## **SUMİTOMO CHEMICAL**



Change and Innovation

## **Create New Value**

**Annual Report 2018** 

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This section includes a greeting to stakeholders and describes the company's vision for achieving a sustainable society.

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#### **Editorial Direction**

Last fiscal year, Sumitomo Chemical adjusted the positioning of its annual report and CSR Report, reorganizing them as an integrated report, which is Sumitomo Chemical's new Annual Report. With the aim of communicating its sustained growth in a way that is easy to understand for shareholders and other investors, as well as a broad array of other stakeholders, the new Annual Report comprehensively brings together financial information and non-financial information. In addition to a report on financial results and information on the strengths of businesses and business strategies, the Annual Report includes information on Sumitomo Chemical's corporate governance system as well as its environmental and corporate social responsibility initiatives.

The Annual Report 2018 was created with the intention of having analysts and investors see, read, and feel our value creation story, serving as the "Sumitomo Chemical Museum" that introduces Sumitomo Chemical's past, present, and future. The report also features new content such as an ESG dialogue with an investor, a discussion of governance with Outside Directors, and value creation models for each business sector. Sumitomo Chemical hopes this Annual Report serves as a bridge to its stakeholders and communicates its efforts to create new value by mobilizing the entire Sumitomo Chemical Group.



The Guidance for Collaborative Value Creation, put forth by the Ministry of Economy, Trade and Industry, is a handbook that serves as a shared language connecting companies and investors, systematically and comprehensively laying out the information that companies ought to convey to investors in order to raise the quality of information disclosure and of dialogue with investors. This report primarily relies on this guidance in the value creation models for each sector in the section on Creating Value through Business (starting on page 40).

#### Financial Statements in This Document

Beginning FY2017, the Sumitomo Chemical Group is adopting international financial reporting standards (IFRS) in place of Japanese GAAP, which it previously used, and is therefore restating figures for the previous consolidated fiscal year using IFRS for comparative analysis. However, as the consolidated statement of financial position was not calculated for the sectors using IFRS at the beginning of FY2016, the sectors' ROA for FY2016 were not calculated.

#### Forward-looking Statements

Statements made in this annual report with respect to plans, strategies, and future performance that are not historical facts are forward-looking statements involving risks and uncertainties. Sumitomo Chemical cautions that a number of factors could cause actual results to differ materially from such statements including, but not limited to, general economic conditions in Sumitomo Chemical's markets; demand for, and competitive pricing pressure on, Sumitomo Chemical's products in the marketplace; Sumitomo Chemical's ability to continue to win acceptance for its products in these highly competitive markets; and movements of currency exchange rates.



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#### **Three Reports of Sumitomo Chemical**

#### **Annual Report**



This report aims to communicate Sumitomo Chemical's value creation story in a way that is easy to understand.

https://www.sumitomo-chem.co.jp/ english/ir/library/annual\_report/

#### Investors' Handbook



This report gives a detailed explanation of Sumitomo Chemical's businesses and products.

https://www.sumitomo-chem.co.jp/ english/ir/library/investors\_handbook/

#### Sustainability Data Book



This report provides information on Sumitomo Chemical from an environmental and social perspective.

https://www.sumitomo-chem.co.jp/ english/csr/report/

#### To Our Stakeholders

## Through Our Business We are Working even Harder to Contribute to Solving Pressing Problems that Society Faces and to Building a Sustainable Society.

The efforts of the international community to build a sustainable society, as represented by the United Nation's Sustainable Development Goals (SDGs), are gathering speed in earnest. In these circumstances, companies are expected to play a major role on both local and global levels, and particularly are being called upon to contribute as leaders in technological innovation to resolving a wide range of problems facing people around the world.

Based on Sumitomo's business philosophy, which emphasizes that our businesses must benefit society at large, not just our own interests, we at the Sumitomo Chemical Group have helped people to better their lives through continual technological innovation. In addition, we have striven to create new value by incorporating and integrating technologies and insights from various fields beyond the boundaries of chemistry.

Against the backdrop of technological advancement in areas such as IoT, robotics, and AI, a structural change is taking place in industry. The Sumitomo Chemical Group views these societal changes as new opportunities. By fully utilizing our core technologies developed over many years as a diversified chemical company, while also collaborating with other companies, universities, and research institutions in a variety of fields, we will continue to bring together technology and expertise from inside and outside the company and thereby create innovative products and technologies. Furthermore, we will work even harder to contribute through our business to solving pressing problems that society faces in the areas of health, food security, the environment, and global warming, and to building a sustainable society.

Thank you very much for your continued support and cooperation.

July 2018

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Osamu Ishitobi
Chairman of the Board



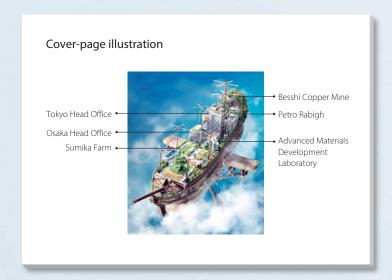
#### Sumitomo Chemical's DNA

#### **Sumitomo's Business Principles**

- 1. Sumitomo shall achieve prosperity based on solid foundation by placing prime importance on integrity and sound management in the conduct of its business.
- 2. Sumitomo's business interest must always be in harmony with public interest; Sumitomo shall adapt to good times and bad times but will not pursue immoral business.

#### **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.



# Building Trust and Bringing Joy to People around the World

Sumitomo Chemical designed this cover-page illustration in 2015, when we celebrated the 100th anniversary of the commencement of our operations, to express our determination to set sail into an awaiting future of growth and challenges by making use of our 100-year history.

The surface of the ship shows the Besshi Copper Mine, where the company has its origins, along with other buildings and facilities representing the company's history. This illustration expresses our determination to be a company that seeks to continue to build trust and bring joy to people around the world, as stated in our Corporate Statement, which lays out the pride and commitment to share as employees.

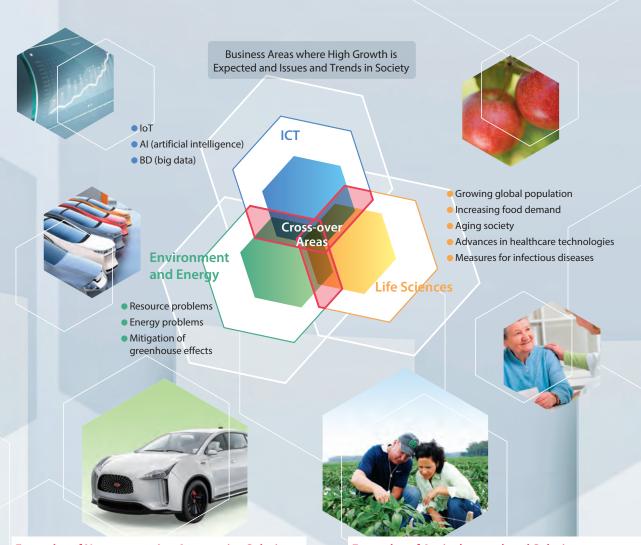
We at Sumitomo Chemical aim to contribute to the sustained growth of not only this company, but of the whole world, by making full use of the three core competencies we have developed over many years to solve the various challenges facing human society through the power of chemistry, and to contribute to improving the quality of life for people around the world.

#### Capabilities to Develop Innovative Solutions by Leveraging Its Technological Expertise in Diverse Areas

## Power of Chemistry Creates New Value

Sumitomo Chemical has continued to pioneer new fields with its creative technologies and tireless spirit of inquiry. Through our broad research activities over many years, we have established a set of six core technologies. Using these core technologies, we are working on research and development to generate new solutions for issues and trends in global society in the three business areas of the environment and energy, ICT, and life sciences, where high growth is expected. We will continue to enhance our technological capabilities based on the belief that we can create a new era through creative research and development.





#### **Examples of Next-generation Automotive Solutions**

#### Separators for Lithium-ion Secondary Batteries

By providing its proprietary aramid-coated separators, which are thin and highly heat resistant, Sumitomo Chemical is contributing to the creation of safe, high-capacity lithium-ion secondary batteries.

#### Super Engineering Plastics (SEPs)

Sumitomo Chemical is contributing to reducing the weight of automobile components by replacing metallic components used in cars with components made from SEPs. In addition, by using injection molding technology, components with complex shapes can be mass produced in a short period of time, leading to reductions in customer costs.

#### Olefin Thermoplastic Elastomer

In addition to being an advanced polymer that is highly moldable when processed, and which offers outstanding weather resistance and recyclability, this elastomer is useful in creating a luxurious feel in vehicle interiors.

#### **Examples of Agriculture-related Solutions**

#### Crop Stress Management

Crop stress management aims to contribute to crop yield improvement by developing agrochemicals and biological materials that improve resistance to environmental stresses, such as low and high temperatures and drought.

#### Biorationals

Sumitomo Chemical is contributing to the stabilization of agricultural production and the improvement of crop quality and yields by supplying biorational crop protection and enhancement products derived from natural sources such as microbial pesticides, plant growth regulators and biorational rhizosphere, thereby meeting the rising demand for organic food and high-quality fruits and vegetables around the world.

#### Total Support for Agriculture in Japan

Sumitomo Chemical provides comprehensive support for agricultural businesses, utilizing the various products and services of group companies, such as crop protection products, fertilizers, agricultural materials, technical services and sales of farm produce.

#### **Capabilities to Reach Global Markets**

## **Competitive Businesses around the World**

The Sumitomo Chemical Group has expanded its businesses around the world, aiming to be a truly global company. The Group's current overseas sales revenue ratio is over 60%. The Group is actively expanding competitive businesses into global markets, hoping to create sustained growth.





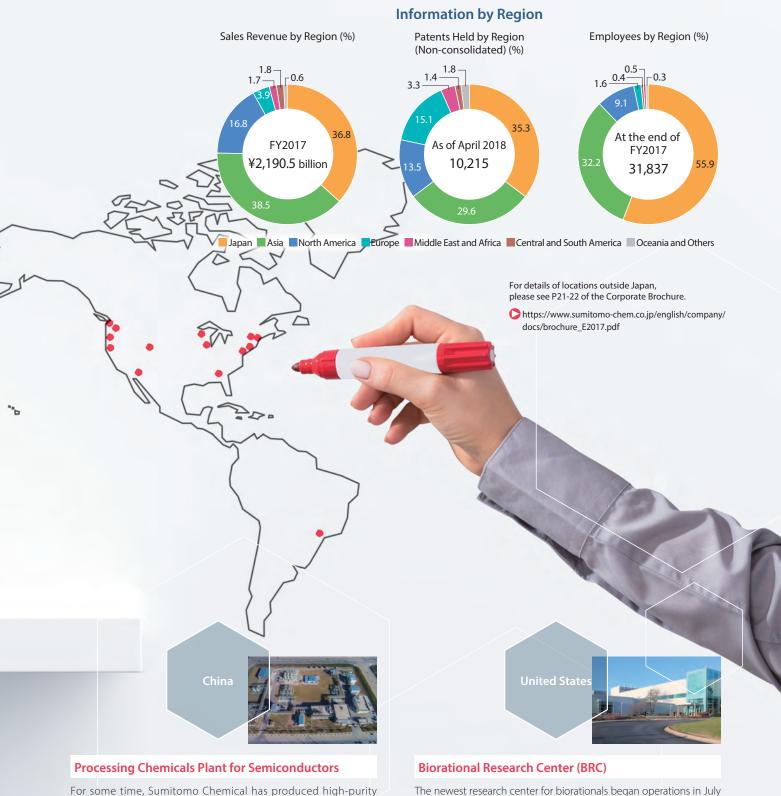
#### **Polyolefin Plant**

The strength of Sumitomo Chemical's petrochemical business is its global business development utilizing the unique features of its three locations in Japan, Singapore, and Saudi Arabia. The Polyolefin Company (TPC) in Singapore reliably produces and sells high-quality products, thanks to the outstanding plant operation techniques of its experienced local staff.



#### **Separator Plant for Lithium-ion Secondary Batteries**

Since 2006, Sumitomo Chemical has been producing heat-resistant separators at its Ohe Works. Subsequently, in light of the sudden increase in soaring demand, particularly for lithium-ion secondary batteries for automotive applications, we began operations at the subsidiary company SSLM (South Korea) in 2016, expanding its production capacity in stages.



For some time, Sumitomo Chemical has produced high-purity chemicals for semiconductors in Japan, South Korea, and China. Now, in order to seize the Chinese semiconductor market, which is expected to expand rapidly going forward, Sumitomo Chemical has begun constructing a new plant in Changzhou. In addition, the company has also decided to expand its production facilities in Xi'an. The company aims to further expand sales through a timely entry into the Chinese market.

The newest research center for biorationals began operations in July 2018. The center plays a pivotal role in research and development activities for microbiology, plant biology, chemistry, fermentation, and formulation technologies.

#### **Loyal Employees**

## Their Goal is to Shape the Future

The Sumitomo Chemical Group has about 30,000 employees working around the world. One of the greatest strengths of the Group is that all employees loyally push forward with their day-to-day work. Going forward, all employees will work together to enhance our capabilities, explore new possibilities every day, and overcome the challenges lying ahead with enthusiasm and a strong sense of mission.



Yüki Hiroi Functional Organic Material Synthesis Group Advanced Materials Development Laboratory

My team is working on developing lightemitting materials for OLED displays. Our number one mission is to create light-emitting materials with a long life and vivid colors. Development has presented a series of difficulties, but everyone in the team, myself included, has a strong desire to produce results no matter what, overcoming difficulties one after another.

#### **Charter for Business Conduct**

- We will respect Sumitomo's business philosophy and act as highly esteemed "good citizens."
- 2. We will observe national and international laws and regulations and will carry out activities according to our corporate rules.
- 3. We will develop and supply useful, safe products and technologies that will contribute extensively to the progress of society.
- 4. We will take voluntary and active initiatives to achieve zero-accident and zero-injury operations and to 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 make efforts to become a professional who has advanced skills and expertise in his or her field of responsibility.
- 8. We will actively communicate with our various stakeholders such as shareholders, customers, and regional communities.
- 9. We, as a corporate member of an international society, will esteem the culture and customs of each region around the world and contribute to the development of those regions.
- 10. We will strive for the sound development of our Company through business activities conducted in accordance with the guiding principles stipulated hereinabove.





Song Heng Mun Monomer 2 Sumitomo Chemical Asia Pte Ltd

I joined then Sumitomo Chemical Singapore (now Sumitomo Chemical Asia) more than 16 years ago with the Planning and Coordination department. Over the years, I witnessed the growth of its MMA/PMMA capacities and had the opportunity to play an active role in this wonderful journey. My main role is to secure stable and reliable feedstocks for our plants. This motivates me to strive for the best while giving me a sense of satisfaction whenever we overcome difficult situations. Armed with the Company's strong core values in doing business, I look forward to contributing more in my current capacity in the Monomer department.



Ayaka Shigematsu Production Planning & Administration Dept. Oita Works

As the person in charge of accounting for the Oita Works, I conduct trial calculations and analysis for product costs, which are an indicator of plant operations. This contributes to maintaining safe and stable operations and high cost competitiveness at the Oita Works. In addition, I also frequently prepare documents that effectively convey timely information from relevant departments, as well as issues at the Oita Works that can be read from the numbers, in order to lead to smoother management decision-making.



I work to clarify problems caused by the flow of materials by using Computational Fluid Dynamics. This technique leads to a speeding up of our research and development and improves the process for production equipment. In addition, in order to properly evaluate the impact of wastewater from the Ehime Works on the ocean, I successfully developed proprietary analysis technology for environmental evaluation across the entire Seto Inland Sea. I think this helps us to fulfill our social responsibility, contributing to the actualization of a sustainable society.



Kou Hakley Business Planning & Administration Dept. Environmental Health Division Tokyo Headquarters

I am responsible for planning the production and logistics scheme for new devices and products launched by the Environmental Health Division. I am making my best effort to plan more effective production schedules, in light of market trends and demand information from our sales representative. In addition, I actualize rational product shipments by using our global logistics network. These duties also contribute to the timely delivery of our products around the world.



#### What Sumitomo Chemical Strives to Be

## A More Resilient Sumitomo Chemical that Continues to Grow

Sumitomo Chemical recognizes its capabilities to develop innovative solutions by leveraging its technological expertise in diverse areas, capabilities to reach global markets, and loyal employees as its three core competencies, developed based on the three principles of its Business Philosophy. By making full use of these core competencies, we are making every effort to solve issues facing society, particularly environmental and food supply issues, and to improve people's quality of life. Through these efforts, we aim to bring about the sustained growth of both the company and society, reliably achieving goals such as ROE above 10% and ROI above 7%.

#### **Business Philosophy**



We commit ourselves to creating new value by building on innovation.



We work to contribute to society through our business activities.



We develop a vibrant corporate culture and continue to be a company that society can trust.

#### **Core Competence**



Capabilities to develop innovative solutions by leveraging its technological expertise in diverse areas



Capabilities to reach global markets



Loyal employees

#### Achieve sustained growth by creating new value through innovative technologies

#### Consistently achieve the following targets

ROE Over 10%

ROI **Over 7**%

D/E Ratio Approx. 0.7 times

Dividend Payout Ratio Approx. 30%

Profit Growth Over **7**% per year





















Through its revolutionary technology, Sumitomo Chemical hopes to contribute not just to its own sustained growth, but also to the creation of a sustainable world. This also means simultaneously contributing to the Sustainable Development Goals (SDGs) set forth by the United Nations. Sumitomo Chemical hopes to conduct business with responsibility, in order to create a world where the planet can continue into the future, and where no one is left behind.

### **Interview with the President**



(Billions of yen)	FY2016	>	FY2017	Change
Sales revenue	1,939.1		2,190.5	+251.4
Core operating income	184.5		262.7	+78.1
Operating income	126.5		250.9	+124.5
Net income attributable to owners of the parent	76.5		133.8	+57.2
Naphtha price (yen/KL)	34,700		41,900	+21%
Exchange rate (yen/US\$)	108.34		110.85	+2%
ROE (%)	10		15	
ROI (%)	6		9	
D/E ratio (times)	0.8		0.7	
Dividend payout ratio (%)	30		27	



# Aiming for Sustainable Growth by Creating Value for Society while Sustaining Economic Activity

At Sumitomo Chemical we focus our resources on specialty chemicals businesses, where we have distinct competitive advantages and where high growth is anticipated, and work to improve our ROI to enhance our enterprise value. In addition, we aim to achieve sustainable growth by creating value for society while sustaining economic activity.





Looking back on fiscal 2017, what is your evaluation of the Company's results?



#### We were able to achieve our highest income ever on the back of a strong global economy.

The overall trends in the global economy in fiscal 2017 remained strong. In the US, economic growth continued, supported by increasing employment numbers and strong consumer spending, while the European economy continued its gradual recovery, despite factors such as the UK's exit from the EU. In addition, signs of recovery were seen in emerging economies, including China. The Japanese economy remained on a moderate recovery path, with increased corporate income as well as an improved employment and income environment.

As for our performance in fiscal 2017, not only did sales volume improve across all segments, particularly in the Pharmaceuticals Sector and the Petrochemicals & Plastics Sector, market prices also rose for products in the Petrochemicals & Plastics Sector. Because of these factors, and a gain on conversion to the reporting currency resulting from the weak yen, our sales revenue increased by 251.4 billion yen over the previous fiscal year, to 2,190.5 billion yen, under the IFRS standards adopted beginning this fiscal year.

Core operating income increased by 78.1 billion yen over the previous fiscal year, to 262.7 billion yen, because of improvements in business performance in areas such as the Petrochemicals & Plastics Sector, where margins have improved, and in the Pharmaceuticals Sector, where shipments of pharmaceuticals increased in North America.

Operating income rose by 124.5 billion yen over the previous fiscal year, to 250.9 billion yen, due to factors such as lower impairment losses.

Net income attributable to the owners of the parent increased by 57.2 billion yen over the previous year, to 133.8 billion yen, despite factors such as increasing foreign exchange losses and an increased tax burden. Under Japanese accounting standards, operating income was 179.1 billion yen, 44.8 billion yen higher than the previous year, while net income attributable to the owners of the parent was 126.0 billion yen, 40.6 billion yen higher than one year earlier—both being the highest ever. In addition, this is the first time that our net income has exceeded 100 billion yen.

ROE for fiscal 2017 was 15.4%, making this the third year in a row, since fiscal 2015, that ROE has exceeded our target of 10% or higher.

We increased dividends by 8 yen over the previous year, to 22 yen, the highest ever.

## O

#### Please recap Sumitomo Chemical's current Corporate Business Plan.



## We continue to further improve our business portfolio by focusing our resources in specialty chemicals businesses where we have technological advantages.

Under the current Corporate Business Plan, we are committed to our slogan "Change and Innovation—Create New Value," and by capitalizing on the robust financial strength we built over the previous Corporate Business Plan period, we are aggressively pursuing growth opportunities and further spurring our transformation into a more resilient Sumitomo Chemical that continues to grow.

Specifically, we are working on five priority initiatives, including further improving our business portfolio, generating more cash flow, and accelerating the launch of next-generation businesses.

In order to further improve our business portfolio, we are directing 70% to 80% of the capital expenditures and investments to be determined in the three years from fiscal 2016 to fiscal 2018, and 90% of our R&D expenses over the same period, to the area of specialty chemicals, primarily life sciences businesses.

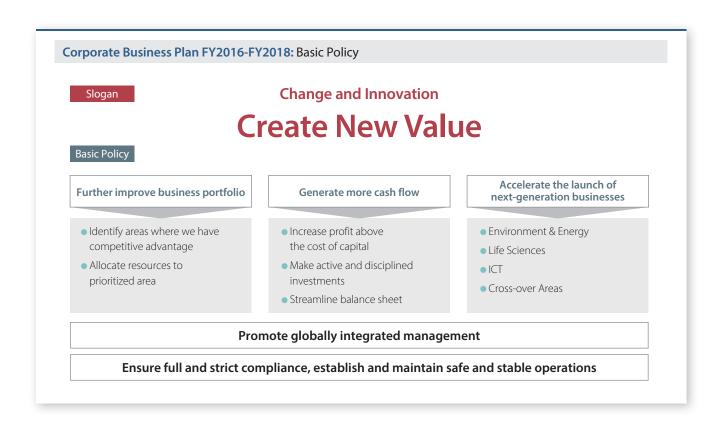
As for generating more cash flow, we retain our lean financial structure and, at the same time, are striving to

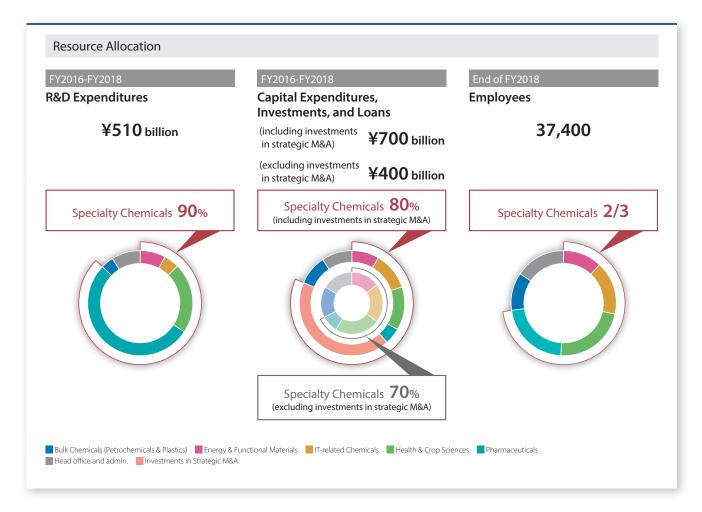
build and maintain robust earnings power to consistently generate strong cash flow, so that we can take advantage of large-scale investment opportunities when they arise.

In the initiative of accelerating the launch of nextgeneration businesses, we continue to invest in the fields of the environment and energy, ICT, and life sciences, as well as their cross-over areas, and are stepping up efforts to bring to market our products and technologies under development as early as possible.

Along with these three initiatives, we continue to promote globally integrated management while also ensuring full and strict compliance and establishing and maintaining safe and stable operations.

For fiscal 2018, the final year of the current Corporate Business Plan period, we seek to achieve sales revenue of 2,490 billion yen and net income attributable to the owners of the parent of 130 billion yen. We anticipate an ROI of 7% and an ROE of 13%, exceeding our targets for income.





#### Performance Targets

(Billions of yen)	FY2016	FY2017	FY2018 Forecast	FY2018 Target*1
Sales revenue	1,939.1	2,190.5	2,490.0	2,540.0
Core operating income	184.5	262.7	240.0	240.0
Net income attributable to owners of the parent	76.5	133.8	130.0	110.0
Naphtha price (yen/KL)	34,700	41,900	47,000	45,000
Exchange rate (yen/US\$)	108.34	110.85	110.00	120.00

ROE (%)	10	15	13	12
ROI (%)	6	9	7	7
D/E ratio (times)	0.8	0.7	0.7	0.6~0.7*2
Dividend payout ratio (%)	30	27	28	_

Over 10%
Over 7%
Approx. 0.7 times
Approx. 30%

Targets\*3

- \*1 Figures for the FY2018 target are restated using IFRS.
- \*2 Including the effects of investments in strategic M&A
- \*3 In the long term, we seek to achieve an annual profit growth of at least 7%.

## Q

In what areas was major progress made in fiscal 2017, the second year of the current Corporate Business Plan?



We made steady progress in implementing measures to further improve our business portfolio.



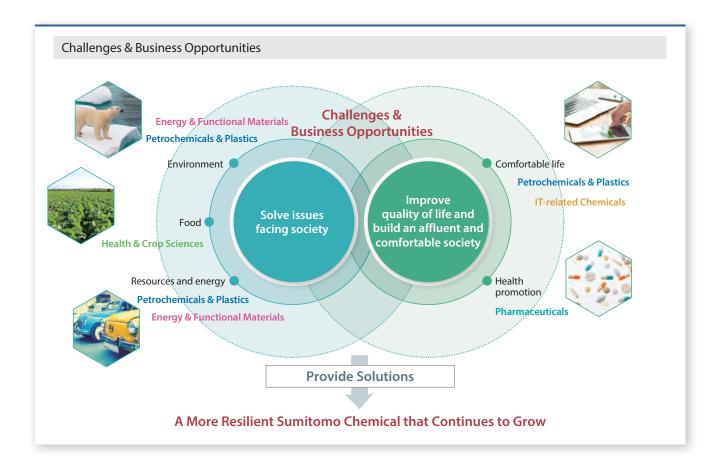
In fiscal 2017, the second year of the current Corporate Business Plan period, we made steady progress in further improving our business portfolio, as we worked in each Sector to expand businesses that contribute to solving issues in society and to improving the quality of life.

In the Petrochemical & Plastics Sector, we completed construction on the Rabigh Phase II Project and began production, while we also made progress in our efforts to increase the added value of our products.

In the Energy & Functional Materials Sector, we expanded production capacity for lithium-ion secondary battery separators, for which demand continues to grow for use in electric vehicles. Meanwhile, we pushed ahead with business restructuring efforts, including exiting the diesel particulate filter (DPF) business.

In the IT-related Chemicals Sector, we enhanced our production capacity for a variety of materials used in the production of semiconductors, whereas we exited the sapphire LED substrate business.

