks and analyze trends at worksites and workplaces to provide feedback to workplaces and set themes for lectures and other meetings.

In addition, during the new employee training and the grade-based promotion training, we hold appropriate mental healthcare training for participants eligible for training encouraging employees to take care of themselves and encouraging superiors to look after their subordinates. In addition, we created lecture videos on mindfulness, which is said to help build good personal relationships and enhance productivity, and released them in-house as part of our efforts to improve the mental healthcare environment.

Health & Productivity Management Outstanding Organization (White 500)

After analyzing medical examination results and medical interview responses, we set quantifiable targets, such as improving the rate of positive findings, and take various measures to maintain and promote health.

In addition, Sumitomo Chemical was certified as a Health & Productivity Management Outstanding Organization (White 500) for the fourth year in a row. The Certified Health & Productivity Management Outstanding Organization Recognition Program was created in 2016 by the Ministry of the Economy, Trade and Industry. The program recognizes companies that practice outstanding health and productivity management based on the health promotion efforts of the Japan Health Council. The Company's various measures and systems related to health and productivity management received a positive evaluation.

2021
健康経営優良法人
Health and productivity
ホワイト500

Looking Ahead

Sumitomo Chemical will continue creating and implementing various initiatives to maintain and promote the health of employees in line with the Sumika Healthy Employee Declaration. In addition, we will assess the results of these initiatives, make improvements, and implement PDCA cycles in our continuing efforts to develop more effective measures and support employee health.

COVID-19 Infection Prevention Measures

Based on measures taken by the government and demands from municipalities, Sumitomo Chemical comprehensively considered the local infection risks, the varying commuting situations, the impact on operations, and other factors and came to the conclusion that each worksite should respond in line with their own judgment.

Furthermore, at the Tokyo Headquarters, we actively utilize telecommuting. If employees come into the office, the general rule is that they should utilize the flextime program (no core time) so that their entries and exits are staggered. In addition, we are taking measures to prevent the spread of COVID-19 among employees in part by requiring employees to wear masks when commuting and working and encouraging moving meetings online.

Sumitomo Chemical Group's Initiatives against the New Coronavirus (COVID-19)

https://www.sumitomo-chem.co.jp/english/company/covid19_response/

Occupational Safety and Health / Industrial Safety and Disaster Prevention

Basic Stance

Reflecting the core principle of "Making safety our first priority," Sumitomo Chemical has formulated five fundamental and personal safety principles that each employee is expected to follow as well as guidelines based on the core principle. All Sumitomo Chemical employees and all involved parties, including partner companies, are thus united in promoting safety activities with the goal of eliminating all accidents. Furthermore, the Company undertakes stringent process risk assessments of the entire product life cycle (development, manufacture, distribution, use, disposal), and takes appropriate safety measures based on its evaluation of risks. The aim of these efforts is to prevent unforeseen industrial accidents, including fires, explosions, and the leakage of hazardous substances; to minimize damage in the event of a natural disaster such as a major earthquake; and to secure the safety and peace of mind of employees and local communities.

Sumitomo Chemical has acquired OSHMS* certification at its worksites. In addition, the Company implements PDCA cycles that support a host of measures on the path to realizing improvements based on risk assessments. These safety-related measures and their results are reviewed at the end of each fiscal year by the Responsible Care Committee, which is headed by the President. The reviews ensure a continuous connection to future fiscal years' cycles, thereby strengthening safety and health activities that prevent accidents.

* By introducing and deploying ISO (International Organization for Standardization) 45001 and JISHA (Japan Industrial Safety and Health Association) OSHMS (Occupational Health and Safety Assessment Series) Standards equivalent to OHSAS 18001, the Company conducts sound corporate management and risk management from the perspective of occupational safety and health.

Core Principle: Making Safety Our First Priority

Raison D'être for the Core Principle

1. Line management is fundamental to Safety and Health.
2. Each person is responsible for Safety and Health.
3. Sumitomo Chemical is united with partner companies on Safety and Health.

Five Fundamental and Personal Safety Principles that Each Employee is Expected to Follow.

- I will give safety and health the top priority in every aspect of business.
- I will identify and resolve safety and health issues at the source.
- I will comply with rules and instructions.
- I will act with safety in mind 24 hours a day, not just during working hours.
- I will cooperate with all involved parties, including partner companies, to ensure safety and health.

Management System

The president serves as the chief coordinator and the executive officer in charge of Responsible Care serves as the coordinator of the Safety Group of the Responsible Care Department. This group is responsible for matters related to safety, health, industrial safety, and disaster prevention of the Company as a whole and supports the safety, health, industrial safety, and disaster prevention activities of Group companies. To assess the safety, health, and industrial safety management status and to consider measures for improvement, the safety, health, industrial safety, and disaster prevention departments of each worksite and Group company regularly meet and exchange information. In these and other ways, relevant departments work together to steadily enhance the level of safety, health, industrial safety, and disaster prevention activities.

In addition, Safety and Health Committees comprising labor and management representatives are convened every month at each worksite. The committees investigate and deliberate matters related to safety and health risks to all employees at worksites and promotes specific measures in unison with labor and management.

P.90 Organization of Responsible Care

Occupational Safety and Health / Industrial Safety and Disaster Prevention

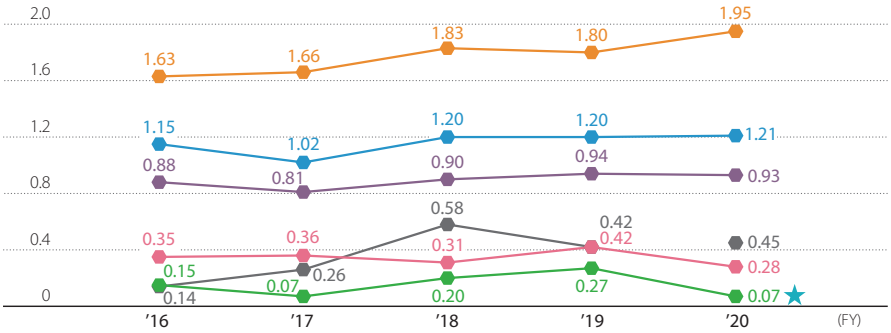
★: Assured by an independent assurance provider

Goals and Results

<Occupational Safety and Health>

The Sumitomo Chemical Group*1 targets a frequency rate of lost-workday injuries*2 of under 0.1, but its rate was 0.45 in fiscal 2020, or a total of 39 injuries, failing to meet the target. Moreover, while the Group has set a goal of zero severe accidents,*3 a contractor at a Sumitomo Chemical facility recorded one in fiscal 2020, the same number as the previous fiscal year, failing to meet the target. On a non-consolidated basis, Sumitomo Chemical recorded a frequency rate of 0.07 (lost-workday injuries: 1) and a severity rate of 0.001 in fiscal 2020, while contractors and other affiliate companies recorded a frequency rate of 0.52 (lost-workday injuries: 5) and a severity rate of 0.43.

■ Frequency Rate of Lost-workday Injuries



All industries — Manufacturing industry — Chemical industry — Japan Chemical Industry Association — Sumitomo Chemical (all worksites) — Sumitomo Chemical Group*1

■ Lost-workday Injuries (Sumitomo Chemical Group*1)

	FY2016	FY2017	FY2018	FY2019	FY2020
Number of lost-workday injuries	9	17	35	27	39

<Industrial Safety and Disaster Prevention>

The Sumitomo Chemical Group*4 achieved the target of "no severe industrial accidents"*5 in fiscal 2020 (zero severe industrial accidents in the six consecutive years since fiscal 2015). We see this as evidence of the success of our straightforward daily activities on the frontlines as well as the steady enhancement of our industrial safety management level.

However, there was one industrial accident, which is a minor accident whose scale does not reach that of a severe industrial accident, in fiscal 2020. We will work to enhance industrial safety management and quickly share the causes of the minor industrial accident and the lessons learned across the entire Sumitomo Chemical Group.

■ Severe Industrial Accidents (Sumitomo Chemical Group*4)

	FY2016	FY2017	FY2018	FY2019	FY2020
Number of severe industrial accidents	0	0	0	0	0

*1 The Sumitomo Chemical Group as defined for occupational safety and health:
Until FY2019:
Sumitomo Chemical (including contractors) and consolidated Group companies in Japan and overseas.
From FY2020 onward:
Sumitomo Chemical (including contractors) and consolidated subsidiaries in Japan and overseas.

*2 Scope of frequency rate:
Employees of Sumitomo Chemical (including contractors) and consolidated subsidiaries (excluding one overseas consolidated subsidiary), including temporary employees, part-time staff, and dispatch employees.
Calculation of hours worked:
For the number of hours worked by consolidated Group subsidiary employees, the Company uses an estimate reached by multiplying the number of employees by 1,928 hours (Sumitomo Chemical's standard number of hours worked annually). (For the number of hours worked by Sumitomo Chemical employees (non-consolidated) and contractors, the Company uses the actual number of hours recorded.)

*3 Severe accidents are defined as those that result in a fatality or those that result in severe lost-workday injuries, including blindness and loss of a limb.

*4 The Sumitomo Chemical Group as defined for industrial safety and disaster prevention:
Sumitomo Chemical (including contractors) and consolidated Group companies in Japan and overseas.

*5 "Severe industrial accidents" refers to any of the following workplace incidents:
- Accidents that cause injuries to local residents requiring outpatient/hospital treatment
- Accidents that result in lost-workday injuries to workers on the site
- Accidents that result in equipment and facility damage exceeding ¥10 million

Occupational Safety and Health / Industrial Safety and Disaster Prevention

Examples of Initiatives

<Occupational Safety and Health>

Sumitomo Chemical thoroughly investigates the causes of each accident and works to prevent accidents by taking such measures as ensuring strict adherence to safety rules, providing hazard prediction training, also known as Kiken Yochi Training (KYT), and sharing accident information. In addition, we are working to raise safety awareness among construction partner companies that enter our Works by distributing pocket-size booklets and entrance certificates that feature the ground rules and core principles of safety as we promote our initiative of "Making safety our first priority."

Ensuring Thorough Compliance with the Sumitomo Chemical Group's Basic Safety Rules (Ground Rules)

In light of trends in the causes of accidents, the Group has established the following ground rules and is working to ingrain safe behavior.

1. Think Before You Act!
2. Help each other to be more aware of unsafe actions
3. Do not place hands in or around areas of working machinery/equipment

Improving Hazard Prediction Abilities

We are working to improve employees' hazard prevention ability—their ability to perceive and avoid danger—through, for example, behavior-based safety training and workplace discussions using illustrations.

Sharing and Using Accident Data

The Group shares information about all accidents mainly for use in safety education and comprehensive on-site investigations. When an accident occurs, we conduct a thorough examination of the causes and organize studies on how to prevent recurrences through on-site inspections with the top management of the affected workplace and safety managers.

Awards for Safety

Safety awards are given to workplaces that achieve zero lost-workday injuries. The President's Award for workplace safety is presented to workplaces with both a solid safety track record and good practices for safety and health, which could be an example to other workplaces. The President's Award was given to eight workplaces in fiscal 2020.

Safety Promotion through In-house Magazine, Slogan and Poster

In our in-house magazine entitled "Raising the Level of Safety!" (entitled "Learn through Manga! Promoting a culture of safety" since fiscal 2019), we have introduced examples of accidents that tend to happen at work and their preventive measures in a series of articles on enhancing safety since fiscal 2013. We also collect ideas each year for a slogan and a poster for safety and health, and make a poster using the best ideas and display it at each workplace to raise safety awareness.

Preventing Severe Accidents in Subcontracted Operations and Construction Operations

Sumitomo Chemical is taking action across the Company to ensure the safety and health of all involved parties, including partner companies. For example, one of the key initiatives outlined in the "Fiscal 2019 to Fiscal 2021 Medium-Term Plan for Responsible Care Activities" and "Fiscal 2021 Annual Responsible Care Policy" is to respond to changes in employment structure, work to establish a foundation of safety ensure work safety and health, and promote measures to prevent severe accidents in subcontracted operations and construction operations. We also conduct thorough risk assessments.

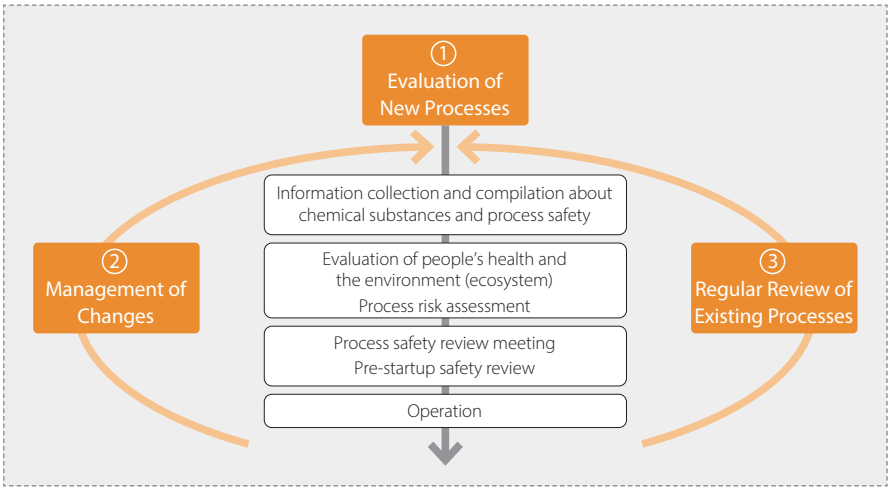
Occupational Safety and Health / Industrial Safety and Disaster Prevention

<Industrial Safety and Disaster Prevention>

Risk Management Initiatives

Sumitomo Chemical manages risks related mainly to process safety, chemical (raw materials, products) safety, and occupational safety and health at each stage from new chemical process R&D through the commercialization process to plant design, construction, operation, maintenance, and even demolition. The items and procedures essential to risk management are specifically outlined in the Development and Commercialization Regulations, the Safety Management Guidelines, the Chemical Safety Management Regulations, and other similar documents that provide the standards for the Company. In addition, we introduced this system to major consolidated subsidiaries as part of efforts to enhance safety management across the entire Group.

■ Risk Management (Three Routes)



① Evaluation of New Processes

The Process Safety Review Meeting (levels 1 to 5) convenes at every step, from R&D through to industrial-scale production. These meetings are held to identify risks related mainly to process safety and chemical safety, to review risk assessment results as well as to determine whether safety countermeasures are appropriate. This mechanism ensures that processes do not proceed to the next step unless adequate safety has been confirmed. Furthermore, before starting operations, the meeting conducts safety reviews to assess responses to risks related to occupational safety and health. For example, the meeting confirms the absence of problems in the operational environment (including temperature, noise, vibration, etc.), if safety signs are appropriately displayed, if necessary personal protective equipment and ample equipment and materials for emergency have been secured, and whether there is sufficient preparation of and education regarding instruction manuals.

② Management of Changes

When certain changes are made to, for example, improve plant facilities or modify operating conditions, the Company conducts all necessary safety assessments before such changes are made to confirm whether there are new risks related mainly to process safety, chemical safety, and occupational safety and health following the changes and to, as needed, consider additional safety measures.

③ Regular Review of Existing Processes

Even when there is no change in the process, Sumitomo Chemical conducts regular process hazard reviews (no more than every five years, as a general rule) to catch up with the latest information on industrial safety technologies and to check whether there will be a significant impact from the long-term use of a plant. In addition, in our internal audits conducted every year for each workplace, we check whether or not safety management systems are functioning appropriately.

Occupational Safety and Health / Industrial Safety and Disaster Prevention

Preparation for Large-Scale Natural Disasters

Sumitomo Chemical drew up a basic plan on earthquake countermeasures in 2004, taking the initiative to improve the earthquake resistance features of equipment that was especially susceptible to the risk of damage. Furthermore, in accordance with recent directives by government authorities to improve the seismic adequacy of existing facilities, we made a plan to obtain required earthquake-resistant features of critical high-pressure gas equipment and are carrying out reinforcements and reconstruction in line with the plan. Before carrying out this work, we took measures to reduce risk and ensure safety, such as reducing the volume of gas held in equipment in order to decrease its weight and meet the earthquake resistance criteria.

In addition, as natural disasters continue to grow more extreme, including the typhoons and torrential rains seen in recent years, we continually review the current status of our safety measures to ensure they are adequate and take measures aimed at securing facilities and personnel as necessary. Furthermore, we confirmed that even in the event of flooding inside a Sumitomo Chemical plant due to a typhoon or torrential rain, the risk of the following is low: a loss of power to the plant's cooling facilities or water-reactive substances inside the warehouse coming into contact with water causing large-scale fires and explosions that could cause trouble for neighboring residents.

Measures to Address Intensifying Downpours (Osaka Works)

To prevent the flood damage from intensifying downpours, we have been boosting the site's ability to expel rainwater in line with Osaka City's measures to mitigate damage from localized downpours. Moreover, we will continue to elevate some critical equipment that serves as the backbone of production, such as electric converters. In this and other ways, we will promote measures to prevent and mitigate damage from natural disasters as we continue enhancing the agility and resilience of the Works going forward.

Occupational Safety and Health / Industrial Safety and Disaster Prevention Education and Drills

Sumitomo Chemical has a variety of industrial safety educational programs that reflect the operational roles of employees throughout the Company. The programs are aimed at bolstering the ability of employees to acquire knowledge and skills in order to ensure process safety. In addition, we provide safety education to Group companies in Japan suited to each company's needs.

■ FY2020 Main Safety Education Programs (Companywide Education)

Name	Type	Purpose	Boundary	Participants
In-house Safety Management System Education	e-learning	Fostering a deep understanding of the basic rules of safety management (the "Safety Management Guidelines")	Sumitomo Chemical (all worksites)	623
Disaster Prevention Theory	Group training	Promoting the acquisition of basic knowledge regarding safety and disaster prevention for fires, explosions, reaction hazards, static electricity, etc.	Sumitomo Chemical (Works, research laboratories)	102
			Group companies in Japan	5
Fire and Explosion Training	Group training and self-study	Promoting the acquisition of knowledge to prevent accidents and perceive hidden dangers in the workplace through hands-on training related to fires and explosions	Sumitomo Chemical (Works, research laboratories)	99
			Group companies in Japan	22
Company-wide Safety Education	e-learning	Training that covers the latest topics each fiscal year (The training involved process safety technologies, conducting HAZOPs, and static electricity safety.)	Sumitomo Chemical (Works, research laboratories)	846
			Group companies and partner companies within Sumitomo Chemical (Works, research laboratories)	47
HAZOP* Training	e-learning	Training personnel to learn the basics of HAZOP and to be able to conduct HAZOP	Sumitomo Chemical (Works, research laboratories)	25
			Group companies in Japan	0
Safety Engineer Training Course	Group training and self-study	Training personnel who have central roles in uncovering process hazard sources, carrying out appropriate risk assessments, crafting safety measures, and effectively reducing risks	Sumitomo Chemical (Works)	15

* HAZOP:
A method of assessing process hazards that was developed with the aim of uncovering all latent hazards in chemical processes, assessing those impacts and results, and considering necessary safety measures.

Occupational Safety and Health / Industrial Safety and Disaster Prevention

At each of their worksites, Sumitomo Chemical and Group companies conduct education when necessary regarding operational details, substances handled, and the setup of protective equipment for operators who need to consider occupational health and safety in situations such as operations in high places, operations in hazardous places with poor oxygen, operations in high or low temperature environments, operations in high-noise environments, and operations handling specified chemical substances and organic solvents. In addition, special health assessments are made, operational environments are monitored, and workplace patrols are regularly conducted by occupational physicians and health inspectors as we strive to upgrade and maintain operational environments.

Examples of Safety Education and Drills at Sumitomo Chemical Worksites

Safety Education Examples	Safety and health training for new employees, newly appointed supervisors, and newly appointed managers; briefings on laws and regulations (Industrial Safety and Health Act, High Pressure Gas Safety Act, Fire Service Act, etc.), health management system education, safety and health seminars (protective equipment, etc.), hazard experience training (exposure to liquids, squeezing, falling, etc., includes VR training materials.), hazard prediction training, also known as Kiken Yochi Training (KYT), training in accident analysis methods (why and what analysis, etc.) safety and health education in officers, traffic safety education, etc.
Safety Drill Examples	Petrochemical complex integrated emergency response drills (municipalities, companies in petrochemical complex districts), earthquake and tsunami evacuation drills, joint firefighting drills with specialized firefighting teams and workplace firefighting teams, drills using fire extinguishers and fire hydrants, drills on lifesaving procedures (AEDs, etc.), drills on emergency contacts at night and on holidays, etc.

In addition, for everyone at partner companies conducting operations within our worksites, we provide safety education for entering worksites (basic policy on safety, basic rules inside worksites, etc.), construction supervisor training (supervisor obligations, risk assessments, etc.), hazard experience training, and more.

Industrial Safety Action Plan

Industry organizations came together with the Japan Petrochemical Industry Association and drew up an industrial safety action plan in July 2013 in a bid to step up efforts aimed at promoting industrial safety. Here we introduce the Company's initiatives based on the action plan.

(1) Commitment by Top Management to Industrial Safety

- Sumitomo Chemical has identified efforts to ensure full and strict compliance and maintain safe and stable operations as one of the Group's priority management issues under its Corporate Business Plan.
- The president issues a safety week message to all employees and Group companies in Japan and overseas to coincide with National Safety Week, which begins on July 1 each year.
- We have held the President's Awards for workplace safety on a continuous basis since fiscal 2012.

(2) Setting Industrial Safety Targets

- Each year, Sumitomo Chemical sets targets for a variety of key parameters, including the elimination of all accidents resulting in lost workdays as well as all severe industrial accidents. The Company engages in a broad spectrum of activities aimed at achieving these targets.