In the Health & Crop Sciences Sector, the development of major next-generation agricultural chemicals progressed and we began applying for registration of

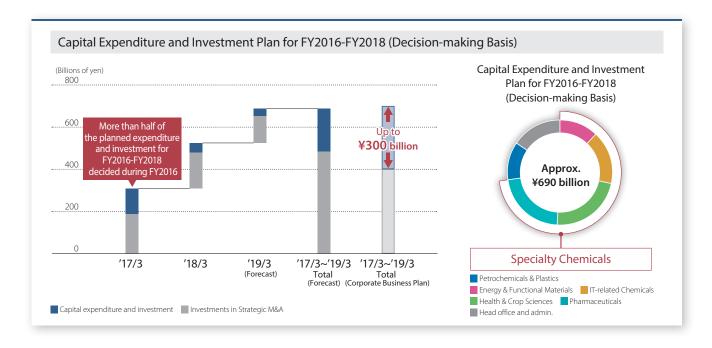


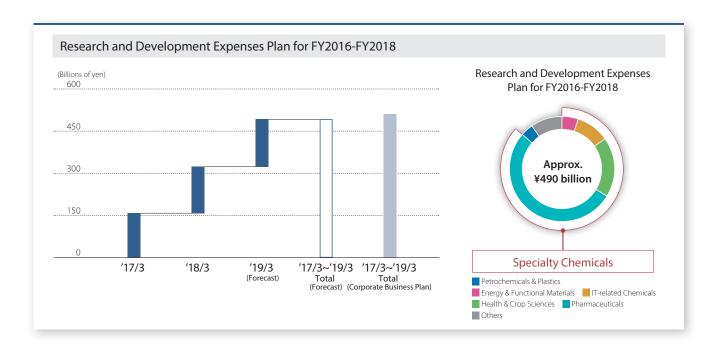
new products. We also acquired a major supplier of pyrethrum-derived insecticidal compounds.

In the Pharmaceuticals Sector, we received US approval for LONHALA MAGNAIR, a treatment for chronic obstructive pulmonary disease (COPD). In addition, we saw positive results in a phase III clinical study for a Parkinson's treatment under development in the US.

In fiscal 2016 and 2017, we determined capital expenditures and investments of approximately 530 billion yen, and we plan to make decisions on new capital

expenditures and investments of approximately 160 billion yen in fiscal 2018. Of these expenditures and investments of about 690 billion yen in total, more than 70% will go to the specialty chemicals field. In addition, over the same period, we plan to direct most of our research and development investment of approximately 490 billion yen to the Pharmaceuticals Sector and the Health & Crop Sciences Sector. With these investments, we will continue to further improve our business portfolio.





## O

#### Please describe the businesses where strong growth is anticipated.

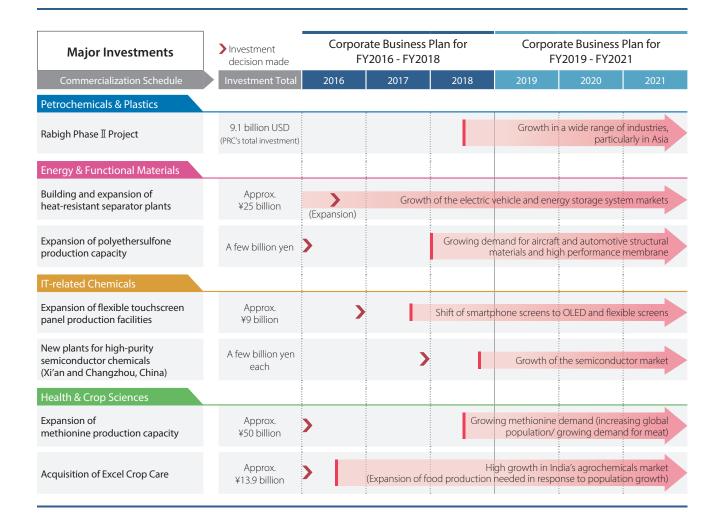


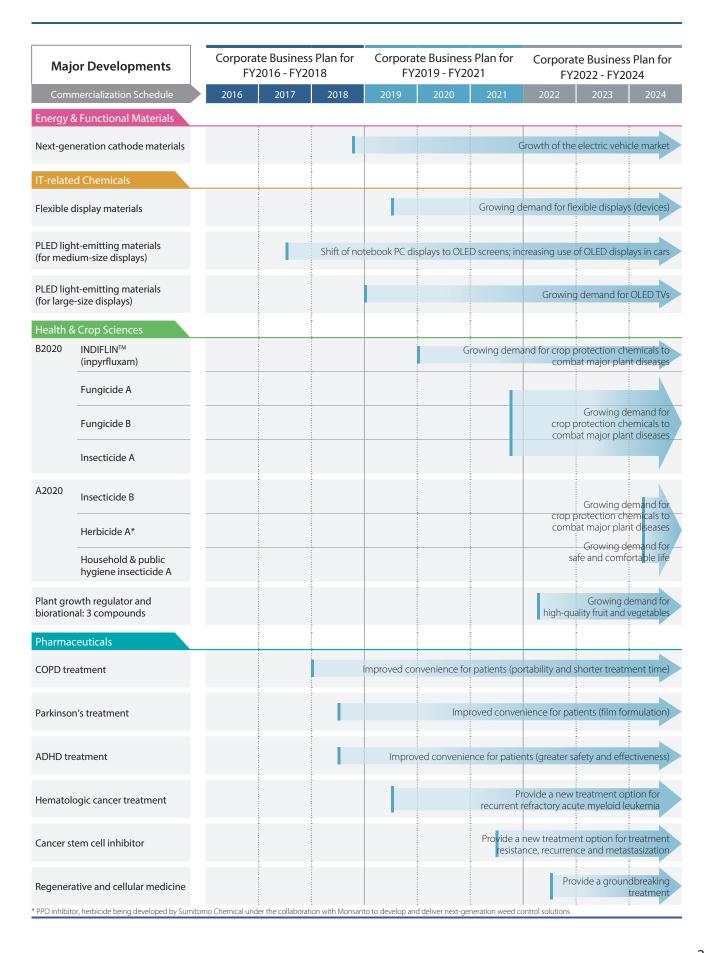
## There are many businesses that we expect to contribute to our financial performance in fiscal 2019 and beyond.

Some of the investments we decided on in the first two years of the current Corporate Business Plan period have already begun to contribute to our financial performance, but it will be after fiscal 2019 that several major investments, such as the acquisitions in the pharmaceuticals area and the expansion of methionine production capacity, will contribute to a full extent. In the next Corporate Business Plan, we will seek to achieve growth by successfully executing these major projects.

Furthermore, our development efforts are continuing to progress for products that are expected to see significant growth in the future, including next-generation battery cathode materials, polymer OLED components and materials, next-generation major crop protection chemicals, and new pharmaceuticals. In the next Corporate Business Plan, we will strive to bring these products under development to market as soon as possible.

At Sumitomo Chemical, we have many sprouting seeds of future businesses that could not only contribute to solving pressing issues facing society, including those related to the environment, energy, and food supply, but could also help to promote health, make daily lives more comfortable and improve people's quality of life. Under the next Corporate Business Plan, we would like to make these seeds grow into new businesses, and thereby create new value and contribute to building a sustainable society.





## A

Since the company's founding, we have been putting into practice "creating shared value," a concept that a business should not just work to sustain its economic activity, but should also strive to create value for society.

About a century ago, Sumitomo Chemical got its start by manufacturing fertilizers from harmful gas emitted from copper smelting operations, aiming to solve the environmental problem of smoke pollution while helping to increase agricultural output. Since then, we have put into practice "Creating Shared Value," the concept that a business should not just work to sustain its economic activity, but should also strive to create value for society.

In order to encourage each employee to put into action the philosophy of "contributing to society through our business," we work to have all employees participate in efforts to provide solutions through business and help achieve the SDGs, and all our top executives are committed to the initiatives.

In our "Sustainable Tree" initiative, for instance, in which employees can express their own commitment to the SDGs on a dedicated website, more than 9,000 messages were posted in the year 2017. I believe the fact that two-thirds of them were from Group companies outside Japan shows that employees of Sumitomo Chemical Group are committed, beyond the boundaries of nations, to achieving the SDGs.

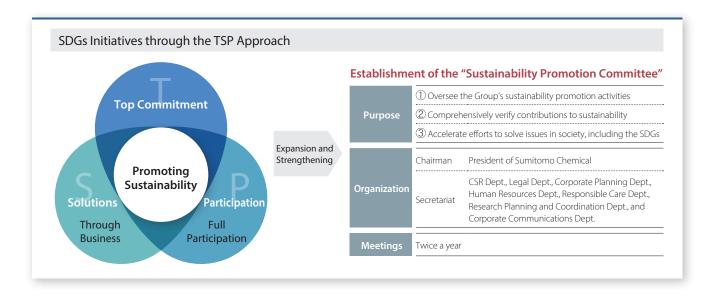
In addition, we have a program to designate as "Sumika Sustainable Solutions" those Sumitomo Chemical Group

products and technologies that contribute to mitigating global warming and reducing environmental burdens, in which 44 products and technologies have been designated. By promoting the development and the spread of these products, we will provide solutions to build a sustainable society.

In order to further promote these initiatives for creating a sustainable society, we established the "Sustainability Promotion Committee" in April 2018. This committee not only takes a comprehensive view of the Sumitomo Chemical Group's various initiatives relating to environmental and societal problems, but it also works to further accelerate the Company's efforts by evaluating how much we are contributing to sustainability overall.

Along with these initiatives, we are stepping up efforts to make our governance more effective, increasing the number of Outside Directors from 3 to 4 in June 2018, and further enhancing the oversight and management functions, as well as the advisory functions, of the Outside Directors.

Going forward, we at Sumitomo Chemical will continue our ESG (environmental, social, and governance) initiatives to help solve various problems facing people around the world, and to achieve long-term sustained growth.



## Q

#### Finally, could you provide an overview of Sumitomo Chemical's vision?

## A

## We seek to achieve sustained growth by creating new value through innovative technologies.

The capability to develop innovative solutions by leveraging extensive technological expertise, global market reach, and highly loyal employees—these are Sumitomo Chemical's core competencies, which we have built up through our operations spanning over a century. Going forward, by making full use of these strengths, we will continue to strive to solve issues in society, particularly environmental, energy, and food supply issues, and continue to contribute to improving the quality of life by promoting health and making daily lives more comfortable for people around the world.

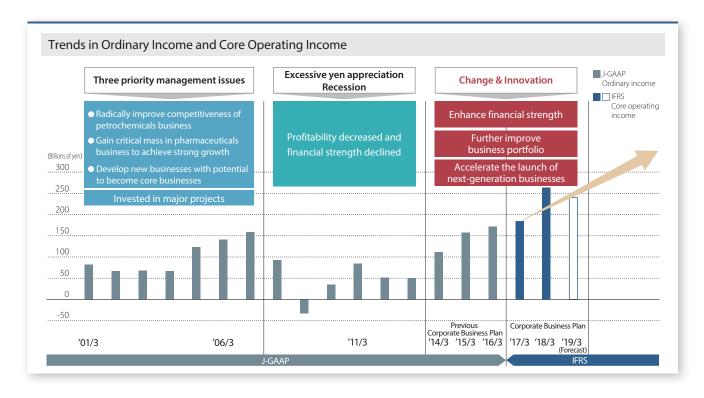
We also aim to achieve sustained growth by creating new value through innovative technologies, and strive to constantly realize an ROI of above the cost of capital and 7% or higher.

At the same time, to achieve this vision, it is essential that we maintain financial strength robust enough to withstand any changes in our business environment. Specifically, we aim to hold a D/E ratio at approximately

0.7 times, and constantly achieve an ROE of 10% or above.

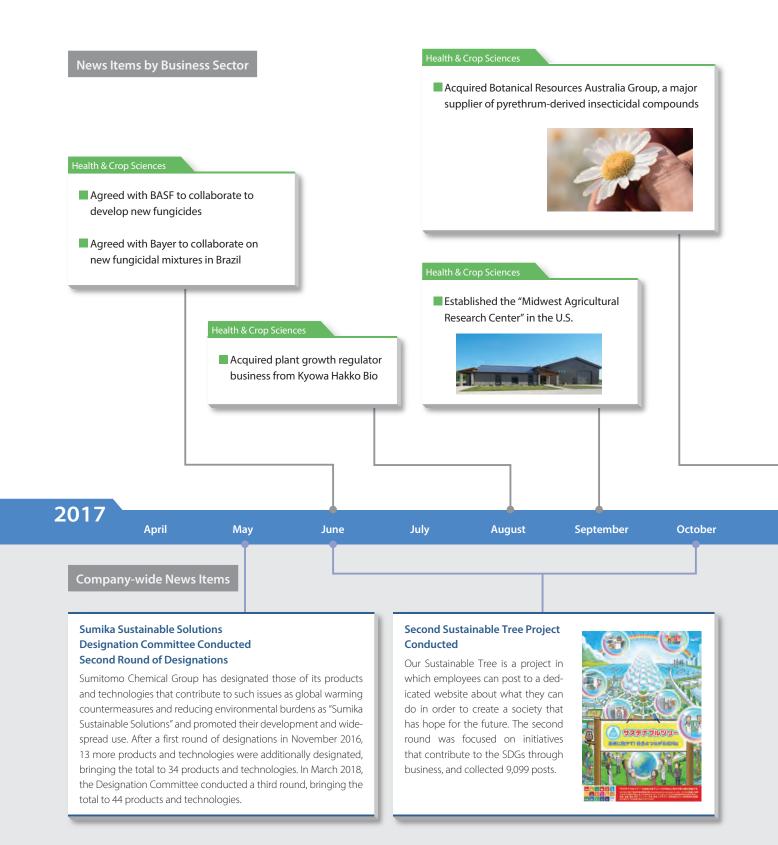
In addition, for the time being we set our dividend payout ratio at around 30%, and by investing about 70% of net income in new growth opportunities in the areas of the environment and energy, life sciences, and ICT, we seek to achieve an annual profit growth rate of over 7%.





#### One Year at Sumitomo Chemical

In fiscal 2017, Sumitomo Chemical proactively invested in future growth and also achieved record profit at each profit level. It was also a year in which our initiatives to bring about a sustainable society were recognized.



#### Petrochemicals & Plastics **Energy & Functional Materials** Began operations at Decided to expand the production Constructed a new plant in the a new naphtha tank in Singapore capacity at the high-purity chemicals Chiba works for the manufacture plant for semiconductors in Xi'an, China of the polyethersulfone (PES) Pharmaceuticals Announced a global seed-applied ■ Nihon Medi-Physics launched technology agreement with DuPont Vizamyl® Injectable, an imaging agent used in amyloid PET scans Pharmaceuticals Sumitomo Dainippon Pharma Nihon Medi-Physics' business Energy & Functional Materials developing "theranostics" received U.S. approval for LONHARA® MAGNAIR®, (therapy and diagnostics) Decided to exit a treatment for chronic for commercialization was the diesel particulate filter (DPF) obstructive pulmonary disease selected by the Japan Agency business (COPD) for Medical Research and Development (AMED) as part of its Cyclic Innovation for Clinical Empowerment (CiCLE) program Began construction of a high-purity chemicals plant for semiconductors Petrochemicals & Plastics in Changzhou, China ■ Began full-scale production of derivative goods in Rabigh Phase II Project

2018

Sumitomo Chemical Received Deputy Chief's Award (by Minister for Foreign Affairs) in the Japan SDGs Awards

December

Please see P29

November



#### Sumitomo Chemical Received Excellence Award in Corporate Value Improvement Awards Sponsored by the Tokyo Stock Exchange

The Corporate Value Improvement Awards are given to companies, from among all of the companies listed on the Tokyo Stock Exchange (about 3,500 companies), which have achieved high corporate value and consistently adopt man-

January

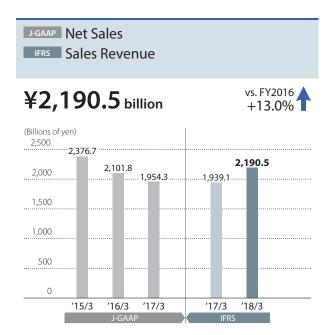


agement practices aimed at improving corporate value through those initiatives that duly consider capital cost and other investor concerns.

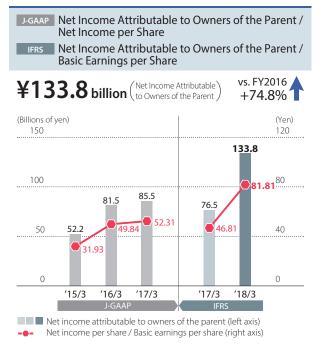
**February** 

March

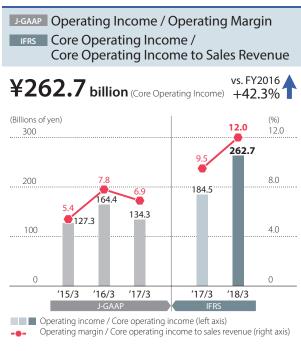
#### **Financial Highlights**



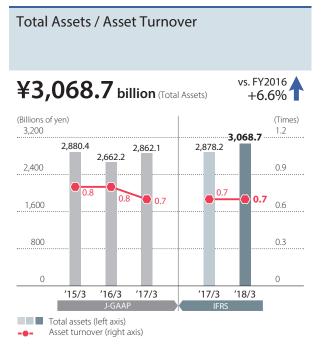
In addition to increased shipments accompanying business expansion, overall sales rose by 251.4 billion yen compared to the previous fiscal year because the market price for products in the Petrochemicals & Plastics Sector rose alongside increases in raw material prices.



While the burden of foreign exchange losses and corporate taxes increased, Net income attributable to owners of the parent increased by 57.2 billion yen over the previous year, due to the significant increase in core operating income.



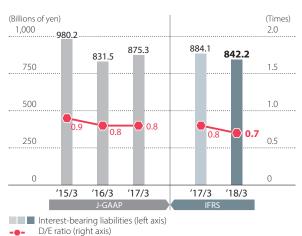
Core operating income rose by 78.1 billion yen compared to the previous fiscal year due to increased shipments across all segments, as well as due to improvements in profitability at an equity affiliate in Saudi Arabia.



Total assets increased by 190.5 billion yen over the end of the previous fiscal year because of increases in areas such as inventories and cash and cash equivalents.

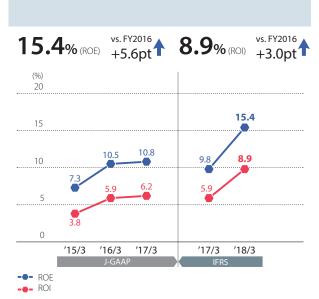
#### Interest-bearing Liabilities / D/E Ratio





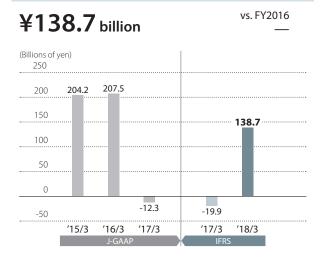
Due to improved performance and lower investment, the balance of interest-bearing liabilities decreased by 41.9 billion yen compared to the end of the previous fiscal year. In addition, because retained earnings increased, total assets increased, and the debt/equity ratio fell.

#### ROE / ROI



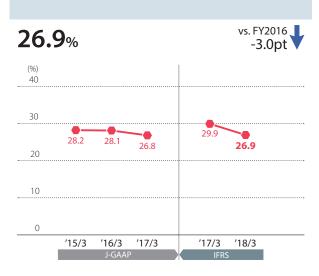
ROE significantly exceeded the goal of 10%, while ROI was also able to exceed the goal of 7%. In addition, both ROE and ROI improved significantly compared to the previous fiscal year.

#### Free Cash Flow



Cash flows from operating activities improved by 107.5 billion yen compared to the previous year, due to factors such as improved performance. In addition, compared with the previous fiscal year, in which large-scale corporate acquisitions were carried out, cash flows from investment activities decreased. As a result, free cash flow increased compared to the previous year.

#### Dividend Payout Ratio



Sumitomo Chemical considers shareholder returns to be one of its most important management priorities, and it has a target dividend payout ratio of around 30%. This year Sumitomo Chemical was again able to achieve a payout ratio fairly close to its target.

#### **Non-Financial Highlights**

#### Carbon Intensity Index in Japan\* / Carbon Intensity Index outside Japan\*





Carbon intensity index in JapanCarbon intensity index outside Japan

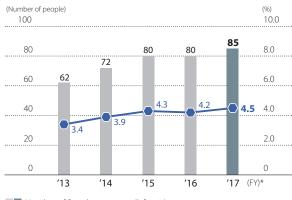
The reason for the deterioration in the intensity index of  $CO_2$  emissions outside Japan in fiscal 2017 is due to factors such as new and expanded plant facilities. Sumitomo Chemical is working to improve this index, both inside and outside Japan, putting greater focus on saving energy.

\* Index reflects the total production plants of Sumitomo Chemical and its major Group companies that share CO2 emission intensity index reduction goals.

#### Number of Female Managers / Percentage of Female Managers among Managers (Non-consolidated)







Number of female managers (left axis)

Percentage of female managers among managers (right axis)

In order to promote the advancement of female employees, Sumitomo Chemical has set a goal of at least 10% of female employees above the positions equivalent to manager by 2020.

\* All numbers as of April 1 of that year

#### Lost-workday Incident Rate\*









Sumitomo Chemical GroupChemical industry of Japan

The frequency rate of lost-workday incidents for fiscal 2017 was 0.26, failing to meet the goal of less than 0.1. To achieve this goal, Sumitomo Chemical is working to ensure thorough compliance with basic safety rules and implementing policies to prevent recurrence.

\* Indicates the frequency of industrial incidents as the number of deaths and injuries per one million hours of total work time.

#### Number of People Taking Childcare Leave / Number of Men Taking Childcare Leave (Non-consolidated)



175 people (Number of Men Taking)





Number of people taking childcare leave
Number of men taking childcare leave

Sumitomo Chemical is encouraging male employees who have had children to take childcare leave, with a goal of achieving a ratio of male employees taking childcare leave of at least 50%\* by 2020 (the ratio for fiscal 2017 was 18.7%).

\*The number of people who have taken leave divided by the number of male employees who have had children in the relevant period (one year)

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

This award primarily recognizes two initiatives.

- ① Sumitomo Chemical has for many years contributed to promoting Africa's integrated advancement in economy, society, and the environment through the Olyset™ Net business whereby mosquito net local production created job opportunities, the working environment for women improved, and constructing school buildings helped enhance educational assistance.
- 2 Under the strong leadership of top management, the Sumitomo Chemical Group as a whole has undertaken efforts such as "Sumika Sustainable Solutions," which designates products and technologies that will contribute to mitigating global warming or reducing the burden on the environment, and "Our Sustainable Tree," in which employees post messages on the Company's internal website about how they believe they can contribute to the SDGs.

With the Sumitomo business philosophy, emphasizing that our business must benefit society at large, as part of its DNA, Sumitomo Chemical hopes to further accelerate its efforts aimed at solving issues in society by using the SDGs as a shared language with society.





Kanako Fukuda General Manager, CSR Dept.

#### What are the Japan SDGs Award?

The Japan SDGs Award is conferred by the Sustainable Development Goals (SDGs) Promotion Headquarters, a Cabinet body composed of all Ministers, to those companies and organizations which have demonstrated outstanding initiatives toward achieving the United Nations' SDGs adopted in 2015.



#### Sumitomo Chemical to Support Recommendations on Promoted Disclosures of Climate-related Information, Prepared by TCFD

In June 2017, Sumitomo Chemical signed, together with over 100 leading companies in the world, the Recommendations on Promoted Disclosures of Climate-related Information, prepared by the Task Force on Climate-Related Financial Disclosures (TCFD), which was established by the Financial Stability Board (FSB)\*. Sumitomo Chemical sees climate change as one of the most important challenges facing society. Toward its resolution, the Company has actively been working on such issues as greenhouse gas reductions, by capitalizing on its versatile technical capabilities cultivated over many decades as a chemical company operating comprehensively in diverse industrial fields.

\* An international institution with the finance ministries, financial regulators, and central banks of 25 of the world's major countries as participating members.

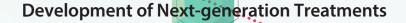


The recommendations of the TCFD are intended to promote disclosure of information about business risks and opportunities related to climate change so that it will be thoroughly shared with members of the investment community.

#### **Collaboration with Startup Companies**

## Developing Nucleic Acid Medicine as Next-generation Treatments

In order to continue to grow sustainably, Sumitomo Chemical considers it essential to generate innovation and continually create next-generation businesses. And to promote the development of next-generation businesses, we are not only developing technology in-house, we are also focusing on promoting open innovation through collaborations with startup companies. This feature will introduce one of those initiatives, a collaboration in the field of nucleic acid medicine with the startup company Bonac.





Issues in Society that Need to be Faced

## A Lack of Treatment Methods for Incurable Diseases

Even today, with so many advances in medical technology, there are many incurable diseases that have still never been solved with existing medicine. Attention has been focused on nucleic acid medicine, a new type of pharmaceutical, as a treatment method for this sort of incurable disease.

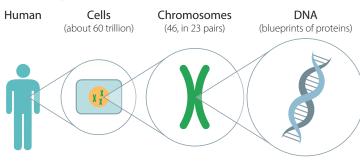
Sumitomo Chemical is working with Bonac, a startup company that is working on development of nucleic acid medicine to make it more widely available. In 2013, we received consent from Bonac for the exclusive right to use intellectual property rights relating to the manufacture and distribution of nucleic acid medicine, thereby entering the business of contract manufacturing. Thereafter, in 2016, we invested in Bonac, strengthening their relationship as development partners. In September 2017, the two companies strengthened their partnership even further, with Sumitomo Chemical making an additional investment.



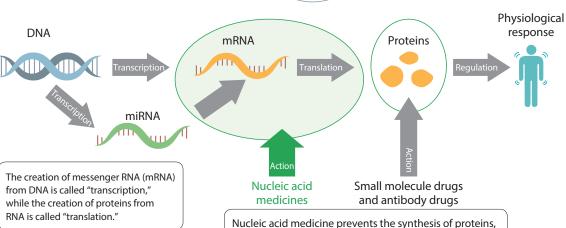
What is Nucleic Acid Medicine?

Nucleic acid medicine is the use of nucleic acid, which is the substance that holds genetic information including DNA (deoxyribonucleic acid) and RNA (ribonucleic acid), as a pharmaceutical.

#### ■ Human Body Structure, DNA and RNA, the Mechanism of Action of Nucleic Acid Medicine



Human bodies are made of cells, and chromosomes are found in the nucleus of those cells. The DNA that makes up chromosomes holds the blueprints (genes) for proteins.



or gene products, by associating with specific sequences of targeted mRNA and obstructing its movement.

(Source) Partially modified from Bonac's website

#### Comparison with Treatments such as Small Molecule Drugs and Antibody Drugs

Many existing pharmaceuticals, including small molecule drugs\*1 and antibody drugs\*2, act on the anomalous proteins themselves. On the other hand, nucleic acid medicine acts directly on the genes that synthesizes the proteins causing the illness, so it is capable of inhibiting the illness.

- \*1 General pharmaceuticals manufactured through chemical synthesis. They are inexpensive because they can be synthesized industrially, but because they act on a broad range of various cells, they can sometimes not produce the intended effect.
- \*2 Pharmaceuticals that primarily consist of antibodies, which are the main part of the body's immune system. Their effects are quite strong, because their activity targets the proteins involved in the illness, but prices are high because of manufacturing difficulty.



#### Status of the Nucleic Acid Medicine Market

Bio-venture companies have taken the lead in developing the seeds of drug discovery for nucleic acid medicine. Major pharmaceutical companies in the US and Europe have also entered the market with licenses from these venture companies. Moreover, several Japanese companies are also conducting clinical studies. The number of nucleic acid treatments that have been approved as medicines around the world is still quite small, but it is attracting attention as a next-generation treatment, and the market is expected to grow quickly going forward.



Nucleic acid medicine makes it possible to target RNA molecules for drug discovery, which could not be done with existing small molecule drugs or antibody drugs, and it is expected to be a ground-breaking, next-generation therapy. It is expected to enable the creation of treatments for difficult-to-treat conditions, such as hereditary diseases, cancer, and viral infections, particularly influenza, and development is ongoing around the world.

### Diseases Targeted by Nucleic Acid Medicine

- Hereditary diseases
- Cancer
- Influenza

#### Issues in Nucleic Acid Medicine

Nucleic acid medicine is expected to provide next-generation treatments, but there have been some issues in achieving practical utility. These issues include the fact that the medicine is quickly degraded by enzymes when injected into the body, and there are also concerns about side effects. Drug delivery systems\* to solve these problems are still in development.

 $^{\ast}\text{Technology}$  to deliver minimum amount of drugs to the right part of the body at the right time.

#### Issues

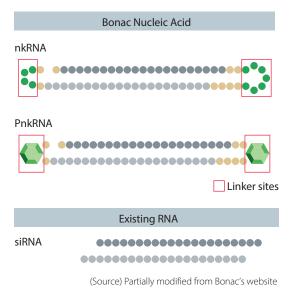
- Easily degraded by enzymes
- Concerns over side effects
- Drug delivery systems still in development



#### **Bonac Nucleic Acid**



Bonac is developing Bonac Nucleic Acid, a product that will solve issues with nucleic acid medicine. Unlike many existing nucleic acid products, which use a double-stranded structure, the major feature of the Bonac Nucleic Acid the company has developed is a unique single-stranded structure with secondary modification. As a result, Bonac Nucleic Acid has the following strengths.



#### Strengths of Bonac Nucleic Acid

**Higher Stability** 

With a double-stranded structure, nucleic acid products can be easily degraded by enzymes from the two protruding ends (overhang) of the structure. Because the single long chain exists in the form of linker(s) with Bonac Nucleic Acid, however, its ends are not open to enzymes, making it more resistant to enzymatic degradation, and providing increased stability.

**Less Side Effects** 

Because it is a single-stranded, not double-stranded, Bonac Nucleic Acid is more tolerant for the body to recognize as a foreign substance, and as a result the side effects can be reduced.

Application to Drug Delivery Systems A variety of different components can be conjugated at the linker sites, so the structure of Bonac Nucleic Acid can produce a diversity of drug delivery systems.

Natural Nucleic Acid Composed of Natural Substances

Bonac Nucleic Acid (e.g. PnkRNA) contains amino acids besides ribonucleotides, which are natural products, at its linker sites, so there is no need for concern about toxicity due to chemical modification.

**Patent Ownership** 

Bonac holds patents for this technology in Japan, the US, and in major countries in Europe.







market is still small, we believe that demand will grow in the future.

As a leading player in the pharmaceutical chemicals business, we have many technologies that can be used in the field of nucleic acid medicine. Of the next-generation medicines, antibody drugs must be made by culturing cells, while nucleic medicine can be made through chemical synthesis. As a result, nucleic medicine is a field where we have high affinity, as a company with strong technical background in the field of chemical synthesis. Furthermore, by applying the organic synthesis technology developed through manufacturing active ingredients for small molecule drugs, along with the industrial process know-how to commercialize the business, we are capable of manufacturing high quality active ingredients of nucleic acid medicines.

#### **Synergies with Bonac**

The Sumitomo Chemical Group would like to combine the drug development, manufacturing of active ingredients and analysis technology, as well as the medical diagnostic technology it has developed, with Bonac's unique nucleic acid medicine technology. Currently, Sumitomo Chemical's and Bonac's researchers are working on a variety of projects, including joint research, while maintaining close communication.

In addition, pharmaceutical companies, our customers, are continuing development of nucleic acid medicine, so we expect demand for the active ingredients of nucleic acid medicine to also increase. In order to respond to these circumstances, we are working to prepare a supply system for the active ingredients in nucleic acid medicine. By doing so, we will contribute to the commercialization of the nucleic acid medicine that our customers are developing as soon as possible. We are already conducting contract manufacturing at a plant in Osaka (Utajima), and we are capable of manufacturing high-purity nucleic acid medicine. Moreover, that plant has a proven track record of manufacturing in strict compliance with GMP\*1.

Sumitomo Chemical hopes to work with Bonac in contributing to the spread of nucleic acid medicine from the active ingredient manufacturing perspective. In addition, the technology that we adopted from Bonac has the potential to be applied to an important tool for genome editing\*2 as well. By continuing this sort of initiative, we are taking on the challenge of dealing with incurable diseases that modern medicine cannot handle.

- \*1 Good Manufacturing Practices. A standard for manufacturing and quality management for pharmaceuticals and other medical products.
- \*2 Technology to change a genome by deleting or inserting targeted genes. Research is ongoing for applications in gene therapy and breeding crops and livestock.





Hirotake Hayashi President and CEO Bonac Corporation

#### Message from Bonac President Hirotake Hayashi

# By Further Deepening and Expanding Our Collaboration with Sumitomo Chemical, We will Deliver Revolutionary Nucleic Acid Medicine.

Our company was founded to achieve the goal of bringing out never-before-seen revolutionary nucleic acid medicine using our proprietary Bonac Nucleic Acid technologies to help patients fighting against refractory diseases and to satisfy the needs of the front lines of healthcare.

We believe that the partnership with Sumitomo Chemical will certainly accelerate not only reliable manufacturing and the supply chain of Bonac Nucleic Acid as active ingredients for nucleic acid medicine, but also the development of new platforms for Bonac technologies. By further deepening and expanding our collaboration under this trustful relationship in the future, we expect to make more progress than ever in creating platform technologies in the field of nucleic acid chemistry, utilizing our respective strengths, as well as making progress in commercialization with these technologies.

#### ■ Bonac's Partnership and Collaboration

Toray Industries, Inc.

In December 2015, Bonac concluded a license agreement and capital alliance with Toray regarding BNC-1021/TRK-250, targeting idiopathic pulmonary fibrosis.

Fujifilm Corporation

In July 2017, Bonac concluded a joint research agreement and capital alliance with Fujifilm, about a liposome formulation of a new nucleic acid medicine.

Many companies are currently evaluating the Bonac Nucleic Acid, developed by Bonac, and are in discussions about concluding licensing agreements.

Overview of Bonac				
Bonac Corporation				
Kurume, Fukuoka prefecture, Japan				
3,877 million yen (as of December 31, 2017)				
Hirotake Hayashi				
Nucleic acid medicine platform licensing, synthesis of nucleic acid, etc.				

Additional Investment in Bonac		
Investment Date	September 2017	
Investment Amount	About 4 billion yen	
Investment Ratio	19.55%	



# **Creating Value through ESG Management**

ESG (Environment, Society, Governance) is something that long-term investors weigh heavily when measuring corporate value. We welcomed Ms. Shizuko Ohmi of Amundi Japan, whose headquarters is located in Europe, where ESG investing is expanding, and spoke with her about the current state and future of the Sumitomo Chemical Group, which is accelerating ESG management.

### Sumitomo Chemical's Way of Thinking about ESG

**Nozaki** I understand, Ms. Ohmi, that your company, Amundi, weights sustainability very heavily when evaluating companies. **Ohmi** Yes. As companies conduct business, factors such as the course of major trends around the world, and the changes made to regulations in light of those trends will impact

long-term corporate value. Whether a company can respond to a variety of situations is extremely important when thinking about future corporate value. In that sense, we consider the importance of ESG initiatives to be extremely high.

**Nozaki** The origin of Sumitomo Chemical is as Sumitomo Fertilizer Manufacturing, which was founded to make fertilizer from harmful gasses. For this reason, the top leadership of the company has always been committed to solving issues in society through business. Because this idea has been instilled in



# It is easy for us to accustom ourselves to the ways of thinking found in ESG and the SDGs.

---- Kunio Nozaki

Chemical as a whole. We would like it to thoroughly absorb points brought up both inside and outside the company, and to consider how future measures should be taken on a company-wide basis.

**Nozaki** We would also like to hold debates in the committee going forward.

Ohmi Thope you do.

# The Environmental Issues and Responsibilities of the Chemical Industry

**Nozaki** We have been working hard in our own way, but from an investor's perspective, what are you focusing on when you look at our company or the chemical industry?

**Ohmi** Looking at the chemical industry from the environmental side, I think that, while there are many business opportunities, at the same time there is also the possibility of a significant burden. In that sense, it is also an industry in which the focus will be on environmental measures and responsible management. For example, the agricultural chemicals you deal with would generally be considered a high-risk business.

**Ueda** That is true, and it is for that reason that we are implementing a variety of initiatives in our agrochemicals business. We have Japan's only independent organization specialized in researching the safety of agrichemicals, to properly evaluate the environmental risks of products within our own company, and then thoroughly explain those risks to society.

**Ohmi** Yes, I think your company is taking a very thorough approach to handling risk management. At the same time, how do things look from an even longer-term perspective? For example, looking at the E in ESG (Environment), what measures are you taking in preparation for the arrival of a low-carbon society?

our corporate culture, so to speak, it is easy for us to accustom ourselves to the ways of thinking found in ESG and the SDGs.

**Ohmi** If we think about the fact that the chemical industry places a significant burden on the environment, I think there will continue to be a need for the industry to take a forward-looking position on subjects like the SDGs, as your company has done. You are actively working on these issues through such initiatives as the Sumika Sustainable Solutions (SSS), are you not?

**Ueda** Yes. SSS is an internal program that designates products that contribute to reducing environmental burdens, and currently 44 products and technologies have been designated.

**Ohmi** Your company recently established the Sustainability Promotion Committee, but what does this committee aim to do? **Niinuma** All of our divisions have been working on sustainability, but as sustainability of companies is attracting more attention from the world now, this committee was established out of a need for an organization that could look over Sumitomo



I think key performance indicators relating to sustainability initiatives should be shown in your management strategy.

----- Ms. Shizuko Ohmi

**Ueda** The technologies that would enable us to achieve the targets set out in the Paris Agreement still do not exist anywhere. Numerous companies and institutions are conducting a massive amount of research and development at the same time, working hard to somehow achieve an 80% reduction by 2050, and our company is among them. Our company would like its future research and development to proceed in the direction of global warming countermeasures and environmental measures.

**Ohmi** That is wonderful to hear. Right now, many companies are making long-term investments in research and development in order to preserve the planet. They will not generate returns right away, but I think that searching for solutions will ultimately generate significant value for both the planet and the companies.

#### **Information Disclosure and Long-term Goals**

**Nozaki** We are undertaking a variety of efforts, but looking at it from an outside perspective, where is our company falling short?

**Ohmi** I thoroughly understand that you are undertaking a variety of efforts, but could you perhaps provide more specific and concrete transparency for them? It seems to me that you have a number of initiatives aimed at further raising outside evaluations of your company by more actively disclosing your efforts, such as the methods of safety management for agrochemicals mentioned earlier. Japanese companies are working on sustainability as a matter of course, so you might be inclined to think you do not need to specifically point it out. However, you have

to make important information for your company public, and that is also extremely useful for outsiders like us. In particular, such information as the management of chemical substances and your future plans for handling substances of high concern are important in evaluating chemical manufacturers.

**Ueda** So you are saying that, even if it is obvious we are working on it, if we do not provide sufficient disclosures about it, it will not be sufficiently considered in outside evaluations of us? **Ohmi** Exactly.

**Niinuma** Certainly, when we pointed out the effort we are putting into promoting the SDGs to the government, we received an SDGs award from the Minister for Foreign Affairs. Until now, we had the sense that our efforts would be thoroughly evaluated even if we kept quiet, but I understand that now active PR is important.

**Ohmi** That really is true. Also, I think it is not just about publicizing your efforts. I think key performance indicators relating to sustainability initiatives should be shown in your management strategy. For example, if the theme of your Corporate Business Plan is "Innovation," then if you include diversity ratios in your goals for that Corporate Business Plan, we will be able to see your company's idea that promoting diversity will promote innovation. For intangible things like sustainability, by having indicators to review your degree of achievement fully incorporated in your KPIs, it becomes easier to evaluate your company from the outside. ESG investment is taking off in Europe, but if a company does not have ways of measuring its performance when outsiders try to evaluate it, it will not lead to greater investment in the company's shares.

**Nozaki** So you mean that we should both disclose our performance and have long-term goals for it, right?

**Ohmi** Yes, that is what I mean.

#### **Governance Reform for Sustained Growth**

**Ohmi** In terms of your company's governance, I think your Board of Directors is somewhat lacking in diversity.

**Niinuma** There is a female executive officer and there are non-Japanese executive officers, but as you say, we still have an issue with diversity on the Board of Directors. We are currently working hard on this point\* (for details on our efforts to increase the diversity of the Board of Directors, please see pages 83-85).

**Ohmi** I also think that there is room to improve in executive remuneration. Currently, it is quite hard to understand how the results of your company's long-term initiatives will be reflected in executive remuneration. Do you not think it might be better to have initiatives that take sustainability indicators into account in annual remuneration?

**Niinuma** This is something that we are discussing at this very moment within the company. We are holding discussions in the Remuneration Advisory Committee about adding some variability to basic remuneration based on long-term indicators, as well.

**Ohmi** I see. Many Japanese companies are working hard to improve the environment, but when talking about governance, problems like the weakness of board oversight and their lateness in promoting diversity stand out, and when compared with companies in countries that are advanced in ESG initiatives, Japan is definitely falling behind. With regard to executive remuneration, as well, because of low transparency into remuneration schemes, outside evaluations tend to be quite low. I think it is important to clearly set out the ways remuneration is tied to performance.

**Niinuma** Yes. Our company is not perfect, but it seems we will be able to take several steps forward.

**Ohmi** It does seem that a number of new policies will be set out going forward. I hope that you continue to work hard on the governance front, as well.

**Nozaki** I have once again felt the importance of transparency. There are some ESG evaluation institutions that have given us a low rating because we are not publishing things, even though we are doing them. We will try to rectify this going forward. You have given us a number of suggestions, Ms. Ohmi, and I hope we will be able to take those suggestions and move even further forward.

Even if it is obvious we are working on it, if we do not provide sufficient disclosures about it, it will not be sufficiently considered in outside evaluations of us.

----- Hiroshi Ueda

Our company is not perfect, but it seems we will be able to take several steps forward.

——— Hiroshi Niinuma



#### Profile



**Ms. Shizuko Ohmi** Amundi Japan Ltd.

Ms. Ohmi graduated in 1991 from International Christian University with a Master of Arts in Comparative Culture. That same year, she joined S. G. Warburg & Co. After working at Lehman Brothers Holdings Inc. and Credit Suisse Trust and Banking Co., she joined Société Générale Asset Management (now Amundi Japan) in 2003. She has investigated companies as a corporate research analyst for industries such as the chemical, textile, oil, automobile, and machine industries. She became head of the investment analysis unit in September 2008 and then became head of the ESG research unit in April 2015. She is a member of the Ministry of the Environment's "Working Group on Incorporating Issues Regarding Sustainability into Investment" and a member of the working group for the "Environmental Reporting Platform Development Pilot Project."

<sup>\*</sup> As of the time of this conversation (May 7, 2018)

# **Creating Value through Business**



At the end of 1915, when Sumitomo Chemical began manufacturing fertilizer, the company only had about 160 employees. Since then, five business sectors have been born from the wide range of technologies we have developed over many years, as we grew into a diversified chemical manufacturer with about 30,000 employees. The following pages introduce the changes our company has undergone and each business sector's initiatives.

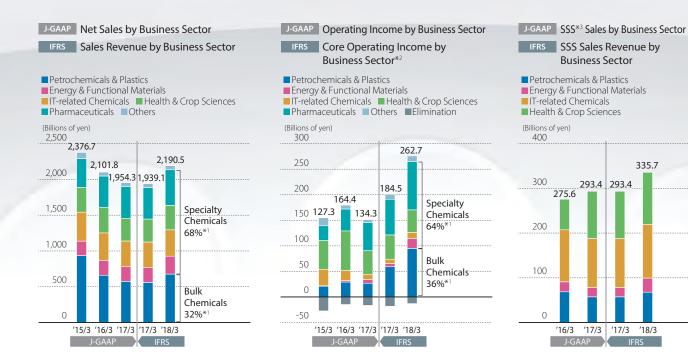
- **42** Origins of the Business Sectors
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- 58 Health & Crop Sciences
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335.7









#### Change in Business Sector Classification Methods

As of April 1, 2015, the Basic Chemicals Sector was eliminated and businesses in this sector were split and transferred to the Petrochemicals & Plastics Sector and the Energy & Functional Materials Sector that was established as a new business sector. In addition, a part of businesses in the Petrochemicals & Plastics Sector was transferred to the Energy & Functional Materials Sector. Inorganic chemicals, raw materials for synthetic fibers, organic chemicals, and methyl methacrylate that had been included in the Basic Chemicals Sector were transferred to the Petrochemicals & Plastics Sector. Alumina products, aluminum, functional materials, additives, and dyes that had also been included in the Basic Chemicals Sector were transferred to the Energy & Functional Materials Sector. In addition, synthetic rubber that had been included in the Petrochemicals & Plastics Sector was transferred to the Energy & Functional Materials Sector. The business sector categorization of one of the consolidated subsidiaries has been changed. For comparison, the figures for fiscal 2014 have been adjusted to reflect the organizational revision as of April 1, 2015, except for return on assets in the Petrochemicals & Plastics Sector, the Energy & Functional Materials Sector, and the Health & Crop Sciences Sector.

To further strengthen the Energy & Functional Materials business, as of April 1, 2016, battery materials and engineering plastics that had been included in the IT-related Chemicals Sector were transferred to the Energy & Functional Materials Sector. For comparison, the figures for fiscal 2015 have been adjusted to reflect the organizational revision as of April 1, 2016, except for return on assets in the Energy & Functional Materials Sector, and the IT-related Chemicals Sector.

- \*1 Excluding "Others" and adjustment amount
- \*2 Figures on top of each bar in the graph include eliminations \*3 Sumika Sustainable Solutions

# **Origins of the Business Sectors**

#### 1913

#### The Birth of Sumitomo Chemical

Sumitomo Chemical was born with the goals of overcoming an environmental problem and increasing agricultural production by manufacturing fertilizer from the gasses emitted from the refining of copper.

Since its foundation, Sumitomo Chemical's philosophy has been to contribute to the sustainable development of society through our business. This is very much in line with the way of thinking in the SDGs.



Sumitomo Fertilizer Manufactory

1953

#### **>>>** Entering the Crop Sciences Business

Sumitomo Chemical's entry into the crop sciences field began with the manufacture of Pynamin®, a household insecticide, one of the new businesses started after the war.



Pynamin Plant (Torishima, Osaka)

#### 1944

#### **>>>** Entering the Fine Chemicals Business

Sumitomo Chemical merged with Japan Dyestuff Manufacturing Company, which was engaged in the fine chemicals business, including dyes and pharmaceuticals.



Japan Dyestuff Manufacturing Company Kasugade Works

#### 1958

#### **Entering the Petrochemicals Business**

Sumitomo Chemical brought in technology from outside Japan, built an ethylene plant in the Ohe district of Ehime, and began full-scale operations.



Ethylene Plant (Ohe, Ehime)

J-GAAP Net Sales / Composition of Net Sales IFRS Sales Revenue / Composition of Sales Revenue



#### 1975-

#### Advancing Globalization in Each Business

In order to respond to changes in the framework of the global economy and society, Sumitomo Chemical expanded all of its businesses outside Japan.

#### 1984

Petrochemical Corporation of Singapore began operations



#### 1988

Established Valent U.S.A. as a development and sales location for agricultural chemicals in the U.S.



#### 1991

Established Dongwoo Pure Chemicals (now Dongwoo Fine-Chem) in South Korea



#### 1984

#### Launch of Sumitomo Pharmaceuticals Co., Ltd.

In order to improve the efficiency of research and development and increase the agility of sales, Sumitomo Chemical and Inabata & Co. spun off their pharmaceuticals businesses, establishing Sumitomo Pharmaceuticals Co., Ltd. Subsequently, in 2005, it merged with Dainippon Pharmaceutical Co., Ltd., becoming Sumitomo Dainippon Pharma.



Advertisements for Dan, a post-war popular cold remedy, and U-VON, an anti-aging/ nutritional drug

# #1,296.3 billion Overseas sales ratio 38% Basic Chemicals Petrochemicals & Plastics Fine Chemicals IT-related Chemicals Agricultural Chemicals Pharmaceuticals Others

#### 2001

#### >>> IT-related Chemicals Sector Established

Sumitomo Chemical aggregated its ICT-related businesses, establishing the IT-related Chemicals Sector in order to expand and increase the efficiency of these businesses and strengthen their business foundations by centralizing information and accelerating decision-making.

#### 2015

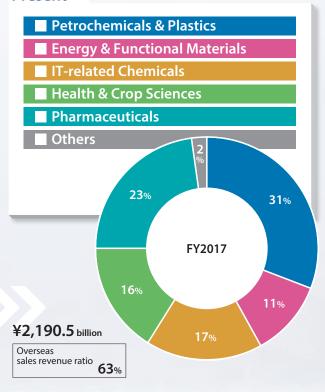
#### Energy & Functional Materials Sector Established

Sumitomo Chemical aggregated its businesses relating to the environment and energy, establishing the Energy & Functional Materials Sector in order to accelerate the development of new businesses in the field and expand income by further clarifying its customer-oriented mindset.



Resorcinol

#### **Present**



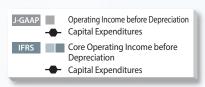
# **Sumitomo Chemical Today**





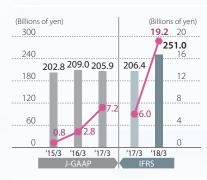


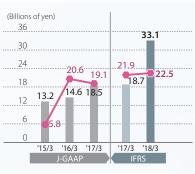




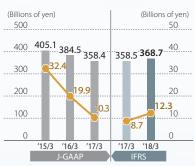


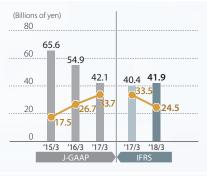




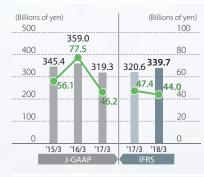






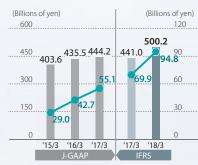
















(Billions of yen) (96)

800 760.7 769.6 16

709.4 12.8 12

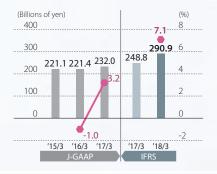
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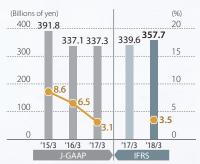
200 3.3 4.0 3.8 4

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15/3 '16/3 '17/3 '17/3 '18/3

J-GAAP IFRS









Sumika Sustainable Solutions Sales Revenue / Composition of Sales Revenue

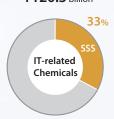
> FY2017 **¥67.4** billion



FY2017 ¥31.5 billion



FY2017 ¥120.3 billion



FY2017 ¥116.5 billion



Sumitomo Dainippon Pharma

https://www.ds-pharma.com/csr/customer/ improved\_access.html



Initiative for Access to Healthcare



**Primary Focus SDGs** 













#### **Petrochemicals & Plastics**

Provide Customers with
New Solutions Based on
High Value-added Products

竹下第一昭

Noriaki Takeshita

Representative Director & Senior Managing Executive Officer

Sumitomo Chemical's Petrochemicals & Plastics Sector manufactures such products as polyethylene (PE), polypropylene (PP), and methyl methacrylate (MMA) using the various strengths of its manufacturing locations in Japan, Singapore, and Saudi Arabia, and offers them to a wide variety of industries, including automobiles, electric appliances, and food products.

We are manufacturing cost-competitive products in Saudi Arabia, taking advantage of the low prices of raw materials and fuel in that region. At our locations in Singapore and Japan, we are developing high value-added products in anticipation of customer needs, and we also provide a stable supply of high-quality products. Our relationships of trust with core customers in the Asian market, cultivated over many years, are also a major strength of Sumitomo Chemical.

Currently, we are working to achieve stable plant operations in Saudi Arabia, and to enhance our ability to offer solutions through high value-added products in Singapore and Japan.

In fiscal 2017, stable operations continued at the Rabigh Phase I plant in Saudi Arabia, enabling us to record our highest ever profit. In addition, we completed construction on the Rabigh Phase II Project, and began production of products. Moreover, in Singapore, we further enhanced the cost competitiveness of our naphtha cracker through measures including the building of new naphtha tanks.

Our greatest issue at present is getting production at the Rabigh Phase II Project on track as soon as possible to mobilize its initially planned capabilities. We aim to quickly transfer to Saudi Arabia the technology we have previously developed in order to achieve stable plant operations. Moreover, in Singapore and Japan, we are continuing to put effort into developing high value-added applications for polyolefin, while in Japan we are enhancing our licensing business. In addition, we aim to improve the competitiveness of our naphtha cracker in Singapore by revamping equipment.

Going forward, Sumitomo Chemical will not only continue to enhance our strengths in these three locations, but will also aim to consistently achieve a return on assets in excess of our cost of capital by working to streamline assets, including working capital.

(Billions of yen)	FY2017	In Comparison to FY2016	Corporate Business Plan FY2016-FY2018: Sector Goals FY2018 Target
Sales revenue	674.1	+116.3	800.0
Core operating income	94.6	+35.7	39.0
Sales revenue of SSS*	67.4	+10.4	
			* Sumika Sustainable Solutions



#### **Status of the Major Businesses**

- Global operation by leveraging the competitive advantages of the three bases in Japan, Singapore, and Saudi Arabia
- Strong relations with prominent customers in the Asian market
- Access to low-cost ethane feedstock
- Capabilities to develop high value-added products
- Large and deep markets
- Steady growth in demand

- Relatively small business size compared to the global majors
- Dependence on naphtha, a more expensive feedstock than ethane / shale gas
- Establishment of more cost-competitive new plants
- Business risks and country risks

#### **Main Initiatives in the Major Businesses**

#### Polyolefin Business (Polyethylene and Polypropylene)

Global polyethylene (PE) demand is estimated at 90 million tons per year, and that of polypropylene (PP) is estimated at 65 million tons per year. Demand for both PE and PP is expected to grow at an annual rate of 4%. We operate PE and PP manufacturing facilities in Japan, Singapore, and Saudi Arabia with a combined production capacity of 1.66 million tons per year for PE and 1.68 million tons per year for PP. We aim to further enhance the profitability of our PE business by expanding our business in high value-added applications, such as water-resistant laminate for paper and protective films for LCDs. We are

enhancing our PP business in high value-added applications, such as PP compounds for use in automotive components, film materials for high-quality electronic components, and film materials for food packaging.



Products made using polyethylene

#### MMA Business

Strengths Weaknesses

Opportunities Threats

MMA polymer, which offers outstanding transparency and weather resistance, is an excellent material for a broad range of uses, such as light-guide plates for LED televisions and other optical components, as well as automotive applications, showcases, and outdoor signboards. With the economic expansion in Asian countries, demand in Asia for MMA polymer is estimated at 700,000 to 800,000 tons per year, and is expected to grow at an annual rate of 3 to 4%. As Asia's major MMA producer, Sumitomo Chemical continues to enhance the competitiveness of its entire MMA product chain, from monomers and polymers to the sheet business.



A large aquarium tank made using MMA



Sumitomo Chemical and the Saudi Arabian Oil Company (Saudi Aramco), the world's largest oil company, each have a 37.5% stake in the Rabigh Refining and Petrochemical Company (Petro Rabigh), and support the operation of Petro Rabigh's world-scale integrated oil refinery and petrochemical complex. In the Rabigh Phase I Project, the complex utilizes crude oil and highly cost-competitive ethane as primary feedstocks to produce a variety of refined petroleum products and petrochemical products. In the Rabigh Phase II Project, full-scale production of high value-added petrochemical products has begun.