(3) Drawing Up an Action Plan to Secure Industrial Safety

- Sumitomo Chemical pursues activities aimed at thoroughly identifying industrial safety risks that encompass regular and irregular operations.

(4) Checking and Evaluating Progress toward Achieving Targets and Implementing Measures

- The Responsible Care Committee reviews progress toward the achievement of targets and the implementation of measures. Findings under this review are reflected in the plan for the next fiscal year.

(5) Initiatives Aimed at Promoting Voluntary Safety Activities

- The Sumitomo Chemical Group established the ground rules related to safety and strives to foster a culture of safety.
- Sumitomo Chemical designates one day each month as a "safety day" in an effort to continuously focus the attention of the entire Group on the importance of industrial safety.
- Academic experts conduct seminars and undertake an evaluation of safety assurance capabilities by the Process Safety Competency Center of Japan Society for Safety Engineering.

Occupational Safety and Health / Industrial Safety and Disaster Prevention

Logistics Initiatives

The Sumitomo Chemical Logistics Partnership Council was formed by Sumitomo Chemical and the logistics subcontractors (84 companies at 116 locations) for Sumitomo Chemical and its Group companies in Japan with the core principle of "Making Logistics Safety the First Priority." The Council maintains committees for Works in each area as well as for logistical centers (transport and storage) and marine transport-related operations nationwide. The Council is expanding the Logistics Department's Responsible Care activities.

In fiscal 2020, there was one lost-workday injury related to safety and health. Fortunately, the injury could not possibly have led to a severe accident, but we will continue striving to uncover risks and further enhance our safety and health management level going forward.

In addition, as for industrial safety and disaster prevention, we present our logistics subcontractors with transport standards to ensure safety, such as safety management rules related to land and marine transport of hazardous substances, and strictly ensure the rules are followed. We built a system where we can cooperate with logistics subcontractors even during critical times when an accident occurs to quickly arrive at the crisis site and address the situation. Moreover, we strengthened the system from July 2019 by joining the Hazardous Materials Emergency Response Service of the Maritime Disaster Prevention Center.

■ Lost-workday Injuries in Logistics

	FY2016	FY2017	FY2018	FY2019	FY2020
Number of cases	0	0	1	5	1

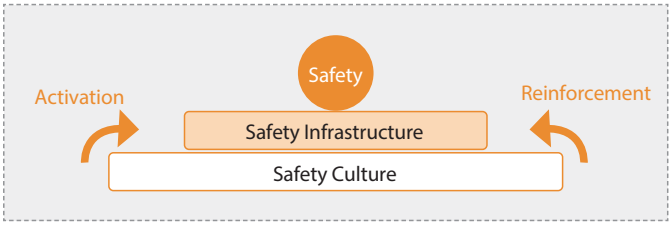
Note: Lost-workday accidents caused by logistics subcontractors on the premises of Sumitomo Chemical workplaces and lost-workday accidents caused by major logistics subcontractors outside the premises of Sumitomo Chemical workplaces.

Looking Ahead

Although activities to enhance a culture of safety have taken root, we currently have not entirely eliminated severe accidents, including those resulting in fatalities. To bring these accidents down to zero, we measure the level of the safety culture of each workplace and constantly strive to make improvements as we strive to foster a culture where safety is a given. In addition, we promote safety and health activities based on international standards (occupational safety management systems, machinery safety, etc.) and will continue adapting as we work toward realizing a society where people can choose from a diverse range of flexible working styles.

In addition, we will further strengthen our safety infrastructure by carefully managing our facilities and construction projects, providing advanced training for safety-related personnel, and introducing sophisticated risk assessment methods and cutting-edge technologies, including IoT, to bolster our employee safety and industrial safety management technologies. We will also reinforce our responses to new threats, such as intensifying natural disasters and terrorism.

■ Illustration of How We Ensure Safety through Safety Infrastructure and Safety Culture



Product Stewardship / Product Safety / Quality Assurance

Basic Stance

Product Stewardship at Sumitomo Chemical

Under its Corporate Policy on Responsible Care (Safety, Health, the Environment and Product Quality), the Sumitomo Chemical Group promotes product stewardship*1 and works to provide products and services that satisfy customers and can be used with peace of mind.

To achieve the 2020 goal*2 proposed at the World Summit on Sustainable Development (WSSD) in 2002, it is now time for chemical management to be risk-based in regard to laws and regulations as well as company efforts to promote product stewardship on a global basis. We expect this trend to continue moving forward.

Sumitomo Chemical promotes voluntary initiatives to enhance product stewardship, including the Global Product Strategy (GPS)*3/Japan Initiative of Product Stewardship (JIPS)*3 put forward by chemical industry associations, including the International Council of Chemical Associations (ICCA) and the Japan Chemical Industry Association. We actively participate in capacity-building activities, conduct risk assessments of our products, and perform risk-based management. We will continue responding to international trends.

*1 Product stewardship: The assessment of risks and protecting people's health and the environment from those risks throughout the product life cycle, which encompasses the entire supply chain from the development of chemical products to manufacture as well as sale, use/consumption, and disposal.
*2 2020 goal: Ensure that chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment.
*3 GPS/JIPS: Initiatives that call on companies to conduct risk assessments of their products and to engage in appropriate chemical management based on risk in order to minimize risks throughout the supply chain. Under GPS/JIPS, toxicological information on chemical products is disclosed to the general public, including customers.

Ensuring Thorough Compliance

Sumitomo Chemical Group conscientiously adheres to various laws and regulations related to the manufacture, import, export, and sale of goods. We are working to ensure thorough compliance throughout our entire globally expanding group of companies.

Quality Assurance

The Group maintains its commitment to further improving product quality and is continually enhancing its global quality assurance system, which is tailored to each product, because the Group values the trust it has earned from customers and society and aims to further improve customer satisfaction.

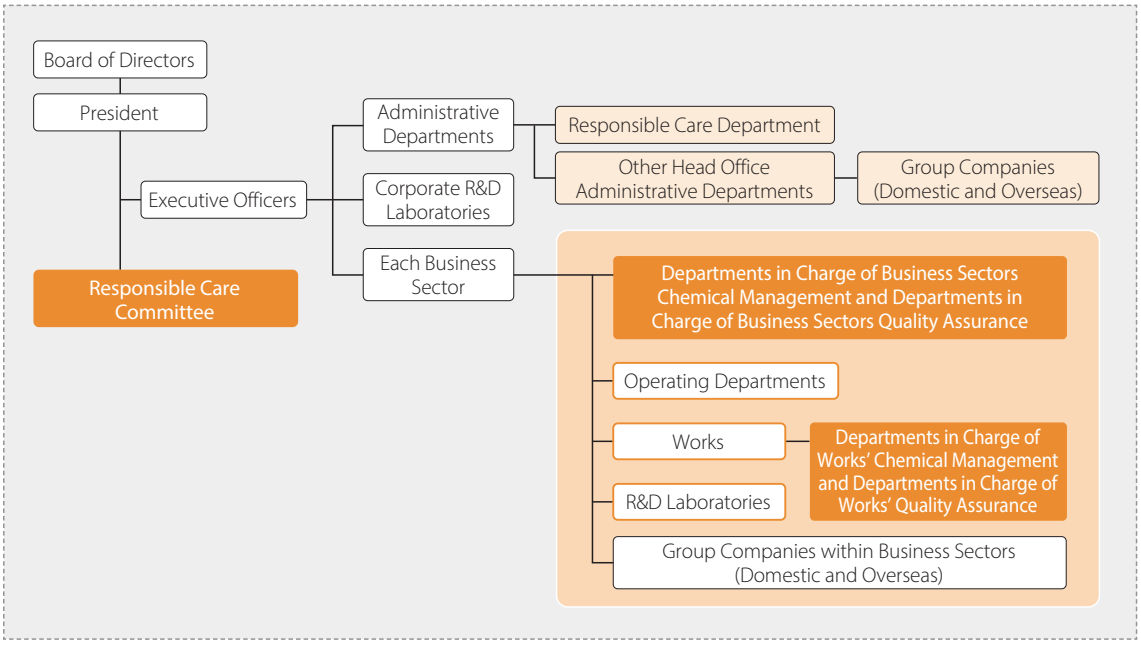
Product Stewardship / Product Safety / Quality Assurance

Management System

As the highest body for deliberating and approving Sumitomo Chemical's RC activities, the Responsible Care Committee is chaired by the president and comprises executive officers supervising the administrative departments and the four business sectors of the Company, and the General Manager of each Works. The Committee puts in place annual policies on RC activities, including chemical management and quality assurance activities; medium-term plans; and specific measures as they relate to Responsible Care. The Committee also analyzes and assesses the results of Responsible Care activities.

In addition, the Responsible Care Department oversees the Company's chemical management and quality assurance management as well as supports each Group company's chemical management and quality assurance management. Each department in charge of chemical management and quality assurance for Works and other departments promote appropriate chemical management and quality assurance management for their respective Works and department.

Organization of Chemical Management and Quality Assurance Activities



Product Stewardship / Product Safety / Quality Assurance

Goals and Results

For goals and results for Product Stewardship / Product Safety / Quality Assurance, refer to the section entitled, "Social Activity Goals and Results."

P.150 Product Stewardship / Product Safety / Quality Assurance

Examples of Initiatives

Risk Assessment and Management throughout the Entire Product Life Cycle

With regard to the chemicals (products) that it uses and sells, Sumitomo Chemical conducts risk assessments that span the entire product life cycle and all that could be affected, including internal operators, neighboring residents, the surrounding environment, customers, and consumers. The Company supports the Ministry of the Environment's Eco-First program, having pledged to systematically conduct appropriate risk assessments for its products manufactured or sold in annual amounts of one ton or more by fiscal 2020 in line with the voluntary initiatives (GPS/JIPS) adopted by chemical industry associations. The results of these assessments are compiled into a safety summary and made publicly available online, including on the Japan Chemical Industry Association (JCIA)'s portal website https://www.jcia-bigdr.jp/jcia-bigdr/en/material/icca_material_list. In fiscal 2020, 2 new summaries were released, bringing the total of publicly available safety summaries to date up to 59 (covering 58 substances).

In conducting chemical risk assessments, it is necessary to collect information regarding the hazards associated with each product and the levels of human and environmental exposure when products are handled. Based on the information needed for these risk assessments, we work to ensure that customers and employees handle chemical substances safely. To this end, we have created a collaborative framework centering on the Responsible Care Department and encompassing the frontlines of production and our internal research laboratories, which possess specialized technologies in risk assessment and safety engineering. To estimate exposure levels, the Company draws on projection models and expert insights in Japan and overseas and has developed its own simulation program. We also use the latest technology to efficiently conduct highly precise risk assessments. In line with our internal rules, during the development of new products, we collect data regarding risks and hazards for all handled substances before entering the production stage and survey and respond to all relevant laws and regulations. We will continue to conduct risk assessments based on the most up-to-date information available.

Product Stewardship / Product Safety / Quality Assurance

Risk Management for Product Safety

As for risk assessments of product safety, it is necessary to assess the risks of chemical substances in products as well as the risks associated with product applications and uses. Taking into consideration not only their use by our direct customers but also the use and disposal of such products by their end-users, we conduct risk assessments of applications and uses using failure mode and effects analysis (FMEA)*1 and other methods in addition to chemical substance risk assessments. Sumitomo Chemical conducts rigorous risk assessments of new products and reassesses items already on the market. In fiscal 2020, we performed 82 risk assessments, including 31 reassessments. In fiscal 2020, we completed risk reassessments of all our products. Going forward, we will continue to conduct rigorous risk assessments of new products and regularly conduct reassessments of products already on the market. In addition, we continue supporting Group companies in conducting similar product risk assessments and countermeasures.

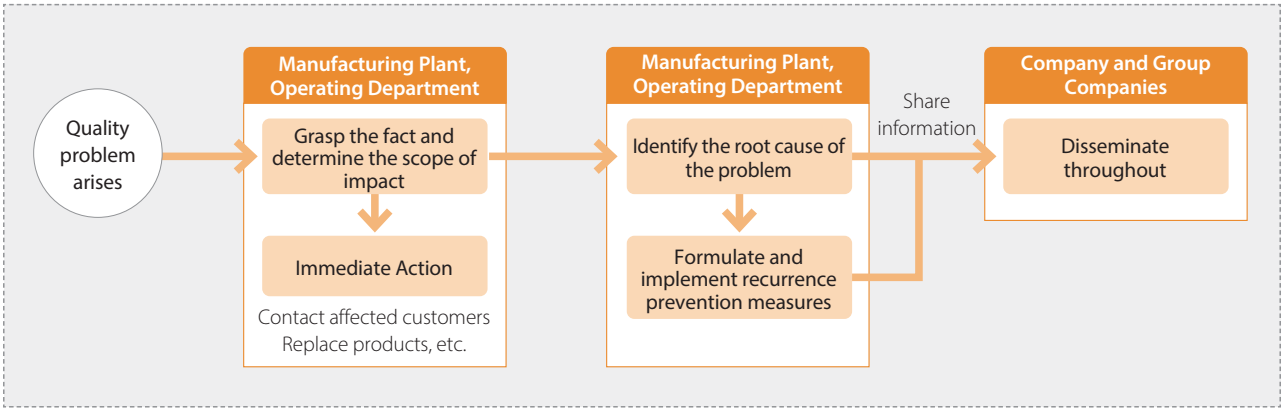
*1 FMEA: A systematic method of analysis for detecting potential malfunctions and defects with the objective of their prevention

Providing Products and Services of Stable Quality

The Sumitomo Chemical Group is proud to provide its customers with products and services from a variety of fields centered on chemicals. In order to continue to supply our customers with products and services of stable quality, we have established quality assurance systems based on quality management systems and manufacturing and quality management guidelines, such as ISO 9001*2 and GMP,*3 appropriate for each product and service. In addition to maintaining thorough day-to-day product quality control, we are committed to further improving product quality.

When a problem related to the quality of our products or services occurs, we grasp the facts and determine the scope of impact in line with internal rules. We then take immediate action, such as contacting affected customers and replacing products. We subsequently work to identify the root cause of the problem, formulate and implement recurrence prevention measures, and implement those measures. Moreover, from the perspective of preventing recurrence of similar quality problems, depending on the severity of the problem, we disseminate information related to the root cause and recurrence prevention measures within the Company and to Group companies. We are committed to ensuring prevention problems in the first place.

■ Flowchart of How We Handle Quality Problems



However, in fiscal 2020, there were two major product quality problems recorded by the Sumitomo Chemical Group. Working to determine the causes underlying these problems, we are promoting strict preventive measures.

We are also improving quality assurance (including quality compliance) for the entire Group by widely disseminating information on responses to quality problems that arise within the Group and sharing activities and information related to product quality and safety. Furthermore, in order to continue supplying products and services of stable quality worldwide while addressing growing supply chain diversification accompanying its business expansion and the increasingly sophisticated needs of customers, the Group is enhancing its global quality assurance system through measures that include strengthening management of overseas suppliers and contractors.

*2 ISO 9001: The international standards on quality management systems issued by the International Organization for Standardization (ISO).
*3 Good Manufacturing Practice (GMP): Guidelines relating to manufacturing and quality management of pharmaceuticals.

Product Stewardship / Product Safety / Quality Assurance

The Information Sharing System and Ensuring thorough Compliance

The governments of Europe, the Americas, China, and the Asia Pacific region hold considerable sway over trends in global laws and regulations. To ensure thorough compliance, we post product stewardship specialists at our regional headquarters in these areas and are constructing a system to swiftly collect information related to regulatory trends. As for China, South Korea, Taiwan, Southeast Asia, and India, all of which have recently seen rapid and major changes in the legislative environment, together with Group companies we have been responding appropriately to the chemical regulations of each country.

As a response to the REACH Regulation in Europe, which is a world leader in terms of laws and regulations, we are moving forward with appropriate legal registration, managing our supply chain, and properly transferring data. In addition, our local Group company Sumitomo Chemical Europe is drawing up letters about its registration status in response to its customers' wishes as well as a declaration of conformity, which states the status of compliance and certificate acquisition with regard to various regulations.

In fiscal 2020, there were no reports of violations of regulations for Sumitomo Chemical products and services at any stage of their life cycles.

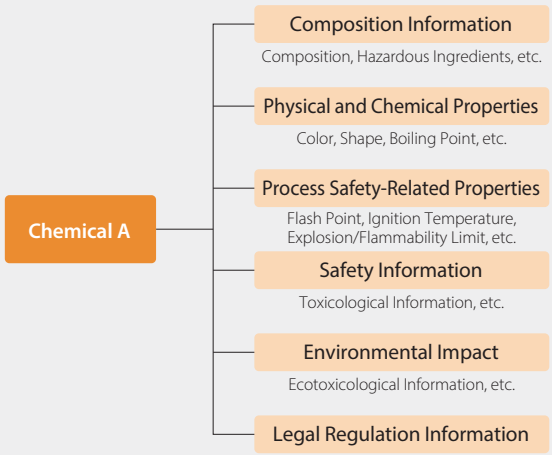
Effective Use of SuCCESS

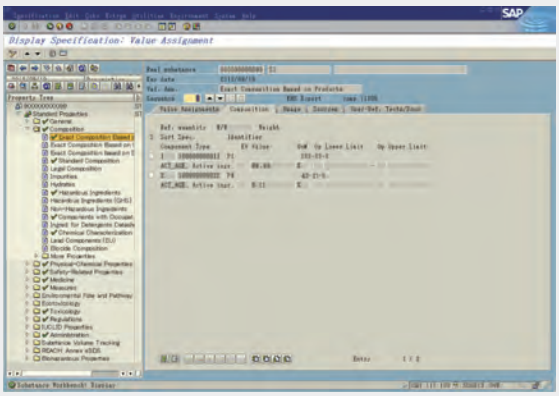
In order to appropriately manage and effectively use information on chemicals handled by the Company, such as their composition, toxicological information (risks and hazards), and regulatory requirements, Sumitomo Chemical has developed the comprehensive chemical management system (SuCCESS).*1 This system is used in order to respond to inquiries from customers concerning substances contained in our products and precisely comply with laws and regulations in Japan and around the world, such as the REACH Regulation in Europe. We also use this system to create SDSs*2 in around 40 languages to comply with GHS*3 and accurately and efficiently communicate hazard information throughout the supply chain. This system is also being proactively rolled out to Group companies. We had installed the system at 14 Group companies in Japan and overseas as of fiscal 2020. In addition, we are using SuCCESS to calculate the manufactured volumes reported to the government under the chemical substances control law via a substance volume tracking (SVT) system as well as to calculate exported volumes.

*1 Sumitomo Chemical Comprehensive Environmental, Health & Safety Management System (SuCCESS)
*2 Safety Data Sheets (SDS): SDSs include information on the safe handling of chemical products (properties, handling methods, safety measures, etc.) and should be created in compliance with the Japanese Industrial Standards (JIS) and the standards set by the International Organization for Standardization (ISO).
*3 Globally Harmonized System of Classification and Labeling of Chemicals (GHS): In 2003, the United Nations established these global rules for how to convey information about the classification and degree of hazards for chemical substances.

SuCCESS comprehensive chemical management system

Management of chemical composition, toxicological, regulatory information based on tree-shaped structure





Product Stewardship / Product Safety / Quality Assurance

Providing Toxicological Information

To ensure its products are handled safely, Sumitomo Chemical uses SDSs and labels to provide customers with toxicological and regulatory information about the chemical substances they contain and the hazard data consolidated in SuCCESS. Furthermore, especially regarding products requiring warnings about their handling, we create yellow cards that are a simplified version of their SDSs. This provides logistics operators with the information they need to ensure they can respond appropriately to an emergency situation during transportation.

Sharing Information on Chemicals in Products

Countries and regions around the world are moving forward with regulations on chemicals in products, as represented by the European Union's RoHS Directive*1 and REACH Regulation.*2 Because the content and required action for these regulations differs by country, region, and product field, we need to properly manage the chemicals present in not only final products but also raw materials and parts, and we need to accurately share this information on the chemicals present across the supply chain.

As a founding member of the Joint Article Management Promotion-consortium (JAMP), Sumitomo Chemical encourages acquiring and sharing information using chemSHERPA, which is an information-sharing scheme promoted by JAMP, and provides information in response to customer demands.

*1 RoHS Directive: An EU law related to restricting the use of specific hazardous substances, such as those in electric and electronic equipment
*2 REACH Regulation: A regulation related to the registration, evaluation, authorization, and restriction of chemicals within the EU

Laboratory Animal Welfare

In the process of developing useful chemical substances, a large variety of safety assessments are required. With this in mind, Sumitomo Chemical is actively developing new assessment methods, including structure-activity relationship approaches, and minimizing the use of laboratory animals for safety assessments. However, assessments of impact on humans, animals, and the environment cannot be completed without conducting experiments using laboratory animals. Sumitomo Chemical therefore advocates the humane treatment of laboratory animals and applies the 3Rs*3 of replacement, reduction, and refinement to conduct animal studies appropriately with due consideration for animal welfare.

*3 The 3Rs: From the Law for the Humane Treatment and Management of Animals
Replacement: To the greatest extent possible, replace methods that involve animals with those that do not.
Reduction: To the greatest extent possible, reduce the number of animals used.
Refinement: To the greatest extent possible, refine methods to minimize the suffering of animals.

Latest Emergency Issue

Microplastics and marine plastic pollution have become a global problem in recent years. Recognizing the importance of this issue, Sumitomo Chemical quickly agreed to the measures of the Japan Plastics Industry Federation and bolstered its internal education system. We also participate in the International Council of Chemical Associations (ICCA) and Japan Chemical Industry Association's task force. We are working to keep abreast of the latest issues and are also proposing our comments to the aforementioned organizations.

Looking Ahead

Sumitomo Chemical promotes appropriate risk-based chemical management and continually conducts safety risk assessments of all products, including newly introduced items.

In response to strong social demand for the proper management of chemicals, the pace of establishment and revision of laws and regulations relating to chemical management is expected to pick up in even more countries and regions in the near future. Closely collaborating with Group companies in Japan and overseas, Sumitomo Chemical consistently undertakes thorough compliance initiatives that involve carefully studying information on the regulatory trends as well as enhancing the functions of its comprehensive chemical management system (SuCCESS).

In addition, to improve customer satisfaction, the entire Group will continue to work to sustain its product and service quality improvements and to achieve an optimal product quality assurance system amid changing business conditions.

Responsibility to Our Customers

Basic Stance

Throughout the Group, Sumitomo Chemical is working to supply high-quality products and services that satisfy customers' recently diversifying needs and ensure safety in their use, and sales managers and customer consultation offices provide support tailored to products and specific details.

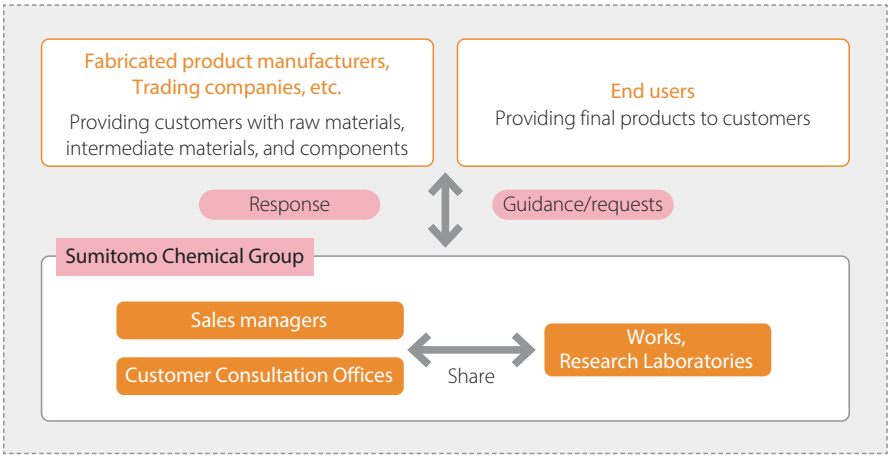
Business & Products

https://www.sumitomo-chem.co.jp/english/products/

Management System

Sumitomo Chemical works to accurately and rapidly reflect customers' requests in product development and improvement by sharing this information among Works, Research Laboratories, and sales personnel. In addition, data on customer inquiries and requests for improvements in product quality are stored on an internal database to prevent similar issues from occurring.

■ Customer Communication System



Examples of Initiatives

In this section, we will introduce the initiatives of the Health & Crop Sciences Sector and Pharmaceuticals Sector, which handle products that are more closely entwined with customers' daily lives.

Initiatives in the Rice Business

In autumn of 2014, Sumitomo Chemical started a business that handles everything from providing rice producers with original varieties of rice seed, crop protection chemicals, and fertilizers; supporting cultivation management; and buying and selling harvested rice. We have teamed up with a range of business partners in agricultural regions, including producers; wholesalers of crop protection chemicals and fertilizers; agricultural cooperatives; and rice collectors. We've also joined with distribution partners, including rice wholesalers. Taking advantage of the unique characteristics of different rice varieties with regard to taste, flavor and yield, we have been engaged in producing commercial-grade rice seed, which is in high demand. In addition, in recent years, temperatures have been rising due to climate change, competitive rice varieties have emerged, the productivity of large-scale producers has risen, and demand and needs are changing. As the environment surrounding rice changes in these and other ways, the Company's research laboratories are making moves to develop new varieties. Going forward, we will continue to contribute to the development of Japan's agriculture through new rice production proposals while developing varieties that meet the needs of both producers and customers.

Responsibility to Our Customers

Initiatives of the AgroSolutions Division-Japan

Within the AgroSolutions Division-Japan, Sumitomo Chemical and Group companies are expanding their total solution provider (TSP)-style businesses, which provide a wide range of agriculture-related services and products, such as agrochemicals, fertilizers, and agricultural materials. Other operations include the biorational business, which is centered on plant growth regulators that enhance the yield and quality of crops. And the division operates the i-nouryoku website, which is a tool for disseminating information to support these businesses. Through this website, we provide vital data that helps a wide range of farmers. Besides the website, we also post streaming videos on social media platforms, namely You Tube, to provide farmers with simple and easy-to-understand product information.

In addition, the AgroSolutions Division-Japan established a customer support office related to Sumitomo Chemical's crop protection chemical products, fertilizers, and plant growth regulators. The division promotes business operations based on the basic stance of prompt, appropriate, sincere service provided with an awareness of the customer's perspective and ensuring legal compliance.

In addition, we respond to questions about gardening from general customers, not just farmers. Consultants strive to closely engage with customers to ensure that they can properly and effectively use the Company's products.

Sumitomo Chemical i-nouryoku (Japanese only)

https://www.i-nouryoku.com/index.html

The official YouTube channel of Sumitomo Chemical's AgroSolutions Division-Japan (Japanese only)

https://www.youtube.com/channel/UCk0GEjn4LXD7dxEf9uSfnIw

Initiatives of Sumitomo Chemical Garden Products

To meet the diversifying needs of users who enjoy gardening, Sumitomo Chemical Garden Products Inc. constantly works to upgrade its offerings, for example, via improved product containers, as well as to enhance services related to information dissemination and customer consultation.

In the area of information dissemination, the company is working to enhance its websites to ensure the provision of easy-to-understand information to a variety of gardeners. In addition, it began uploading videos to the social media platform YouTube, with content ranging from product information videos to instructions on the preparation of diluents and how to read registration slips, to Garden Doctor TV, which covers cultivation methods for tomatoes and roses as well as other topics.

As for customer consultations, in addition to answering questions via telephone and email, from April 2020 the company began providing web content via the Garden Doctor™ AI, an AI image diagnostic tool that enables anybody to easily diagnose plant diseases and pests at any time.

In addition, it is researching customer concerns through marketing surveys and working to develop products to solve those issues. It is striving to enhance usability, for example, the company developed and adopted a longer trigger for BENICA X NEXT™ Spray that is more comfortable and easier to pull even when continuously spraying the product for a prolonged period and adopted a container for Grass Killer E Granules that is easier to hold, making scattering the product less difficult.

Sumitomo Chemical Garden Products Inc. official website (Japanese only)

https://www.sc-engei.co.jp

Sumitomo Chemical Garden Products' official YouTube channel (Japanese only)

https://www.youtube.com/c/scengeich/playlists

Responsibility to Our Customers

Sumitomo Chemical Garden Products' Garden Doctor™ AI (Japanese only)

https://www.sc-engei.co.jp/gardendoctor.ai

Sumitomo Chemical Garden Products' BENICA X NEXT™ Spray (Japanese only)

https://www.sc-engei.co.jp/sp_contents/en/201902/benicaXnext

Sumitomo Chemical Garden Products' Grass Killer E Granules (Japanese only)

https://www.youtube.com/watch?v=4oielqO-bw4

https://www.sc-engei.co.jp/guide/detail/5364.html

Responsibility to Our Customers

Initiative for Access to Healthcare

Sumitomo Chemical started its pharmaceuticals business as the first Japanese company to manufacture synthetic pharmaceuticals based on its advanced organic synthesis technology. Our Group company Sumitomo Dainippon Pharma Co., Ltd. considers the below listed items to be part of its duty to its customers in the pharmaceutical business.

Conduct Responsible Advertising and Marketing

(Refer to section "12. Cooperation with Healthcare Professionals, etc.," "13. Sales, Marketing and Information Communication Activities" of Sumitomo Dainippon Pharma's Compliance Standard for more details.)

◆ Our approach to promotional activities for healthcare professionals

In compliance with the IFPMA Code of Practice, the JPMA Code of Practice, and Guidelines for Prescription Drug Marketing Information Provision issued by the Ministry of Health, Labour and Welfare, Sumitomo Dainippon Pharma has drawn up the "Rules for Marketing Information Provision" and established the "Department Responsible for Supervising Marketing Information Provision." The Department Responsible for Supervising Marketing Information Provision supervises and provides guidance to departments that implement detailing activities, examines and approves materials, carries out monitoring as well as education and training for officers and employees, operates a complaints desk and handles complaints. As an advisory body to the Department Responsible for Supervising Marketing Information Provision, we have established the "Review and Supervisory Committee," which is held regularly. It has an external chairperson who is completely independent of our company.

Sumitomo Dainippon Pharma has drawn up internal rules for the examination of materials for use in promotional activities titled "Rules for Examination of Materials Used in Marketing Information Provision" and created an internal structure for examination and approval of such materials.

https://www.ds-pharma.com/csr/patients_medical_personnel/promotion.html

Contribution to Global Health

◆ Countermeasures to Antimicrobial Resistance (AMR) and Initiatives for the Appropriate Use of Antibiotics

Sumitomo Dainippon Pharma is conducting joint research with a drug discovery group of Kitasato Institute.

As a partnership initiative with the Ministry of Health of Vietnam, Sumitomo Dainippon Pharma and the National Center for Global Health and Medicine jointly commenced an antibiotic susceptibility surveillance study in Vietnam in order to contribute to antimicrobial resistance (AMR) countermeasures and promote the proper use of antibiotics in Vietnam.

◆ Efforts for Eradication of Malaria

Sumitomo Dainippon Pharma is working on the research and development of malaria vaccines in collaboration with Ehime University and the global organization PATH, and supports the initiatives for the eradication of malaria in several countries in Asia and Africa.

https://www.ds-pharma.com/csr/global_health/contribution_to_global_health.html

Initiatives to Improve Access to Medicines

◆ Targets for Initiatives to Improve Access to Medicines

As described to the right, Sumitomo Dainippon Pharma established the targets for initiatives to improve access to medicines, which is a material issue linked to value creation.

- Strengthening of response to requests for the development of unapproved and off-label drugs
- Acceleration of provision of drugs at fair prices
- Promotion of public awareness-raising activities with the aim of improving medicine-related literacy

https://www.ds-pharma.com/csr/management/materiality.html

Responsibility to Our Customers

Transparency in Partnerships with Patient Groups and Medical Institutions

As a member of the Japan Pharmaceutical Manufacturers Association (JPMA) which issued its Transparency Guideline for the Relation between Corporate Activities and Medical Institutions and its Transparency Guideline for the Relation between Corporate Activities and Patients' Groups, Sumitomo Dainippon Pharma established its own Guidelines for Transparency in Partnerships with Medical Institutions in October 2011 and Guidelines for Transparency in Partnerships with Patients' Groups in April 2013. In accordance with these guidelines, the company publicly disclose information on its corporate website on such issues as payments that the company make to medical institutions, healthcare professionals, patient groups and patient advocacy groups.

https://www.ds-pharma.com/csr/patients_medical_personnel/promotion.html

Providing Employee Training

◆ Compliance Education and Training

Sumitomo Dainippon Pharma provides all its employees with annual compliance education and training on a number of topics that include corruption, insider trading, the harmful effects of drugs, and harassment. A booklet about the Compliance Standards is used in compliance workshops held at the workplace level. Group companies in and outside Japan are required to provide similar compliance education and training programs.

https://www.ds-pharma.com/profile/compliance/

Sumitomo Dainippon Pharma's Efforts against the Novel Coronavirus Disease (COVID-19)

Sumitomo Dainippon Pharma is addressing the stable supply of its pharmaceutical products, minimization of impact on its research and development activities, and support for research on COVID-19 in addition to supporting activities for preventing the spread of COVID-19. The company also takes measures to ensure the safety and health of its stakeholders, including its employees and their families, and to prevent the spread of COVID-19. Specific actions are detailed below.

1. Stable supply of pharmaceutical products
2. Impacts on R&D activities
3. Research support activities
4. Support activities to prevent the spread of COVID-19
5. Measures to prevent the spread of infection inside and outside the company

https://www.ds-pharma.com/covid-19.html

Looking Ahead

Collecting information through close consultation with internal and external partners, and maintaining a proactive attitude when listening to our customers' opinions, Sumitomo Chemical remains committed to continuously providing products that satisfy the needs of its customers. Moreover, the Company is expanding information disclosure in order to provide our customers with vital information in the most appropriate manner.

Communities

Basic Stance

Based on the concept of contributing to establishment of a sustainable society through the sustainable growth of business, the Sumitomo Chemical Group is committed to social contribution activities undertaken from three perspectives: securing safety and health, and protecting the environment; raising children who will lead the next generation; and assisting in natural disaster relief.

Regarding communication with society, in order to enhance information disclosure while engaging in interactive dialogue, Sumitomo Chemical, its worksite in Japan and overseas, and Group companies engage in a variety of activities to meet the needs of local communities, thereby building good relations with them.

Sumitomo Chemical's Social Contribution Activities

Securing Safety and Health, and Protecting the Environment

- Work and research laboratory tours
- RC dialogues and distribution of local newsletters
- Malaria prevention campaign
- Investment in the World Bank's BioCarbon Fund
- TABLE FOR TWO program
- Matching Gift program (support for tree-planting activities)
- Cooperation with U.N. activities
- Support for infection control measures

Raising Children who will Lead the Next Generation

- Establishment of in-house childcare facilities
- Launch of Young Inventors' Club, Science Workshops, etc.
- Sponsorship of community sports events
- Cooperation on civic and university courses
- Acceptance of student interns
- Matching Gift program (educational and developmental support for children)
- Educational support in Africa
- University scholarship programs

Assisting in Natural Disaster Relief

- Relief activities after typhoons, earthquakes, and other disasters, Offering facilities for Public use after major disasters
- Relief donations for victims of hurricanes, earthquakes, etc.

Management System

We are promoting Sumitomo Chemical's social contribution activities throughout the entire Sumitomo Chemical Group, including Sumitomo Chemical's Head Office, each worksite, and each Group company. To encourage such activities across the Group, we hold manager meetings attended by social contribution managers from each worksite. These meetings enable attendees to share information about their activities and exchange opinions. In addition, Group companies in Japan share information and exchange opinions through Domestic Group Company Liaison Meetings held by each functional department.

We are cooperating with the labor union in planning and conducting certain social contribution activities.

Communities

Goals and Results

The results of the main social contribution activities undertaken by Sumitomo Chemical and its Group companies in Japan are as follows.

FY2020 Main Social Contribution Activities at Bases in Japan (Sumitomo Chemical*1)

Type of Activity	Number of Events
Science classes held at schools, Children's office visits	9
Cleaning beaches and neighborhoods around worksites	9
Worksite tours, community dialogues, hands-on work experiences	3
Hosting and participating in regional sports competitions, festivals, and other events	1

*1 Include some Group companies in Japan

Volunteers for the OISCA Coastal Woodland Rejuvenation Project (Sumitomo Chemical Group*2)

(No. of people)

	FY2018	FY2019	FY2020
Number of volunteers for the OISCA coastal woodland rejuvenation project*3	20	23	0 Suspended due to the pandemic

*2 Sumitomo Chemical and Group companies in Japan participating in the Matching Gift program
*3 Volunteer activities in Natori, Miyagi Prefecture

P.213 Support for Recovery from the Great East Japan Earthquake

Major Donations in FY2020 (Sumitomo Chemical)

(Million yen)

Item	Amount
Donations of medical gowns	16.8
To support education in Africa (Plastic Recycling Education)	5.4
To support the development and education of children through ASHINAGA (Matching Gift program)	6.8
To support OISCA's tree planting activities (Matching Gift program)	6.0
Monetary donations in response to torrential rains in July 2020	3.0
TABLE FOR TWO (Matching Gift program)	1.3

Note: Donation figures for Matching Gift programs are the amount of money provided by the Company.

Communities

■ Number of Major Donations in FY2020 (Sumitomo Chemical)

Total number of donations: 251

Item	Number of cases
Local community activities	86
International exchange and cooperation	16
Sports	11
Academic study and research	11
Culture and art	15
Education and social education	16
Social welfare	14
Environment	10
Support to areas devastated by disasters	5
Others	67

Examples of Initiatives

Securing Safety and Health, and Protecting the Environment

Disclosing Information and Holding Diverse Interactive Dialogues Rooted in Local Communities

Sumitomo Chemical, with the understanding and cooperation of local communities, works to foster smooth communication to continue conducting better business activities as a community member.

Every year, all worksites create and publish their own environmental and safety reports, detailing the initiatives taken at each worksite. In addition, the Ehime, Osaka, and Oita worksites publish community newsletters that are inserted into newspapers as a way to disseminate information that is especially relevant to their communities. Moreover, we proactively cultivate diverse two-way dialogue from a wide range of perspectives. Our activities include regular dialogue meetings, opinion exchanges, and Works tours held with local community members at each worksite, conducting risk communication model businesses in cooperation with municipalities, conducting support businesses focused on the environment and safety for local governments and companies, and holding community dialogues in collaboration with the chemical industry.

Going forward, we will continue working to foster greater understanding of the Company and earning more trust while continually exchanging opinions with various stakeholders in local communities and disseminating necessary information.

Report on the Environment and Safety (at all worksites) (Japanese only)

https://www.sumitomo-chem.co.jp/sustainability/information/library/

Communities

Initiatives to Ensure Safety at All Group Workplaces

The Sumitomo Chemical Group aims to achieve zero severe accidents across all workplaces, as per the basic principle of "Making safety our first priority." To this end, we have ramped up our efforts to ensure safety by communicating thoroughly to make sure everyone observes the Safety Ground Rules, which are common to all Group employees, evaluating and improving the level of safety culture in workplaces, raising the level of safety management with the use of IoT technology, and reviewing and reinforcing natural disaster prevention measures. Through dialogues with residents in the region, we explain to neighboring residents our efforts to ensure safety, and work to deepen our mutual understanding.

Status of Dialogues with Local Communities

FY2020 Results[*1, 2]

Number of dialogues held	Participants
3	18

*1 Cumulative result of each Sumitomo Chemical worksite
*2 Most dialogues were postponed due to the COVID-19 pandemic.

Page 93 of *Annual Report 2021*
https://www.sumitomo-chem.co.jp/english/ir/library/annual_report/

Initiatives Related to the COVID-19 Pandemic

Sumitomo Chemical joined in the "IP Open Access Declaration against COVID-19" as a supporter and took various measures to help prevent the spread of COVID-19. Responding to the shortage of masks in medical facilities, we donated 20,000 N95 masks through the Japan Business Federation (Keidanren). In addition, addressing the shortage of medical gowns for medical professionals, we donated a total of 300,000 gowns to governments and other relevant organizations in cooperation with Sekisui Chemical Co., Ltd. Sumikasekisui Film Co., Ltd., which is funded by Sumitomo Chemical and Sekisui Chemical, procured the medical gowns from a Chinese gown manufacturer. The gowns were sent directly to the donation beneficiaries from the Chinese manufacturer. Sumitomo Chemical and Sekisui Chemical purchased 150,000 gowns each and donated them. Furthermore, at Ehime Works, we held the Stay Home Works Web Exhibition, a collaborative project with the Niihama City Museum of Art, so that children who could not go outside could still have fun at home. In addition, at Ehime Works and Ohe Works (Niihama City, Ehime Prefecture), we conducted the Sumika Akagane Cafeteria project, an event supporting restaurants in the city, between March 9 and April 2, 2021. Group companies supplied film used for making medical gowns, provided funding to startups developing sensors to detect COVID-19, and donated masks and gowns to medical institutions. To help quickly end the pandemic, the Sumitomo Chemical Group will continue considering maximum support measures while collaborating with governments, industrial organizations, and other groups.

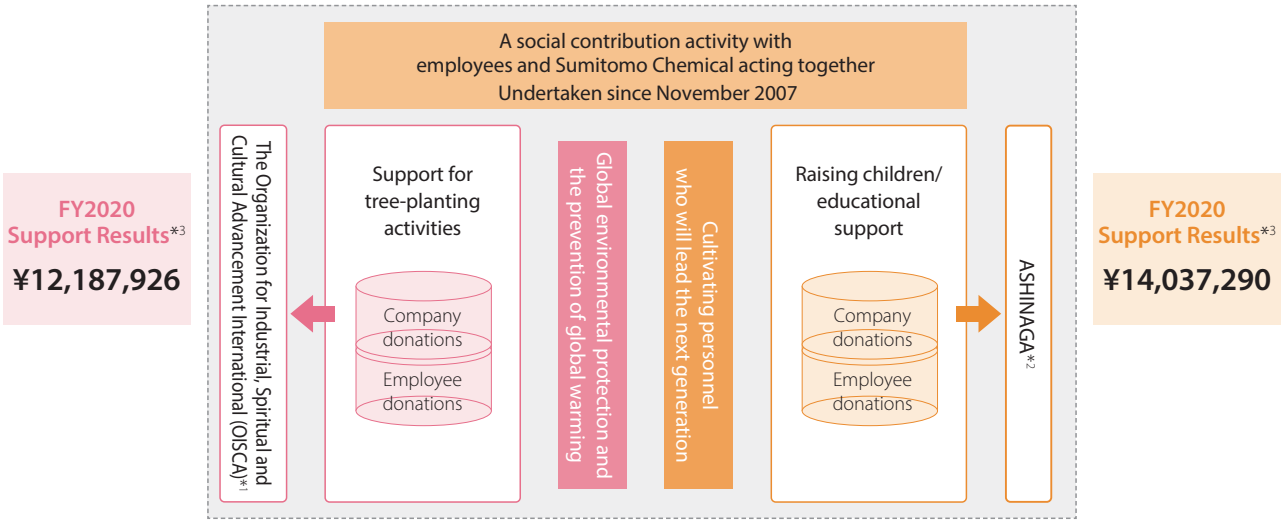
Communities

Matching Gift Program

As a social contribution activity with employees and the Sumitomo Chemical Group acting together since 2007, the matching gift program, which is run in collaboration with the labor union, collects donations from executives and employees working at Sumitomo Chemical and Group companies. Sumitomo Chemical then matches their donations.