Petrochemicals & Plastics

#### **Value Creation Model: Rabigh Project**

# **System for Providing Added Value**

#### Major Management Resources (Input)

Natural Capital

Cost-competitive ethane from Saudi Aramco

Social and Relationship Capital

Good relations with the Saudi Arabian government built over many years

Human Capital

Improved skill-level of local employees in recent years

Manufacturing Capital A world-scale integrated oil refinery and petrochemical complex



Operations at Petro Rabigh

#### Competitive Advantages of Rabigh Project

#### Competitive Conditions in the Market

Because the field of petrochemical products is extremely broad, connected with the necessities of life – food, clothing, and shelter – the market is incredibly vast, with massive numbers of players. Petro Rabigh's ethylene production capacity is 1.6 million tons per year.

Ethylene Production Capacity		
	(1,000 tons/year)	
1 SABIC	12,365	
2 Dow Chemica	al 11,996	
3 Exxon Mobil	9,040	
Petro Rabigh	1,600	

PE Production Capacity			
(1,000	tons/year)		
1 Exxon Mobil	9,410		
2 Dow Chemical	8,178		
3 SABIC	6,485		
Petro Rabigh	1,050		

(Source) "Chemicals Handbook 2017" by The Heavy & Chemical Industries News Agency

#### Competitive Advantages

Among a large number of players, Petro Rabigh has outstanding cost competitiveness compared to other companies using naphtha as a feedstock by sourcing cost-competitive ethane from Saudi Aramco for its major feedstock. In addition, because it is a world-scale integrated complex, the company has a low unit cost as another competitive advantage.



#### **Major Processes Generating Competitive Advantages**

**Production:** Petro Rabigh produces products such as PP, PE, and PO (propylene oxide), using technology licenses from Sumitomo Chemical, which boasts world-class technology. Moreover, the local staffs' operational technique is improving dramatically by receiving training at overseas facilities, particularly in Singapore.

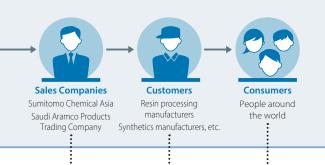
**Sales:** Sumitomo Chemical Asia has taken on the role of supplying products produced by Petro Rabigh in Saudi Arabia to countries across Asia. The company has shortened delivery times and reduced logistics costs by establishing stocking points throughout Asia.

#### **Earnings Structure and Role in Driving Income**

The margins for petrochemical products change depending on the supply and demand balance for each of the various products. On the other hand, because the prices for ethane feedstock are fixed, margins for petrochemical products produced at Petro Rabigh expand when product prices increase, compared with companies that use naphtha as a feedstock. In order to increase the profitability of Petro Rabigh, the company is endeavoring to continue safe and stable operations. In addition, the business is expected to expand in the future by beginning full-scale operation of Phase II Project facilities and achieving a high rate of stable operations.

## **Added Value Provided to Society**

Petro Rabigh produces a variety of petroleum and petrochemical products using crude oil and cost-competitive ethane from Saudi Aramco as its primary feedstocks.



#### **Customer and Consumer Needs**

There are cases when customers in regions in Asia and the Middle East have to maintain a significant amount of inventory because there is a risk of difficulty in procuring petrochemical products due to unstable logistic arrangements in this region. Moreover, in cases when customers switch suppliers, it is a burden on customers to adjust the products' processing methods used in customer factories. For these reasons, customers demand accurate and stable product deliveries.

#### **Providing Customer Value**

Sumitomo Chemical Asia, which sells products from Petro Rabigh, offers more reliable product deliveries than the competition, as well as short delivery times, because it has warehouses in locations near its customers. This means it is able to provide a stable supply, and to earn a high degree of trust from customers. In addition, while it has the flexibility to change a certain volume of sales and customers according to market conditions in each region, by focusing more on continued sales to core customers, the company further increases the reliability of its stable supply. Through these efforts, Sumitomo Chemical Asia is working to build long-term relationships with customers.



#### Supporting the Foundation of Peoples' Daily Lives and Strengthening Friendly Relations between Japan and Saudi Arabia

Products produced by Petro Rabigh form the foundation of a wide range of industries, including automobiles, electric appliances, food products, and other daily necessities. In addition, the company is not only contributing to the development of Saudi Arabia by creating employment in the country, it is also contributing to the strengthening of friendly relations between Japan and Saudi Arabia, the world's largest oil producer.

#### **Sumika Sustainable Solutions**

The propylene oxide-only (PO-only) process has been designated as one of the Sumika Sustainable Solutions. This PO-only technology is a ground-breaking, environmentally friendly process that uses heat effectively and limits wastewater, without producing byproducts.



Propylene oxide-only process plant (Chiba)



# **Energy & Functional Materials**

Contribute to Solving
Environmental and Energy Issues
through the Revolutionary Technologies
Resulting from a Long-term Perspective
Research and Development

Keiichi lwata

Representative Director & Senior Managing Executive Officer

The Energy & Functional Materials Sector was created in 2015 by integrating related businesses that had been spread across multiple business units within Sumitomo Chemical, with the goal of developing and strengthening businesses in the fields of the environment and energy. The goal of this sector is to contribute to solving global environmental and energy problems through the revolutionary technologies resulting from a long-term perspective on research and development.

A major core competency of this sector is its global business development capability, as proved by high-purity alumina and resorcinol, our products that hold the top global market share, but also by our separators for lithium-ion secondary batteries, which offer world-class heat resistance. The above products are also results of our other core competencies: our research and development capabilities as well as our evaluation, manufacturing, and process technologies.

This sector's medium-term strategy is to continue to expend every effort of investing its management resources particularly in those fields in which Sumitomo Chemical can offer comparative advantages technologically, and where the growth of those businesses can be expected. At the same time, we are working to restructure businesses that have become unprofitable.

In fiscal 2015, this sector's first year of existence, an operating loss was posted, but through initiatives aimed at improving income across each of manufacturing, sales, and research, particularly increasing sales of super engineering plastics and resorcinol, we recorded core operating income of 19.2 billion yen in fiscal 2017. The sector is conducting a phased increase of production capacity in the heat-resistant battery separator materials plant built in South Korea in 2016. On the other hand, the sector also conducted a business triage, which for example led to exiting the diesel particulate filter business.

By focusing management resources on new research and development in the fields where Sumitomo Chemical has comparative advantages, and where long-term growth can be expected, we will actively work to develop the core businesses of this sector. In addition, to reliably record profits we are continuing our efforts to improve the earnings capacity for all businesses. Moreover, in our efforts to develop core businesses from a medium to long-term perspective, we aim to promote the development of our CO<sub>2</sub> separation membrane business, which is a promising technology for reducing greenhouse gas emissions, one of the global issues.

(Billions of yen)	FY2017	In Comparison to FY2016	Corporate Business Plan FY2016-FY2018: Sector Goals FY2018 Target
Sales revenue	251.0	+44.6	260.0
Core operating income	19.2	+13.2	18.0
Sales revenue of SSS*	31.5	+10.7	
			* Sumika Sustainable Solutions



#### **Status of the Major Businesses**

- Products with top global market shares
- Differentiated products with technological advantage

 Expansion of the environment- and energy-related markets



 Need to enhance the capability of grasping fast-changing market and customer needs

- Developing and drastically changing markets
- Intense competition

#### **Main Initiatives in the Major Businesses**

#### Advanced Polymers Business

Sumitomo Chemical manufactures and sells super engineering plastics including liquid crystal polymer (LCP) and polyethersulfone (PES). LCP is used mainly in connectors and other electronic parts, taking advantage of its outstanding thermal resistance, flowability, and dimensional stability. PES, with excellent flame resistance, thermal resistance, and dimensional stability, is used mainly in carbon fiber composite materials in aircraft. Demand

is growing, as both polymers contribute to reducing weight and processing costs for final products. In addition, we are pioneering new applications that take advantage of these features, including use in automotive components.



Super engineering plastics

#### Resorcinol Business

We manufacture and sell resorcinol, which is used as a bonding agent between tire rubber and reinforcing materials, and as a raw material for a wood adhesive used in construction. Worldwide demand for resorcinol is estimated at 60,000 tons. As the world's top manufacturer of resorcinol, we have an

annual production capacity of over 30,000 tons and supply highly cost-competitive resorcinol by taking advantage of our outstanding manufacturing technology and production capacity.



Resorcinol

#### ■ Inorganic Materials Business

We provide distinctive high-performance inorganic materials using our advanced technologies for precisely controlling such physical properties as particle size and form. In addition to high-purity alumina, for which demand is increasing for such applications as a component in lithium-ion secondary batteries,

we also manufacture and sell fine alumina used as a raw material for glass substrates for products like liquid crystal displays, aluminum hydroxide, used for products like artificial marble, and high-purity aluminum, used as a circuit material in condensers and semiconductors.



Alumina products

#### ■ Battery Materials Business

We manufacture and sell separators for lithium-ion secondary batteries and cathode materials. Our separators have been highly esteemed by battery manufacturers for their outstanding heat resistance, reliability and safety, and demand is growing for applications such in as electric vehicles, because they are particularly suited for high-capacity batteries. At the plant of SSLM in South Korea established in the fall of 2016, we have

expanded production capacity in stages. With regard to the cathode materials, we converted Tanaka Chemical Corporation into a subsidiary company in 2016. We are pushing forward with an expansion of production capacity and development of new products with high capacity and low electric resistance.



Pervio® separators for lithium-ion secondary batteries

Energy & Functional Materials

#### **Value Creation Model: Separators**

# **System for Providing Added Value**

#### **Major Management Resources (Input)**

#### Intellectual Capital

Sumitomo Chemical holds a basic patent for the aramid coating process. With this patent, we are able to provide added value to customers that is unlike that of ceramic separators from other companies.

#### Human Capital

Sumitomo Chemical has operators with advanced techniques and experience to produce high quality products. We are focusing on technical guidance from veteran to novice operators so as to pass on the techniques.



Inspecting separators at the Ohe Works

#### **Sumitomo Chemical's Competitive Advantages**

#### Competitive Conditions in the Market

The use of coated separators has become mainstream for automotive lithium-ion secondary batteries. In addition to Sumitomo Chemical's aramid separators, coated separators also include ceramic separators, and the majority of the several dozen separator manufacturers around the world manufacture ceramic separators. However, there are only a limited number of manufacturers capable of producing separators used for high capacity automotive batteries like ours.

#### Competitive Advantages

Since our aramid separator is superior to ceramic separators in safety (heat resistance) and can reduce the overall weight of an electric vehicle by a couple of kilograms, it is highly regarded by customers.

#### ■ Initiatives to Enhance Competitive Advantages

In order to further strengthen the superiority of our aramid separator, we are conducting research to enhance the strength of the separators and reduce their thickness. In addition, we are working on development to improve the performance of the separators by using the optimal composition of aramid resin.

#### **Value Chain**



#### **Major Processes Generating Competitive Advantages**

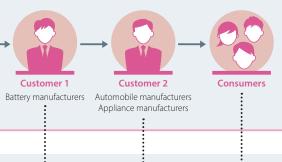
**Production:** Sumitomo Chemical is not only conducting research and development of separators but also working on improving productivity. We are capable of applying a uniform aramid coating with industry-leading speed, while maintaining high quality. Productivity at the plant of SSLM in South Korea has tripled since 2015 due to factors such as more advanced techniques, accumulated experience, and improvements in coating equipment. We expect further productivity improvement in the future.

#### **Earnings Structure and Role in Driving Income**

With the spread of eco-friendly vehicles, the separator market is also expanding. Sumitomo Chemical aims to expand sales through increased demand from existing customers and through reaching out to new customers. In addition, we are considering increasing the production capacity of our in-house base film, which offers outstanding cost competitiveness.

# **Added Value Provided to Society**

Sumitomo Chemical purchases raw materials such as base film and aramid resin, and produces aramid separators by coating the base film with aramid resin. Battery manufacturers combine them with other materials to produce lithium-ion secondary batteries. The final product is widely used in applications like electric vehicles and ESS (energy storage systems).



#### **Customer and Consumer Needs**

Customers and consumers are demanding eco-friendly vehicles with long cruising ranges and low fuel consumption. Safe, high capacity batteries are indispensable for that sort of vehicle. For this reason, our direct customers, the battery manufacturers, seek to manufacture batteries that provide that performance at the lowest possible cost.

#### **Providing Customer Value**

In order for battery manufacturers to make safe, high capacity products, Sumitomo Chemical provides thin separators with high heat resistance. Furthermore, we strive to improve productivity in order to provide products with outstanding cost competitiveness. In addition, the company elicits new needs from customers in regular meetings, and works to develop products to meet those needs.



# Contributing to Climate Change Countermeasures and the Spread of Eco-friendly Vehicles through the Separator Business

The shift to eco-friendly vehicles is accelerating due to the strengthening of environmental regulations around the world. Under these circumstances, separators are indispensable to the spread of these vehicles. Sumitomo Chemical contributes to climate change countermeasures through our separator business.

#### **Sumika Sustainable Solutions**

Separators, essential components in producing high density, high capacity and safe lithium-ion secondary batteries, have been designated as one of the Sumika Sustainable Solutions. Eco-friendly vehicles featuring lithium-ion secondary batteries can reduce energy consumption in comparison to gasoline-powered cars.



Pervio® separators for lithium-ion secondary batteries



#### **IT-related Chemicals**

Deliver New Value that Responds to the Changes in the ICT Industry by Leveraging Our Material Development Capabilities in Collaborative Development with Customers

Sumitomo Chemical's IT-related Chemicals Sector contributes to innovation in display technology by providing display manufacturers with highly functional materials that contribute to improved display performance. In addition, the sector contributes to improved semiconductor performance and productivity by providing high-quality semiconductor materials to semiconductor manufacturers.

Locating our production centers near customer manufacturing sites, we strive to foster good relationships with customers, to be quick to determine their needs, and to build market needs-driven supply chains that reflect these needs in the development and supply of products. The advantages our company brings to this field are this development and supply approach, our material development capability as a diversified chemicals manufacturer, our product development ability, as well as our processing technology in the display materials business.

Now, in order to respond to the generational shift in display technology from LCD to OLED, we are working to expand our OLED business and transform the cost structure of our LCD components business. In addition, we are also focusing on developing semiconductor materials that support increasingly

sophisticated semiconductor manufacturing technology, as well as expanding our production capacity.

In fiscal 2017, we not only expanded sales of polarizing films for OLED displays, we also made progress in the development of components for flexible displays. As for LCD components, we built a new polarizing film factory in China. In addition, in the semiconductor materials field, where demand is expected to grow, we decided to expand production capacity for high-purity chemicals and photoresists for use in semiconductors.

Going forward, by developing new products and expanding production capacity at the appropriate times, we aim to expand our touchscreen panels business for OLED displays and polarizing film businesses. As for LCD components, we will continue to improve our cost competitiveness, and also aim to expand our business in the Chinese market, which is expected to grow. Moreover, we are working to pioneer new applications and develop new customers in the semiconductor materials business.

In this way, utilizing Sumitomo Chemical's strengths, we will expand the scale of our business and increase profitability by providing new materials and solutions that anticipate developments in the ICT industry.

(Billions of yen)	FY2017	In Comparison to FY2016	Corporate Business Plan FY2016-FY2018: Sector Goals FY2018 Target
Sales revenue	368.7	+10.2	490.0
Core operating income	12.3	+3.6	34.0
Sales revenue of SSS*	120.3	+10.7	
			* Sumika Sustainable Solutions



#### **Status of the Major Businesses**



#### Main Initiatives in the Major Businesses

#### OLED-related Materials Business

Sumitomo Chemical offers OLED components, such as touchscreen panels and circular polarizing films. The company's main product is touchscreen panels, which are input units used in devices such as smartphones and tablets. The use of OLED displays in smartphones is expanding, and we are working to set up an optimal production system to meet demand for flexible-type touchscreen panels, which are becoming more common. Moreover, we also have manufacturing facilities for touchscreen panels that support foldable displays. Sumitomo Chemical will continue its focus on developing new products going forward, including flexible touchscreen panels, circular polarizing films, and window films. We will also work to develop new technologies that integrate the capabilities of these multiple materials into one material, expanding our OLED materials business. We are also working to commercialize polymer OLED materials that will enable the manufacture of large-scale OLED displays at low cost.



#### LCD-related Materials Business

Sumitomo Chemical offers a wide range of LCD components, including polarizing films, color filters, and color resists. We operate production facilities in various countries in East Asia, and have forged strategic partnerships as a prime supplier with major LCD panel manufacturers. In May 2018, we converted a

polarizing film substrate manufacturing company in China into a subsidiary. We aim to ensure the sustainability of our LCD-related materials business by building an integrated production system, starting from substrates, for polarizing films in the Chinese market, where demand is expected to grow.



Polarizing films

#### Semiconductor Processing Materials Business

Sumitomo Chemical offers a variety of semiconductor materials, such as photoresists, aluminum sputtering targets, and high-purity chemicals used in semiconductor manufacturing, including sulfuric acid, ammonia water, and hydrogen peroxide solution. Photoresists are photosensitive resins used in semiconductor manufacturing processes. As semiconductor manufacturers are adopting processes to etch finer circuits,

we are working to develop cutting-edge ArF immersion photoresists, and have the largest share of the global market for this product. We will expand the business by quickly developing state-of-the-art materials that meet customer needs.



Photoresists

IT-related Chemicals

#### **Value Creation Model: Circularly Polarizing Film for OLED Displays**

# **System for Providing Added Value**

#### **Major Management Resources (Input)**

Intellectual Capital Sumitomo chemical conducts research and development based on compound synthesis technology developed through the development of a wide range of products as a diversified chemical manufacturer.

Social and Relationship Capital We connect product design with a timely grasp of customer needs, using relationships of trust with customers developed over many years.



#### **Sumitomo Chemical's Competitive Advantages**

#### Competitive Conditions in the Market

Several companies that manufacture polarizing film are competing to improve quality in anticipation of adoption for use in flexible OLED displays.

#### Competitive Advantages

Sumitomo Chemical's unique strength is a liquid crystal material that can be used to coat circularly polarizing film for OLED displays. This liquid-crystal material, developed in-house, offers outstanding functionality, including preventing reflections from light sources such as sunlight or indoor lighting, and displaying real blacks that do not change color no matter what angle they are viewed from. For this reason, they contribute to the creation of OLED displays with extremely high image quality.

#### ■ Initiatives to Enhance Competitive Advantages

Sumitomo Chemical is pushing ahead every day on the development of liquid crystal materials that will contribute to even better image quality for OLED displays. In addition, in order to meet demand that is expected to grow in the future, the company is considering economically superior synthesis processes and manufacturing facility, with the goal of also improving cost competitiveness.

#### **Value Chain**

#### [OLED Displays Currently on the Market]

Sumitomo Chemical manufactures liquid crystal coated-type retardation film based on proprietary technology, processes it into the final product, circularly polarizing film and ships it to customers.



#### **Major Processes Generating Competitive Advantages**

Research: Sumitomo Chemical is conducting research on liquid crystal materials that can coat films. In order to produce phase contrast and polarizing functionality using liquid crystal materials, the liquid crystal molecules that are the raw material must be systematically oriented in a specific direction. Sumitomo Chemical is working to develop molecular designs that will achieve this. Moreover, the company is also devising production processes to manufacture the newly developed liquid crystal material and coat it onto film without harming its functionality.



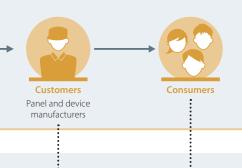
#### **Earnings Structure and Role in Driving Income**

The market for OLED displays (on a revenue basis) is expected to expand even further going forward. It is anticipated that in 2025, the OLED TV market will be five times its current level, while the market for smartphones using OLED displays will be about 1.4 times its current level. Sumitomo Chemical will increase its earnings capacity by expanding sales and improving productivity.

# **Added Value Provided to Society**

#### [Next-generation Flexible Displays]

We provide panel manufacturers with circularly polarizing film featuring liquid crystal coated-type retardation film, and the panel manufacturers work to develop foldable displays, which are expected to be the next-generation display technology.



#### **Customer and Consumer Needs**

Customers are continuing to develop foldable smartphones, which have not yet been launched, and devices using panels that can be rolled up like paper or cloth. Because this cannot be done using existing circularly polarizing films, panel manufacturers need a next-generation circularly polarizing film.

#### **Providing Customer Value**

Customers are designing next-generation displays in order to create entirely new devices. For this reason, Sumitomo Chemical is working with customers to repeatedly conduct trial and error process for circularly polarizing film, which is a component of these new devices, in an effort to provide the performance customers need in terms of thinness and strength when bent.

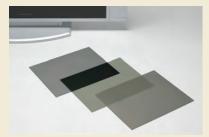


# Creating More Affluent and Convenient Lives for People

By developing and manufacturing circularly polarizing films for OLED displays, Sumitomo Chemical is contributing to the creation of entirely new products. The company will continue to provide new materials and solutions going forward, enabling people to lead more affluent and convenient lives.

#### **Sumika Sustainable Solutions**

The UV adhesive curing process in polarizing film manufacturing is designated as Sumika Sustainable Solutions. Manufacturing polarizing film, which is made by pasting together multiple sheets of film, previously used a great deal of electricity for the superheated drying process for the water-soluble glue. By adopting a UV adhesive curing process that uses ultraviolet curing technology, Sumitomo Chemical was able to significantly reduce the amount of power consumed in this process.



Polarizing films



# **Health & Crop Sciences**

Contribute to Solving Global Issues related to Food, Health, Hygiene, and the Environment by Leveraging Our Excellent Research and Development Capabilities

Ray Nishimoto

Representative Director & Senior Managing Executive Office

Sumitomo Chemical's Health & Crop Sciences Sector contributes to improving food productivity around the world by providing such specialized solutions as crop protection and enhancement products, agricultural materials, and methionine.

Sumitomo Chemical globally distributes not only excellent chemical crop protection products developed in-house, but also unique biorational crop protection/enhancement products and post-harvest solutions with high market shares. In addition to our range of unique crop protection products and the research and development capabilities that have been creating them, the strength of Sumitomo Chemical's crop protection and enhancement business lies in its global distribution channels. And in our methionine business, Sumitomo Chemical offers a stable supply, with integrated production from raw materials using advanced production technology.

Currently, Sumitomo Chemical is working on further enhancing the strength of our crop protection products and agricultural materials, expanding our global footprint (our own distribution network), and maximizing earnings of existing products. In addition, we plan to increase our methionine production capacity, solidifying our position as the leader in this business in Asia.

In fiscal 2017, we continued development of next-generation

crop protection products and filed registration applications for some of those products. In addition, in order to maximize sales of those products, we have agreed to enter into new collaborative arrangements with major crop protection companies (Bayer, BASF, Corteva Agriscience™) for development and commercialization. We also acquired several businesses in order to further enhance our competitiveness both in the biorationals business and in the household and public hygiene insecticide business, where Sumitomo Chemical has strengths.

Sumitomo Chemical aims to accelerate the development of next-generation crop protection products to enable the earliest market launch, and will also work on expanding our biorational and post-harvest businesses where we have competitive advantages. Furthermore, we will seek to expand our business opportunities further by strengthening collaborations with our partners from which we have acquired shares or with which we have formed alliances. We are also working to further strengthen our sales structure before the new methionine plant begins operations in fiscal 2018.

We aim to expand the scale of our businesses by contributing to solving global issues related to food, health, hygiene, and the environment by leveraging our research and development capabilities.

(Billions of yen)	FY2017	In Comparison to FY2016	Corporate Business Plan FY2016-FY2018: Sector Goals FY2018 Target
Sales revenue	339.7	+19.1	440.0
Core operating income	44.0	-3.5	89.0
Sales revenue of SSS*	116.5	+10.5	
			* Sumika Sustainable Solutions



#### **Status of the Major Businesses**

- Excellent research and development capabilities and robust pipeline both in chemicals and biorationals
- Differentiated technologies and products in niche areas
- Products with high market share
- Alliances with major multi-national players
- Offering total solutions in Japan
- Increasing food demand due to the growing global population
- Growing agriculture-related businesses
- Opportunities in peripheral and downstream businesses of the household insecticide business

- Relatively small business size compared to the competing majors
- Need to strengthen global sales channels
- Tightening of the regulations on crop protection chemicals
- Increased competition with off-patent crop protection chemicals
- Consolidation in the major agrochemical companies

#### Main Initiatives in the Major Businesses

#### AgroSolutions Business

In our crop protection and fertilizer business in Japan, we are aiming to increase our market share and broaden the scope of our business by developing attractive new products in-house, in-licensing new products, etc. We also offer comprehensive support for farmers' operations, from production to sale, by providing a wide range of agriculture-related supplies, technologies, and know-how. As part of our business as a total solutions provider, we engage in the rice business to produce and sell rice.

Meanwhile, we are enhancing collaboration and increasing investments to expand our overseas agrosolutions business. Besides mutually distributing crop protection products with Australian crop protection company Nufarm Limited, in which Sumitomo Chemical has an 18% stake, in 31 countries (as of June 2018), we are actively collaborating with several major crop protection companies in both distribution and development. We are also globally working to further strengthen research and development capabilities around the world, in order to accelerate the development of crop protection and enhancement products. In

2018, we begin operations of newly established Chemistry Research Center as our global discovery and innovation research and development base, and Biorational Research Center in North America as a research and development base for our biorational business.



Agrosolution products

#### ■ Environmental Health Business

Our environmental health business contributes to safe and comfortable living environments through its worldwide businesses in

household and public hygiene insecticides, products for control of infectious diseases, and ectoparasiticides for use in the animal health field.



Household insecticides

#### Feed Additives Business

Our feed additives business engages in the manufacture and sale of methionine, which is an essential amino acid used primarily as a feed additive in chicken and other poultry farming. The global methionine market is estimated at 1.3 million tons annually, and is expected to grow at an annual rate of about 6% due to the growth

of the world population and the spread of meat-eating cultures in emerging countries. To consolidate our position as Asia's top producer, we will increase our production capacity for methionine by 100,000 tons, to 250,000 tons a year in 2018, aiming to expand sales to good-standing new customers.



DL-methionine, Methionine hydroxy analog

#### ■ Pharmaceutical Chemicals Business

We supply pharmaceutical companies in Japan and overseas with APIs and their intermediates. We aim to further expand our business by conducting contract manufacturing of oligonucleotides

for nucleic acid therapeutics. (Nucleic acid therapeutics are an emerging class of therapeutics for treating unmet medical needs. They are capable of targeting a disease at the genetic level by preventing the expression of disease-causing proteins.)



Active pharmaceutical ingredients (APIs)

Health & Crop Sciences

#### **Value Creation Model: Global Agrosolutions Business**

# **System for Providing Added Value**

#### Major Management Resources (Input)

#### Intellectual Capital

Sumitomo Chemical is conducting research and development based on the knowledge regarding chemical and biorational crop protection products, which it obtained after its many years of research and development activities.

#### Human Capital

Personnel located around the world are conducting research and development using a global network.



The Chemistry Research Center, a global discovery and innovation base for the Health and Crop Sciences Sector

#### Sumitomo Chemical's Competitive Advantages

#### Competitive Conditions in the Market

There are many producers in the global crop protection market, from major producers in the US and Europe to comparatively small producers. Crop Protection products differ significantly in needs by region and crops. Sumitomo Chemical pursues unique positioning in various markets around the world, by using its product portfolio consisting of chemical and biorational products for crop protection and enhancement.

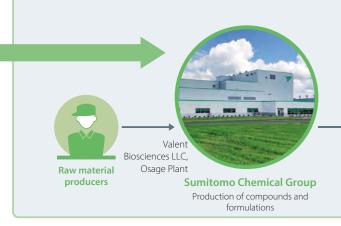
#### ■ Competitive Advantages

Sumitomo Chemical is committed to research and development, working on everything from the discovery of novel lead compounds to the product development for end users from a long-term perspective in order to provide new solutions. These efforts enable Sumitomo Chemical to obtain proprietary products and technologies, which is the foundation of its competitive advantages.