One of the beneficiaries of the donations from the matching gift program is the Organization for Industrial, Spiritual and Cultural Advancement International (OISCA)*1, with whom we work on various tree-planting projects. In collaboration with the labor union, we have been dispatching employee volunteers to help with these projects since 2008.

■ Matching Gift Program



*1 The Organization for Industrial, Spiritual and Cultural Advancement International (OISCA) is a global NGO engaged in rural development and environmental protection, mainly in the Asia-Pacific region. The money donated by Sumitomo Chemical to this organization is used for its Children's Forest Program and Japan's Coastal Forest Restoration Project following the Great East Japan Earthquake.

*2 ASHINAGA is an NPO established to provide physical and mental support for children who have lost their parents because of illness, accidents, or for other reasons. The money donated to this organization is used to provide a scholarship fund for these orphans.

*3 Sums after matching by the Company

TABLE FOR TWO Activities

Since May 2008, each of Sumitomo Chemical's worksites has participated in the TABLE FOR TWO (TFT) initiative. Participating companies in this matching gift program donate an amount of money equal to the total donated by executives and employees.

When employees choose to eat any of the healthy TFT menu options available at the Company's cafeterias, 20 yen per meal is donated to help fight starvation in developing countries as well as obesity and lifestyle diseases in advanced nations. Through these types of social contribution activities originating in Japan, we are working to eliminate food disparity.

For the Company's support in 2020, Sumitomo Chemical received a letter of appreciation as a Platinum Partner from the TABLE FOR TWO secretariat.

2020 Results

¥1,355,400* **33,885** meals

* Sums after matching by the Company

Communities

Nurturing the Children of the Next Generation

Supporting Education through Science Workshops

The Sumitomo Chemical Group holds science workshops for children to conduct experiments and make crafts with the Group's products. These workshops enable them to experience the wonders and appeal of science with their own hands, in order to convey in a manner that children can easily understand how everyday products are linked to chemicals. These science workshops are held during plant tours and at visiting classes at neighboring schools.

In fiscal 2020, we held the Stay Home Works Web Exhibition, a collaborative project with the Niihama City Museum of Art, so that children who could not go outside due to measures to prevent the spread of COVID-19 could still have fun at home. In this project, children colored in an image of Ehime Works and submitted their completed "My Dream Works" entries through a website, and the submitted pieces were displayed on the museum's website. Any elementary and middle school students could participate, and those who submitted pieces were given original goods from Ehime Works. In addition, a video produced in collaboration with Ehime Works veteran employees entitled, "Science Experiments and Crafts You Can Do at Home!" was unveiled and streamed on the Akagane Museum's website and broadcast on heart network (heart TV).*

* A cable TV channel in Niihama City and Saijo City

Entries the children submitted

Demonstrations by Ehime Works veteran employees

vol.1 Let's make a paper spring with the whole family
vol.2 The mysterious movements of the Cartesian diver
vol.3 Let's separate the colors of a water-based pen

Akagane Museum website: "Stay Home: The Factories of Your Dreams, Online Exhibition" (Japanese only)

https://akaganemuseum.jp/%e3%81%8a%e7%9f%a5%e3%82%89%e3%81%9b/1079.html

"Science Experiments and Crafts You Can Do at Home!" (Japanese only)

https://youtube.com/playlist?list=PLdCPE61HN0W7Jcys1mzqLjrVI52fjvJLY

Communities

Support for Education in Africa

Because Sumitomo Chemical believes that Africa needs to build a better educational environment for children in order to break free from poverty and achieve sustainable economic development, since 2005, the Company has been conducting educational support activities centered on the construction of primary and secondary school buildings and related facilities to support children, on whom the continent's future rests.

Supporting Plastic Recycling Education in Nigeria

Sumitomo Chemical donated US$50,000 to the Clean Our World (COW) Project, which is run by the Nigeria-based Oando Foundation* with the aim of raising awareness of plastic recycling. In Nigeria, we have collaborated with the Oando Foundation since 2017 to support Science, Technology, Engineering and Mathematics (STEM) education and have, for example established six ICT centers equipped with solar panels. Over 32 million tons of garbage are generated in Nigeria every year, and more than 30% of that is classified as plastics. Currently, most of the plastic is not properly disposed of. It sometimes clogs pipes causing flooding and is also washed into the ocean via West Africa's main waterway, the Niger River. To resolve this situation, the Oando Foundation established the COW Project in 2020. The COW Project engages in local clean-up activities and provides educational materials to the suburbs of Lagos, Nigeria's largest city. Through these and other efforts, the project encourages people to change their behavior by promoting educational activities and providing elementary school students with opportunities to learn about the plastic waste problem and recycling. Initiatives are already under way at two of the seven targeted elementary school districts.

Sumitomo Chemical outlined "Contribution to the recycling of plastic resources" as one of management's material issues. Accordingly, in addition to the development and supply of products connected to reducing and reusing plastic, in recent years we have been promoting the development of multiple chemical recycling technologies jointly with other companies and academic institutions. Going forward, Sumitomo Chemical will continue to help improve the educational environment for children in Africa and actively promote initiatives aimed at resolving social issues.

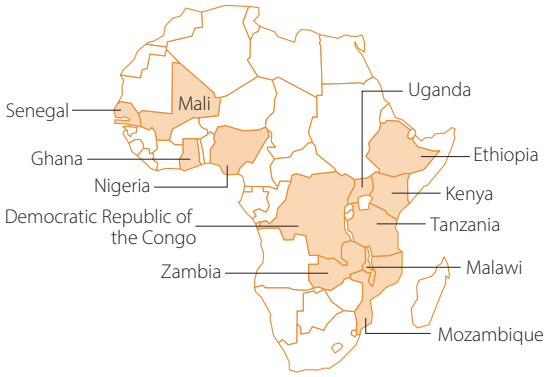
* A foundation established in 2011 by Oando PLC, which conducts energy-related business in Nigeria, in order to support the Nigerian government's efforts to broadly provide basic education throughout the country

Clean-up campaign at a school in the Mushin district

Clean-up campaign undertaken jointly by school and community members in the Orile-Iganmu district

Communities

Support for Education in Africa



Support Results

Beneficiaries: over **34,000** people

Supported countries: 12
(31 projects completed, 1 projects under way)

Support Results

Country	Collaborator	Support details
Tanzania	WVJ*1	Between 2005 and 2007, we built elementary schools, teacher housing, and other structures. In 2014, we built elementary schools and restrooms.
Kenya	WVJ*1	In 2005 and 2006, we built girls' dormitories, restrooms and other structures for elementary schools. In 2015, we built elementary schools and provided math and science teaching materials.
Zambia	WVJ*1	Between 2005 and 2007, we built middle schools, restrooms, teacher housing, and other structures.
Uganda	WVJ*1	In 2006, we built elementary schools, restrooms, and other structures. Between 2008 and 2011, we built schools, restrooms, and other structures. In 2019 and 2020, we built classrooms for elementary schools and raised awareness of malaria prevention techniques.
Ethiopia	WVJ*1	In 2007, we built elementary schools, middle schools, restrooms, and other structures. In 2013, we built elementary schools, restrooms, water storage tanks, and other structures.
Mali	PIJ*2	Between 2010 and 2012, we built elementary schools, restrooms, wells, and other structures.
Ghana	PIJ*2	Between 2010 and 2012, we built elementary schools, libraries, and other structures. In 2015 and 2016, we built technical schools, science laboratories, and other structures. In 2019 and 2020, we built technical high schools, science laboratories, and other structures, provided teaching materials, and provided training to teachers.
Malawi	WVJ*1	Between 2010 and 2012, we built elementary schools and other structures. In 2013, we built elementary schools, restrooms, and other structures.
Democratic Republic of the Congo	WVJ*1	In 2012 and 2013, we built elementary schools, restrooms, and other structures. Between 2016 and 2019, we built elementary schools, restrooms, and other structures, provided math and science teaching materials, provided training to teachers, and raised awareness of malaria prevention techniques.
Mozambique	PIJ*2	In 2012 and 2013, we built elementary schools, restrooms, and other structures.
Senegal	PIJ*2	In 2014 and 2015, we built elementary schools, restrooms, and other structures and provided training to school management committees. Between 2016 and 2019, we built middle schools, high schools, and restrooms, set up science laboratories, and enhanced science courses for girls.
Nigeria	Oando*3	Between 2017 and 2020, we set up ICT centers, provided computer peripheral equipment, and provided training to teachers of science, technology, engineering, and math (STEM) education. [In 2020 and 2021, we carried out the current "Clean Our World" (COW) project.]

*1 WVJ: World Vision Japan
*2 PIJ: Plan International Japan
*3 Oando: The Oando Foundation of the Federal Republic of Nigeria

Communities

Assisting in Natural Disaster Relief

Support in Response to Torrential Rains in July 2020

After torrential rains in July 2020, we provided material support in the form of our own emergency food rations to some regions in Oita Prefecture in addition to a monetary donation of ¥3 million to Oita Prefecture.

Support for Recovery from the Great East Japan Earthquake

Since the Great East Japan Earthquake of 2011, we have been promoting initiatives involving employee participation to keep the memory of the disaster fresh in people's minds. We have also been providing donations collected through the sale of "Disaster Hit Area Support Meals" served in our cafeterias since April 2011. Under this scheme, a portion of sales is donated to a business that aids orphans in areas hit by the disaster, and the companies match that amount.

Since fiscal 2013, through the matching gift program, we have participated in the OISCA coastal woodland rejuvenation project aimed at rejuvenating black pine coastal woodlands in Natori, Miyagi Prefecture.

Since fiscal 2015, we have dispatched employee volunteers to the area to provide black pine saplings, plant trees, and weed and fertilize areas where trees have been planted with the aim of rejuvenating about 100 hectares of coastal woodland. These activities were suspended in fiscal 2020, however, to prevent the spread of COVID-19. We have already achieved our planting goal, and, going forward, we will continue to help manage the planted black pines on a voluntary basis.

FY2020 Results

Disaster Hit Area Support Meals

¥650,120* **16,253** meals

* Sums after matching by the Company

The Great East Japan Earthquake Fukushima Children's Fund ¥311,720 7,793 meals
(the portion used between March 2020 and August 2020)

Iwate Learning Hope Fund ¥338,400 8,460 meals
(the portion used between September 2020 and February 2021)

Examples of Social Contribution Activities (Japanese only)

https://www.sumitomo-chem.co.jp/sustainability/files/docs/social_contribution_activities.pdf

Looking Ahead

In order to maintain the trust of local communities, Sumitomo Chemical will promote its social responsibilities by making various social contributions distinctive to the Sumitomo Chemical Group that lead to solving global problems and coexistence with local communities through various activities.

Social Activities: Supplementary Data

★: Assured by an independent assurance provider

1 Human Resources

Basic Data

■ Number of Employees, Average Age, Length of Service, Average Compensation (Sumitomo Chemical Group)

Item			FY2018	FY2019	FY2020
Number of employees (Sumitomo Chemical Group)	Total		32,542	33,586	34,743★
		Male	24,483	25,005	25,740★
		Female	8,059	8,581	9,003★
		Percentage of female employees (%)	24.8	25.5	25.9
Sumitomo Chemical	Total		6,096	6,214	6,277★
		Male	5,182	5,269	5,299★
		Female	914	945	978★
		Percentage of female employees (%)	15.0	15.2	15.6
Consolidated in Japan	Total		11,965	12,292	12,486★
		Male	9,272	9,521	9,610★
		Female	2,693	2,771	2,876★
		Percentage of female employees (%)	22.5	22.5	23.0
Consolidated overseas	Total		14,481	15,080	15,980★
		Male	10,029	10,215	10,831★
		Female	4,452	4,865	5,149★
		Percentage of female employees (%)	30.7	32.3	32.2
Number of non-Japanese employees (Sumitomo Chemical)			82	78	76
Average age (Sumitomo Chemical)			40.7	40.9	41.0
		Male	40.8	41.1	41.2
		Female	40.2	40.1	40.0
Average length of service (years; Sumitomo Chemical)			14.9	15.3	15.5
		Male	14.9	15.4	15.7
		Female	14.6	14.5	14.5
Average annual compensation (yen; Sumitomo Chemical)			9,035,111	8,906,426	8,557,134
Average monthly wages (yen; Sumitomo Chemical)			319,721	323,872	327,761
		Male	319,342	324,170	328,711
		Female	321,456	322,537	323,577

Notes: • The above figures are as of March 31 for each fiscal year. Employee numbers do not include temporary employees, part-time staff, dispatch employees, and staff assigned to other companies not included in the scope of consolidation, but do include staff assigned from other companies not included in the scope of consolidation.
• Average wages are for non-managerial employees (as of August of each year).

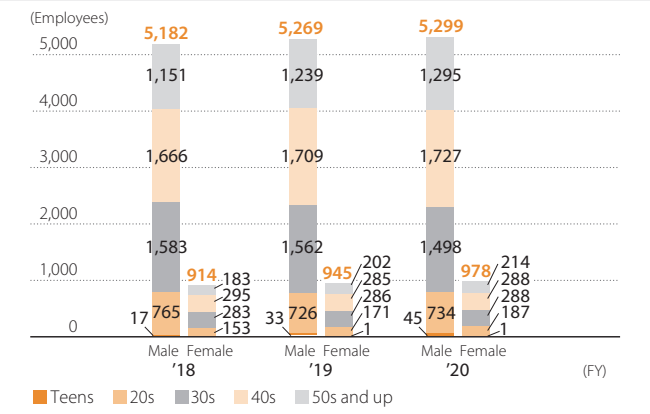
Social Activities: Supplementary Data

Number of Employees by Region and Gender (Sumitomo Chemical Group)

Region			FY2018	FY2019	FY2020
Japan	Total		18,060	18,505	18,762
		Male	14,453	14,789	14,908
		Female	3,607	3,716	3,854
(The rest of) Asia	Total		10,661	10,825	10,836
		Male	7,770	7,788	7,819
		Female	2,891	3,037	3,017
North America	Total		2,926	3,214	3,466
		Male	1,648	1,730	1,822
		Female	1,278	1,484	1,644
Central and South America	Total		163	191	865
		Male	108	130	636
		Female	55	61	229
Europe	Total		509	618	586
		Male	344	429	395
		Female	165	189	191
Middle East and Africa	Total		132	134	122
		Male	91	93	86
		Female	41	41	36
Oceania	Total		91	99	106
		Male	69	46	74
		Female	22	53	32
Total	Total		32,542	33,586	34,743

Note: As of March 31 for each fiscal year

Employee Age Composition and Distribution (Sumitomo Chemical)



Social Activities: Supplementary Data

Number of New Graduate and Mid-career Hires, Percentage of Mid-career Hires (Sumitomo Chemical)

Results		FY2018	FY2019	FY2020
New graduate hires	Male	108	138	168
	Female	38	51	55
	Total	146	189	223
Mid-career hires	Male	40	27	21
	Female	11	8	3
	Total	51	35	24
Percentage of mid-career hires (%)	Total	25.9	15.6	9.7

Number of Internships (Sumitomo Chemical)

Results	FY2018	FY2019	FY2020
University students in Japan	675	483	727
University students overseas	8	4	0

Number and Percentage of People Who Left the Company (Sumitomo Chemical)

	FY2018			FY2019			FY2020		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Retired early	89	62	27	62	53	9	67	56	11
Early retirement rate (%)	1.5	1.2	2.9	1.0	1.0	1.0	1.1	1.1	1.1

Retention of New Graduate Hires (Sumitomo Chemical)

	Male	Female
New graduate hires in April 2018	108	37
Number of those remaining as of April 2021	105	35
Retention rate of new graduates after three years (%)	97	95

Promotion of Diversity and Inclusion

Promotions of Employees (Sumitomo Chemical) As of April 1, 2021

	Female	Male	Non-Japanese	Percentage of Female (%)
Managerial employees*	123	1,838	16	6.3
(Those ranked general manager or above)	14	472	3	2.9
Directors and senior management	2	44	4	4.3
(Those ranked executive officer or above)	1	27	4	3.6

* All employees equivalent to managers or above

Social Activities: Supplementary Data

Number of Managers and General Employees, Percentage of Female Employees (Sumitomo Chemical Group)

		FY2018	FY2019	FY2020
Managers	Male	8,378	8,594	8,710
	Female	1,455	1,743	1,750
	Total	9,833	10,337	10,460
	Percentage of female managers (%)	14.8	16.9	16.7
General employees	Male	16,105	16,411	17,030
	Female	6,604	6,838	7,253
	Total	22,709	23,249	24,283
	Percentage of female managers (%)	29.1	30.4	30.1
Total		32,542	33,586	34,743

Note: As of March 31 for each fiscal year

Work-Life Balance

Percentage of Paid Vacation Days Used (Sumitomo Chemical)

	FY2018	FY2019	FY2020
Number of days of paid vacation provided	20	20	20
Number of days of paid vacation used	14.3	14.7	14.4
Percentage of paid vacation days used (%)	71.8	73.9	72.2

Average Overtime Work (Sumitomo Chemical)

(Hours/Month)

	FY2018	FY2019	FY2020
Average overtime hours	21.2	20.7	20.7

Return Rate of Employees Who Take Cessation from Work for Childcare (Sumitomo Chemical)

(%)

	FY2018	FY2019	FY2020	
	Female	Female	Male	Female
Of employees who finished childcare leave within the fiscal year, percentage of employees who returned to work	98.1	100.0	100.0	100.0

Leave for Volunteer Work and Number of Employees Using Leave for Volunteer Work (Sumitomo Chemical)

	System in place	FY2018	FY2019	FY2020
Vacations for volunteering	Yes	24	21	3

Social Activities: Supplementary Data

2 Occupational Safety and Health / Industrial Safety and Disaster Prevention

Occupational Safety and Health Management System*

The Company's Osaka Works and Chiba Works acquired certification from the Japan Industrial Safety and Health Association (JISHA) for the international standards ISO 45001, which is for occupational safety and health management systems, and JISQ 45100, which added requirements related mainly to daily safety and health activities to ISO 45001 (JISQ 45001), and is conducting operations accordingly. We are making preparations toward acquiring certification for ISO 45001 and JISQ 45100 at other worksites as well.

By fiscal 2009, Sumitomo Chemical acquired OSHMS certification from JISHA at all of its Works and Research Laboratories. Afterward, some worksites switched to independent operations, and currently 2 Works (5 facilities) and 1 Research Laboratory maintain certification. (JISHA's OSHMS includes the same requirements as OHSAS 18001.)

* Applicable scope of the Occupational Safety and Health Management System: Employees who work at the Company's Works and Research Laboratories (including temporary, part-time, and dispatch employees)

JISHA's Official Websites

Japanese: https://www.jisha.or.jp/about/index.html

English: https://www.jisha.or.jp/english/index.html

Acquisition of ISO 45001 and JISQ 45100 Certification (Sumitomo Chemical)

Facilities	Certificate Number	Certification Date
Osaka Works	ISO45001: JISHA-O-31	April 2020
Osaka Works	JISQ45100: JISHA-31	April 2020
Chiba Works	ISO45001: JISHA-O-61	June 2021
Chiba Works	JISQ45100: JISHA-61	June 2021

Acquisition of JISHA's OSHMS Certification (Sumitomo Chemical)

Facilities	Certificate Number	Certification Date
Oita Works (Utajima)	09-27-14	January 2009
Oita Works (Gifu Plant)	09-21-6	February 2009
Oita Works (Okayama Plant)	09-33-7	February 2009
Oita Works	06-44-1	July 2006
Ohe Works	10-38-4	March 2010
Health & Crop Sciences Research Laboratory	07-28-9	January 2007

Social Activities: Supplementary Data

Voluntary Safety Management of High-Pressure Gas Based on Certification by the Minister

Sumitomo Chemical continually renews the Accreditation of Completion and Safety Inspection, as stipulated in the High Pressure Gas Safety Act, for the Ehime Works and the Chiba Works. Certification is given to facilities that have achieved excellent safety, management, and technological levels and that are recognized as having met legally mandated requirements for safety management systems. Certified plants are allowed to conduct Completion Inspections and Safety Inspections of their own facilities in place of national, prefectural, and other governmental organizations.

Number of Accreditations of Completion and Safety Inspection Given for Sumitomo Chemical Facilities

Works	Area	Year of certification	Year and month renewed	Number of facilities given accreditation
Ehime Works	Niihama	2002	March 2018	13
	Kikumoto	2002	March 2018	4
Chiba Works	Anesaki	1987	May 2019	8
	Sodegaura	1987	May 2019	15

Note: Number of facilities given accreditation data as of the time of certification renewal.

Social Activities: Supplementary Data

Criteria and Results of the President's Safety Award for Zero-Lost Workday Operations (as of May 31, 2021)

Sumitomo Chemical has set facility specific criteria for the achievement of continuous periods of zero-lost workday operations for employees as well as contractors. The President's Safety Award is presented to facilities in recognition of their satisfaction of the above-mentioned criteria.