#### ■ Initiatives to Enhance Competitive Advantages

In 2018, Sumitomo Chemical established Chemistry Research Center, a synthesis research building at the Health & Crop Sciences Research Laboratory. Research functions ranging from the compound discovery to the commercial process development have been integrated in this new research building, in an effort to promote more efficient and speedier development. In addition, the company established a research center in Brazil in 2016 and a field testing station in the western US in 2017, where tests are conducted in a wider range of environments and therefore development of new products is accelerated.

#### **Value Chain**



#### **Major Processes Generating Competitive Advantages**

**Research:** In discovery research, Sumitomo Chemical searches for active ingredients for new crop protection products. In this process, we evaluate not only a compound's efficacy but also its safety for people and the environment. We utilize our global research and development network so as to develop new solutions as soon as possible. In addition, we are also putting effort into product development for new formulations and applications of existing active ingredients.



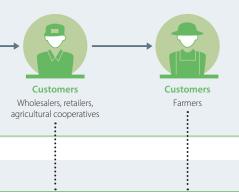
Health & Crop Sciences Research Laboratory

#### **Earnings Structure and Role in Driving Income**

The scale of the global crop protection market is about USD60 billion, and it is expected to grow at an annual rate of about 3%. In order to improve its earnings rate, Sumitomo Chemical aims to continuously launch highly effective products that meet the needs of the market, using the advanced technology obtained in research and development. In 2017, we continued to make progress on the development of next-generation crop protection products and submitted registration applications for some of these new products, which are planned to be launched in 2020 and beyond.

# Added Value Provided to Society

Sumitomo Chemical provides crop protection products through research and development, registrations, and manufacturing. These products are sold through wholesalers and retailers, and are used by farmers.



#### **Customer and Consumer Needs**

Farmers use crop protection products as they hope to improve the quality and yield of their agricultural crops. In addition, they also expect to make farming work more efficient, and improve profitability. At the same time, they also pursue safety and security, hoping that the crop protection products will not harm either their health or that of the consumers of the agricultural products.

#### **Providing Customer Value**

Sumitomo Chemical offers unique, effective products that meet customer needs and creates solutions that match the needs of every region and crop, which contribute to developing new, sustainable agricultural technologies.



Training on using biorationals



# Contributing to a Stable Food Supply by Improving Agricultural Productivity

With the growth in the world population and the development of the global economy, the need for a safe and secure food supply has been increasing. The crop protection and enhancement products Sumitomo Chemical provides around the world are aiming to contribute to a stable food supply by improving agricultural productivity.

#### **Sumika Sustainable Solutions**

Plant growth regulators (PGRs), a set of the products from a Sumitomo Chemical's global agrosolutions business, have been certified as Sumika Sustainable Solutions. PGRs have such effects as improving fruit set, size and quality of fruits and vegetables. In addition, as the timing of flowering and ripening of crops can be adjusted by PGRs, they are effective in cultivating crops in areas where cooling or droughts caused by climate change has progressed, thereby contributing to an increase in food production around the world.



From Valent Biosciences' product summary



#### **Pharmaceuticals**

Contribute to the Improvement of People's Quality of Life through R&D-oriented Innovative Drug Discovery Research

(Billions of yen)	FY2017	In Comparison to FY2016	Corporate Business Plan FY2016-FY2018: Sector Goals FY2018 Target
Sales revenue	500.2	+59.3	490.0
Core operating income	94.8	+24.9	65.0

#### Main Initiatives in the Major Subsidiaries

#### Sumitomo Dainippon Pharma

Sumitomo Dainippon Pharma Co., Ltd. is working to realize its vision of "Aspire to be a globally active R&D-based company" and "Contribute to medical care through leading-edge technologies," while



advancing initiatives aimed at medium- to long-term business growth, and always looking one step ahead of the times.

In its development of new drugs, which is a driver of business growth, Sumitomo Dainippon Pharma aims to continually create outstanding new drugs, conducting research and development activities incorporating cutting-edge technology with a number of methods, including not only its own internal research in focus areas with unmet medical needs, such as psychiatry & neurology, oncology, and regenerative medicine and cell therapy, but also the introduction of technology from other companies and joint research with biotech companies and academia.

In April 2018, the company was able to launch LONHALA® MAGNAIR® in the US market, a treatment for chronic obstructive

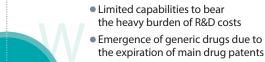
pulmonary disease (COPD) administered using a portable nebulizer. In addition, new drug applications in the US have also been submitted for dasotraline (attention-deficit hyperactivity disorder (ADHD)), and APL-130277 (OFF episodes associated with Parkinson's disease), for which significant sales are expected, and the company hopes to receive approval for both during fiscal 2018.

Furthermore, the company is also developing anticancer drugs napabucasin and amcasertib, which were added to the company's development pipeline by the 2012 acquisition of Boston Biomedical, Inc. Because napabucasin and amcasertib are designed to inhibit cancer stemness pathways, they may provide a new therapeutic option against the challenges in cancer treatment, such as treatment resistance, recurrence, and metastasis.

In its efforts to utilize cutting-edge technology, the company is applying iPS cell technology to drug discovery, while also working on research and development of regenerative medicine and cell therapy. In the US, it is working with SanBio, Inc. to conduct a Phase Ib clinical trial of a cell therapy product

#### **Status of the Major Businesses**

- Drug research platform in the areas of psychiatry & neurology and oncology
- Relationships with academia and biotech companies
- Development pipeline for psychiatry & neurology, oncology, and regenerative medicine and cell therapy
- The world's first commercial manufacturing plant dedicated to allogeneic iPS cell-derived products
- Innovation in healthcare technology
- Increasing health awareness



Strengths Weaknesses

Opportunities Threats

- Accelerated implementation of medical expense control measures in Japan
- Changes in the health insurance systems
- Consolidation in the pharmaceutical industry

for chronic stroke. The company is also working with universities and research institutes to develop cell therapy products for age-related macular degeneration, Parkinson's disease, retinitis pigmentosa, and spinal cord injury. In fiscal 2017, the world's first commercial manufacturing plant dedicated to allogeneic iPS cell-derived regenerative medicine and cell therapy products, called the Sumitomo Dainippon Manufacturing Plant for Regenerative Medicine & Cell Therapy (SMaRT), began operations. Regenerative medicine and cell therapy is a field where Japan has the potential to lead the world. Sumitomo Dainippon Pharma is taking on the challenge of continuing to develop products that can address unmet medical needs.



Sumitomo Dainippon Manufacturing Plant for Regenerative Medicine & Cell Therapy (SMaRT)

#### ■ Nihon Medi-Physics

Nihon Medi-Physics Co., Ltd. (NMP) is a leading company in Japan in the highly specialized field of nuclear medicine.

NMP engages in the development, manufacture, and sale of radiopharmaceuticals, which are used for diagnosis of disease conditions and post-therapy evaluation, chiefly for malignant tumors and brain and heart diseases. In addition to diagnostic pharmaceuticals, NMP also offers therapeutic products, such as a medical device for brachytherapy for prostate cancer, and a radiopharmaceutical that provides pain relief for cancer patients suffering from bone metastasis.

The Company's main product is FDG scan Injectable for PET (positron emission tomography) procedures, which are

effective in the early detection of malignant tumors. Because the half-life of the radioisotope (18F) used in this product lasts for an extremely short time of about two hours, NMP has established production facilities in major regions across Japan in order to ensure swift and reliable delivery to various medical institutions after manufacturing. In March 2018, the eleventh manufacturing facility for PET products was completed in Toyama prefecture.

In November 2017, NMP began sales of Vizamyl®, an imaging agent used in amyloid PET scans. An amyloid PET scan can evaluate the possibility of Alzheimer's as a cause of dementia, and thus it is expected to contribute to the diagnosis of dementia.

In addition, when the Japan Agency for Medical Research and Development (AMED) was accepting projects under its Cyclic Innovation for Clinical Empowerment (CiCLE) program, one of the research topics adopted for support was the development of diagnostic agents using the Theranostics concept. As part of this research topic, NMP will not only prepare a drug discovery facility to put into practice the Theranostics concept, which aims to bring together diagnostics and therapeutics, it will also develop antibody-labeled therapeutic drugs as well as their companion diagnostics. This is expected to contribute to efficient and effective cancer treatment.

As a leading company in the field of nuclear medicine, NMP will continue to work to develop new diagnostic pharmaceuticals.



SPECT diagnosis

**Pharmaceuticals** 

#### **Value Creation Model: Sumitomo Dainippon Pharma**

# **System for Providing Added Value**

#### **Major Management Resources (Input)**

#### Intellectual Capital

Research and development capabilities, in order to discover new drugs, and intellectual property, such as patents and licenses, are the source of income.

Social and Relationship Capital Not only do good relationships with institutions such as universities and other institutions contribute to the development of new drugs, good relationships with regulators and those in the medical field support global business development.

Human Capital Outstanding personnel support all business activities, including the research and development of new drugs, production, and sales.

#### **Sumitomo Dainippon Pharma's Competitive Advantages**

#### Competitive Conditions in the Market

The global pharmaceutical market is over \$1.1 trillion, and has grown at an annual rate of about 3% over the last five years.\* Within that, significant market growth is expected in the specialty pharmaceutical market, aimed at specific illnesses and requiring a prescription from a specialist. Numerous pharmaceutical manufacturers are participating in this massive market, particularly in the US and Europe, engaging in fierce competition in the development of new drugs.

#### Competitive Advantages

Although the scale of Sumitomo Dainippon Pharma is small compared to major global pharmaceutical manufacturers, the company has strong research and development capabilities in the psychiatry & neurology area, where it has built up knowledge over many years. In addition, by concentrating management resources into research and development in the oncology area, where there are many unmet medical needs, the company aims to discover revolutionary new drugs. Moreover, the company is a global leader in research and development in regenerative medicine and cell therapy, which is attracting attention as a next-generation treatment method.

#### ■ Initiatives to Enhance Competitive Advantages

Sumitomo Dainippon Pharma aims to accelerate the discovery of groundbreaking new drugs by appointing a project leader for each drug discovery project in the psychiatry & neurology area and transferring significant authority to these leaders. In oncology area, the company is conducting research and development through a collaboration between the company and two US-based subsidiaries. In the regenerative medicine/cell therapy field, the company is not only moving ahead with projects with collaborators in industry and academia, it has also completed work on, and launched operations at, the world's first commercial manufacturing plant dedicated to allogeneic iPS cell-derived regenerative medicine and cell therapy products.

#### **Value Chain**



Chemical manufacturers Manufacturers of drug raw materials and intermediate materials

#### **Major Processes Generating Competitive Advantages**

**Research:** By searching for candidate compounds for new drugs, Sumitomo Dainippon Pharma takes on the first step of drug discovery. It not only works to promote innovation within the company, it also actively promotes joint research with research institutions, such as universities inside and outside Japan, as well as alliances with biotech companies, working to discover revolutionary treatments.

**Development:** The company scientifically evaluates the effectiveness and safety of development candidates discovered in the laboratory through preclinical and clinical studies. It aims to efficiently promote development, and obtain speedy approval of new drugs.

**Production and Quality Management:** The company provides stable supplies of pharmaceuticals of reliable quality. In addition, it maintains a quality assurance system supporting the safety and security of its pharmaceuticals.

**Sales and Information Provision:** The company has sales locations in Japan, the US, and China, providing information necessary for the appropriate use of its pharmaceuticals.

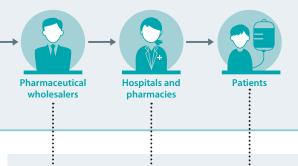
#### **Earnings Structure and Role in Driving Income**

While pharmaceuticals discovered in-house can provide high returns in the period when exclusive sales are possible due to patents or other intellectual property, profitability deteriorates significantly once a patent has expired. For this reason, Sumitomo Dainippon Pharma hopes to maintain and improve income by continually developing and launching new drugs.

<sup>\* (</sup>Source) Created based on the IQVIA World Review 2008-2017, Copyright © 2018 IQVIA (unauthorized copying and reproduction prohibited) (Source) Japan Pharmaceutical Manufacturers Association DATA BOOK 2018

# **Added Value Provided to Society**

Sumitomo Dainippon Pharma manufactures the pharmaceuticals it has developed using raw materials, including medical raw materials and intermediate materials, and then supplies them to hospitals and pharmacies via pharmaceutical wholesalers. In addition, it makes pharmaceutical information available to medical professionals so that its pharmaceuticals will be used appropriately.



#### **Customer and Consumer Needs**

Medical professionals and patients demand pharmaceuticals with higher therapeutic effectiveness, fewer side effects, and in easier to use forms. In addition, there is a strong demand for the development of new drugs for diseases that have no effective treatment method at the present time. Moreover, it is also essential to provide information leading to safer and more effective treatment of illnesses, enabling medical professionals to appropriately use the pharmaceuticals.

#### **Providing Customer Value**

Sumitomo Dainippon Pharma is concentrating research and development resources into the fields of psychiatry & neurology, oncology, and regenerative medicine and cell therapy, where unmet medical needs are high. By discovering new revolutionary drugs, the company aims to contribute to improved quality of life for patients. In addition, the company earns the trust of medical professionals by both providing a stable supply of the pharmaceuticals it discovers, and by providing timely and accurate information about those pharmaceuticals.



#### Contributing to the Development of Medicine and Improved Quality of Life for Patients

Sumitomo Dainippon Pharma contributes to the treatments of patients with a variety of illnesses by providing high-quality pharmaceuticals and pharmaceutical information. In addition, the company contributes to the development of medicine by generating further innovation through collaboration with organizations in academia and with biotech companies. Furthermore, the company also works to provide healthcare in countries and regions where receiving necessary medical treatment is difficult, both through research and development of its own products and through collaboration with such bodies as government institutions and international organizations.



# Sumitomo Dainippon Pharma Primary Focus SDGs 3 6000 HEALIP AND WELEBERNG AND WELEBERNE AND WELEBERNG AND WELEBERN





Sumitomo Chemical aims to achieve sustained growth by creating new value. In order to continue steady growth over the long term, initiatives in human resources, responsible care, and governance are essential and indispensable. The following pages introduce various initiatives that support Sumitomo Chemical's value creation.

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- 73 Research and Development / Intellectual Property

#### Corporate Governance

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Photo: Sewing Olyset™ Nets in a factory in Tanzania

Sumitomo Chemical developed Olyset™ Nets, mosquito nets to protect people from the mosquitos that transmit malaria, by using proprietary technology. The nets are supplied primarily to Africa.

# **Human Resource Strategy**

### Promoting a Deepening of Global Management from the Perspective of Human Resources Initiatives and Talent Development

Based on our Corporate Business Plan, with the slogan "Change and Innovation—Create New Value," Sumitomo Chemical's basic human resource (HR) policy is to encourage employees to grow through carrying out rewarding and worthwhile day-to-day duties and bring about the sustainable growth of the Sumitomo Chemical Group as a strong global chemical company through their individual growth.

In order to achieve this, we are continuing to create environments and organizations that make it easy for employees to work. We are also promoting a deepening of global management from an HR perspective by enhancing various measures to secure, develop, and encourage the active participation of talents at global level, in order to develop our business while creating new value.

Due to the current technological revolution and the advance of globalization, Sumitomo Chemical's business management has become more and more complex and sophisticated. For that reason, placing greater weight on "people," and increasing their abilities, is the key to sustained growth for the Sumitomo Chemical Group. The HR system of Sumitomo Chemical was revised in 2017, as the company decided to design the system from the perspective of how to best encourage the development and growth of its personnel. In addition, in light of the fact that ways of thinking about careers are becoming increasingly diverse, the company is deploying systems throughout the organization to contribute to increasing employee motivation. We are including making it possible to better evaluate employees with high-level expertise, and providing detailed support for each individual's motivation and aptitude, instead of the sort of mass management used previously.

We will not only work to appropriately operate this system in accordance with its purpose, we will continue our efforts to promote the growth and development of personnel, including implementing revisions to our training system intended to develop leadership and strengthen management in this time of intense change.

#### Yasuaki Sasaki Executive Officer



#### Sumitomo Chemical's HR System

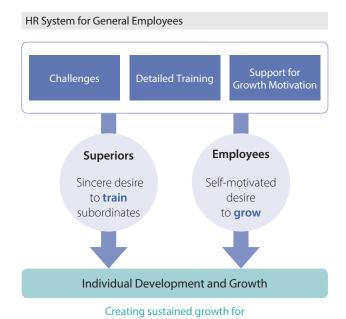
Sumitomo Chemical has implemented an HR system oriented toward duties and results, in which the treatment of each employee is based on the details of the role they fulfill, the size of their responsibilities, and the results they achieve. In order to treat employees appropriately based on their jobs in this way, we have established a system that enables employees with motivation and ability to take on the challenge of higher-level roles as soon as possible. Furthermore, this system responds to employees' self-motivated desire to improve and grow.

In addition, our annual evaluations not only evaluate to

what degree individual employees were able to fulfill the expectations of their position or role, but also evaluate them in terms of the degree to which they employ the knowledge and skills required for the role they are responsible for, and the degree to which they employ their capabilities to generate results. Through this evaluation process, we have adopted a system that can promote the development and growth of each individual, without being biased toward short-term results.

The Sumitomo Chemical Group will continue to promote the growth of employees, whether inside or outside Japan, through a mindset of cultivation, working to create an environment where each employee can actively succeed.

#### Diagram of Sumitomo Chemical's HR System MGII Fellows Associates Fellows Managers MGI Specialists ' MGI IV General **Employees** П Career/Development Career Development Field ...... (CDF) Ι



the Sumitomo Chemical Group through the growth of individuals

#### **Key Points of the HR System**

#### **Career Development Field (CDF)**

Individuals' desired careers can vary widely, so we established CDF as a way of demarcating those differences. In this way, we can conduct systematic deployment and training of individual employees in light of their desired career direction (career vision), while also further promoting their growth and development by enabling them to think proactively about their own careers.

#### <Implementation of CDF> Incorporating Career Visions into the System

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.

#### **Careers for Specialists**

Under the old model of careers, it was typically assumed that section heads and department heads would be promoted from front-line roles. On the other hand, in fields such as research and development, or jobs that are becoming increasingly sophisticated and complex, we have deployed a system in which specialists are handled appropriately, in order to enable personnel with sophisticated expertise to better employ their capabilities to produce results.

#### **Careers for Specialists**

#### Associates

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**

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

# **Responsible Care**

# **Hirokazu Murata**Associate Officer, General Manager,

Responsible Care Dept.



# Promoting Responsible Care Activities Rooted in Local Communities

At Sumitomo Chemical, policies and targets relating to Responsible Care are shared across the entire Group, in an effort not only to establish and maintain safe and stable operations, which is a part of the basic policy for the Corporate Business Plan, but also in an effort to ensure safety, environmental friendliness, and health throughout the lifecycle of products, and to maintain and improve the quality of the chemical products and services we deliver.

Currently, we have positioned dedicated Responsible Care personnel at regional headquarters in Europe, the Americas, China, and the wider Asia-Pacific region. This has enabled us to develop Responsible Care activities rooted in each region. Since 2016, we have set Safety Ground Rules for the entire Group as a measure to ensure safety across all Group workplaces, and notified all Group employees of them, in order to eliminate labor accidents and improve safety activities. Furthermore, we strive to ensure safety and protect the environment in these regions, and explain these efforts to our neighbors, working to deepen mutual understanding through dialogue.

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. We also believe that it is the chemical industry that can deliver solutions to these issues. In order to secure the license to operate from our customers, our neighbors, and our employees, we will continue to promote Responsible Care activities throughout the Group.

#### Occupational Safety and Health, Industrial Safety and Disaster Prevention

#### **Initiatives to Ensure Safety at All Group Workplaces**

The Sumitomo Chemical Group aims to achieve zero labor accidents across all workplaces through safety measures. Moreover, in order to ensure safety and peace of mind for the local community, we are conducting thoroughgoing voluntary safety management. Specifically, in order to minimize the risk of damage when a natural disaster occurs, such as a large-scale earthquake, we are periodically refurbishing facilities and buildings to ensure earthquake resistance. We also aim to minimize safety risks by focusing not just on the risks hidden in regular operations, but also on risks in non-typical operations, such as when a plant undergoes an emergency stop or when it is restarted after being stopped.

# Status of Dialogues with Local Communities (FY2017 – All Sumitomo Chemical Business Locations)

Number of dialogues held

Number of participants

40

Approx. **690** 



A local dialogue



A tour of a plant

# **Environmental Protection and Addressing Global Climate Change**

#### **Toward the Creation of a Sustainable Society**

Sumitomo Chemical and its major Group companies have set common goals for environmental activities, endeavoring to reduce the environmental burden of the Group as a whole. In particular, as a response to climate change, the Sumitomo Chemical Group has announced that it will set goals in accordance with the Science Based Targets (SBT) initiative, which aims to help companies set goals to voluntarily reduce greenhouse gas emissions that conform to the 2°C goal set by the Paris Agreement, and the Group has already begun working to meet those goals. Specifically, we have begun reviewing systems to promote energy-saving investments, in order to reduce greenhouse gas emissions at each plant. Moreover, starting in fiscal 2017, the Sumitomo Chemical Group began disclosing data that complies with the GHG Protocol, an international standard for greenhouse gas emission disclosure. Going forward, we will further enhance coordination between units such as plants, research facilities, and production technology departments, in an effort to accelerate technological innovations that promote reductions in greenhouse gas emissions. In addition, as it is a precious resource, we are working to reduce the amount of water we use, through effective utilization depending on the application.

# Product Stewardship, Product Responsibility, and Quality Assurance

#### For the Safety and Peace of Mind of Our Customers

The Sumitomo Chemical Group estimates the degree of impact our chemical products have in terms of safety on people and the environment throughout their lifecycle, and promotes activities to protect people's health and the environment based on those risks. As part of its Eco First Commitments, Sumitomo Chemical is currently reassessing that the products it sells are of sufficient quality so that customers can use them safely, and publishing the results as safety summaries\*. Going forward, Group companies will periodically conduct similar reviews for the products they sell, disclosing such information from a global perspective. In order to be able to deliver products and services of a quality that customers around the world can use safely, we will not only ensure that day-to-day management is conducted thoroughly, we will also continue to work to improve our products and services.

# Greenhouse Gas Emission Volume (Thousand tons) 10,000 8,000 6,000 1,326 4,000 7,086 7,289 6,002 5,509 6,432

Greenhouse gas emission volume in Japan
Greenhouse gas emission volume outside Japan

<sup>′</sup>13

\* Under GHG Protocol standards, the computation includes volumes that were not included in previous computations, including the volume of CO<sub>2</sub> emissions from energy use sold to other parties by the Sumitomo Chemical Group, the volume of CO<sub>2</sub> emissions from energy use from non-production facilities of Sumitomo Chemical itself, and the volume of CO<sub>2</sub> emissions from non-energy use that was excluded from the computation under the Act on Promotion of Global Warming Countermeasures.

16

'17 (FY)
GHG Protocol Standards\*

#### Water Usage in Japan\*1,3 / Water Usage outside Japan\*2,3 (Million tons) (Thousand tons) 1,600 10,000 1.415 1.420 1,200 7,500 7,091 6<u>,</u>475 975 6,406 1,017 5,888 1.043 5,000

- Water usage in Japan (left axis)
  Water usage outside Japan (right axis)
- \*1 Consolidated total for Sumitomo Chemical and major Group companies in Japan (for production plants)
- \*2 Consolidated total for major Group companies outside Japan (for production plants)

15

116

117

\*3 Water usage volume includes seawater

113

400

0

#### **Eco-First Commitments**



2,500

0

(FY)

Promise Example We will promote the management of chemical substances and the risk communications in an appropriate and proactive manner using proprietary technology.

Results

We have completed hazard assessments for all substances in our initial plan, and published **41** safety summaries.

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.

<sup>\*</sup> Documents that record safety information for chemical substances

#### **Dialogue with Shareholders and Investors**



#### Fulfilling Our Accountability to Shareholders so that an Accurate Understanding of the Company is Properly Reflected in the Stock Price and Higher Corporate Value

The basic policy guiding Sumitomo Chemical's IR activities is to provide planned, effective, and strategic communications with shareholders and other investors regarding our management policies, business strategies, and performance trends, so as to fulfill our accountability to shareholders and maintain and raise market confidence, while endeavoring to convey an accurate understanding of the Company that will be reflected properly in the stock price and in higher corporate value.

Based on this basic policy, the president gives management strategy briefings to investors twice a year, while sector heads give a business strategy briefing to investors once yearly. In addition, the president and I, as the executive officer in charge of IR, periodically visit major shareholders and have an active dialogue with them. Moreover, since fiscal 2016 we have arranged opportunities for directors who are in charge of a sector or head-office function to meet with investors and analysts and directly exchange views. By making this effort, we seek to have our shareholders develop a deeper understanding of Sumitomo Chemical.

Furthermore, recently we have begun receiving many questions and comments about our ESG initiatives. In light of this, we are now working to ensure an even more complete disclosure of ESG information on our website and in this Annual Report. We are also working to appropriately communicate both financial and non-financial information in other IR materials, such as the Investors' Handbook.

#### Summary of IR Activities (Fiscal 2017)

Briefing Sessions				
Times held	3			
Attendees	286			

Online Conferences			
Times held	4		
Attendees	554		

Investor Visits					
44					
12					

Individual Meetings
Number of persons
311

Briefing Sessions for Individual Investors				
Times held	7			
Attendees Approx. 5	15			

#### **Factory Tour**





A tour of production facilities of SSLM in South Korea in March 2018

#### Research and Development / Intellectual Property

#### **Research and Development**

Sumitomo Chemical has established six core technologies by enhancing the technologies accumulated through a broad range of research activities over many years: Catalyst Design, Precision Processing, Organic & Polymer Material Function Design, Inorganic Material Function Design, Device Design, and Biological Mechanism Analysis. Sumitomo Chemical's fundamental R&D strategy is to produce innovative technologies and products and create value by combining these core technologies and by merging technologies inside and outside the Company through open innovation, a process we call Creative Hybrid Chemistry.

Based on its forecasts of the business environment and the economy over the medium- to long-term, we have set the fields of the environment and energy, ICT, and life sciences as areas where our company can utilize its competitive strengths, and where we can expect high growth. In addition, we believe that the cross-over areas where two or more of these three fields meet are areas where we can employ our strengths as a diversified chemical manufacturer. For this reason, we are focusing the allocation of management resources on these three areas and their cross-over areas.

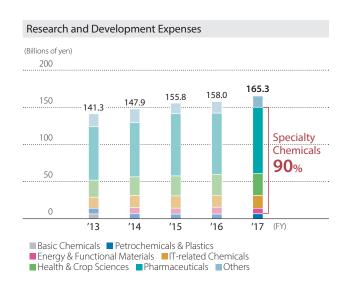
Going forward, we will work to develop next-generation businesses, making maximum use of the creative possibilities of chemistry.

#### **Intellectual Property**

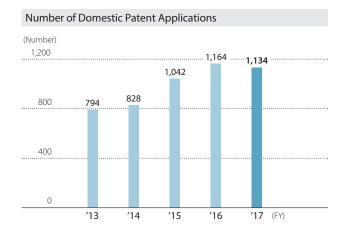
Sumitomo Chemical's intellectual property (IP) activities are aimed at contributing to the creation, maintenance, and increase of the Sumitomo Chemical Group's business value, through unified efforts by its business sectors, research laboratories, and the IP Department.

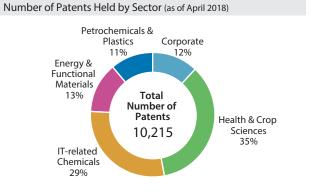
Utilizing AI technologies such as concept searches and text mining in the field of IP search and analysis, we have been improving work efficiency at the IP Department and R&D organizations.