Sumitomo Chemical Employees (Works, Research Laboratories)

Facilities	Criteria for the President's Safety Award*1	Results
Ehime Works	3 million hours	A lost workday accident occurred in July 2020. Working to reach the target of 3 million work hours.
Ohe Works*2	3 million hours	Working to reach the target of 6 million work hours.
Chiba Works	3 million hours	Working to reach the target of 6 million work hours.
Osaka Works	3 million hours	Working to reach the target of 21 million work hours.
Oita Works*3	1.5 million hours	Working to reach the target of 3 million work hours.
Misawa Works	30 months	A lost workday accident occurred in February 2020. Working to reach the target of 30 months.
Health & Crop Sciences Research Laboratory	30 months	Working to reach the target of 60 months.
Tsukuba Regional Research Laboratory*4	30 months	Working to reach the target of 390 months.

Contractors / Affiliated Company Employees of Sumitomo Chemical (Works, Research Laboratories)

Facilities	Criteria for the President's Safety Award*1	Results
Ehime Association (Plant maintenance)	24 months	A lost workday accident occurred in September 2020. Working to reach the target of 24 months.
Ehime Logistics Association (Logistics)	24 months	A lost workday accident occurred in June 2019. Working to reach the target of 24 months.
Ohe Association (Plant maintenance)	48 months	Working to reach the target of 192 months
Ohe Logistics Association (Logistics)	48 months	Working to reach the target of 192 months
Chiba Association (Plant maintenance)	24 months	A lost workday accident occurred in October 2020. Working to reach the target of 24 months.
Chiba Logistics Association (Logistics)	24 months	A lost workday accident occurred in March 2020. Working to reach the target of 24 months.
Osaka Association	24 months	A lost workday accident occurred in October 2020. Working to reach the target of 24 months.
Oita Association	24 months	Working to reach the target of 144 months
Okayama Association	48 months	A lost workday accident occurred in November 2020. Working to reach the target of 48 months.
Gifu Association	48 months	Working to reach the target of 144 months
Misawa Works	48 months	A lost workday accident occurred in September 2019. Working to reach the target of 48 months.
Health & Crop Sciences Research Laboratory	48 months	Working to reach the target of 288 months
Tsukuba Regional Research Laboratory*4	48 months	Working to reach the target of 144 months

*1 Continuous periods of zero lost-workday operations.
*2 Ohe Works includes Sumika Assembly Techno Co., Ltd.
*3 Oita Works includes the Utajima Pilot Production Department, Gifu Plant, and Okayama Plant.
*4 The Tsukuba Regional Research Laboratory was reorganized into the Advanced Materials Development Research Laboratory (Tsukuba) and Energy & Functional Materials Research Laboratory (Tsukuba).

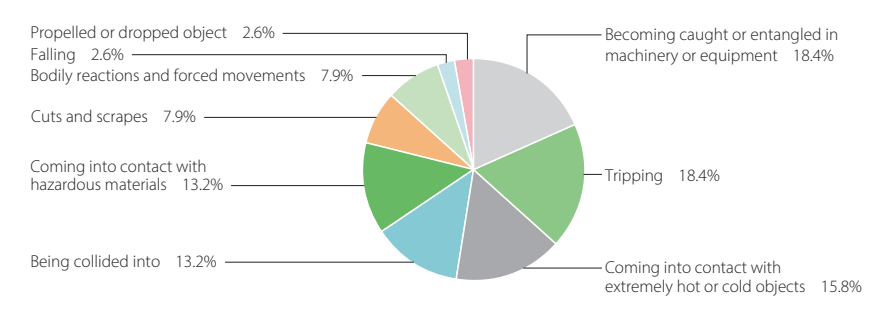
Social Activities: Supplementary Data

Safety Achievements

Lost-Workday Injuries (Sumitomo Chemical Group*)

	FY2017	FY2018	FY2019	FY2020
Number of lost-workday injuries	17	35	27	39
Frequency rate of lost-workday injuries	0.26	0.58	0.42	0.45
Number of fatal accidents	2	1	0	0
Number of fatal accidents (contract employees)	0	1	0	0

FY2020 Breakdown of Causes of Injury by Type (Sumitomo Chemical Group*)

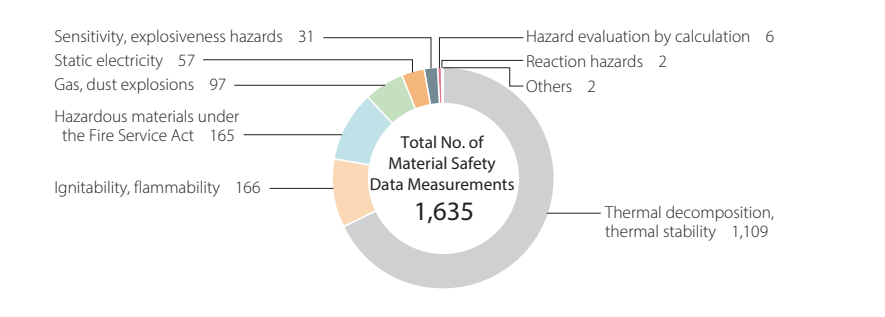


* Changed the definition of the Group for occupational health and safety in fiscal 2020
Up to FY2019: Sumitomo Chemical (including contractors) and consolidated Group companies in Japan and overseas.
FY2020 on: Sumitomo Chemical (including contractors) and consolidated subsidiaries in Japan and overseas.

Social Activities: Supplementary Data

Industrial Safety and Disaster Prevention Results

FY2020 Results of Material Safety Data Measurements Requiests (Sumitomo Chemical Group*)



* Sumitomo Chemical (including contractors) and consolidated Group companies in Japan and overseas.

The Safety Engineering Group at the Production & Safety Fundamental Technology Center studies and assesses process safety, researches safety measures, measures and evaluates material safety data, compiles a database on safety technologies, and undertakes training for safety engineers in its efforts to enhance process safety management and to prevent accidents such as fires and explosions. In fiscal 2020, 1,566 material safety data measurements were taken from within Sumitomo Chemical and 69 measurements were taken from Group companies for a total of 1,635.

The Launch of Several Process Safety Review Committees (Sumitomo Chemical)

	R&D stages		Industrialization stage		
Fiscal Year	Level 1	Level 2	Level 3	Level 4	Level 5
2017	25	19	27	88	47
2018	24	38	27	91	24
2019	25	17	30	67	21
2020	26	28	16	91	22

When new processes are developed at Sumitomo Chemical, the Process Safety Review Committee (levels 1 to 5) convenes at every step, from R&D through to industrial-scale production. In essence, this Committee focuses on process safety assessment results and confirms whether safety countermeasures are appropriate.

Safety Information Database (Sumitomo Chemical)

	Number of data sets	(Year on year comparison)
Accident prevention technology information	20,693	(Increased by 540)
Accident cause investigations	2,525	(Increased by 80)
Accident information	20,903	(Increased by 126)
As of March 31, 2021	44,121	(Increased by 746)

A safety information database has been created by collecting information on accidents in Japan and overseas and compiling abstracts of said data. As of the end of March 2021, 44,121 sets of data were stored in the database (43,375 sets of data as of March 31, 2020). This system allows all employees at each Works or Research Laboratory to search stored data using individual terminals. This data is also used in process hazard evaluations and case study examinations to prevent similar accidents. In addition, accident data is also disclosed to Group companies as necessary.

Social Activities: Supplementary Data

3 Product Stewardship / Product Safety / Quality Assurance

Quality Management System

■ Acquisition of ISO 9001 Certification (Sumitomo Chemical)

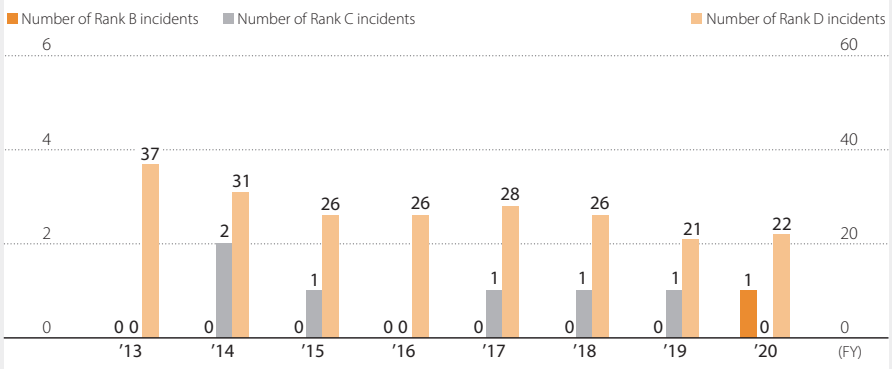
Works	Certificate Number	Certification Date
Ehime Works	JCQA-0019 JET-0847	October 1994 August 2009
Chiba Works	JQA-0829	March 1995
Osaka Works	JQA-0721	December 1994
Oita Works*	JQA-1069	December 1995
Oita Works (Okayama Plant)	JSAQ-2904	October 2020
Misawa Works	JQA-0752	December 1994
Ohe Works	JET-0829 JCQA-1720	April 1998 January 2010

* The Oita Works (Gifu Plant) has been pursuing Good Manufacturing Practice (GMP) management.

Logistics Quality Assurance

In fiscal 2020, the Company reported one logistics quality incident of rank B and 22 incidents of rank D. Of these incidents, 12 involved shipping error or false delivery, which can cause significant problems in the quality of customers' products. Going forward, we will continue to promote measures to reduce the number of logistics quality incidents.

■ Logistics Incidents Having an Impact on Our Customers (Sumitomo Chemical)*



Note: • Ranks reflect Sumitomo Chemical's standard, which classifies incidents into Ranks A, B, C, and D in descending order of severity.
• There were no occurrences of Rank A (the most severe) incidents.
• Incidents within the scope of logistics operations are consigned to Sumitomo Chemical.

* Includes some Group companies in Japan that have Works within a Sumitomo Chemical worksite

List of Policies

We have gathered together the Sumitomo Chemical Group's policies, guidelines, and other guidance related to sustainability.

Policies	Web
Corporate Philosophy	
The Sumitomo Spirit	https://www.sumitomo-chem.co.jp/english/company/principles/sumitomo/
Business Philosophy	https://www.sumitomo-chem.co.jp/english/company/principles/philosophy/
Basic Principles for Promoting Sustainability	https://www.sumitomo-chem.co.jp/english/sustainability/management/principles/basic_principles/
Sumitomo Chemical Charter for Business Conduct	https://www.sumitomo-chem.co.jp/english/company/principles/charter/
Material Issues for Sustainable Value Creation	
Sumitomo Chemical Group Basic Policy Towards a Circular System for Plastics	https://www.sumitomo-chem.co.jp/english/sustainability/management/materiality/plastic/
Governance	
Sumitomo Chemical Corporate Governance Guidelines	https://www.sumitomo-chem.co.jp/english/company/files/docs/governance_pdf_01.pdf
Corporate Governance Report	https://www.sumitomo-chem.co.jp/english/company/files/docs/governance_report_e.pdf
Implementation Policy for Japan's Stewardship Code	https://www.sumitomo-chem.co.jp/english/sustainability/files/docs/stewardship_E.pdf
Basic policy for Enhancement of the Internal Control System	https://www.sumitomo-chem.co.jp/english/company/files/docs/InternalControlSystem_20190329_e.pdf
Compliance Manual	https://www.sumitomo-chem.co.jp/english/sustainability/governance/compliance/rules_society/
Basic Policy Regarding on Compliance	https://www.sumitomo-chem.co.jp/english/sustainability/governance/compliance/
Compliance Manual for Bribery Prevention (Outline)	https://www.sumitomo-chem.co.jp/english/sustainability/governance/anti_corruption/#headline-manuals
Sumitomo Chemical Group Tax Policy	https://www.sumitomo-chem.co.jp/english/sustainability/files/docs/sumitomo_chemical_group_tax_policy.pdf
Corporate Policy on Responsible Care (Safety, Health, the Environment and Product Quality)	https://www.sumitomo-chem.co.jp/english/sustainability/governance/responsiblecare/promote/
Environment	
Corporate Policy on Responsibl e Care (Safety, Health, the Environment and Product Quality)	https://www.sumitomo-chem.co.jp/english/sustainability/governance/responsiblecare/promote/
Eco-First Commitments	https://www.sumitomo-chem.co.jp/english/sustainability/governance/responsiblecare/ecofirst/
Sumitomo Chemical's Commitment to the Conservation of Biodiversity	https://www.sumitomo-chem.co.jp/english/sustainability/environment/conservation/biodiversity/
Society (Social Activities)	
Sumitomo Chemical Group Human Rights Policy	https://www.sumitomo-chem.co.jp/english/sustainability/files/docs/HumanRightsPolicy_e.pdf
Compliance with the Laws and Regulations involving Respect for Human Rights World-wide	https://www.sumitomo-chem.co.jp/english/sustainability/society/human_rights/statement/
Basic Procurement Principles	https://www.sumitomo-chem.co.jp/english/company/purchasing/principles/
Sumitomo Chemical Group Sustainable Procurement Guidebook	https://www.sumitomo-chem.co.jp/english/sustainability/files/docs/cp_csr_guidebook_e.pdf
Sumitomo Chemical Group Policy for Responsible Procurement of Minerals/Raw Materials	https://www.sumitomo-chem.co.jp/english/sustainability/society/procurement/minerals/
Human Resources System Initiatives	https://www.sumitomo-chem.co.jp/english/sustainability/society/management/
Group Diversity and Inclusion Policy	https://www.sumitomo-chem.co.jp/english/sustainability/society/management/diversity/
Action Plan to Reform Workstyles	https://www.sumitomo-chem.co.jp/english/sustainability/society/management/work_life_balance/
Corporate Policy on Responsible Care (Safety, Health, the Environment and Product Quality)	https://www.sumitomo-chem.co.jp/english/sustainability/governance/responsiblecare/promote/
Sumitomo Chemical's Social Contribution Activities	https://www.sumitomo-chem.co.jp/english/sustainability/society/region/

Calculation Standards for Environmental and Social Data Indicators

1. Period: April 2020 to March 2021
2. Boundary: Refer to Boundary of This Report on page 3 of the *Sustainability Data Book 2021*.
3. Calculation Method:

Environmental Data Indicator		Unit	Calculation Method
Energy	Energy consumption	Thousand kl of crude oil	{(Amount of electricity purchased × Per-unit heating value + Amount of heat purchased × Per-unit heating value) + Σ (Amount of each fuel used × Per-unit heating value for each fuel)} × 0.0258 The per-unit heating value of electricity, per-unit heating value for each fuel, and the types of fuel included in the scope of calculation are based on the values and calculation methods outlined in the Act on the Rational Use of Energy. Because we calculated GHG emissions in accordance with the GHG Protocol from fiscal 2017, the energy usage amount includes the energy used to produce electricity and steam sold to external parties by the Group. The heating value used overseas is based on standard heating values used in the formulation of Japanese laws.
Amount of Exhaustible Resources Used	Hydrocarbon compounds	Thousand tons	Total amount of hydrocarbon compounds used as raw materials (only raw materials purchased from outside the Sumitomo Chemical Group).
	Metals (excluding minor metals)	Thousand tons	Total amount of metals, excluding minor metals, used as raw materials: iron, gold, silver, copper, zinc, aluminum, lead, platinum, titanium, palladium, gallium, and lithium (only raw materials purchased from outside the Sumitomo Chemical Group).
	Minor metals	Thousand tons	Total amount of minor metals used as raw materials: nickel, chromium, tungsten, cobalt, molybdenum, manganese, and vanadium (only raw materials purchased from outside the Sumitomo Chemical Group).
Water	Industrial water Drinking water Seawater Groundwater Other water	Million tons	Amount of industrial water, drinking water, seawater, groundwater, and other water used.
PCBs/CFCs in Use or under Secure Storage	No. of electrical devices containing high concentrations of PCBs	Units	The number of electrical devices containing high concentrations of PCBs, such as condensers and transformers, that are currently in use or under secure storage. Does not include fluorescent lamps and mercury lamp ballasts or contaminated substances (wastepaper, etc.).
	PCB volume	kl	The total amount of PCBs in electrical devices containing PCBs, calculated as the net PCB content by volume. Does not include fluorescent lamps and mercury lamp ballasts or contaminated substances (wastepaper, etc.).
	No. of refrigeration units using specified CFCs as a coolant	Units	No. of refrigeration units using specified CFCs as a coolant
	No. of refrigeration units using specified HCFCs as a coolant	Units	No. of refrigeration units using specified HCFCs as a coolant
Products	Calculated on the basis of ethylene production	Thousand tons	The production volume of products is calculated on the basis of ethylene production, using the amount of energy necessary to manufacture the products by weight and the amount of energy necessary for ethylene production by weight. Some assumptions were made in calculations due to the difficulty of obtaining weight-based figures for certain products.
Water Pollutant Emissions	COD	Tons	The total amount of COD emitted into public water area (coastal waters/waterways) and sewer systems. Calculated as: The COD concentration at drains included in the scope of calculation × The amount of water drained into public water bodies and sewer systems from each drain.
	Phosphorus	Tons	The total amount of phosphorus emitted into public water area (coastal waters/waterways) and sewer systems. Calculated as: The phosphorus concentration at drains included in the scope of calculation × The amount of water drained into public water bodies and sewer systems from each drain.
	Nitrogen	Tons	The total amount of nitrogen emitted into public water area (coastal waters/waterways) and sewer systems. Calculated as: The nitrogen concentration at drains included in the scope of calculation × The amount of water drained into public water bodies and sewer systems from each drain.
Waste Materials	Waste emission amount	Thousand tons	The total amount of waste discharged from business sites. The amount of coal ash generated at Sumitomo Joint Electric Power Co., Ltd., which is included in the waste discharge amount, is calculated on a dry-weight basis.
	Landfill disposal amount: – On-site landfill – External landfill	Thousand tons	The total amount of waste disposed of in landfills. The amount of coal ash generated at Sumitomo Joint Electric Power Co., Ltd., which is included in the landfill disposal amount, is calculated on a dry-weight basis. * Landfill disposal amount for Sumitomo Chemical: Of the waste remaining after external reduction processing, the entire amount disposed of in landfills (not recycled) is calculated as the external landfill disposal amount.
	Total landfill	Thousand tons	The total amount of waste disposed of in landfills.

Calculation Standards for Environmental and Social Data Indicators

Environmental Data Indicator		Unit	Calculation Method
Atmospheric Emissions	Greenhouse gas emissions	Thousand tons of CO_2	**CO_2 emissions from energy use:** Amount of electricity purchased × CO_2 emission factors for electricity + Amount of steam purchased × CO_2 emission factors for steam + Σ(Amount of each fuel used × Per-unit heating value for each fuel × CO_2 emission coefficient for each fuel) The CO_2 emission factors for steam, per-unit heating value for each fuel, and CO_2 emission factors for each fuel are based on the values outlined in the Greenhouse Gas Emissions Accounting, Reporting, and Disclosure System of the Act on Promotion of Global Warming Countermeasures. The CO_2 emission factors for electricity in Japan uses the values for each fiscal year by electric power company and that for overseas uses the values by electric power company along with the IEA's fiscal 2017 efficiency indicators for each country. From fiscal 2017, results include the energy used to produce the power and steam sold to external parties in accordance with the GHG Protocol. **CO_2 emissions from other than energy use and non-CO_2 GHG emissions:** In Japan, results are based on the calculation method outlined in the Greenhouse Gas Emissions Accounting, Reporting, and Disclosure System of the Act on Promotion of Global Warming Countermeasures. From fiscal 2017, results include CO_2 emissions generated by processes not subject to reporting under the Act on Promotion of Global Warming Countermeasures but that emit 3,000 or more tons of CO_2 per year. Overseas, figures are calculated in accordance with the laws and regulations of their respective countries.
	NOx	Tons	The total amount of nitrogen oxides originating from facilities specified in the Air Pollution Control Act. Calculated as: Each facility's dry gas emission volume × NOx (N_2O) concentration.
	SOx	Tons	The total amount of sulfur oxides originating from facilities specified in the Air Pollution Control Act. Calculated as: Amount of sulfur in fuel used by each facility × Amount of fuel used. Or calculated as: Each facility's dry gas emission volume × SOx (SO_2) concentration.
	Soot and dust	Tons	The total amount of soot and dust originating from facilities specified in the Air Pollution Control Act. Calculated as: Each facility's dry gas emission volume × Soot and dust concentration.
Substances Subject to the PRTR Act	Atmospheric emissions, water pollutant emission	Tons	Calculated based on the amended Order for Enforcement of the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (amended Order for Enforcement of the PRTR Act), executed on April 1, 2010.
Logistics	Energy consumption	Thousand kl of crude oil	The energy consumption is calculated as 10 GJ = 0.258 kl of crude oil, based on the Energy Saving Act Guide Book for Shippers written and edited by Japan's Agency for Natural Resources and Energy.
	CO_2 emissions	Thousand tons of CO_2	Calculated based on the Manual for Calculation and Report of Greenhouse Gas Emissions (Ver. 4.6) from Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry using the energy consumption calculated above in GJ.
Scope 3 Greenhouse Gas Emissions	Category 1: Purchased goods and services	Tons of CO_2	Σ {(Volume and monetary amount of goods and services purchased and acquired × Emission intensity)} Values used for emission intensity (volume) are based on the values outlined in IDEA v2 (for calculating supply chain greenhouse gas emissions). Values used for emission intensity (monetary amount) calculations are based on the values outlined in the Database on Emission Intensities for Calculating Organizational Greenhouse Gas Emissions, etc. through a Supply Chain Version 3.1 March 2021.
	Category 2: Capital goods	Tons of CO_2	Σ {(Value of capital goods) × (Emission intensity)} Values used for emission intensity are based on the values outlined in the Database on Emission Intensities for Calculating Organizational Greenhouse Gas Emissions, etc. through a Supply Chain Version 3.1 March 2021.
	Category 3: Fuels and energy-related activities not included in Scope 1 or 2	Tons of CO_2	Σ {(Amount of electricity purchased) × (Emissions intensity)} + Σ{(Amount of heat purchased) × (Emissions intensity)} + Σ{(Amount of each fuel used) × (Emissions intensity for each fuel)} Values used for emission intensity are based on the values outlined in the Database on Emission Intensities for Calculating Organizational Greenhouse Gas Emissions, etc. through a Supply Chain Version 3.1 March 2021 and IDEA v2 (for calculating supply chain greenhouse gas emissions).
	Category 4: Upstream transportation and distribution	Tons of CO_2	Calculated by the calculation method for CO_2 emissions in logistics area or by using values based on IDEA v2 (for calculating supply chain greenhouse gas emissions)
	Category 5: Waste generated in operations	Tons of CO_2	Σ (Amount of waste by type × CO_2 emissions intensity of waste by type) CO_2 emissions intensity of waste by type are based on the values outlined in the Database on Emission Intensities for Calculating Organizational Greenhouse Gas Emissions, etc. through a Supply Chain Version 3.1 March 2021.
	Category 6: Business travel	Tons of CO_2	By mode of travel: Σ (Expenses paid for transportation × Emission intensity) Values used for emission intensity are based on the values outlined in the Database on Emission Intensities for Calculating Organizational Greenhouse Gas Emissions, etc. through a Supply Chain Version 3.1 March 2021.
	Category 7: Employee commuting	Tons of CO_2	By mode of commuting: Σ (Expenses paid for transportation × Emission intensity) Values used for emission intensity are based on the values outlined in the Database on Emission Intensities for Calculating Organizational Greenhouse Gas Emissions, etc. through a Supply Chain Version 3.1 March 2021 and IDEA v2 (for calculating supply chain greenhouse gas emissions).

Calculation Standards for Environmental and Social Data Indicators

Environmental Data Indicator		Unit	Calculation Method
Scope 3 Greenhouse Gas Emissions	Category 8: Upstream leased assets	Tons of CO_2	Calculations of emissions from leased vehicles: Σ (Amount of gasoline consumed annually per vehicle × Emission intensity) The amount of gasoline consumed annually per vehicle is calculated using the Annual Report on Automobile Transportation Statistics. Values used for emission intensity are based on the emission factors outlined in the Accounting, Reporting, and Disclosure System of the Act on Promotion of Global Warming Countermeasures.
	Category 9: Downstream transportation and distribution	Tons of CO_2	Refer to the calculation method used for CO_2 emissions in the logistics section above. Calculations are for fertilizer products for which the sales destination are known and that are sold to consumers as final products.
	Category 10: Processing of sold products	Tons of CO_2	Exempted: The Group's products are mainly materials and components used for various applications, which makes it difficult to know such details as the nature of the processing products undergo after delivery. Based on the calculation guidelines for the chemical industry created by the WBCSD, the Group is exempted from this category.
	Category 11: Use of sold products	Tons of CO_2	Calculations are for the pharmaceutical product fixed-dose mist inhalers as well as fertilizer products for which GHG emissions levels are known and that are sold to consumers as final products. Σ (Fertilizer sales volume by type × Percentage of nitrogen in fertilizers by type × N_2O emission factors by type × 298 (GWP)) Σ (HFC volume in fixed-dose mist inhalers × GWP) Values for GWP are based on emission factors listed in Appendix 15 under the Calculation Method and Emission Factors Chart in the Accounting, Reporting, and Disclosure System of the Order for Enforcement of the Act on Promotion of Global Warming Countermeasures.
	Category 12: End-of-life treatment of sold products	Tons of CO_2	Calculations are for the Group's main resin-related products. Σ {(Production volume of resin-related products) × (Emission intensity)} Values used for emission intensity are based on the values outlined in the Database on Emission Intensities for Calculating Organizational Greenhouse Gas Emissions, etc. through a Supply Chain Version 3.1 March 2021.
	Category 13: Downstream leased assets	Tons of CO_2	Exempted: There are no relevant leased assets.
	Category 14: Franchises	Tons of CO_2	Exempted: There are no relevant operations.
	Category 15: Investments	Tons of CO_2	Exempted: Because Sumitomo Chemical changed its approach to financial control consolidation for disclosure purposes from fiscal 2017, the Group is now exempted from this category.

Social and Economic Data Indicator		Unit	Calculation Method
Occupational Safety and Health	Frequency rate	—	(Number of lost-workday injuries and casualties ÷ Cumulative total of hours worked) × 1,000,000
	Severity rate	—	(Cumulative total of workdays lost ÷ Cumulative total of hours worked) × 1,000

Environmental Accounting Indicators		Unit	Calculation Method
Environmental Protection Costs		Billion yen	Costs include depreciation.
Economic Benefits	Reduced costs through energy saving	Billion yen	Reduced costs of energy through energy-saving activities.
	Reduced costs through resource saving	Billion yen	Reduced costs of waste processing attributable to resource-saving activities.
	Reduced costs through recycling activities	Billion yen	Reduced costs of waste processing compared to the previous fiscal year through waste reduction attributable to recycling activities and gains on sales of valuable resources obtained from recycling, etc.

KPMG

Independent Assurance Report

To the Representative Director & President of Sumitomo Chemical Company, Limited

We were engaged by Sumitomo Chemical Company, Limited (the "Company") to undertake a limited assurance engagement of the environmental and social performance indicators marked with "★" (the "Indicators") for the period from April 1, 2020 to March 31, 2021 included in its Sustainability Data Book 2021 (the "Data Book") for the fiscal year ended March 31, 2021.

The Company's Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the "Company's reporting criteria"), as described in the Data Book.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with the 'International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information' and the 'ISAE 3410, Assurance Engagements on Greenhouse Gas Statements' issued by the International Auditing and Assurance Standards Board. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Data Book, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing the Company's responsible personnel to obtain an understanding of its policy for preparing the Data Book and reviewing the Company's reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical procedures on the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company's reporting criteria, and recalculating the Indicators.
- Making inquiries and reviewing materials including documented evidence of one of the factories of the Company and one of the Company's subsidiaries selected on the basis of a risk analysis, as alternative procedures to a site visit.
- Evaluating the overall presentation of the Indicators.

Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the Indicators in the Data Book are not prepared, in all material respects, in accordance with the Company's reporting criteria as described in the Data Book.

Our Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control 1, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

KPMG AZSA Sustainability Co., Ltd.

KPMG AZSA Sustainability Co., Ltd.
Osaka, Japan
October 22, 2021

GRI Standards Reference Table

The *Sustainability Data Book 2021* has been prepared in accordance with "Core option" of the Sustainability Reporting Standard of the Global Reporting Initiative (GRI).

Universal Standards

NO.	Disclosure	Reporting requirements	Corresponding part		
			The Sustainability Data Book 2021		Website and related reports
GRI102: General Disclosures 2016					
Organizational profile					
102-1	Name of the organization	a. Name of the organization.			Corporate Profile
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.			Business & Products Each Sector Situation (Annual Report PP.38-59)
102-3	Location of headquarters	a. Location of the organization's headquarters.	Introduction to Sumitomo Chemical	P.4	Corporate Profile
102-4	Location of operations	a. Number of countries where the organization operates, and the names of countries where it has significant operations and/or that are relevant to the topics covered in the report.			Business Locations & Group Companies
102-5	Ownership and legal form	a. Nature of ownership and legal form.			Corporate Profile
102-6	Markets served	a. Markets served, including: i. geographic locations where products and services are offered; ii. sectors served; iii. types of customers and beneficiaries.			Corporate Data (Annual Report PP.96-111) Business Locations & Group Companies
102-7	Scale of the organization	a. Scale of the organization, including: i. total number of employees; ii. total number of operations; iii. net sales (for private sector organizations) or net revenues (for public sector organizations); iv. total capitalization (for private sector organizations) broken down in terms of debt and equity; v. quantity of products or services provided.			Corporate Profile
102-8	Information on employees and other workers	a. Total number of employees by employment contract (permanent and temporary), by gender. b. Total number of employees by employment contract (permanent and temporary), by region. c. Total number of employees by employment type (full-time and part-time), by gender. d. Whether a significant 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. 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). f. An explanation of how the data have been compiled, including any assumptions made.	Human Resources Diversity and Inclusion	PP.214-217 PP.174-178	
102-9	Supply chain	a. A description of the organization's supply chain, including its main elements as they relate to the organization's activities, primary brands, products, and services.			Each Sector Situation (Annual Report PP.38-59) Production Flow Charts (Investors' Handbook PP.78-85)
102-10	Significant changes to the organization and its supply chain	a. Significant changes to the organization's size, structure, ownership, or supply chain, including: i. Changes in the location of, or changes in, operations, including facility openings, closings, and expansions; ii. Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations); iii. Changes in the location of suppliers, the structure of the supply chain, or relationships with suppliers, including selection and termination.	Not applicable		
102-11	Precautionary Principle or approach	a. Whether and how the organization applies the Precautionary Principle or approach.	For a Sustainable Future Risk Management	PP.6-51 PP.74-76	Value Creation Platform (Annual Report PP.60-95)

GRI Standards Reference Table

NO.	Disclosure	Reporting requirements	Corresponding part		
			The Sustainability Data Book 2021		Website and related reports
102-12	External initiatives	a. A list of externally-developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes, or which it endorses.	Participation in Initiatives Eco-First Commitments Engaging in Human Rights Initiatives	PP.43-46 PP.93-94 P.159	
102-13	Membership of associations	a. A list of the main memberships of industry or other associations, and national or international advocacy organizations.	Participation in Initiatives	PP.43-46	
Strategy					
102-14	Statement from senior decision-maker	a. A statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy for addressing sustainability.	President's Message	PP.7-12	
102-15	Key impacts, risks, and opportunities	a. A description of key impacts, risks, and opportunities.	President's Message Material Issues to Be Addressed as Management Priorities Key Performance Indicator (KPI) Risk Management Scenario Analysis, Summary Addressing Climate Change	PP.7-12 PP.17-22 PP.23-32 PP.74-76 PP.109-110 PP.105-116	
Ethics and integrity					
102-16	Values, principles, standards, and norms of behavior	a. A description of the organization's values, principles, standards, and norms of behavior.	Corporate Philosophy What Sumitomo Chemical Group Strives to Be	PP.13-15 P.16	
102-17	Mechanisms for advice and concerns about ethics	a. A description of internal and external mechanisms for: i. seeking advice about ethical and lawful behavior, and organizational integrity; ii. reporting concerns about unethical or unlawful behavior, and organizational integrity.	Compliance	PP.77-84	
Governance					
102-18	Governance structure	a. Governance structure of the organization, including committees of the highest governance body. b. Committees responsible for decision-making on economic, environmental, and social topics.	Current Corporate Governance Organization Sustainability Promotion System	PP.54-56 P.34	
102-19	Delegating authority	a. Process for delegating authority for economic, environmental, and social topics from the highest governance body to senior executives and other employees.	Sustainability Promotion System	P.34	
102-20	Executive-level responsibility for economic, environmental, and social topics	a. Whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental, and social topics. b. Whether post holders report directly to the highest governance body.	Sustainability Promotion System	P.34	
102-21	Consulting stakeholders on economic, environmental, and social topics	a. Processes for consultation between stakeholders and the highest governance body on economic, environmental, and social topics. b. If consultation is delegated, describe to whom it is delegated and how the resulting feedback is provided to the highest governance body.	Sustainability Promotion System	P.34	
102-22	Composition of the highest governance body and its committees	a. Composition of the highest governance body and its committees by: i. executive or non-executive; ii. independence; iii. tenure on the governance body; iv. number of each individual's other significant positions and commitments, and the nature of the commitments; v. gender; vi. membership of under-represented social groups; vii. competencies relating to economic, environmental, and social topics; viii. stakeholder representation.	Current Corporate Governance Organization	PP.54-56	*Corporate Governance Report*

GRI Standards Reference Table

NO.	Disclosure	Reporting requirements	Corresponding part: The Sustainability Data Book 2021		Corresponding part: Website and related reports
102-23	Chair of the highest governance body	a. Whether the chair of the highest governance body is also an executive officer in the organization. b. If the chair is also an executive officer, describe his or her function within the organization's management and the reasons for this arrangement.	Corporate Governance Organization Current Corporate Governance Organization	P.54 PP.54-56	Corporate Governance Report
102-24	Nominating and selecting the highest governance body	a. Nomination and selection processes for the highest governance body and its committees. b. Criteria used for nominating and selecting highest governance body members, including whether and how: i. stakeholders (including shareholders) are involved; ii. diversity is considered; iii. independence is considered; iv. expertise and experience relating to economic, environmental, and social topics are considered.	Corporate Governance Organization Current Corporate Governance Organization Directors & Senior Management Expertise and Experience of Directors and Corporate Auditors	P.54 PP.54-56 PP.67-70 P.71	Corporate Governance Report
102-25	Conflicts of interest	a. Processes for the highest governance body to ensure conflicts of interest are avoided and managed. b. Whether conflicts of interest are disclosed to stakeholders, including, as a minimum: i. Cross-board membership; ii. Cross-shareholding with suppliers and other stakeholders; iii. Existence of controlling shareholder; iv. Related party disclosures.	Current Corporate Governance Organization Efforts to Substantively Strengthen Corporate Governance Listed Company with Listed Subsidiaries Cross-Shareholdings	PP.54-56 PP.60-63 PP.64-65 P.66	Corporate Governance Report Consolidated Financial Statements
102-26	Role of highest governance body in setting purpose, values, and strategy	a. Highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental, and social topics.	Sustainability Promotion System Corporate Governance	P.34 PP.53-71	
102-27	Collective knowledge of highest governance body	a. Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental, and social topics.	Efforts to Substantively Strengthen Corporate Governance Sustainability Promotion System	PP.60-63 P.34	
102-28	Evaluating the highest governance body's performance	a. Processes for evaluating the highest governance body's performance with respect to governance of economic, environmental, and social topics. b. Whether such evaluation is independent or not, and its frequency. c. Whether such evaluation is a self-assessment. d. Actions 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.	Efforts to Substantively Strengthen Corporate Governance	PP.60-63	
102-29	Identifying and managing economic, environmental, and social impacts	a. Highest governance body's role in identifying and managing economic, environmental, and social topics and their impacts, risks, and opportunities – including its role in the implementation of due diligence processes. b. Whether stakeholder consultation is used to support the highest governance body's identification and management of economic, environmental, and social topics and their impacts, risks, and opportunities.	Efforts to Substantively Strengthen Corporate Governance Sustainability Promotion System Risk Management Addressing Climate Change (Basic Stance, Management System)	PP.60-63 P.34 PP.74-76 PP.105-106	
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.	Sustainability Promotion System Risk Management	P.34 PP.74-76	
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.	Sustainability Promotion System Risk Management Addressing Climate Change (Management System)	P.34 PP.74-76 P.106	
102-32	Highest governance body's role in sustainability reporting	a. The highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material topics are covered.	Sustainability Promotion System	P.34	
102-33	Communicating critical concerns	a. Process for communicating critical concerns to the highest governance body.	Sustainability Promotion System Internal Control Risk Management Compliance System at the Sumitomo Chemical Group	P.34 PP.72-73 PP.74-76 PP.78-79	

GRI Standards Reference Table

NO.	Disclosure	Reporting requirements	Corresponding part: The Sustainability Data Book 2021		Corresponding part: Website and related reports
102-34	Nature and total number of critical concerns	a. Total number and nature of critical concerns that were communicated to the highest governance body. b. Mechanism(s) used to address and resolve critical concerns.	Sustainability Promotion System Internal Control Risk Management Compliance	P.34 PP.72-73 PP.74-76 PP.77-84	
102-35	Remuneration policies	a. Remuneration policies for the highest governance body and senior executives for the following types of remuneration: i. Fixed pay and variable pay, including performance-based pay, equity-based pay, bonuses, and deferred or vested shares; ii. Sign-on bonuses or recruitment incentive payments; iii. Termination payments; iv. Clawbacks; v. Retirement benefits, including the difference between benefit schemes and contribution rates for the highest governance body, senior executives, and all other employees. b. How performance criteria in the remuneration policies relate to the highest governance body's and senior executives' objectives for economic, environmental, and social topics.	Executive Nomination and Remuneration	PP.57-59	
102-36	Process for determining remuneration	a. Process for determining remuneration. b. Whether remuneration consultants are involved in determining remuneration and whether they are independent of management. c. Any other relationships that the remuneration consultants have with the organization.	Executive Nomination and Remuneration	PP.57-59	
102-37	Stakeholders' involvement in remuneration	a. How stakeholders' views are sought and taken into account regarding remuneration. b. If applicable, the results of votes on remuneration policies and proposals.	Executive Nomination and Remuneration	PP.57-59	
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.	—	—	
Stakeholder engagement					
102-40	List of stakeholder groups	a. A list of stakeholder groups engaged by the organization.	Communication with Stakeholders Digest of Expert Opinion and Advice	PP.47-48 PP.31-32	TOPIC : Engagement with Investors on the Topic of Listed Companies with Listed Subsidiaries (Annual Report P89) Dialogue with Shareholders and Investors (Annual Report P95)
102-41	Collective bargaining agreements	a. Percentage of total employees covered by collective bargaining agreements.	Communication with Employees	P.169	
102-42	Identifying and selecting stakeholders	a. The basis for identifying and selecting stakeholders with whom to engage.	Communication with Stakeholders	PP.47-48	Dialogue with Shareholders and Investors (Annual Report P95)
102-43	Approach to stakeholder engagement	a. The organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	Communication with Stakeholders	PP.47-48	TOPIC : Engagement with Investors on the Topic of Listed Companies with Listed Subsidiaries (Annual Report P89) Dialogue with Shareholders and Investors (Annual Report P95)
102-44	Key topics and concerns raised	a. Key topics and concerns that have been raised through stakeholder engagement, including: i. how the organization has responded to those key topics and concerns, including through its reporting; ii. the stakeholder groups that raised each of the key topics and concerns.	Sustainability Promotion System Digest of Expert Opinion and Advice	P.34 PP.31-32	TOPIC : Engagement with Investors on the Topic of Listed Companies with Listed Subsidiaries (Annual Report P89) Dialogue with Shareholders and Investors (Annual Report P95)

GRI Standards Reference Table

NO.	Disclosure	Reporting requirements	Corresponding part		
			The Sustainability Data Book 2021		Website and related reports
Reporting practice					
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 entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.			Consolidated Financial Statements
102-46	Defining report content and topic Boundaries	a. An explanation of the process for defining the report content and the topic Boundaries. b. An explanation of how the organization has implemented the Reporting Principles for defining report content.	Editorial Policy Report Profile	P.2 P.3	
102-47	List of material topics	a. A list of the material topics identified in the process for defining report content.	Material Issues to Be Addressed as Management Priorities Key Performance Indicator (KPI)	PP.17-22 P.23	
102-48	Restatements of information	a. The effect of any restatements of information given in previous reports, and the reasons for such restatements.	Water Usage (Sumitomo Chemical Group) FY2018–2020 Environmental Performance (Sumitomo Chemical and Group Companies in Japan)	P.120 P.128	
102-49	Changes in reporting	a. Significant changes from previous reporting periods in the list of material topics and topic Boundaries.	Not applicable	—	
102-50	Reporting period	a. Reporting period for the information provided.	Report Profile	P.3	
102-51	Date of most recent report	a. If applicable, the date of the most recent previous report.	Report Profile	P.3	
102-52	Reporting cycle	a. Reporting cycle.	Report Profile	P.3	
102-53	Contact point for questions regarding the report	a. The contact point for questions regarding the report or its contents.			Contact
102-54	Claims of reporting in accordance with the GRI Standards	a. The claim made by the organization, if it has prepared a report in accordance with the GRI Standards, either: i. *'This report has been prepared in accordance with the GRI Standards: Core option'*; ii. *'This report has been prepared in accordance with the GRI Standards: Comprehensive option'*.	Report Profile GRI Standards Reference Table	P.3 "Core option"	
102-55	GRI content index	a. The GRI content index, which specifies each of the GRI Standards used and lists all disclosures included in the report. b. For each disclosure, the content index shall include: i. the number of the disclosure (for disclosures covered by the GRI Standards); ii. the page number (s) or URL (s) where the information can be found, either within the report or in other published materials; iii. if applicable, and where permitted, the reason(s) for omission when a required disclosure cannot be made.	GRI Standards Reference Table	PP.229-249	
102-56	External assurance	a. A description of the organization's policy and current practice with regard to seeking external assurance for the report. b. If the report has been externally assured: 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; ii. The relationship between the organization and the assurance provider; iii. Whether and how the highest governance body or senior executives are involved in seeking external assurance for the organization's sustainability report.	Editorial Policy Independent Assurance Report	P.2 P.228	

GRI Standards Reference Table

NO.	Disclosure	Reporting requirements	Corresponding part		
			The Sustainability Data Book 2021		Website and related reports
GRI103: Management Approach 2016					
103-1	Explanation of the material topic and its Boundary	a. An explanation of why the topic is material. b. The Boundary for the material topic, which includes a description of: i. where the impacts occur; ii. the organization's involvement with the impacts. For example, whether the organization has caused or contributed to the impacts, or is directly linked to the impacts through its business relationships. c. Any specific limitation regarding the topic Boundary.	Material Issues to Be Addressed as Management Priorities Key Performance Indicator (KPI)	PP.17-22 PP.23-32	
103-2	The management approach and its components	a. An explanation of how the organization manages the topic. b. A statement of the purpose of the management approach. c. A description of the following, if the management approach includes that component: i. Policies ii. Commitments iii. Goals and targets iv. Responsibilities v. Resources vi. Grievance mechanisms vii. Specific actions, such as processes, projects, programs and initiatives	Material Issues to Be Addressed as Management Priorities Key Performance Indicator (KPI) Sustainability Promotion System	PP.17-22 PP.23-32 P.34	
103-3	Evaluation of the management approach	a. An explanation of how the organization evaluates the management approach, including: i. the mechanisms for evaluating the effectiveness of the management approach; ii. the results of the evaluation of the management approach; iii. any related adjustments to the management approach.	Sustainability Promotion System Digest of Expert Opinion and Advice	P.34 PP.31-32	