While respecting the valid patents of third parties, we endeavor to promote our businesses strategically by acquiring and protecting "wider, stronger, faster-registered and longer-lasting" patents for the results of our research and technology development. We also endeavor to build a network of patents, not only in Japan, but also in Asia, Europe, North America, and the Middle East, and Africa. In addition, we will continue to maximize the Company's business value by effectively utilizing the patents so obtained for the businesses of Sumitomo Chemical and Group companies and further in the third-party licenses.



Research and Development Summary						
			(FY)			
	2015	2016	2017			
Number of R&D employees	3,831	4,010	4,034			
Ratio of R&D employees to all employees	12%	12%	13%			
Ratio of R&D expenses to sales revenue	7%	8%	8%			





# **Management Team**



Hiroshi Niinuma

Director & Senior Managing Executive Officer Kunio Nozaki

Director & Senior Managing Executive Officer Noriaki Takeshita

Representative Director & Senior Managing Executive Officer Toshihisa Deguchi

Representative Director & Executive Vice President

Osamu Ishitobi Chairman of the Board

Atsuko Muraki

Outside Director

Motoshige Itoh Outside Director **Hiroshi Tomono** Outside Director Koichi Ikeda Outside Director



Masakazu Tokura

Representative Director & President

Ray Nishimoto

Representative Director & Senior Managing Executive Officer

Keiichi Iwata

Representative Director & Senior Managing Executive Officer

Hiroshi Ueda

Director & Senior Managing Executive Officer

Kenya Nagamatsu Standing Corporate Auditor

Hiroaki Yoshida Standing Corporate Auditor

Mitsuhiro Aso

Outside Corporate Auditor

Yoshitaka Kato Outside Corporate Auditor Michio Yoneda

Outside Corporate Auditor



#### Governance Dialogue

# Evolution of Our Corporate Governance that Supports Sustained Growth and the Improvement of Corporate Value

Masakazu Tokura Representative Director & President

#### **Management by Phase**

Under the previous Corporate Business Plan, we strove hard, with an unwavering resolve, to improve the Company's financial strength.

**Ito** Sumitomo Chemical's Corporate Business Plan represents what can be called "Management by Phase," making extremely clear what the Company seeks to accomplish during the plan period. In the previous Corporate Business Plan (fiscal 2013 to 2015), it was very clear to me that Sumitomo Chemical was determined to reduce interest-bearing debt and generate greater free cash flow, and you made decisions toward this goal. **Tokura** At that time, we had a strong sense of crisis. The global financial crisis occurred just after we had taken three major strategic actions, each requiring large-scale investments—first, the Rabigh Project, an undertaking intended to drastically enhance the competitiveness of our petrochemicals business; second, the launch of Sumitomo Dainippon Pharma and several major acquisitions in order to secure a critical mass in the life sciences business; and third, the establishment and expansion of the IT-related Chemicals Sector, an effort to develop new businesses that would become the Company's central pillars in the future. As a result, our financial strength rapidly declined. We became aware that if we failed to make a turnaround and

rebuild strong business foundations without delay, we would have no future. We worked to improve our financial strength with unwavering determination, taking all possible measures, from reducing working capital to more rigorously assessing investment opportunities. We built up truly small initiatives, one by one, all across the Company. When we saw our D/E ratio halved—from a peak of 1.4 to 0.7—through these efforts, we were relieved.

**Ito** Under the current Corporate Business Plan (fiscal 2016 to 2018), launched following these positive results, you have shifted to a more aggressive strategy.

**Tokura** The current Corporate Business Plan is phase two of our commitment to 'Change and Innovation.' Our strategy is that having enhanced our financial strength in phase one (fiscal 2013 to 2015), we will further improve our business portfolio in phase two, which in turn will lead to phase 3, beginning next fiscal year, and beyond.

**Ito** I think it is very fitting for Sumitomo Chemical to adopt a strategy of identifying areas where you have competitive advantage and focusing your resources on these fields.

**Tokura** We have made it clear that, rather than compete by going after scale, we will focus on areas where we can compete with technology, as well as marketing capability. Over the most recent three years, about 75% of our investment has gone to the specialty chemicals businesses.

Sumitomo Chemical has established robust operations globally in the bulk chemicals field, while also achieving strong growth in the specialty chemicals area, and is progressing steadily on the road to becoming a resilient company that is able to continue sustained growth. Since the previous Corporate Business Plan, which provided the foundations for this significant performance, Dr. Kunio Ito\* has kept a close eye on the Company's strategy and the evolution of its corporate governance as a member of the Board of Directors. He spoke with Mr. Masakazu Tokura, President of Sumitomo Chemical, about corporate governance.

\* Dr. Ito served as Outside Director of Sumitomo Chemical's Board for six years after his appointment in 2012, and retired in June 2018.





# In the current Corporate Business Plan, we have achieved both a high income level and further improvement in our business portfolio.

**Ito** As part of your policy of 'Change and Innovation,' carried on from the previous Corporate Business Plan, you clearly express your commitment to contributing to the resolution of societal issues in the current Corporate Business Plan as well.

Tokura You have been promoting the concept of ROESG\*1. We feel that that idea of pursuing both profits and ESG is in keeping with the way we do business. The Sumitomo business philosophy—our business must not just benefit Sumitomo, but also the nation, society and the local communities where we operate—has taken root within Sumitomo Chemical. Our products provide solutions to issues in society, as those of the Energy & Functional Materials Sector help solve problems related to the environment, resources and energy, those of the Health & Crop Sciences Sector food problems, and those of the Pharmaceuticals Sector people's health. By using the power of chemistry, we strive to contribute to resolving issues facing human society and bettering people's lives. In this way, we hope to help build a sustainable society through our business activities, and thereby continue to grow in a sustainable way. Ito I believe that Sumitomo Chemical is a company that embodies ESG management to the core. Moreover, you are running your business in such a way that you increase capital productivity while also pursuing ESG management and the SDGs. The Energy & Functional Materials Sector\*2, created by carving out related products and technologies from the IT-related Chemicals Sector and the Petrochemicals & Plastics Sector, has grown significantly in just two and a half years, and the Company's business portfolio has remarkably improved.

**Tokura** We have a very well balanced portfolio in place, with one-third of our core operating income coming from bulk chemicals (Petrochemicals & Plastics) and two-thirds from specialty chemicals in the fiscal year that ended March 2018. While the tightened petrochemical supply and demand in Asia was a major contributing factor, the most noteworthy factor is that after 10 years of unremitting effort, we have finally achieved a high-rate operation at the Petro Rabigh plant.

**Ito** That is all the more heartening to me because as a member of the Board I saw for myself the Rabigh Project going through a difficult period. You have dramatically increased your ability to generate cash flow and income over the last five years, to the point where ROE is over 15% and ROI is over 7%. I think there are only a very few companies that have changed this much. These last five years, I have been greatly impressed by Sumitomo Chemical's ability to get things done.

<sup>\*1</sup> A concept that does not see ROE and ESG as something opposing each other, but as ideas that are both important and should be pursued. Promoted by Professor Kunio Ito.

<sup>\*2</sup> Please see "Change in Business Sector Classification Methods" on page 41.



#### **Evolution in ESG Management**

# Continuing to improve governance, making full use of the insights of Outside Directors

Ito Sumitomo Chemical's governance is steadily getting better in a number of ways. A case in point is the initiative of addressing issues that emerge in the assessment of the effectiveness of the Board of Directors. After the Company conducts a survey evaluating the effectiveness of the Board of Directors, discussions are held on the results of the survey, and naturally, in those discussions, some specific issues are brought up that need to be addressed from the perspective of corporate governance. Sumitomo Chemical never leaves them there; it follows through and takes action for improvement by the next year. That sort of sincere attitude and the accumulation of actions over time have caused the Company's governance to evolve to where it is now.

**Tokura** I do not think of governance as just a system. Together with internal controls, we must deliver results through governance. To that end, we should take full advantage of a Board that has Outside Directors, because they can provide valuable, eye-opening insights from on high, from a different angle.

Ito How transparent can a company be, for example, when sharing information about an M&A project it is considering at a Board of Directors meeting where Outside Directors are present? I think the answer to this question tells you much about the Company's policy. In this respect, Sumitomo Chemical is extremely prompt in providing information, and is also very candid. Depending on circumstances, as much as several months before submitting an item to the Board for deliberation, explanations are provided in the form of "spot reports." I

am sure that explaining an M&A project, which involves a body of insider information, to the Board members several months in advance requires a certain bravery, but I never felt an attitude in this company that said "we don't have to disclose this information."

**Tokura** I think that if a company really wants to put corporate governance into practice in management and develop it into a competitive advantage, it should pursue that level of transparency. Otherwise, the effort won't pay off. If you want the insights of Outside Directors, it is essential that you share with them information necessary for discussion and deliberation as soon as possible. I am promoting this way of thinking throughout the Company.

**Ito** Another thing that I always considered impressive is that at Board of Directors meetings, you help communicate to Internal Directors what Outside Directors want to convey as well as the background of their comments, by saying, for example, "What the Outside Director meant to say is this," or, "It is a kind of encouragement. He has made that comment because he wants it to succeed." I have rarely seen this kind of thing at other companies. When we make suggestions, we have some reason for saying so. I think it is very important that you as President translate it for people within the Company.

**Tokura** Within the Company, we have no opportunities to see ourselves from a place a little bit further away. As a result, without knowing it, we have become a very homogenous group of people. But we have to remember that we are part of society. If we cannot take true care of the interests of our shareholders and other stakeholders and earn their understanding, in the long run we will end up unable to continue as a company.

**Ito** That is corporate governance in the original sense of the term.

Tokura Yes. That is why I am extremely grateful for Outside Directors' suggestions. They push us forward by telling us to take more risk and be truly aggressive when we have decided to be aggressive. They also suggest that we should not hesitate to take a step back when a problem arises after we have made a commitment. Or regarding a project we are considering, they ask us if we have carefully studied critical issues, while calling for timely reporting. Meanwhile, because our Outside Directors have their own specialized fields, from time to time their comments about our business sound so general that some of our officers or employees do not understand exactly what the Outside Directors are trying to bring home to them. For that reason, I would very much like to somehow convey the full meaning of the Outside Directors' messages to those at the Company—I am not making special efforts, but sometimes I think there is something I can add.

**Ito** At this year's Ordinary General Meeting of Shareholders, a certain shareholder asked about Sumitomo Chemical's corporate governance, and I answered with confidence that the Company's corporate governance has improved remarkably over the last few years. It is no exaggeration to call the changes remarkable.

**Tokura** I am very grateful to you for the comment. Of course, there is no end to improvement in governance. We will continue to work to make further progress, even in small steps.



#### **Sumitomo Chemical's Future**

# Aiming to be a company seen as having a conglomerate premium

Ito "Creative hybrid chemistry" is an appropriate basic strategy for this company. In order to continue implementing it, I think that human resource development will become more and more important. Sumitomo Chemical has many employees who have expertise in specialized areas. In order to create something new by combining technology and expertise from different types of businesses, however, it will be necessary to develop "producer-type" personnel, people who have a broader perspective and can help make new things happen.

**Tokura** I think that is absolutely true. We need to develop personnel who are open-minded, always paying attention to changes and new things beyond their own specialized fields.

**Ito** The capital market tends to value those companies operating a variety of businesses, as Sumitomo Chemical does under the strategy of "hybrid chemistry," at a conglomerate discount. But you have successfully improved your business portfolio, and have delivered results. I do hope that Sumitomo Chemical will become a company that is valued at a premium, not at a discount.

**Tokura** Going forward, solutions to issues facing society will involve not just isolated businesses or products, but combinations of many different things. That is exactly what creative hybrid chemistry tries to achieve, and that is what innovation is about. And I believe that is an area where we can display our unique strengths. In the next Corporate Business Plan, we would like to aim to become a company that is valued at a conglomerate premium. Thank you very much for being with me today.

#### **Board of Directors and Corporate Auditors**

(As of July 1, 2018)

#### **Board of Directors**



Osamu Ishitobi Chairman of the Board

1969 Joined Sumitomo Chemical Co., Ltd. 1994 General Manager, Planning & Coordination Office. Petrochemicals & Plastics Sector

2002 Managing Director

2003 Managing Executive Officer

2005 Director & Senior Managing Executive Officer

2006 Representative Director & Senior Managing Executive Officer

2008 Representative Director & Executive Vice President

2012 Representative Director & Executive Deputy Chairman

2014 Representative Director & Executive Chairman

2017-Chairman of the Board



Masakazu Tokura Representative Director & President

1974 Joined Sumitomo Chemical Co., Ltd.

1998 General Manager, Planning & Coordination Office, Fine Chemicals Sector

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



Toshihisa Deguchi Representative Director & Executive Vice President

IT-related Chemicals Sector, PLED Business Planning, Electronic Devices Development Center, Special Aide to President (pertaining to activities related to new technology and product development as designated by President)

1990 Joined Sumitomo Chemical Co., Ltd.

1994 STI Technology, Inc.

2006 Executive Officer

2009 Managing Executive Officer

2011 Representative Director & Managing Executive Officer

2012 Representative Director & Senior Managing Executive Officer

2017-Representative Director & Executive Vice President



Ray Nishimoto Representative Director & Senior Managing Executive Officer

1980 Joined Sumitomo Chemical Co., Ltd.

2006 General Manager, Planning & Coordination Office, Agricultural Chemicals Sector

2009 Executive Officer

2011 Managing Executive Officer

2013 Representative Director & Managing Executive Officer

2015-Representative Director & Senior Managing Executive Officer

2009-Chairman, Dalian Sumika Chemphy Chemical Co., Ltd.

2010-Chairman, Vector Health International Ltd.

2013-Chairman, Valent U.S.A. LLC 2013-Chairman, Valent BioSciences LLC

2013-Chairman, Dalian Sumika Jingang Chemicals Co., Ltd.



Noriaki Takeshita Representative Director & Senior Managing Executive Officer

igh Project, Petrochemicals & Plastics Sector

1982 Joined Sumitomo Chemical Co., Ltd.

2005 Rabigh Refining and Petrochemical Company

2010 Executive Officer

2013 Managing Executive Officer

2017 Representative Director & Managing Executive Officer

2018-Representative Director & Senior Managing Executive Officer

2016-Deputy Chairman, Rabigh Refining and Petrochemical Company



Keiichi Iwata Representative Director & Senior Managing Executive Officer

Energy & Functional Materials Sector, PLED Business Planning, Electronic Devices Development Center

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



Kunio Nozaki Director & Senior Managing Executive Officer

Corporate Communications, Corporate Business Development, Corporate Planning, IT Innovation, Accounting, Finance

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

2009-President, Sumika Finance Co., Ltd.



Hiroshi Ueda Director & Senior Managing Executive Officer

Research Planning and Coordination, Process & Production Technology & Safety Planning, Production & Safety Fundamental Technology Center, Intellectual Property, Responsible Care, Industrial Technology & Research Laboratory, Environmental Health Science Laboratory, Advanced Materials Development Laboratory, Bioscience Research Laboratory

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



Hiroshi Niinuma Director & Senior Managing Executive Officer

General Affairs, Legal, CSR, Internal Control and Audit, Human Resources, Osaka Office Administration, Procurement, Logistics

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

2017-Outside Director, Sumitomo Seika Chemicals Co., Ltd.



Koichi Ikeda

**Outside Director** 

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. (present Asahi Group Holdings, Ltd.)

2011 Outside Corporate Auditor Sumitomo Chemical Co., Ltd. 2015-Outside Director, Sumitomo Chemical Co., Ltd.

2015-Outside Director, Toshiba Corporation



Hiroshi Tomono

**Outside Director** 

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, Konica Minolta, Inc. 2015-Outside Director, Sumitomo Chemical Co., Ltd. 2015-Advisor, Nippon Steel & Sumitomo Metal Corporation

2016-Outside Director, Japan Nuclear Fuel Limited



Motoshige Itoh Director

**Outside Director** 

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

2016-Professor, Faculty of International Social Sciences, Gakushuin University 2016-Outside Corporate Auditor,

Hagoromo Foods Corporation 2018-Outside Director, The Shizuoka Bank, Ltd. 2018-Outside Director, Sumitomo Chemical Co., Ltd.



Atsuko Muraki

**Outside Director** 

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 2017-Outside Corporate Auditor, Sompo Holdings, Inc. 2018-Outside Director, Sumitomo Chemical Co., Ltd

#### **Corporate Auditors**

#### Kenya Nagamatsu

#### Standing Corporate Auditor

1975 Joined Sumitomo Chemical Co., Ltd. 2009 Deputy General Manager, Ehime Works

2011-Corporate Auditor

2015-Outside Corporate Auditor, Sumitomo Seika Chemicals Co., Ltd.

#### Hiroaki Yoshida

#### Standing Corporate Auditor

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

#### Mitsuhiro Aso

#### **Outside Corporate Auditor**

1975 Prosecutor

2010 Superintending Prosecutor of the Fukuoka High Public Prosecutors Office 2012 Retirement as Prosecutor

2012-Registration of Attorneys

2013-Outside Corporate Auditor, Sumitomo Chemical Co., Ltd.

2016-Outside Corporate Auditor, Sumitomo Mitsui Trust Bank, Limited

#### Yoshitaka Kato

#### **Outside Corporate Auditor**

1978-Registered as a certified public accountant 2008 CEO of Ernst & Young ShinNihon LLC

2014 Left Ernst & Young ShinNihon LLC

2015-Outside Corporate Auditor, Sumitomo Chemical Co., Ltd.

2015-Outside Corporate Auditor, Mitsui Fudosan Co., Ltd.

2016-Outside Corporate Auditor, Sumitomo Corporation

#### Michio Yoneda **Outside Corporate Auditor**

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 (Currently Japan Exchange Group, Inc.)

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 Corporate Auditor, Sumitomo Chemical Co., Ltd.

2016-Outside Director, Kawasaki Heavy Industries, Ltd.

2018-Outside Director, Asahi Broadcasting Group Holdings Corporation

#### **Managing Executive Officers**

#### Kazushi Tan

Ehime Works

#### Marc Vermeire

Sumitomo Chemical Europe S.A./N.V., Special mission related to the Corporate Business Development Dept. and the Corporate Planning Dept.

#### Takashi Shigemori

Corporate Business Development Dept. Corporate Planning Dept., IT Innovation Dept.

#### Kazuyuki Nuki

AgroSolutions Div.- Japan, Environmental Health Div.

#### Masaki Matsui

IT-related Chemicals Sector Planning & Coordination Office,
Quality Assurance Office, Electronic Materials Div

#### Toshiro Ohtsubo

Health & Crop Sciences Sector -Planning & Coordination Office, Quality Assurance Office, Pharmaceutical Chemicals Div

#### Keiichi Sakata

Health & Crop Sciences Sector -Planning & Coordination Office, AgroSolutions Div.– International, Animal Nutrition Div.

#### Motoyuki Sakai

Sumitomo Chemical Asia Pte Ltd

#### Yoshiaki Oda

Research Planning and Coodination Dept., Industrial Technology & Research Laboratory, Advanced Materials Development Laboratory

#### Nobuaki Mito

Corporate Business Development Dept., Intellectual Property Dept.

#### Kingo Akahori

Energy & Functional Materials Sector – Quality Assurance Office, Inorganic Materials Div. Advanced Polymers Div., Battery Materials Div.

#### Hwang Inwoo

Dongwoo Fine-Chem Co., Ltd.

#### Soji Sakamoto

Basic Materials Div., Industrial Chemicals Div., Resin-related Business Development Dept., Polyolefins Div., Automotive Materials Div., Methacrylates Div

#### **Executive Officers**

#### Atsuko Hirooka

Environmental Health Div. Animal Nutrition Div.

#### Seiji Takeuchi

Rabigh Refining and Petrochemical Company

#### Andrew Lee

Valent U.S.A. LLC, Valent BioSciences LLC

#### Naoyuki Inoue

Rabigh Refining and Petrochemical Company

#### Yasuaki Sasaki

Internal Control and Audit Dept., Human Resources Dept., Osaka Office Administration Dept.

#### Keigo Sasaki

Corporate Communications Dept. Accounting Dept., Finance Dept

#### Kenji Ohno

General Affairs Dept., Legal Dept., CSR Dept.

#### Yoshihiro Miyoshi

Petrochemicals Research Laboratory

#### Shinichiro Nagata

Oita Works, Misawa Works

#### Yoshizumi Sasaki

Rabigh Refining and Petrochemical Company

#### Ichiro Kosaka

Energy & Functional Materials Sector -Planning & Coordination Office Specialty Chemicals Div.

#### Masaya Naito

Chiba Works.

Procurement Dept., Logistics Dept.

#### Takanari Yamaguchi

Optical Materials Div.

#### Akira Iwasaki

Corporate Planning Dept.

#### **Corporate Governance**

#### **Corporate Governance Initiatives**

Sumitomo Chemical has been committed to continual efforts to improve corporate governance. In response to demands for further raising the governance level, including application of the Corporate Governance Code, we are taking measures to achieve the optimal governing structure and decision-making processes, while remaining faithful to the intent and spirit of the Code.

#### **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 dialog 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 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 corporate culture of a company that can be trusted by society.
- As part of efforts to build a foundation for constructive dialog 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 dialog
  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 has prepared Corporate Governance Guidelines, in accordance with Japan's Corporate Governance Code. These Guidelines can be viewed on Sumitomo Chemical's website.

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

#### Measures to Date for Strengthening Corporate Governance

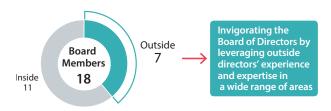
Date	Major Initiatives	Board Composition	Appointment of Board Members	Executive Remuneration	Other
2003 June	Introduced Executive Officer system (reduced number of Directors from 25 to 10)	•			•
July	Established Compliance Committee				
2004 June	Eliminated system of retirement benefits for Directors 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)	•			

# Recent Initiatives to Strengthen Corporate Governance

# Further Strengthening of the Board of Directors' Oversight and Advisory Functions

With the goal of further strengthening the Board of Directors' oversight and advisory functions to increase the transparency and objectivity of management, in June 2018 we added one outside director, increasing the total number to four (including one female director). As a result, of the eighteen total members of the Board of Directors and the Board of Corporate Auditors, seven are outside members. Outside directors have experience in a wide range of fields, including corporate management, economics, government, the legal profession, and accounting, and we leverage these perspectives to further revitalize the Board.

#### Board Composition (As of July 1, 2018)



	Inside	Outside
Director	9	4 (including one female director)
Corporate Auditor	2	3

# scope of decision-making delegated to Executive Officers with the aim of accelerating business execution. At board meetings, reporting by Executive Officers on the status of business execution has been enhanced, and three types of reports are defined based on the contents, with meaningful discussions taking place that contribute to sustainable growth and timely and decisive decision-making. The time required for board meetings has increased by three times since these changes have been implemented.

# Changes in the Operation of the General Meeting of Shareholders

To further promote a dialogue with shareholders, starting from the General Meeting of Shareholders held in June 2017, the way the meeting is administered have been changed, including relocation of the meeting place to a more convenient outside venue, as well as providing explanations and answers to questions that are more thorough and easier to understand. Attendees to the General Meeting of Shareholders held in June 2017 increased by three times compared to the previous year, and many shareholders were active in asking questions and making comments. In response, representatives of the company provided thorough explanations, leading to a further revitalization of the General Meeting of Shareholders.



#### **Changes in the Operation of the Board Meeting**

In addition to addressing Japan's Corporate Governance Code, we changed the operation of the Board of Directors to place greater emphasis on deliberating management policies, business strategy, and important matters of business execution and on oversight of the execution. The changes also expand the

#### **Use of Outside Director Functions**

To make maximum use of the oversight and advisory functions of the outside directors, it is essential to minimize asymmetries in information between internal directors and outside directors. The measures including those listed below have been implemented to revitalize board deliberation.

#### Measures to Make Maximum Use of Outside Director Functions

Measures	Description
Briefings prior to Board of Directors meetings	Outside directors gather together in advance of Board of Directors meetings to receive a detailed briefing from the relevant departments, along with a Q&A session, on issues to be discussed at the Board of Directors meeting.
Reporting on issues discussed in internal meetings	Supplemental information is provided on issues raised in internal meetings, such as on the launch of a business or an acquisition.
Reporting on important matters to the Board of Directors at an early stage	Important matters, such as management direction, M&A transactions, or large-scale projects, are reported to the Board of Directors at an early stage of consideration so that the board's intentions can be reflected.
Outside Directors & Corporate Auditors meetings	Based on such materials as the survey result on the effectiveness of the Board of Directors, meetings consisting primarily of outside directors are held to enable a frank exchange of views.
Visits to production sites	Visits are made to our production sites both inside and outside Japan (twice a year).

# Assessing the Effectiveness of the Board of Directors

#### Assessment Method

Sumitomo Chemical's Board of Directors carries out analyses and appraisals regarding the effectiveness of the Board of Directors through an exchange of opinions at meetings attended by Outside Directors, Outside Corporate Auditors, the Chairman, and the President, as well as at Management Meetings attended by internal directors, while taking into account survey result from all Directors and Corporate Auditors and opinions expressed by the Board of Corporate Auditors. In addition, based on these opinions, every year the Board of Directors makes an overall review of the appraised effectiveness of the Board of Directors.

# Assessment for Fiscal 2017 and Improvements over the Previous Fiscal Year

The effectiveness of the Board of Directors is assessed from a variety of perspectives, including its composition, operation, and deliberations and reporting at the Board of Directors meetings, as well as its oversight of business execution. With thorough management of board meetings leading to questions and answers based on active discussions, at the end of fiscal 2017 Sumitomo Chemical confirmed steady improvements, including the initiatives listed below, and further advances in the effectiveness of the Board of Directors.

#### Improvement Initiatives

- Detailed reports of objective risks analyses of important business launches
- Periodic confirmations of the progress of past business launches
- Further improvements in feedback on conversations with investors and analysts

#### Toward the Future

From the perspective of further enhancing the effectiveness of the Board of Directors, a few matters to be improved have been identified. One is to further improve governance though multifaceted reports on Group companies inside and outside Japan, including qualitative assessments of their internal control and responsible care initiatives, in addition to their business performance. Another is to have deeper discussions of the long-term strategy of the company as a whole. Yet another is to have detailed reports to the Board of Directors about background and the process regarding what has being discussed actively in internal meeting, thereby eliminating the asymmetries in information between internal and outside directors, and leading to further improvements in the deliberations and oversight by the Board of Directors.

### Topics

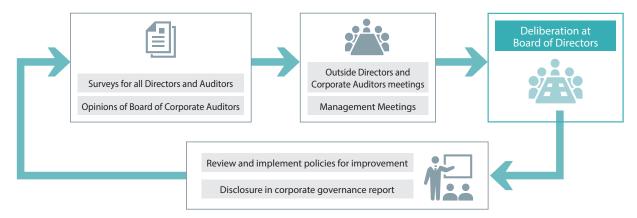
# Visit to Production Sites by Outside Directors and Corporate Auditors

In order for Outside Directors and Corporate Auditors to improve their understanding of our business, Sumitomo Chemical provide them with opportunities to visit our production sites both inside and outside Japan each year. In fiscal 2017, they visited the Oita Works and a Group company in South Korea. They have expressed the opinion that this initiative is extremely valuable, enabling them to get a deeper understanding of our business.



Visit to Dongwoo Fine-Chem (South Korea) in March 2018

#### ${\tt PDCA\ Cycle\ for\ Further\ Improving\ the\ Effectiveness\ of\ the\ Board\ of\ Directors}$



#### Messages from Newly Appointed Outside Directors and Corporate Auditor

We received the following messages from Sumitomo Chemical's new outside directors and corporate auditor, who were appointed in June 2018.