GRI Standards Reference Table

Topic-specific Standards

○: Items related material aspects for Sumitomo Chemical Group in GRI Standards ID 200 – 400 range

NO.	Related material aspects	Disclosure	Reporting requirements	The Sustainability Data Book 2021	
ECONOMIC					
GRI201: Economic Performance 2016					
201-1		Direct economic value generated and distributed	a. Direct economic value generated and distributed (EVG&D) on an accruals basis, including the basic components for the organization's global operations as listed below. If data are presented on a cash basis, report the justification for this decision in addition to reporting the following basic components: i. Direct economic value generated: revenues; ii. Economic value distributed: operating costs, employee wages and benefits, payments to providers of capital, payments to government by country, and community investments; iii. Economic value retained: 'direct economic value generated' less 'economic value distributed'. b. Where significant, report EVG&D separately at country, regional, or market levels, and the criteria used for defining significance.	Consolidated Financial Statements	
201-2	○	Financial implications and other risks and opportunities due to climate change	a. Risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue, or expenditure, including: i. a description of the risk or opportunity and its classification as either physical, regulatory, or other; ii. a description of the impact associated with the risk or opportunity; iii. the financial implications of the risk or opportunity before action is taken; iv. the methods used to manage the risk or opportunity; v. the costs of actions taken to manage the risk or opportunity.	Scenario Analysis, Summary Addressing Climate Change	PP.109-110 PP.105-116
201-3		Defined benefit plan obligations and other retirement plans	a. If the plan's liabilities are met by the organization's general resources, the estimated value of those liabilities. b. If a separate fund exists to pay the plan's pension liabilities: 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; ii. the basis on which that estimate has been arrived at; iii. when that estimate was made. c. If 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. d. Percentage of salary contributed by employee or employer. 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.	Consolidated Financial Statements	
201-4		Financial assistance received from government	a. Total monetary value of financial assistance received by the organization from any government during the reporting period, including: i. tax relief and tax credits; ii. subsidies; iii. investment grants, research and development grants, and other relevant types of grant; iv. awards; v. royalty holidays; vi. financial assistance from Export Credit Agencies (ECAs); vii. financial incentives; viii. other financial benefits received or receivable from any government for any operation. b. The information in 201-4-a by country. c. Whether, and the extent to which, any government is present in the shareholding structure.	—	—
GRI202: Market Presence 2016					
202-1		Ratios of standard entry level wage by gender compared to local minimum wage	a. When a significant proportion of employees are compensated based on wages subject to minimum wage rules, report the relevant ratio of the entry level wage by gender at significant locations of operation to the minimum wage. 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. 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. d. The definition used for 'significant locations of operation'.	—	—

GRI Standards Reference Table

NO.	Related material aspects	Disclosure	Reporting requirements	The Sustainability Data Book 2021	
202-2		Proportion of senior management hired from the local community	a. Percentage of senior management at significant locations of operation that are hired from the local community. b. The definition used for 'senior management'. c. The organization's geographical definition of 'local'. d. The definition used for 'significant locations of operation'.	—	—
GRI203: Indirect Economic Impacts 2016					
203-1		Infrastructure investments and services supported	a. Extent of development of significant infrastructure investments and services supported. b. Current or expected impacts on communities and local economies, including positive and negative impacts where relevant. c. Whether these investments and services are commercial, in-kind, or pro bono engagements.	Results of Social Contribution Activities Communities	PP.206-207 PP.205-213
203-2		Significant indirect economic impacts	a. Examples of significant identified indirect economic impacts of the organization, including positive and negative impacts. 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.	—	—
GRI204: Procurement Practices 2016					
204-1		Proportion of spending on local suppliers	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). b. The organization's geographical definition of 'local'. c. The definition used for 'significant locations of operation'.	—	—
GRI205: Anti-corruption 2016					
205-1	○	Operations assessed for risks related to corruption	a. Total number and percentage of operations assessed for risks related to corruption. b. Significant risks related to corruption identified through the risk assessment.	Anti-corruption	PP.85-87
205-2	○	Communication and training about anti-corruption policies and procedures	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. 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. 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. d. Total number and percentage of governance body members that have received training on anti-corruption, broken down by region. e. Total number and percentage of employees that have received training on anti-corruption, broken down by employee category and region.	Compliance Training Status	P.83
205-3	○	Confirmed incidents of corruption and actions taken	a. Total number and nature of confirmed incidents of corruption. b. Total number of confirmed incidents in which employees were dismissed or disciplined for corruption. c. Total number of confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption. d. Public legal cases regarding corruption brought against the organization or its employees during the reporting period and the outcomes of such cases.	Response to Compliance Violations	P.81
GRI206: Anti-competitive Behavior 2016					
206-1	○	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	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. b. Main outcomes of completed legal actions, including any decisions or judgments.	Response to Compliance Violations	P.81
GRI207: Tax 2019					
207-1		Approach to tax	a. A description of the approach to tax, including: i. whether the organization has a tax strategy and, if so, a link to this strategy if publicly available; ii. the governance body or executive-level position within the organization that formally reviews and approves the tax strategy, and the frequency of this review; iii. the approach to regulatory compliance; iv. how the approach to tax is linked to the business and sustainable development strategies of the organization.	Tax Transparency	PP.88-89

GRI Standards Reference Table

NO.	Related material aspects	Disclosure	Reporting requirements	The Sustainability Data Book 2021	
207-2		Tax governance, control, and risk management	a. A description of the tax governance and control framework, including: i. the governance body or executive-level position within the organization accountable for compliance with the tax strategy; ii. how the approach to tax is embedded within the organization; iii. the approach to tax risks, including how risks are identified, managed, and monitored; iv. how compliance with the tax governance and control framework is evaluated. b. A description of the mechanisms for reporting concerns about unethical or unlawful behavior and the organization's integrity in relation to tax. c. A description of the assurance process for disclosures on tax and, if applicable, a reference to the assurance report, statement, or opinion.	Tax Transparency	PP.88-89
207-3		Stakeholder engagement and management of concerns related to tax	a. A description of the approach to stakeholder engagement and management of stakeholder concerns related to tax, including: i. the approach to engagement with tax authorities; ii. the approach to public policy advocacy on tax; iii. the processes for collecting and considering the views and concerns of stakeholders, including external stakeholders.	Sumitomo Chemical Group Tax Policy	P.88
207-4		Country-by-country reporting	a. All tax jurisdictions where the entities included in the organization's audited consolidated financial statements, or in the financial information filed on public record, are resident for tax purposes. b. For each tax jurisdiction reported in Disclosure 207-4-a: i. Names of the resident entities; ii. Primary activities of the organization; iii. Number of employees, and the basis of calculation of this number; iv. Revenues from third-party sales; v. Revenues from intra-group transactions with other tax jurisdictions; vi. Profit/loss before tax; vii. Tangible assets other than cash and cash equivalents; viii. Corporate income tax paid on a cash basis; ix. Corporate income tax accrued on profit/loss; x. Reasons for the difference between corporate income tax accrued on profit/loss and the tax due if the statutory tax rate is applied to profit/loss before tax. c. The time period covered by the information reported in Disclosure 207-4.	Corporate Income Taxes Paid (Sumitomo Chemical Group) *Consolidated Financial Statements*	P.89

GRI Standards Reference Table

NO.	Related material aspects	Disclosure	Reporting requirements	The Sustainability Data Book 2021	
ENVIRONMENT					
GRI301: Materials 2016					
301-1		Materials used by weight or volume	a. Total weight or volume of materials that are used to produce and package the organization's primary products and services during the reporting period, by: i. non-renewable materials used; ii. renewable materials used.	Environmental Activity Goals and Results Resource Saving and Waste Reduction Environmental Performance Waste Disposal Flow Chart and Results Initiatives to Recycle and Reuse Plastic and Other Waste	P.104 P.122 P.118 PP.128-129 P.142 P.143
301-2		Recycled input materials used	a. Percentage of recycled input materials used to manufacture the organization's primary products and services.	Waste Disposal Flow Chart and Results Initiatives to Recycle and Reuse Plastic and Other Waste	P.142 P.143
301-3		Reclaimed products and their packaging materials	a. Percentage of reclaimed products and their packaging materials for each product category. b. How the data for this disclosure have been collected.	—	—
GRI302: Energy 2016					
302-1	○	Energy consumption within the organization	a. Total fuel consumption within the organization from non-renewable sources, in joules or multiples, and including fuel types used. b. Total fuel consumption within the organization from renewable sources, in joules or multiples, and including fuel types used. c. In joules, watt-hours or multiples, the total: i. electricity consumption ii. heating consumption iii. cooling consumption iv. steam consumption d. In joules, watt-hours or multiples, the total: i. electricity sold ii. heating sold iii. cooling sold iv. steam sold e. Total energy consumption within the organization, in joules or multiples. f. Standards, methodologies, assumptions, and/or calculation tools used. g. Source of the conversion factors used.	Addressing Climate Change (Goals and Results) Calculation Standards for Environmental and Social Data Indicators	P.107 P.225
302-2	○	Energy consumption outside of the organization	a. Energy consumption outside of the organization, in joules or multiples. b. Standards, methodologies, assumptions, and/or calculation tools used. c. Source of the conversion factors used.	Addressing Climate Change (Goals and Results) Calculation Standards for Environmental and Social Data Indicators	P.108 PP.225-227
302-3	○	Energy intensity	a. Energy intensity ratio for the organization. b. Organization-specific metric (the denominator) chosen to calculate the ratio. c. Types of energy included in the intensity ratio; whether fuel, electricity, heating, cooling, steam, or all. d. Whether the ratio uses energy consumption within the organization, outside of it, or both.	Environmental Activity Goals and Results Addressing Climate Change (Goals and Results) Energy Saving	P.103 P.107 P.127
302-4	○	Reduction of energy consumption	a. Amount of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives, in joules or multiples. b. Types of energy included in the reductions; whether fuel, electricity, heating, cooling, steam, or all. c. Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it. d. Standards, methodologies, assumptions, and/or calculation tools used.	Addressing Climate Change (Goals and Results) Environmental Performance Energy Saving Calculation Standards for Environmental and Social Data Indicators	P.107 P.118 P.127 P.225
302-5	○	Reductions in energy requirements of products and services	a. Reductions in energy requirements of sold products and services achieved during the reporting period, in joules or multiples. b. Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it. c. Standards, methodologies, assumptions, and/or calculation tools used.	Key Performance Indicator (KPI) Sumika Sustainable Solutions Calculation Standards for Environmental and Social Data Indicators	PP.24-25 PP.36-40 P.225

GRI Standards Reference Table

NO.	Related material aspects	Disclosure	Reporting requirements	The Sustainability Data Book 2021	
GRI303: Water and Effluents 2018					
303-1		Interactions with water as a shared resource	a. A description of how the organization interacts with water, including how and where water is withdrawn, consumed, and discharged, and the water-related impacts caused or contributed to, or directly linked to the organization's activities, products or services by a business relationship (e.g., impacts caused by runoff). b. A description of the approach used to identify water-related impacts, including the scope of assessments, their timeframe, and any tools or methodologies used. c. A description of how water-related impacts are addressed, including how the organization works with stakeholders to steward water as a shared resource, and how it engages with suppliers or customers with significant water-related impacts. d. An explanation of the process for setting any water-related goals and targets that are part of the organization's management approach, and how they relate to public policy and the local context of each area with water stress.	Environmental Activity Goals and Results Environmental Performance Protecting the Aquatic Environment Evaluating Water-Related Problems	P.104 P.118 P.128 P.120 P.121
303-2		Management of water discharge-related impacts	a. A description of any minimum standards set for the quality of effluent discharge, and how these minimum standards were determined, including: i. how standards for facilities operating in locations with no local discharge requirements were determined; ii. any internally developed water quality standards or guidelines; iii. any sector-specific standards considered; iv. whether the profile of the receiving waterbody was considered.	Environmental Activity Goals and Results Environmental Protection (Management System) Responsible Care (Management System) Protecting the Aquatic Environment	P.104 P.117 PP.90-92 P.120
303-3		Water withdrawal	a. Total water withdrawal from all areas in megaliters, and a breakdown of this total by the following sources, if applicable: i. Surface water; ii. Groundwater; iii. Seawater; iv. Produced water; v. Third-party water. b. Total water withdrawal from all areas with water stress in megaliters, and a breakdown of this total by the following sources, if applicable: i. Surface water; ii. Groundwater; iii. Seawater; iv. Produced water; v. Third-party water, and a breakdown of this total by the withdrawal sources listed in i–iv. c. A breakdown of total water withdrawal from each of the sources listed in Disclosures 303-3-a and 303-3-b in megaliters by the following categories: i. Freshwater (≤1,000 mg/L Total Dissolved Solids); ii. Other water (>1,000 mg/L Total Dissolved Solids). d. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.	Protecting the Aquatic Environment Environmental Performance Calculation Standards for Environmental and Social Data Indicators	P.120 P.118 P.128 P.225

GRI Standards Reference Table

NO.	Related material aspects	Disclosure	Reporting requirements	The Sustainability Data Book 2021	
303-4		Water discharge	a. Total water discharge to all areas in megaliters, and a breakdown of this total by the following types of destination, if applicable: i. Surface water; ii. Groundwater; iii. Seawater; iv. Third-party water, and the volume of this total sent for use to other organizations, if applicable. b. A breakdown of total water discharge to all areas in megaliters by the following categories: i. Freshwater (≤1,000 mg/L Total Dissolved Solids); ii. Other water (>1,000 mg/L Total Dissolved Solids). c. Total water discharge to all areas with water stress in megaliters, and a breakdown of this total by the following categories: i. Freshwater (≤1,000 mg/L Total Dissolved Solids); ii. Other water (>1,000 mg/L Total Dissolved Solids). d. Priority substances of concern for which discharges are treated, including: i. how priority substances of concern were defined, and any international standard, authoritative list, or criteria used; ii. the approach for setting discharge limits for priority substances of concern; iii. number of incidents of non-compliance with discharge limits. e. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.	Protecting the Aquatic Environment Environmental Performance Calculation Standards for Environmental and Social Data Indicators	P.120 P.129 P.225
303-5		Water consumption	a. Total water consumption from all areas in megaliters. b. Total water consumption from all areas with water stress in megaliters. c. Change in water storage in megaliters, if water storage has been identified as having a significant water-related impact. d. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used, including whether the information is calculated, estimated, modeled, or sourced from direct measurements, and the approach taken for this, such as the use of any sector-specific factors.	Protecting the Aquatic Environment Environmental Performance Calculation Standards for Environmental and Social Data Indicators	P.120 P.118 P.129 P.225
GRI304: Biodiversity 2016					
304-1		Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	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: i. Geographic location; ii. Subsurface and underground land that may be owned, leased, or managed by the organization; 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; iv. Type of operation (office, manufacturing or production, or extractive); v. Size of operational site in km^2 (or another unit, if appropriate); 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); vii. Biodiversity value characterized by listing of protected status (such as IUCN Protected Area Management Categories, Ramsar Convention, national legislation).	Biodiversity Preservation Initiatives	PP.123-124
304-2		Significant impacts of activities, products, and services on biodiversity	a. Nature of significant direct and indirect impacts on biodiversity with reference to one or more of the following: i. Construction or use of manufacturing plants, mines, and transport infrastructure; ii. Pollution (introduction of substances that do not naturally occur in the habitat from point and non-point sources); iii. Introduction of invasive species, pests, and pathogens; iv. Reduction of species; v. Habitat conversion; vi. Changes in ecological processes outside the natural range of variation (such as salinity or changes in groundwater level). b. Significant direct and indirect positive and negative impacts with reference to the following: i. Species affected; ii. Extent of areas impacted; iii. Duration of impacts; iv. Reversibility or irreversibility of the impacts.	—	—

GRI Standards Reference Table

NO.	Related material aspects	Disclosure	Reporting requirements	The Sustainability Data Book 2021	
304-3		Habitats protected or restored	a. Size and location of all habitat areas protected or restored, and whether the success of the restoration measure was or is approved by independent external professionals. 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. c. Status of each area based on its condition at the close of the reporting period. d. Standards, methodologies, and assumptions used.	Greening and Environmental Conservation in Thailand (Sumitomo Chemical Forest)	P.124
304-4		IUCN Red List species and national conservation list species with habitats in areas affected by operations	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: i. Critically endangered ii. Endangered iii. Vulnerable iv. Near threatened v. Least concern	Evaluating Water-Related Problems Biodiversity Preservation Initiatives	P.121 P.124
GRI305: Emissions 2016					
305-1	○	Direct (Scope 1) GHG missions	a. Gross direct (Scope 1) GHG emissions in metric tons of CO_2 equivalent. b. Gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all. c. Biogenic CO_2 emissions in metric tons of CO_2 equivalent. d. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii. emissions in the base year; iii. the context for any significant changes in emissions that triggered recalculations of base year emissions. e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. f. Consolidation approach for emissions; whether equity share, financial control, or operational control. g. Standards, methodologies, assumptions, and/or calculation tools used.	Addressing Climate Change (Goals and Results) Environmental Performance Addressing Climate Change Calculation Standards for Environmental and Social Data Indicators	P.107 P.118 P.130 PP.126-127 P.225
305-2	○	Energy indirect (Scope 2) GHG emissions	a. Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO_2 equivalent. b. If applicable, gross market-based energy indirect (Scope 2) GHG emissions in metric tons of CO_2 equivalent. c. If available, the gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all. d. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii. emissions in the base year; iii. the context for any significant changes in emissions that triggered recalculations of base year emissions. e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. f. Consolidation approach for emissions; whether equity share, financial control, or operational control. g. Standards, methodologies, assumptions, and/or calculation tools used.	Addressing Climate Change (Goals and Results) Environmental Performance Addressing Climate Change Calculation Standards for Environmental and Social Data Indicators	P.107 P.118 P.130 PP.126-127 P.225
305-3	○	Other indirect (Scope 3) GHG emissions	a. Gross other indirect (Scope 3) GHG emissions in metric tons of CO_2 equivalent. b. If available, the gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all. c. Biogenic CO_2 emissions in metric tons of CO_2 equivalent. d. Other indirect (Scope 3) GHG emissions categories and activities included in the calculation. e. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii. emissions in the base year; iii. the context for any significant changes in emissions that triggered recalculations of base year emissions. f. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. g. Standards, methodologies, assumptions, and/or calculation tools used.	Addressing Climate Change (Goals and Results) Logistics Initiatives Calculation Standards for Environmental and Social Data Indicators	P.108 P.112 PP.226-227

GRI Standards Reference Table

NO.	Related material aspects	Disclosure	Reporting requirements	The Sustainability Data Book 2021	
305-4	○	GHG emissions intensity	a. GHG emissions intensity ratio for the organization. b. Organization-specific metric (the denominator) chosen to calculate the ratio. c. Types of GHG emissions included in the intensity ratio; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3). d. Gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all.	Addressing Climate Change (Goals and Results) Environmental Performance Addressing Climate Change	PP.107-108 P.118 P.130 PP.126-127
305-5	○	Reduction of GHG emissions	a. GHG emissions reduced as a direct result of reduction initiatives, in metric tons of CO_2 equivalent. b. Gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all. c. Base year or baseline, including the rationale for choosing it. d. Scopes in which reductions took place; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3). e. Standards, methodologies, assumptions, and/or calculation tools used.	Addressing Climate Change (Goals and Results) Environmental Performance Calculation Standards for Environmental and Social Data Indicators	PP.107-108 P.118 P.130 PP.226-227
305-6	○	Emissions of ozone-depleting substances (ODS)	a. Production, imports, and exports of ODS in metric tons of CFC-11 (trichlorofluoromethane) equivalent. b. Substances included in the calculation. c. Source of the emission factors used. d. Standards, methodologies, assumptions, and/or calculation tools used.	Environmental Performance Prevention of Ozone Layer Depletion Calculation Standards for Environmental and Social Data Indicators	P.118 P.128 P.136 P.226
305-7	○	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	a. Significant air emissions, in kilograms or multiples, for each of the following: i. NOx ii. SOx iii. Persistent organic pollutants (POP) iv. Volatile organic compounds (VOC) v. Hazardous air pollutants (HAP) vi. Particulate matter (PM) vii. Other standard categories of air emissions identified in relevant regulations b. Source of the emission factors used. c. Standards, methodologies, assumptions, and/or calculation tools used.	Environmental Performance Preventing Pollution: Atmospheric Emissions of SOx, NOx, Soot, and Dust Addressing PRTR and VOCs Calculation Standards for Environmental and Social Data Indicators	P.118 P.130 P.133 PP.135-136 P.226
GRI306: Waste 2020					
306-1		Waste generation and significant waste-related impacts	a. For the organization's significant actual and potential waste-related impacts, a description of: i. the inputs, activities, and outputs that lead or could lead to these impacts; ii. whether these impacts relate to waste generated in the organization's own activities or to waste generated upstream or downstream in its value chain.	Resource Saving and Waste Reduction	P.122
306-2		Management of significant waste-related impacts	a. Actions, including circularity measures, taken to prevent waste generation in the organization's own activities and upstream and downstream in its value chain, and to manage significant impacts from waste generated. b. If the waste generated by the organization in its own activities is managed by a third party, a description of the processes used to determine whether the third party manages the waste in line with contractual or legislative obligations. c. The processes used to collect and monitor waste-related data.	Environmental Activity Goals and Results Environmental Protection (Basic Stance) Resource Saving and Waste Reduction Digitization of Manifests to Be Prepared Pursuant to the Waste Management and Public Cleansing Act	P.104 P.117 P.122 P.141
306-3		Waste generated	a. Total weight of waste generated in metric tons, and a breakdown of this total by composition of the waste. b. Contextual information necessary to understand the data and how the data has been compiled.	Environmental Performance Industrial Waste Reduction, Sharing Environmental Protection and Management Targets (Japan)	P.118 P.129 PP.140-144