#### I will Provide a Perspective on Macroeconomic Issues and Global Trends.

My research has been on theories and policies in international economics. My impression is that Sumitomo Chemical is very resolutely taking on the challenges of global markets, with its petrochemical complex in Saudi Arabia and its production of separators in South Korea, for example. Based on my personal experience, I would like to provide my perspective on macroeconomic issues and global trends, which are areas that are difficult to grasp when one is working on the actual front lines of business. Aside from the Board of Directors meetings, my understanding is that I will have opportunities to participate in visits to production sites and meetings with Executive Officers. In addition to my full intention of making discussions at the Board of Directors meetings more active, I would like to take a variety of opportunities to have repeated discussions about the company's medium-to long-term vision.

In addition, I am interested in AI and IoT technologies, which are making striking progress recently. I expect these technologies to have an even more significant impact on corporate management and consumer behavior in the future. There is a need to think very carefully about how corporations should leverage these technologies in their business activities, and about how to generate added value by combining functions that can be replaced by AI and IoT with functions that cannot be performed by IT. I would also like to have discussions about the pace of technological innovation and the direction of the changes it generates.



Motoshige Itoh
Outside Director

#### I will Actively Work on Promoting Diversity.

At the Ministry of Health, Labour and Welfare, I worked on creating a society in which all people, including women and people with disabilities, can actively participate. In working to create such a society, corporations need to focus on providing opportunities that enable all kinds of employees to use the full extent of their capabilities. I understand that Sumitomo Chemical is also placing a lot of effort into promoting diversity. The promotion of diversity is not something that will advance on its own. Rather, it requires constant effort, step by step. As an outside director, I would like to actively work to address this issue.

Up until now, many of Sumitomo Chemical's outside directors have been people with a background in business management, and I think I may be the first one whose experience is from a government agency. As someone with a different background, I want to actively express my opinions for constructive discussions at the Board of Directors meetings. Even beyond the meetings, I would like to examine the company's business from a variety of perspectives. As part of these activities, in 2019 there are plans to visit Petro Rabigh's complex in Saudi Arabia. Because it is a country that places restrictions on the advancement of women, I thought such a visit might be difficult, so I am very happy to have such a precious opportunity. It is an important complex for understanding Sumitomo Chemical's business, and I am looking forward to it.



**Atsuko Muraki** Outside Director

#### I will Contribute to Enhancing Governance by Frankly Expressing My Opinions.

I am someone who has spent a long time in finance, such as at the Bank of Japan and securities exchanges. I understand that Sumitomo Chemical got its start by manufacturing fertilizers from sulfur dioxide emitted from smelting operations, aiming to solve smoke pollution caused by the emissions. Using innovation to solve an environmental problem, this approach, I feel, has been continually passed down to the present as Sumitomo Chemical's DNA. I also have the impression that Sumitomo Chemical is very actively engaged in ESG initiatives, which have been attracting considerable attention in recent years, and this is an area that is significantly impacted by the company's DNA.

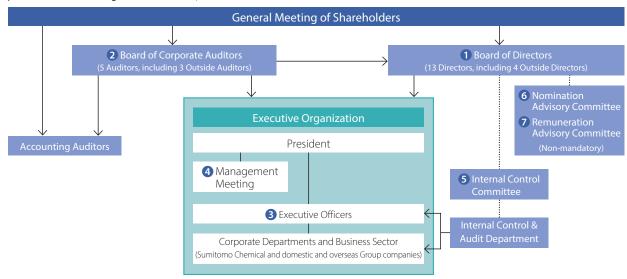
As evidenced by the June 2018 reforms to Japan's Corporate Governance Code, corporations in Japan are facing demands for enhanced governance. Of course, I think that corporate governance structures are being put in place. The goal of enhanced governance, however, is not to put structures into place. Rather, it is a method to enhance corporate value and achieve sustainable growth. I think we are just now entering the stage of actual improvements to ensure the proper functioning of governance in a variety of business activities. As an outside corporate auditor, I will work to contribute to enhancing governance by frankly expressing my opinions.



Michio Yoneda Outside Corporate Auditor

#### **Current Corporate Governance Organization**

Corporate Governance Organization (As of July 1, 2018)



#### **Organizational Structure**

#### 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 Board of Directors regulations. It also receives reports from Directors and others on the performance of duties, financial situation, and operating results, and oversees the performance of duties by each Director.

The Board currently consists of 13 Directors, four of whom are independent outside directors having no conflict of interest with general shareholders. The term of office of Directors is one year, in order to make the administrative organization responsive to changes in the business environment and to establish clear administrative responsibility and roles of Directors.

Board of Directors meetings are held monthly as a rule, with special meetings convened as needed. To ensure the effectiveness of the Board of Directors, assessments and analyses are conducted annually and the follow-up to the results is done.

#### 2 Board of Corporate Auditors

We have a Corporate Auditor System, with a Board of Corporate Auditors consisting of five Corporate Auditors including three outside 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 once a month as a rule.

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.

# 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. We have 35 Executive Officers, with eight acting in dual capacity as Directors. The Executive Officers are 32 Japanese and three non-Japanese, consisting of 34 males and one female. The term of office for Executive Officers is one year.

#### 4 Management Meeting

The Management Meeting supports the decision-making of our management by providing a forum for deliberation on such vital matters as corporate strategy and capital investment, including matters to be deliberated in the Board of Directors for discussion and reports to be made to the Board. The Management Meeting consists of all the Directors (excluding outside directors), some of the Executive Officers of corporate divisions, and one Standing Corporate Auditor. Meetings are held 24 times a year as a rule.

#### **5** Committees

We enhance its business activities and oversight functions by establishing internal meetings (committees) to deliberate on important matters concerning the management of the Company, and the Group from broad and diverse viewpoints. Of these committees, the Internal Control Committee, the Compliance Committee, and the Responsible Care Committee and others are attended by Directors and others, as well as the Standing Corporate Auditor, who serves as an observer. In 2018, we established a new Sustainability Promotion Committee, which is an enhanced iteration of its former CSR Promotion Committee, to strengthen its ESG initiatives.

#### **Internal Committees**

internal committee	-	
Name Purpose		Number of Meetings in Fiscal 2017
Internal Control Committee	Deliberate on measures to build and improve a proper internal control system	3
Risk Crisis Management Committee	Deliberate on company policy to deal with individual risks such as large-scale disasters, pandemics, and a decline in public security	3*
Responsible Care Committee	Comprehensively promote responsible care activities from a long-term viewpoint	1
Compliance Committee	Promote compliance-oriented business management	1

<sup>\*</sup> Subcommittee meetings on specific key themes

#### **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 selection of top management and on appointment of directors and auditors. The committee is made up of outside directors and Sumitomo Chemical representative directors. 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 appointment of officers, with the purpose of ensuring more transparency, fairness, and openness in the process of appointing officers and bringing greater clarity to the process.

#### 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 for top management and Directors,

remuneration levels, and other related matters. The committee is made up of outside directors and Sumitomo Chemical representative directors. 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 officer remuneration system and levels, in order to achieve greater transparency, fairness, and openness.

#### **Remuneration System**

Remuneration for Directors consists of basic remuneration and bonuses. Basic remuneration is designed to serve as an incentive for the actions of Directors to contribute to the company's sustainable growth, rather than short-term effects or half-measures. Accordingly, in addition to a fixed remuneration assigned to each person's rank, every year, from a comprehensive and medium-to-long term perspective, including the company's size, earnings capacity, and outside evaluations, if a determination is made that the position of Sumitomo Chemical has changed, it will be reflected in the remuneration amount. Bonuses are paid to heighten incentive to meet the business plans for each year, with the amount being determined based on consolidated performance for the fiscal year.

#### **Remuneration Levels**

Remuneration for Directors and Corporate Auditors is set at levels that, in addition to taking into consideration such factors as the scale and content of Sumitomo Chemical's business, are designed to be objectively competitive to attract and retain outstanding talent. In addition, based on surveys by outside third party institutions and other materials, each year those levels are checked to determine whether they are objectively appropriate. With regard to basic remuneration, in accordance with the remuneration system described above, levels are changed if Sumitomo Chemical's position is higher or lower than it previously had been. With regard to bonuses, bonuses are paid if performance for that fiscal year exceeds a particular level, with the amount of the bonuses designed to be highly correlated with business performance.

#### Directors' and Corporate Auditors' Remuneration in Fiscal 2017

(Millions of yen)

Title	Eligible Persons	Basic Remuneration	Bonuses	Total
Directors (excluding Outside Directors)	9	¥509	¥170	¥678
Standing Corporate Auditors	2	¥ 78	_	¥ 78
Outside Directors and Corporate Auditors	6	¥ 82	¥ 12	¥ 94
Total	17	¥669	¥181	¥850

Column

#### Message from the Managing Executive Officer

# As Non-Japanese Executive Officer, I would like to Provide a Diversity of Perspective to Sumitomo Chemical.

I have served as President of Sumitomo Chemical Europe since 2001 and as an Executive Officer since 2010. The company regularly holds Executive Officers Meetings, which offer an opportunity for us to meet and exchange information. When I was inducted as an Executive Officer, the style of the meetings was more structured, but now I have realized the atmosphere is more open. We also hold lunch meetings before the formal Executive Officers Meetings. During this time, we are able to discuss a variety of things without restraint. This approach brings forth new ideas which then lead to innovation within the company. Additionally, non-Japanese Executive Officers can be integrated much more easily.

These changes in the meetings are important from the perspective of the progress of diversity. I believe in diversity benefits for companies in countless ways. Sometimes when people encounter diversity, they find it difficult to cooperate together. However, if we focus on and share initial targets strongly, diversity contributes to strengthen the organization and develop innovative solutions for the future.

We have always incorporated Sumitomo Chemical's corporate values into the global management of the company and its worldwide operations. Having talented people in suitable positions, regardless of nationality, culture, or gender is essential for us to move away from being an international company to a truly global company. I would like to contribute to encouraging a productive discussion between all of the Executive Officers and eventually try to provide varying perspectives, cultures and experiences.



Marc Vermeire
Managing Executive Officer

#### **Internal Control**

#### Status of Development of Internal Control System

Sumitomo Chemical recognizes the continuous development and enhancement of our internal control system as a necessary process in maintaining a sound organization, and believe this system should be actively utilized for the achievement of business objectives.

Based on the Basic Policy for Enhancement of the Internal Control System (revised in March 2015) established by the Board of Directors, we have formed the Internal Control Committee (chaired by the President) to review and strengthen the internal control system of the Sumitomo Chemical Group in response to changing circumstances. The Internal Control Committee monitors the implementation status of initiatives based on the Basic Policy, promoting various measures in order to enhance internal control systems.

#### **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 independent 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.

#### **Internal Auditing**

Sumitomo Chemical has established dedicated organizations within the company to conduct internal auditing. Internal audits are conducted on Sumitomo Chemical and major Group companies to evaluate and ascertain the design, operation, and effective functioning of internal controls in the execution of business duties by executives and employees of the Sumitomo

Chemical Group from the following perspectives: (1) effective and efficient operations; (2) reliability of financial reporting; and (3) compliance with relevant laws and statutes in all business activities. These audits are carried out by the Responsible Care Department (technology reliability auditing), for matters that fall under the purview of the Responsible Care Committee, such as the environment, safety, and quality, and by the Internal Control & Audit Department for other topics relating to the execution of operations.

The Internal Control & Audit Department works to improve internal controls for applicable departments through internal auditing. It also regularly holds meetings of the Internal Audit

Coordination Board to share with relevant departments the reports of deficiencies detected by internal auditing and progress on their countermeasures, promoting initiatives to strengthen the internal control systems of the Sumitomo Chemical Group. The department reports the results of audits relating to internal controls to the Board of Directors via the Internal Control Committee. In addition, in accordance with the Financial Instruments and Exchange Act, the Department evaluates, promotes, and coordinates the effectiveness of Sumitomo Chemical's internal control over the Sumitomo Chemical Group's financial reporting as the secretariat, and also reports on the status of such evaluation to the Internal Control Committee.

#### **Risk Management**

Sumitomo Chemical seeks to improve and enhance our risk management system to detect risks at an early stage that have the possibility of hindering the achievement of business objectives and to prevent them from occurring as well as to respond quickly and appropriately on their occurrence.

Each organization of the Sumitomo Chemical Group takes various measures to appropriately manage risk. To support and ensure the risk management measures of each organization, the Internal Control Committee determines Group-wide risk management policy and deliberates initiatives pertaining to collection of risk information and its dissemination throughout the Group.

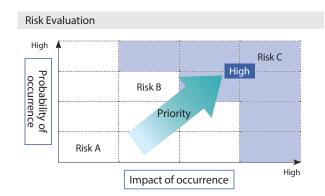
For enhancing the risk management system, each organization of Sumitomo Chemical Group including Group companies both in Japan and abroad conducts a risk assessment every fiscal year in terms of the probability of risk occurrence and its possible impact, and the Internal Control Committee determines based on the assessment results Group-wide priority risks that are to be implemented across the Group. Each organization takes appropriate measures based on the Groupwide risk response plans, which are developed by Sumitomo Chemical's risk response coordination departments designated for each priority risk.

We also establish a Risk Crisis Management Committee to deliberate the Group's response policies and plans, pertaining to the individual risk crisis in order to make prompt responses in the event that a significant risk is realized, such as large-scale disasters (earthquakes, storms, floods and other), pandemics, and a deterioration in security (terrorism, riots and wars and other).

Visit our website for details on business risk. https://www.sumitomo-chem.co.jp/english/ir/policy/risk\_factors.html

# Evaluate risks and formulate measures (Plan) Improve measures (Act) Check progress and results (Check)

We continually implement a PDCA cycle, in which risks are evaluated based on current circumstances, measures are formulated and implemented in light of the results of the evaluation, and the progress and results of those measures are checked. Then appropriate improvements are made.



We conduct risk evaluations across about 120 organizations, prioritizing countermeasures for risks with a high possibility of occurrence, or whose degree of impact would be significant.

#### **Compliance**

# Basic Policy of the Sumitomo Chemical Group's Compliance: Passed Down from One Generation to Another

Sumitomo Chemical places "compliance" at the bedrock of corporate management. As we engage in business in many parts of the world, all companies of 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.

The spirit and 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" (please see P10), 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, greater emphasis is placed on the importance of companies fulfilling their responsibilities to society while relevant laws and their enforcement are continually strengthened around the world. Given the circumstances, all companies of Sumitomo Chemical Group are making concerted endeavors in furthering compliance activities, under the strong leadership of top management, keeping duly in mind that thoroughgoing compliance efforts are becoming ever more important in the Group's increasingly globalized business operations.

# The Compliance Manual and the Charter for Business Conduct embody Sumitomo Chemical's Business Philosophy\*



\* Please see P4

#### Compliance System at Sumitomo Chemical Group

#### (1) Sumitomo Chemical's Compliance Committee

# = The Linchpin of Sumitomo Chemical Group's Compliance Activities

Under the guidance and oversight of the Board of Directors and the Board of Corporate Auditors, the Compliance Committee of Sumitomo Chemical establishes overarching principles of compliance from a global perspective, according to which it works with every Group company in Japan and abroad in building and operating their compliance systems locally in a manner required.

#### (2) Think globally, Manage regionally, Act locally = A Structure Focused on Effectiveness

As business globalizes, it becomes more important that a corporation's compliance system operation be fine-tuned to a situation specific to an individual country or company. 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 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 operation.

#### Compliance System at Sumitomo Chemical Group



#### **Latest Priority Initiatives**

# (1) Initiatives to Prevent Corruption and Comply with Competition Laws

An area of our recent focus is to strengthen those initiatives which 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 (see Topics 1), as well as initiatives to ensure strict observance of competition laws. In addition, with regard to competition laws, we implemented a thoroughly revised Competition Law Compliance Manual in fiscal 2017, and we will also promote to introduce the Manual in Group companies going forward.

#### (2) Compliance Promotion Month

In line with the "Corporate Ethics Promotion Month" initiatives of Keidanren (the Japan Business Federation), Sumitomo Chemical and some of its Group companies have designated October of every year as "Compliance Promotion Month," in which all employees in each workplace, including manufacturing, 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 which are already in place, they review once again whether or not the measures will be effective enough when implemented. Continuous implementation of these measures not only reduces specific compliance risks in the workplace, but also helps in raising employees' compliance consciousness.

During the Compliance Promotion Month initiatives of fiscal 2016, so-called "fraud" risks were made essential topics of discussion

in light of recent corporate scandals that had taken place, while in fiscal 2017, collusion and harassment were essential topics, as all major compliance risks were examined and identified in each department, and then, concrete preventive measures were formulated and implemented. Reports on these activities are 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 departments with positive evaluations and details of their initiatives within the company.

#### (3) Compliance Training

With a firm belief that strict compliance can only be achieved with each employee having high awareness of compliance, Sumitomo Chemical attaches importance to carrying out "compliance education" on a continual basis, which includes training programs geared to management executives at Sumitomo Chemical and Group companies as well as face-to-face lecture-style training courses and e-learning trainings, depending on each company's specific needs and situation.

#### (4) Employee Compliance Awareness Survey

In order to measure the effect of the initiatives listed above, including compliance activities and training, Sumitomo Chemical regularly conducts employee compliance awareness surveys, and in fiscal 2017, a survey of more than 40 Group companies inside and outside Japan was conducted. Questions about topics such as the compliance awareness of individual employees were designated as key performance indicators (KPIs) for this survey, and observing trends in these KPIs each time a survey is conducted will lead to the discovery of issues and the setting forth of measures aimed at further improvement.

#### (5) Compliance Audits

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.

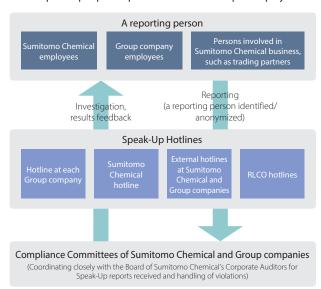
#### **Speak-Up Reporting System**

#### (1) A Speak-Up Reporting System Plays a Key Role Towards Enhanced Compliance

All companies of Sumitomo Chemical Group are constantly making every possible effort to detect any compliance violations as early as possible or to prevent them from occurring in the future, by taking a variety of measures, including improving the operational effectiveness of the Speak-Up Reporting System. Sumitomo Chemical's Speak-Up System is built on the basic thought that anyone involved in Sumitomo Chemical's business, whether a management executive or an employee at the Company, or his or her family member, or an executive or employee of a Group company, or a trading partner, will be able to report a compliance violation or a suspected violation to the Compliance Committee without fail, whenever they come to recognize one in connection with activities of Sumitomo Chemical Group companies. Accordingly, various reporting channels

are available for use, i.e. (1) A Compliance Committee of each Group company, (2) RLCOs, (3) the Compliance Committee of Sumitomo Chemical, and (4) external lawyers designated by the committee. A reporting person can use a reporting channel of his or her choosing. (Please see chart below)

#### How a speak-up report is processed under the Speak-Up System



#### (2) Promoting Use of the Speak-Up Reporting System

An investigation based on a speak-up report is carried out with utmost consideration to protecting the privacy of a reporting person and maintaining confidentiality of information provided. In addition, a maximal care is taken to ensure that a person who has made truthful reporting will never be put at any disadvantage on the ground of having made the report, such as dismissal, transfer, or discrimination. Moreover, to ensure that the Speak-Up 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 and any disadvantageous treatment to a reporting person is strictly prohibited. In addition, the Committee shares with employee's information about how far the Speak-Up Reporting System is in use by employees.

#### (3) Recent Operational Track Record of the Speak-Up Reporting System

As a result of the above initiatives to promote the use of the reporting system, in fiscal 2017, there were a total of 89 reports to the Compliance Committees of Sumitomo Chemical and each Group company, a significant increase of 50 reports over the previous fiscal year. Upon its receipt, each report was worked on, and an investigation was conducted promptly and cautiously into a reported incident. When 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.

# (4) 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.

# Stronger Commitment to Further Enhanced Compliance Initiatives

Being a global enterprise, Sumitomo Chemical is deeply committed to fulfilling its corporate citizenship responsibilities. As Sumitomo Chemical Group companies continue to promote and expand business worldwide, the Sumitomo Chemical Compliance Committee, the RLCOs and each Group company will work jointly and more vigorously to strengthen their compliance initiatives by further cementing the closely-knit network of collaboration through various kinds of modus operandi, such as holding Global Legal and Compliance Conferences annually or the active use of IoT technologies.

Topics 1

Initiatives Regarding Prevention of Corruption in the Supply Chain of the Sumitomo Chemical Group

In order to thoroughly prevent corruption such as briberies to public officials or collusion with trading partners (including excessive business entertainment or giving and receiving of gifts, embezzlement, breaches of trust etc.), Sumitomo Chemical established the Committee on Antitrust Compliance and Corruption Prevention (reorganizing the previous Committee on Antitrust Compliance) in 2012, having the responsibility for building and operating a corruption prevention system for Group companies inside and outside Japan.

Under the guidance and oversight of the Board of Directors and the Board of Corporate Auditors, this Committee conducts assessments of corruption risks, based on the situations and factors such as corruption prevention laws and regulations of each country, the status of transactions and the countries in which trading partners are located. In light of the assessment results, the Committee determines the policies, rules, procedures and other protocols, and ensures that they are abided by throughout the Group.

Specific measures include establishment of policies, rules, procedures and other protocols such as the corruption prevention manual and approval standards for approval, and operation of measures such as due diligence processes when entering into or renewing contracts with agents, consultants, and business or trading partners, including distributors, and authorization processes for entertainment and the giving and receiving of gifts.

The company ensures that executives and employees are fully informed, through internal training and internal information systems, of the Sumitomo Chemical Group's commitment with regard to preventing corrupt activities, and of the compliance with relevant internal regulations. Sumitomo Chemical's business and trading partners are also fully informed from time to time by providing training etc, during the process of concluding contracts and due diligence, and other meeting opportunities.

The company has in place and operates internal reporting hotlines (Speak-Up hotlines – anonymous reporting also possible) that can be used by anyone involved in Sumitomo Chemical's businesses, including business and trading partners, enabling the Company to find out conduct of violation including corruption in its early stage of development and take remedial actions therefor promptly, hence conducive to ensuring compliance throughout the Company.

With regard to executives and employees who have been confirmed as undertaking corrupt activities, they will be subject to disciplinary actions per the internal regulations. With regard to business and trading partners, measures such as termination of a contract and other recourse will be taken.

Topics 2

Initiatives to Ensure Respect for Human Rights in the Supply Chain of the Sumitomo Chemical Group

In 2004, Sumitomo Chemical established a CSR Procurement Policy, based on the Basic CSR Policy, working to ensure socially responsible procurement across the entire supply chain, particularly in purchasing departments. Since 2009, the company has issued the Sumitomo Chemical Supply-Chain CSR Deployment Guidebook to suppliers, and requested their compliance with it. The Guidebook includes items such as respect for human rights, the prohibition of harsh and inhumane treatment such as maltreatments and/or various harassment, the prohibition of discrimination during the process of job offering and hiring, the implementation of equal opportunity and fair treatment, compliance with legal work hours, respect for the right to freedom of association of employees, the prohibition of forced labor and child labor, and payment of legal minimum wage. After providing prospective new suppliers with the Sumitomo Chemical Supply-Chain CSR Development Check Sheets in advance, the company conducts due diligence for their compliance status, and only begins doing business with them after confirming that the evaluation result is positive. In addition, after beginning a business relationship, the company conducts regular monitoring of compliance status, and has decided to work to prioritize procurement from business partners working to improve CSR. If violations are confirmed, the company will demand an necessary remedial measure be taken by the supplier and itself take appropriate measures, including terminating the relationship.

In addition, in order to reconfirm its commitment to ensuring respect for human rights across the entire supply chain of the Sumitomo Chemical Group, and to ensure thoroughgoing compliance with initiatives related to this issue by executives and employees, the company expressed its agreement with the Joint Declaration on Rectifying Business Practices That Lead to Long Working Hours in October 2017, which has been joined by about 110 economic organizations, particularly Nippon Keidanren (Japan Business Federation). Furthermore, in April 2018, the company added an item dedicated to its initiatives to ensure respect for human rights in its supply chain to the compliance manual, and is working to ensure that Group executives and employees comply with these measures thoroughly.

# The Old Niihama Thermal Power Station (Niihama, Ehime Prefecture)

The Old Niihama Thermal Power Station was completed in 1905 on the premises of the Niihama Smelting Works as a full-scale thermal power station. It supplied the electricity necessary for the manufacture of fertilizer at the Sumitomo Fertilizer Manufactory, the predecessor of Sumitomo Chemical, supporting the growth of this company. The red brick building is a valuable piece of industrial history, with traces of the Meiji era.

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#### **Financial Review**

#### 1. Results of Operations

#### (1) Sales revenue

Sales revenue increased by ¥251.4 billion from ¥1,939.1 billion for the fiscal year ended March 31, 2017 to ¥2,190.5 billion (US\$20,618 million) for the fiscal year ended March 31, 2018. This is mainly due to the increase in sales quantity associated with business expansion that has the most significant impact on the increase in sales revenue, the increase in selling price due to the increase in raw material purchase price, and the translation differences from local currencies into Japanese yen in foreign subsidiaries due to the depreciation of the Japanese yen.

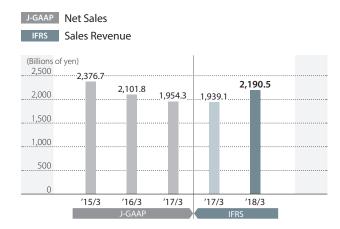
#### (2) Core operating income / Operating income

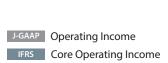
Core operating income increased by ¥78.1 billion from ¥184.5 billion for the fiscal year ended March 31, 2017 to ¥262.7 billion (US\$2,473 million) for the fiscal year ended March 31, 2018 due to the increase in sales quantity as well as the improvement in share of profit of investments accounted for using the equity method, such as Rabigh Refining and Petrochemical Company.

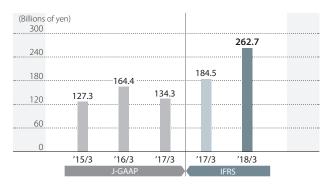
Loss from non-recurring factors, which is deducted from Operating income when calculating Core operating income, decreased by ¥46.3 billion from ¥58.1 billion for the fiscal year ended March 31, 2017 to ¥11.8 billion for the fiscal year ended March 31, 2018 due to the large amount of impairment losses recorded in the fiscal year ended March 31, 2017. As a result, Operating income increased by ¥124.5 billion from ¥126.5 billion for the fiscal year ended March 31, 2017 to ¥250.9 billion (US\$2,362 million) for the fiscal year ended March 31, 2018.

# (3) Finance income and Finance expenses / Income before taxes

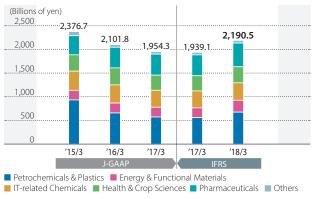
Finance income and Finance expenses worsened by ¥6.0 billion from loss of ¥4.1 billion for the fiscal year ended March 31, 2017 to loss of ¥10.1 billion for the fiscal year ended March 31, 2018 due to the appreciation of the Japanese yen toward the end of the current fiscal year and recorded a large amount of exchange losses. As a result, Income before taxes increased by ¥118.5 billion from ¥122.3 billion for the fiscal year ended March 31, 2017 to ¥240.8 billion for the fiscal year ended March 31, 2018.



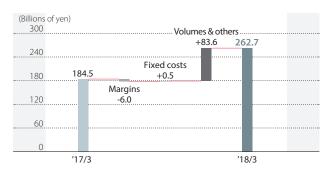








#### Change in Core Operating Income: '17/3 vs. '18/3



#### (4) Income tax expenses / Net income attributable to owners of the parent and Net income attributable to non-controlling interests

Income tax expenses were ¥62.7 billion for the fiscal year ended March 31, 2018, and the ratio of Income tax expenses to income before taxes after applying the tax effect accounting came in at 26.0%.