GRI Standards Reference Table

NO.	Related material aspects	Disclosure	Reporting requirements	The Sustainability Data Book 2021	
306-4		Waste diverted from disposal	a. Total weight of waste diverted from disposal in metric tons, and a breakdown of this total by composition of the waste. b. Total weight of hazardous waste diverted from disposal in metric tons, and a breakdown of this total by the following recovery operations: i. Preparation for reuse; ii. Recycling; iii. Other recovery operations. c. Total weight of non-hazardous waste diverted from disposal in metric tons, and a breakdown of this total by the following recovery operations: i. Preparation for reuse; ii. Recycling; iii. Other recovery operations. d. For each recovery operation listed in Disclosures 306-4-b and 306-4-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste diverted from disposal: i. onsite; ii. offsite. e. Contextual information necessary to understand the data and how the data has been compiled.	Waste Disposal Flow Chart, List of Results by Item in connection with the Disposal of Waste, Categories of Hazardous and Non-Hazardous Waste, Results of Recycling and Reusing Waste (including heat recovery), Results of Recycling and Reusing Plastic Waste (including heat recovery)	PP.142-143
306-5		Waste directed to disposal	a. Total weight of waste directed to disposal in metric tons, and a breakdown of this total by composition of the waste. b. Total weight of hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following disposal operations: i. Incineration (with energy recovery); ii. Incineration (without energy recovery); iii. Landfilling; iv. Other disposal operations. c. Total weight of non-hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following disposal operations: i. Incineration (with energy recovery); ii. Incineration (without energy recovery); iii. Landfilling; iv. Other disposal operations. d. For each disposal operation listed in Disclosures 306-5-b and 306-5-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste directed to disposal: i. onsite; ii. offsite. e. Contextual information necessary to understand the data and how the data has been compiled.	Waste Disposal Flow Chart, List of Results by Item in connection with the Disposal of Waste, Categories of Hazardous and Non-Hazardous Waste, Results of Recycling and Reusing Waste (including heat recovery), Results of Recycling and Reusing Plastic Waste (including heat recovery)	PP.142-143
GRI307: Environmental Compliance 2016					
307-1	○	Non-compliance with environmental laws and regulations	a. Significant fines and non-monetary sanctions for non-compliance with environmental laws and/or regulations in terms of: i. total monetary value of significant fines; ii. total number of non-monetary sanctions; iii. cases brought through dispute resolution mechanisms. b. If the organization has not identified any non-compliance with environmental laws and/or regulations, a brief statement of this fact is sufficient.	Environmental Activity Goals and Results Compliance with Environmental Laws and Regulations	P.104 P.130
GRI308: Supplier Environmental Assessment 2016					
308-1		New suppliers that were screened using environmental criteria	a. Percentage of new suppliers that were screened using environmental criteria.	Initiative for Suppliers Promoting Sustainable Procurement throughout the Supply Chain	P.162 P.164
308-2		Negative environmental impacts in the supply chain and actions taken	a. Number of suppliers assessed for environmental impacts. b. Number of suppliers identified as having significant actual and potential negative environmental impacts. c. Significant actual and potential negative environmental impacts identified in the supply chain. 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. 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.	Supplier Engagement Initiative for Suppliers Promoting Sustainable Procurement throughout the Supply Chain	P.112 P.162 P.164

GRI Standards Reference Table

NO.	Related material aspects	Disclosure	Reporting requirements	The Sustainability Data Book 2021	
SOCIAL					
GRI401: Employment 2016					
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.	Number of New Graduate and Mid-career Hires, Percentage of Mid-career Hires, Number and Percentage of People Who Left the Company	P.216
401-2		Benefits provided to full-time employees that are not provided to temporary or part-time employees	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: i. life insurance; ii health care; iii. disability and invalidity coverage; iv. parental leave; v. retirement provision; vi. stock ownership; vii. others. b. The definition used for 'significant locations of operation'.	Work-Life Balance	PP.179-183
401-3		Parental leave	a. Total number of employees that were entitled to parental leave, by gender. b. Total number of employees that took parental leave, by gender. c. Total number of employees that returned to work in the reporting period after parental leave ended, by gender. d. Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work, by gender. e. Return to work and retention rates of employees that took parental leave, by gender.	Results of Systems for Work-Life Balance Return Rate of Employees Who Take Cessation from Work for Childcare	P.182 P.217
GRI402: Labor/Management Relations 2016					
402-1		Minimum notice periods regarding operational changes	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. b. For organizations with collective bargaining agreements, report whether the notice period and provisions for consultation and negotiation are specified in collective agreements.	Communication with Employees	P.169
GRI403: Occupational Health and Safety 2018					
403-1	○	Occupational health and safety management system	a. A statement of whether an occupational health and safety management system has been implemented, including whether: i. the system has been implemented because of legal requirements and, if so, a list of the requirements; ii. the system has been implemented based on recognized risk management and/or management system standards/guidelines and, if so, a list of the standards/guidelines. b. A description of the scope of workers, activities, and workplaces covered by the occupational health and safety management system, and an explanation of whether and, if so, why any workers, activities, or workplaces are not covered.	Occupational Safety and Health / Industrial Safety and Disaster Prevention (Basic Stance) Occupational Safety and Health Management System	P.187 P.218
403-2	○	Hazard identification, risk assessment, and incident investigation	a. A description of the processes used to identify work-related hazards and assess risks on a routine and non-routine basis, and to apply the hierarchy of controls in order to eliminate hazards and minimize risks, including: i. how the organization ensures the quality of these processes, including the competency of persons who carry them out; ii. how the results of these processes are used to evaluate and continually improve the occupational health and safety management system. b. A description of the processes for workers to report work-related hazards and hazardous situations, and an explanation of how workers are protected against reprisals. c. A description of the policies and processes for workers to remove themselves from work situations that they believe could cause injury or ill health, and an explanation of how workers are protected against reprisals. d. A description of the processes used to investigate work-related incidents, including the processes to identify hazards and assess risks relating to the incidents, to determine corrective actions using the hierarchy of controls, and to determine improvements needed in the occupational health and safety management system.	Occupational Safety and Health / Industrial Safety and Disaster Prevention (Management System, Examples of Initiatives) Responsible Care (RC) Audits	PP.187-193 PP.95-97
403-3	○	Occupational health services	a. A description of the occupational health services' functions that contribute to the identification and elimination of hazards and minimization of risks, and an explanation of how the organization ensures the quality of these services and facilitates workers' access to them.	Occupational Safety and Health / Industrial Safety and Disaster Prevention (Examples of Initiatives) Responsible Care (RC) Audits	PP.189-193 PP.95-97

GRI Standards Reference Table

NO.	Related material aspects	Disclosure	Reporting requirements	The Sustainability Data Book 2021	
403-4	○	Worker participation, consultation, and communication on occupational health and safety	a. A description of the processes for worker participation and consultation in the development, implementation, and evaluation of the occupational health and safety management system, and for providing access to and communicating relevant information on occupational health and safety to workers. b. Where formal joint management–worker health and safety committees exist, a description of their responsibilities, meeting frequency, decision-making authority, and whether and, if so, why any workers are not represented by these committees.	Occupational Safety and Health / Industrial Safety and Disaster Prevention (Management System) Communication with Employees	P.187 P.169
403-5	○	Worker training on occupational health and safety	a. A description of any occupational health and safety training provided to workers, including generic training as well as training on specific work-related hazards, hazardous activities, or hazardous situations.	Occupational Safety and Health / Industrial Safety and Disaster Prevention Education and Drills	PP.191-192
403-6	○	Promotion of worker health	a. An explanation of how the organization facilitates workers' access to non-occupational medical and healthcare services, and the scope of access provided. b. A description of any voluntary health promotion services and programs offered to workers to address major non-work-related health risks, including the specific health risks addressed, and how the organization facilitates workers' access to these services and programs.	Healthcare	PP.184-186
403-7	○	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	a. A description of the organization's approach to preventing or mitigating significant negative occupational health and safety impacts that are directly linked to its operations, products or services by its business relationships, and the related hazards and risks.	Occupational Safety and Health / Industrial Safety and Disaster Prevention (Examples of Initiatives) Preventing Severe Accidents in Subcontracted Operations and Construction Operations Logistics Initiatives	PP.189-193 P.189 P.193
403-8	○	Workers covered by an occupational health and safety management system	a. If the organization has implemented an occupational health and safety management system based on legal requirements and/or recognized standards/guidelines: i. the number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system; ii. the number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been internally audited; iii. the number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been audited or certified by an external party. b. Whether and, if so, why any workers have been excluded from this disclosure, including the types of worker excluded. c. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.	Occupational Safety and Health / Industrial Safety and Disaster Prevention (Basic Stance) Occupational Safety and Health Management System	P.187 P.218
403-9	○	Work-related injuries	a. For all employees: i. The number and rate of fatalities as a result of work-related injury; ii. The number and rate of high-consequence work-related injuries (excluding fatalities); iii. The number and rate of recordable work-related injuries; iv. The main types of work-related injury; v. The number of hours worked. b. For all workers who are not employees but whose work and/or workplace is controlled by the organization: i. The number and rate of fatalities as a result of work-related injury; ii. The number and rate of high-consequence work-related injuries (excluding fatalities); iii. The number and rate of recordable work-related injuries; iv. The main types of work-related injury; v. The number of hours worked. c. The work-related hazards that pose a risk of high-consequence injury, including: i. how these hazards have been determined; ii. which of these hazards have caused or contributed to high-consequence injuries during the reporting period; iii. actions taken or underway to eliminate these hazards and minimize risks using the hierarchy of controls. d. Any actions taken or underway to eliminate other work-related hazards and minimize risks using the hierarchy of controls. e. Whether the rates have been calculated based on 200,000 or 1,000,000 hours worked. f. Whether and, if so, why any workers have been excluded from this disclosure, including the types of worker excluded. g. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.	Occupational Safety and Health / Industrial Safety and Disaster Prevention (Basic Stance, Goals and Results) Safety Achievements, Industrial Safety and Disaster Prevention Results Calculation Standards for Environmental and Social Data Indicators	PP.187-188 PP.221-222 P.227

GRI Standards Reference Table

NO.	Related material aspects	Disclosure	Reporting requirements	The Sustainability Data Book 2021	
403-10	○	Work-related ill health	a. For all employees: i. The number of fatalities as a result of work-related ill health; ii. The number of cases of recordable work-related ill health; iii. The main types of work-related ill health. b. For all workers who are not employees but whose work and/or workplace is controlled by the organization: i. The number of fatalities as a result of work-related ill health; ii. The number of cases of recordable work-related ill health; iii. The main types of work-related ill health. c. The work-related hazards that pose a risk of ill health, including: i. how these hazards have been determined; ii. which of these hazards have caused or contributed to cases of ill health during the reporting period; iii. actions taken or underway to eliminate these hazards and minimize risks using the hierarchy of controls. d. Whether and, if so, why any workers have been excluded from this disclosure, including the types of worker excluded. e. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.	Occupational Safety and Health / Industrial Safety and Disaster Prevention (Basic Stance, Goals and Results) Safety Achievements	PP.187-188 P.221
GRI404: Training and Education 2016					
404-1		Average hours of training per year per employee	a. Average hours of training that the organization's employees have undertaken during the reporting period, by: i. gender; ii. employee category.	Time Spent on Training Training for Development of Global Talent Management Skills Enhancement Training Human Resources Development	P.171 P.172 P.173 PP.170-173
404-2		Programs for upgrading employee skills and transition assistance programs	a. Type and scope of programs implemented and assistance provided to upgrade employee skills. b. Transition assistance programs provided to facilitate continued employability and the management of career endings resulting from retirement or termination of employment.	Organization of Training Programs	P.170
404-3		Percentage of employees receiving regular performance and career development reviews	a. Percentage of total employees by gender and by employee category who received a regular performance and career development review during the reporting period.	Human Resources System Initiatives, Characteristics of Our HR Systems, Initiative to Enhance Productivity	PP.167-169
GRI405: Diversity and Equal Opportunity 2016					
405-1	○	Diversity of governance bodies and employees	a. Percentage of individuals within the organization's governance bodies in each of the following diversity categories: i. Gender; ii. Age group: under 30 years old, 30–50 years old, over 50 years old; iii. Other indicators of diversity where relevant (such as minority or vulnerable groups). b. Percentage of employees per employee category in each of the following diversity categories: i. Gender; ii. Age group: under 30 years old, 30–50 years old, over 50 years old; iii. Other indicators of diversity where relevant (such as minority or vulnerable groups).	Directors & Senior Management Basic Data, Promotion of Diversity and Inclusion	PP.67-70 PP.214-217
405-2	○	Ratio of basic salary and remuneration of women to men	a. Ratio of the basic salary and remuneration of women to men for each employee category, by significant locations of operation. b. The definition used for 'significant locations of operation'.	Average monthly wages	P.214
GRI406: Non-discrimination 2016					
406-1	○	Incidents of discrimination and corrective actions taken	a. Total number of incidents of discrimination during the reporting period. b. Status of the incidents and actions taken with reference to the following: i. Incident reviewed by the organization; ii. Remediation plans being implemented; iii. Remediation plans that have been implemented, with results reviewed through routine internal management review processes; iv. Incident no longer subject to action.	Consultation Office	P.155

GRI Standards Reference Table

NO.	Related material aspects	Disclosure	Reporting requirements	The Sustainability Data Book 2021	
GRI407: Freedom of Association and Collective Bargaining 2016					
407-1	○	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	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: i. type of operation (such as manufacturing plant) and supplier; ii. countries or geographic areas with operations and suppliers considered at risk. b. Measures taken by the organization in the reporting period intended to support rights to exercise freedom of association and collective bargaining.	Respect for Human Rights Procurement	PP.151-159 PP.160-165
GRI408: Child Labor 2016					
408-1	○	Operations and suppliers at significant risk for incidents of child labor	a. Operations and suppliers considered to have significant risk for incidents of: i. child labor; ii. young workers exposed to hazardous work. b. Operations and suppliers considered to have significant risk for incidents of child labor either in terms of: i. type of operation (such as manufacturing plant) and supplier; ii. countries or geographic areas with operations and suppliers considered at risk. c. Measures taken by the organization in the reporting period intended to contribute to the effective abolition of child labor.	Respect for Human Rights Procurement	PP.151-159 PP.160-165
GRI409: Forced or Compulsory Labor 2016					
409-1	○	Operations and suppliers at significant risk for incidents of forced or compulsory labor	a. Operations and suppliers considered to have significant risk for incidents of forced or compulsory labor either in terms of: i. type of operation (such as manufacturing plant) and supplier; ii. countries or geographic areas with operations and suppliers considered at risk. b. Measures taken by the organization in the reporting period intended to contribute to the elimination of all forms of forced or compulsory labor.	Respect for Human Rights Procurement	PP.151-159 PP.160-165
GRI410: Security Practices 2016					
410-1	○	Security personnel trained in human rights policies or procedures	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. b. Whether training requirements also apply to third-party organizations providing security personnel.	—	—
GRI411: Rights of Indigenous Peoples 2016					
411-1		Incidents of violations involving rights of indigenous peoples	a. Total number of identified incidents of violations involving the rights of indigenous peoples during the reporting period. b. Status of the incidents and actions taken with reference to the following: i. Incident reviewed by the organization; ii. Remediation plans being implemented; iii. Remediation plans that have been implemented, with results reviewed through routine internal management review processes; iv. Incident no longer subject to action.	Not applicable	—
GRI412: Human Rights Assessment 2016					
412-1	○	Operations that have been subject to human rights reviews or impact assessments	a. Total number and percentage of operations that have been subject to human rights reviews or human rights impact assessments, by country.	Human Rights Due Diligence and Relief Efforts	PP.156-157
412-2	○	Employee training on human rights policies or procedures	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. b. Percentage of employees trained during the reporting period in human rights policies or procedures concerning aspects of human rights that are relevant to operations.	Raising Employees' Awareness of Human Rights	PP.154-155
412-3		Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	a. Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening. b. The definition used for 'significant investment agreements'.	Respect for Human Rights Introducing Human Rights Clauses into Contracts	PP.151-159 P.158

GRI Standards Reference Table

NO.	Related material aspects	Disclosure	Reporting requirements	The Sustainability Data Book 2021	
GRI413: Local Communities 2016					
413-1		Operations with local community engagement, impact assessments, and development programs	a. Percentage of operations with implemented local community engagement, impact assessments, and/or development programs, including the use of: i. social impact assessments, including gender impact assessments, based on participatory processes; ii. environmental impact assessments and ongoing monitoring; iii. public disclosure of results of environmental and social impact assessments; iv. local community development programs based on local communities' needs; v. stakeholder engagement plans based on stakeholder mapping; vi. broad based local community consultation committees and processes that include vulnerable groups; vii. works councils, occupational health and safety committees and other worker representation bodies to deal with impacts; viii. formal local community grievance processes.	Securing Safety and Health, and Protecting the Environment	PP.207-208
413-2		Operations with significant actual and potential negative impacts on local communities	a. Operations with significant actual and potential negative impacts on local communities, including: i. the location of the operations; ii. the significant actual and potential negative impacts of operations.	Preparation for Large-Scale Natural Disasters Industrial Safety and Disaster Prevention (Examples of Initiatives)	P.191 PP.190-193
GRI414: Supplier Social Assessment 2016					
414-1		New suppliers that were screened using social criteria	a. Percentage of new suppliers that were screened using social criteria.	Initiative for Suppliers	P.162
414-2		Negative social impacts in the supply chain and actions taken	a. Number of suppliers assessed for social impacts. b. Number of suppliers identified as having significant actual and potential negative social impacts. c. Significant actual and potential negative social impacts identified in the supply chain. 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. 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.	Human Rights Due Diligence and Relief Efforts Initiative for Suppliers	PP.156-157 P.162
GRI415: Public Policy 2016					
415-1		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.	—	—
GRI416: Customer Health and Safety 2016					
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.	Risk Assessment and Management throughout the Entire Product Life Cycle Risk Management for Product Safety	P.196 P.197
416-2	○	Incidents of non-compliance concerning the health and safety impacts of products and services	a. Total number of incidents of non-compliance with regulations and/or voluntary codes concerning the health and safety impacts of products and services within the reporting period, by: i. incidents of non-compliance with regulations resulting in a fine or penalty; ii. incidents of non-compliance with regulations resulting in a warning; iii. incidents of non-compliance with voluntary codes. b. If the organization has not identified any non-compliance with regulations and/or voluntary codes, a brief statement of this fact is sufficient.	Not applicable	—
GRI417: Marketing and Labeling 2016					
417-1	○	Requirements for product and service information and labeling	a. Whether each of the following types of information is required by the organization's procedures for product and service information and labeling: i. The sourcing of components of the product or service; ii. Content, particularly with regard to substances that might produce an environmental or social impact; iii. Safe use of the product or service; iv. Disposal of the product and environmental or social impacts; v. Other (explain). b. Percentage of significant product or service categories covered by and assessed for compliance with such procedures.	Providing Products and Services of Stable Quality The Information Sharing System and Ensuring thorough Compliance Effective Use of SuCCESS Providing Toxicological Information Sharing Information on Chemicals in Products	P.197 P.198 P.198 P.199 P.199

GRI Standards Reference Table

NO.	Related material aspects	Disclosure	Reporting requirements	The Sustainability Data Book 2021	
417-2		Incidents of non-compliance concerning product and service information and labeling	a. Total number of incidents of non-compliance with regulations and/or voluntary codes concerning product and service information and labeling, by: i. incidents of non-compliance with regulations resulting in a fine or penalty; ii. incidents of non-compliance with regulations resulting in a warning; iii. incidents of non-compliance with voluntary codes. b. If the organization has not identified any non-compliance with regulations and/or voluntary codes, a brief statement of this fact is sufficient.	Not applicable	—
417-3		Incidents of non-compliance concerning marketing communications	a. Total number of incidents of non-compliance with regulations and/or voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by: i. incidents of non-compliance with regulations resulting in a fine or penalty; ii. incidents of non-compliance with regulations resulting in a warning; iii. incidents of non-compliance with voluntary codes. b. If the organization has not identified any non-compliance with regulations and/or voluntary codes, a brief statement of this fact is sufficient.	Not applicable	—
GRI418: Customer Privacy 2016					
418-1		Substantiated complaints concerning breaches of customer privacy and losses of customer data	a. Total number of substantiated complaints received concerning breaches of customer privacy, categorized by: i. complaints received from outside parties and substantiated by the organization; ii. complaints from regulatory bodies. b. Total number of identified leaks, thefts, or losses of customer data. c. If the organization has not identified any substantiated complaints, a brief statement of this fact is sufficient.	Not applicable	—
GRI419: Socioeconomic Compliance 2016					
419-1	○	Non-compliance with laws and regulations in the social and economic area	a. Significant fines and non-monetary sanctions for non-compliance with laws and/or regulations in the social and economic area in terms of: i. total monetary value of significant fines; ii. total number of non-monetary sanctions; iii. cases brought through dispute resolution mechanisms. b. If the organization has not identified any non-compliance with laws and/or regulations, a brief statement of this fact is sufficient. c. The context against which significant fines and non-monetary sanctions were incurred.	Compliance Anti-corruption	PP.77-84 PP.85-87