As a result, Net income was ¥178.2 billion for the fiscal year ended March 31, 2018.

Net income attributable to non-controlling interests increased by ¥11.8 billion from ¥32.6 billion for the fiscal year ended March 31, 2017 to ¥44.4 billion for the fiscal year ended March 31, 2018, which mainly represents net income attributable to non-controlling interests of consolidated subsidiaries, such as Sumitomo Dainippon Pharma Co., Ltd. or Japan-Singapore Petrochemicals Co., Ltd.

As a result, Net income attributable to owners of the parent increased by ¥57.2 billion from ¥76.5 billion for the fiscal year ended March 31, 2017 to ¥133.8 billion for the fiscal year ended March 31, 2018.

#### (5) Dividends

The Company has decided to pay a year-end dividend of ¥12 per share. As a result, the Company's annual dividend for fiscal 2017 is ¥22 per share, including an interim dividend of ¥10 per share.

#### 2. Segment Information

#### (1) Petrochemicals & Plastics

Market prices of petrochemical products and synthetic resins rose because of higher feedstock prices. Market prices of raw materials for synthetic fibers and methyl methacrylate (MMA) also increased. In addition, for associates accounted for using the equity method, the earnings of Petrochemical Corporation of Singapore (Pte.) Ltd. remained strong, while the earnings of Rabigh Refining and Petrochemical Company improved due chiefly to a continued high level of capacity utilization and rising market price of petrochemical products. As a result, the segment's sales revenue grew by ¥116.3 billion compared with the previous fiscal year, to ¥674.1 billion. Core operating income increased by ¥35.7 billion, to ¥94.6 billion.

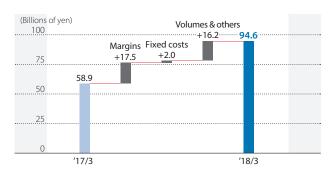
#### **Results by Business Segment**

Fiscal years ended March 31, 2018 and 2017

								(Millions of yen)
	Petrochemicals & Plastics	Energy & Functional Materials	IT-related Chemicals	Health & Crop Sciences	Pharmaceuticals	Others	Adjustments & Elimination	Consolidated
Year ended March 31, 2018								
Sales revenue	¥674,116	¥250,988	¥368,709	¥339,698	¥500,227	¥56,771	¥ —	¥2,190,509
Core operating income	94,567	19,189	12,341	43,964	94,786	11,052	(13,205)	262,694
Core operating income ratio (%)	14.0	7.6	3.3	12.9	18.9	19.5	<del></del>	12.0
Core operating income growth (%)	60.6	218.2	41.6	(7.3)	35.7	8.9	<del></del>	42.3

Year ended March 31, 2017								
Sales revenue	¥557,852	¥206,414	¥358,473	¥320,613	¥440,974	¥54,743	¥ —	¥1,939,069
Core operating income	58,884	6,030	8,714	47,440	69,871	10,146	(16,538)	184,547
Core operating income ratio (%)	10.6	2.9	2.4	14.8	15.8	18.5		9.5

#### Petrochemicals & Plastics Change in Core Operating Income: '17/3 vs. '18/3



# Energy & Functional Materials Change in Core Operating Income: '17/3 vs. '18/3



#### (2) Energy & Functional Materials

Shipments of resorcinol, a raw material for adhesives, and engineering plastics increased due to a rise in demand. Shipments of separators for lithium-ion secondary batteries also rose due to production capacity expansion. In addition, the acquisition of a manufacturer of cathode materials in the previous fiscal year pushed up sales. As a result, the segment's sales revenue increased by ¥44.6 billion compared with the previous fiscal year, to ¥251.0 billion. Core operating income grew by ¥13.2 billion, to ¥19.2 billion.

#### (3) IT-related Chemicals

Shipments of touchscreen panels and polarizing film increased due to growth in demand while selling prices declined. The weaker yen had a positive effect on sales from overseas subsidiaries in yen terms. As a result, the segment's sales revenue increased by ¥10.2 billion compared with the previous fiscal year, to ¥368.7 billion. Core operating income rose by ¥3.6 billion, to ¥12.3 billion.

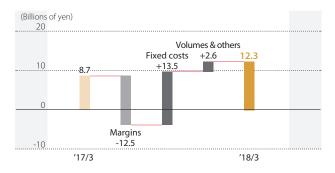
#### (4) Health & Crop Sciences

Sales of the feed additive methionine dropped due to lower market prices. Meanwhile, the acquisition of an Indian agrochemicals company in the previous fiscal year boosted sales. As a result, the segment's sales revenue increased by ¥19.1 billion compared with the previous fiscal year, to ¥339.7 billion. Core operating income declined by ¥3.5 billion, to ¥44.0 billion.

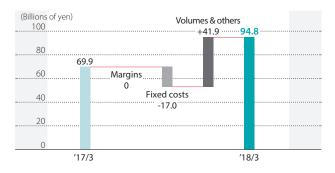
#### (5) Pharmaceuticals

In North America, sales of Latuda® (atypical antipsychotic) and other drugs increased steadily. In Japan, sales of Trulicity® (type 2 diabetes drug), Aimix® (anti-hypertension drug) and other drugs rose as well. As a result, the segment's sales revenue increased by ¥59.3 billion from the previous fiscal year, to ¥500.2 billion. Core operating income grew by ¥24.9 billion, to ¥94.8 billion.

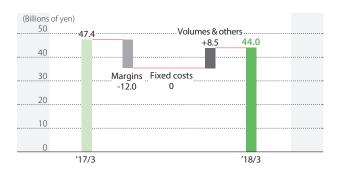
#### IT-related Chemicals Change in Core Operating Income: '17/3 vs. '18/3



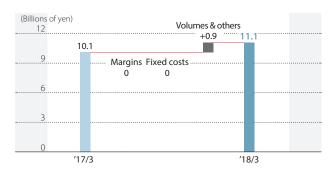
# Pharmaceuticals Change in Core Operating Income: '17/3 vs. '18/3



Health & Crop Sciences Change in Core Operating Income: '17/3 vs. '18/3



Others
Change in Core Operating Income: '17/3 vs. '18/3



#### (6) Others

In addition to the above five segments, the Sumitomo Chemical Group engages in supplying electrical power and steam, providing services for the design, engineering, and construction management of chemical plants, providing transport and warehousing, and conducting materials and environmental analysis. The segment's sales revenue increased by ¥2.0 billion from the previous fiscal year, to ¥56.8 billion. Core operating income grew by ¥0.9 billion, to ¥11.1 billion.

#### 3. Financial Position

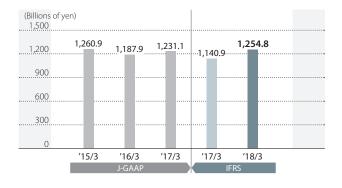
Total assets as of March 31, 2018 increased by ¥190.5 billion, to ¥3,068.7 billion (US\$28,884 million) from ¥2,878.2 billion as of March 31, 2017. Current assets as of March 31, 2018 amounted to ¥1,254.8 billion (US\$11,811 million), a 10.0% increase from ¥1,140.9 billion as of March 31, 2017, due mainly to increases of Cash and cash equivalents, and Inventories. Non-current assets as of March 31, 2018 amounted to ¥1,813.9 billion (US\$17,073 million), a 4.4% increase from ¥1,737.3 billion as of March 31, 2017.

Current liabilities as of March 31, 2018 were ¥1,029.0 billion (US\$9,685 million), a 7.6% increase from ¥956.2 billion as of March 31, 2017. The current ratio was 122.0%, compared with 119.3% as of March 31, 2017.

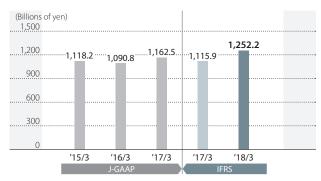
Non-current liabilities as of March 31, 2018 were ¥787.5 billion (US\$7,413 million), a 2.3% decrease from ¥806.1 billion as of March 31, 2017.

Interest-bearing liabilities (short-term and long-term bank loans, corporate bonds, and commercial paper) as of March 31, 2018 amounted to ¥842.2 billion (US\$7,927 million), compared

#### **Total Current Assets**



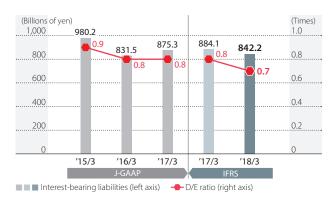
# J-GAAP Net Assets IFRS Total Equity



#### **Total Assets**



#### Interest-bearing Liabilities / D/E Ratio



with ¥884.1 billion as of March 31, 2017.

Total equity was ¥1,252.2 billion (US\$11,787 million) as of March 31, 2018, a 12.2% increase from ¥1,115.9 billion as of March 31, 2017, mainly because retained earnings increased. The ratio of net worth to total assets stood at 30.2% as of March 31, 2018, compared with 28.2% as of March 31, 2017.

There were 1,635,056,024 shares issued and outstanding as of March 31, 2018. Retained earnings amounted to ¥738.9 billion (US\$6,955 million), an 18.5% increase from ¥623.5 billion as of March 31, 2017.

#### 4. Cash Flows

Net cash provided by operating activities in fiscal 2017 was ¥293.3 billion, an increase of ¥107.5 billion compared to the previous fiscal year, due chiefly to a rise in operating income and a decrease in income taxes paid. Net cash used in investing activities was ¥154.5 billion, a decrease in cash outflows of ¥51.2 billion compared to the previous fiscal year, due mainly to the acquisition of Cynapsus Therapeutics Inc. (the present Sunovion CNS Development Canada ULC) and Tolero Pharmaceuticals Inc. by Sumitomo Dainippon Pharma, a subsidiary of Sumitomo Chemical, in the previous fiscal year. This resulted in free cash flow of ¥138.7 billion for fiscal 2017, compared with negative ¥19.9 billion for the previous fiscal year. Net cash used in financing activities was ¥94.3 billion. The balance of cash and cash equivalents at the end of fiscal 2017 increased by ¥38.6 billion over the previous fiscal year, to ¥231.9 billion.

#### **Breakdown of Capital Expenditures**

(Billions of yen, %) J-GAAP **IFRS** Years ended March 31 2014 2015 2016 2017 2017 2018 New plants and expansions: Basic Chemicals ¥ 4.0 3% ¥ — --% --% --% --% ¥ --% 7 Petrochemicals & Plastics 10.2 25 3 1.8 2 1.5 1 3.2 2 Energy & Functional Materials 1.1 1 10.0 10 11.8 9 14.3 9 IT-related Chemicals 15 21 48.1 34 12.9 22.1 29.5 23 21.3 13 Health & Crop Sciences 9 86 6 10.6 13 6.4 6 12.1 38.0 24 Pharmaceuticals 1 2 2 2 2 1.9 1.6 1.9 2.8 3.7 Others 0.6 0 0.9 1 0.7 1 1.2 1 6.0 4 Subtotal ¥ 73.4 51% ¥29.6 35% ¥ 43.0 41% ¥ 58.9 45% ¥ 86.5 54% Rationalization of production processes 3 5 3 2.7 2 4.8 4.5 8.3 3.5 Research and development 10 7.4 7 7.4 13.0 9 8.3 6 12.1 8 Maintenance and renewal 27.2 19 22.7 27 21.7 21 25.2 19 31.3 20 Others 25.0 17 19.1 27 23 233 22 350 26.2 16 Total ¥143.4 100% ¥84.2 100% ¥103.8 100% ¥130.1 100% ¥136.3 ¥158.8 100%

#### 5. Capital Expenditures

In the year ended March 31, 2018, the Companies' capital expenditures totaled ¥158.8 billion (US\$1,495 million), which includes investments for new installations and the expansion of manufacturing facilities as well as investments for streamlining existing facilities.

Major facilities completed in the fiscal year ended March 31, 2018 included the expansion of the manufacturing facility for lithium-ion secondary battery separators in South Korea in the Energy & Functional Materials Segment and the expansion of the production facility for touchscreen panels for OLED display panels in South Korea in the IT-related Chemicals Segment. Major facilities under construction in the fiscal year ended March 31, 2018 included the expansion of the manufacturing facility for processing chemicals for semiconductors in China in the IT-related Chemicals Segment, the expansion of the production facility for methionine and the synthesis research building in the Health & Crop Sciences Segment.

Broken down by segment, capital expenditures in the Petrochemicals & Plastics Segment were ¥17.4 billion (US\$164 million), ¥22.5 billion (US\$212 million) in the Energy & Functional Materials Segment, ¥24.5 billion (US\$231 million) in the IT-related Chemicals Segment, ¥56.3 billion (US\$530 million) in the Health

& Crop Sciences Segment, ¥21.2 billion (US\$200 million) in the Pharmaceuticals Segment, and ¥16.8 billion (US\$159 million) in the Others Segment.

#### 6. Research and Development

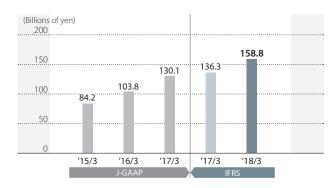
The Companies' basic R&D policy is to establish superior proprietary technologies that will contribute to profitability and business expansion. To maximize overall efficiency, the Companies proactively promote collaborative R&D and outsourcing through closer cooperation, while each subsidiary performs its own R&D activities.

In the fiscal year ended March 31, 2018, the Companies focused R&D resources on 1) Environment and Energy; 2) ICT (Information & Communication Technology); and 3) Life Science as part of the 2016-2018 Corporate Business Plan.

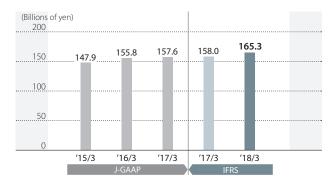
In addition, the Companies are promoting cross-sectoral projects for the development of new businesses.

R&D expenses were ¥165.3 billion (US\$1,556 million), up 4.6% from the fiscal year ended March 31, 2017.

#### **Capital Expenditures**



#### Research and Development Expenses



#### **Consolidated Financial Statements**

#### **Consolidated Statement of Financial Position**

Sumitomo Chemical Company, Limited and Consolidated Subsidiaries March 31, 2018, 2017 and transition date

		Millions of yen		Thousands of US dollars
	March 31, 2018	March 31, 2017	April 1, 2016 (Transition Date)	March 31, 2018
Assets				
Current assets:				
Cash and cash equivalents	¥ 231,929	¥ 193,295	¥ 215,631	\$ 2,183,067
Trade and other receivables	530,571	503,509	445,768	4,994,079
Other financial assets	6,720	5,652	6,262	63,253
Inventories	446,801	397,400	384,041	4,205,582
Other current assets	38,797	41,022	26,426	365,183
Total current assets	1,254,818	1,140,878	1,078,128	11,811,164
Non-current assets:				
Property, plant and equipment	675,745	644,059	661,763	6,360,552
Goodwill	122,849	120,548	82,647	1,156,335
Intangible assets	232,629	232,754	103,402	2,189,655
Investments accounted for using the equity method	294,370	268,719	256,324	2,770,802
Other financial assets	316,888	294,151	320,767	2,982,756
Retirement benefit assets	67,693	58,310	53,567	637,171
Deferred tax assets	62,146	80,017	93,104	584,959
Other non-current assets	41,547	38,757	26,035	391,066
Total non-current assets	1,813,867	1,737,315	1,597,609	17,073,296
Total assets	¥3,068,685	¥2,878,193	¥2,675,737	\$28,884,460

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		Millions of yen		Thousands of US dollars
	March 31, 2018	March 31, 2017	April 1, 2016 (Transition Date)	March 31, 2018
Liabilities and equity				
Liabilities				
Current liabilities:				
Bonds and borrowings	¥ 289,190	¥ 310,619	¥ 227,235	\$ 2,722,044
Trade and other payables	486,832	417,724	374,090	4,582,380
Other financial liabilities	52,244	54,129	47,304	491,755
Income taxes payable	28,078	22,956	43,626	264,288
Provisions	94,796	84,996	64,475	892,282
Other current liabilities	77,810	65,806	69,678	732,398
Total current liabilities	1,028,950	956,230	826,408	9,685,147
Non-current liabilities:				
Bonds and borrowings	552,971	573,476	604,270	5,204,923
Other financial liabilities	96,655	113,990	86,337	909,780
Retirement benefit liabilities	39,871	35,518	41,405	375,292
Provisions	24,620	26,604	28,810	231,739
Deferred tax liabilities	58,404	45,743	51,629	549,736
Other non-current liabilities	15,000	10,729	7,799	141,190
Total non-current liabilities	787,521	806,060	820,250	7,412,660
Total liabilities	1,816,471	1,762,290	1,646,658	17,097,807
Equity				
Share capital	89,699	89,699	89,699	844,305
Capital surplus	21,688	22,105	23,389	204,142
Retained earnings	738,882	623,508	546,542	6,954,838
Treasury shares	(8,296)	(8,228)	(8,186)	(78,087)
Other components of equity	85,168	85,528	95,494	801,656
Equity attributable to owners of the parent	927,141	812,612	746,938	8,726,854
Non-controlling interests	325,073	303,291	282,141	3,059,799
Total equity	1,252,214	1,115,903	1,029,079	11,786,653
Total liabilities and equity	¥3,068,685	¥2,878,193	¥2,675,737	\$28,884,460

#### **Consolidated Statement of Profit or Loss**

Sumitomo Chemical Company, Limited and Consolidated Subsidiaries Years ended March 31, 2018 and 2017

	Million	Thousands of US dollars	
	2018	2017	2018
Sales revenue	¥2,190,509	¥1,939,069	\$20,618,496
Cost of sales	(1,440,635)	(1,308,824)	(13,560,194)
Gross profit	749,874	630,245	7,058,302
Selling, general and administrative expenses	(557,888)	(533,890)	(5,251,205)
Other operating income	25,262	14,661	237,783
Other operating expenses	(21,644)	(26,787)	(203,727)
Share of profit of investments accounted for using the equity method	55,319	42,238	520,698
Operating income	250,923	126,467	2,361,851
Finance income	11,542	10,700	108,641
Finance expenses	(21,654)	(14,829)	(203,822)
Income before taxes	240,811	122,338	2,266,670
Income tax expenses	(62,653)	(13,238)	(589,731)
Net income	178,158	109,100	1,676,939
Net income attributable to:			
Owners of the parent	133,768	76,540	1,259,111
Non-controlling interests	44,390	32,560	417,828
Net income	¥ 178,158	¥ 109,100	\$ 1,676,939
	Y	en	US dollars
Earnings per share:			
Basic earnings per share	¥81.81	¥46.81	\$0.770
Diluted earnings per share	81.77	46.77	0.770

# Consolidated Statement of Comprehensive Income Sumitomo Chemical Company, Limited and Consolidated Subsidiaries Years ended March 31, 2018 and 2017

	Millions	Millions of yen		
	2018	2017	2018	
Net income	¥178,158	¥109,100	\$1,676,939	
Other comprehensive income:				
Items that will not be reclassified to profit or loss				
Remeasurements of financial assets measured at fair value through other comprehensive income	18,236	5,619	171,649	
Remeasurements of defined benefit plans	4,975	7,258	46,828	
Share of other comprehensive income of investments accounted for using the equity method	455	1,954	4,283	
Total items that will not be reclassified to profit or loss	23,666	14,831	222,760	
Items that may be subsequently reclassified to profit or loss  Cash flow hedge	2,349	(483)	22,110	
Exchange differences on translation of foreign operations	(16,907)	1,586	(159,140)	
Share of other comprehensive income of investments accounted for using the equity method	(2,705)	(4,072)	(25,461)	
Total items that may be subsequently reclassified to profit or loss	(17,263)	(2,969)	(162,491)	
Other comprehensive income, net of taxes	6,403	11,862	60,269	
Total comprehensive income	¥184,561	¥120,962	\$1,737,208	
Total comprehensive income attributable to:				
Owners of the parent	142,421	88,258	1,340,559	
Non-controlling interests	42,140	32,704	396,649	
Total comprehensive income	¥184,561	¥120,962	\$1,737,208	

Consolidated Statement of Changes in Equity
Sumitomo Chemical Company, Limited and Consolidated Subsidiaries
Years ended March 31, 2018 and 2017

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				F	quity attributable to	n owners of the nar	ent					
					equity attributable to							
						Other compone	nts of equit					
					Remeasurements of financial assets measured at fair value through other	Remeasurements		Exchange differences on translation		Equity attributable to owners	Non-	
	Share	Capital	Retained	Treasury	comprehensive	of defined benefit		of foreign		of the	controlling	
	capital	surplus	earnings	shares	income	plans		operations		parent	interests	Total equity
Balance as at April 1, 2016	¥89,699	¥23,389	¥546,542	¥(8,186)	¥100,245	¥ —	¥(4,751)	¥ —	¥95,494	¥746,938	¥282,141	¥1,029,079
Net income	_	_	76,540		_	_	_	_	_	76,540	32,560	109,100
Other comprehensive income					9,720	4,703	(173)	(2,532)	11,718	11,718	144	11,862
Total comprehensive income	_	_	76,540	_	9,720	4,703	(173)	(2,532)	11,718	88,258	32,704	120,962
Purchase of treasury shares	_	_	_	(43)	_	_	_	_	_	(43)	_	(43)
Disposal of treasury shares	_	0		1	_	_	_	_	_	1	_	1
Dividends	_	_	(21,258)	_	_	_	_	_	_	(21,258)	(16,880)	(38,138)
Changes in interest in subsidiaries Transfer from other	_	(1,284)	_	_	_	_	_	_	_	(1,284)	(2,409)	(3,693)
components of equity to												
retained earnings	_	_	21,684	_	(16,981)	(4,703)	_	_	(21,684)	_	_	_
Others, net	_	_		_			_	_		_	7,735	7,735
Total transactions with owners		(1,284)	426	(42)	(16,981)	(4,703)			(21,684)	(22,584)	(11,554)	(34,138)
Balance as at March 31, 2017	¥89,699	. , ,	¥623,508	¥(8,228)	¥92,984	¥ —	¥(4,924)	¥ (2,532)	¥85,528	¥812,612	¥303,291	¥1,115,903
	,	,	,	(-7 -7				. , , ,	,-	. , ,	, .	, , , , , , ,
Balance as at April 1, 2017	¥89,699	¥22,105	¥623,508	¥(8,228)	¥92,984	¥ —	¥(4,924)	¥ (2,532)	¥85,528	¥812,612	¥303,291	¥1,115,903
Net income	_	_	133,768	_	_	_	_	_	_	133,768	44,390	178,158
Other comprehensive income	_	_	_	_	13,673	6,390	2,072	(13,482)	8,653	8,653	(2,250)	6,403
Total comprehensive income	_	_	133,768	_	13,673	6,390	2,072	(13,482)	8,653	142,421	42,140	184,561
Purchase of treasury shares	_	_	_	(68)	· <u> </u>	_	, —		· —	(68)	<i></i>	(68)
Disposal of treasury shares	_	0	_	0	_	_	_	_	_	0	_	0
Dividends	_	_	(27,797)	_	_	_	_	_	_	(27,797)	(15,569)	(43,366)
Changes in interest in subsidiaries	_	(417)	_	_	_	_	_	_	_	(417)	(4,789)	(5,206)
Transfer from other components of equity to		,								,	( ) ,	(0)
retained earnings	_	_	9,034	_	(2,644)	(6,390)	_	_	(9,034)	_	_	_
Others, net	_	_	369	_	21	_	_	_	21	390	_	390
Total transactions with owners	_	(417)	(18,394)	(68)	(2,623)	(6,390)	_	_	(9,013)	(27,892)	(20,358)	(48,250)
Balance as at March 31, 2018	¥89,699	¥21,688	¥738,882	¥(8,296)	¥104,034	¥ —	¥(2,852)	¥(16,014)	¥85,168	¥927,141	¥325,073	¥1,252,214
						Thousands of US	dollars					
Balance as at April 1, 2017	\$844,305	\$208,067	\$5,868,863	\$(77,447)	\$875,226	\$ —	\$(46,348)	\$(23,833)	\$805,045	\$7,648,833	\$2,854,772	\$10,503,605
Net income	_	_	1,259,111	_	_	_	_	_	_	1,259,111	417,828	1,676,939
Other comprehensive income	_	_	_	_	128,699	60,147	19,503	(126,901)	81,448	81,448	(21,179)	60,269
Total comprehensive income	_	_	1,259,111	_	128,699	60,147	19,503	(126,901)	81,448	1,340,559	396,649	1,737,208
Purchase of treasury shares	_	_	_	(640)	_	_	_	_	_	(640)	_	(640)
Disposal of treasury shares	_	0	_	0	_	_	_	_	_	0	_	0
Dividends	_	_	(261,643)	_	_	_	_	_	_	(261,643)	(146,546)	(408,189)
Changes in interest in subsidiaries	_	(3,925)	_	_	_	_	_	_	_	(3,925)	(45,076)	(49,001)
Transfer from other												
components of equity to												
retained earnings	_	_	85,034	_	(24,887)	(60,147)	_	_	(85,034)	_	_	_
Others, net	_	_	3,473	_	197		_	_	197	3,670	_	3,670
Total transactions with owners		(3,925)	(173,136)	(640)	(24,690)	(60,147)	_	_	(84,837)	(262,538)	(191,622)	(454,160)
Ralanco as at March 31, 2018	\$844.305	\$20/11/12	\$6,057,838	\$(70 007)	\$070 225	¢	\$126.845)	\$(150.734)	\$201 656	\$2 726 251	\$3,050,700	\$11 786 653

\$979,235

\$ —

\$(26,845) \$(150,734) \$801,656 \$8,726,854 \$3,059,799 \$11,786,653

Balance as at March 31, 2018

\$844,305 \$204,142 \$6,954,838 \$(78,087)

#### **Consolidated Statement of Cash Flows**

Sumitomo Chemical Company, Limited and Consolidated Subsidiaries Years ended March 31, 2018 and 2017

	Millions	Thousa Millions of yen US do		
	2018	2017	2018	
Cash flows from operating activities:				
Income before taxes	¥240,811	¥122,338	\$2,266,670	
Depreciation and amortization	107,103	110,308	1,008,123	
Impairment loss	12,378	36,525	116,510	
Reversal of impairment loss	(3,477)	_	(32,728)	
Share of profit of investments accounted for using the equity method	(55,319)	(42,238)	(520,698)	
Interest and dividend income	(10,101)	(8,967)	(95,077)	
Interest expenses	10,646	11,145	100,207	
Business structure improvement expenses	14,210	18,186	133,754	
Changes in fair value of contingent consideration	(8,383)	6,507	(78,906)	
Gain on sale of property, plant and equipment	(6,801)	(1,035)	(64,015)	
Gain on step acquisitions	_	(2,840)	_	
Increase in trade receivables	(24,617)	(43,452)	(231,711)	
Increase in inventories	(55,626)	(3,292)	(523,588)	
Increase in trade payables	73,607	31,665	692,837	
Increase in provisions	10,514	17,232	98,965	
Others, net	(7,170)	(17,592)	(67,491)	
Subtotal	297,775	234,490	2,802,852	
Interest and dividends received	41,742	42,978	392,903	
Interest paid	(10,534)	(11,322)	(99,153)	
Income taxes paid	(28,747)	(64,303)	(270,585)	
Business structure improvement expenses paid	(6,986)	(16,067)	(65,757)	
Net cash provided by operating activities	293,250	185,776	2,760,260	
Net cash provided by operating activities	293,230	103,770	2,700,200	
Cash flows from investing activities:				
Purchase of property, plant and equipment, and intangible assets	(149,207)	(137,989)	(1,404,433)	
	(149,207)	(137,909)	(1,404,433)	
Proceeds from sale of property, plant and equipment, and intangible assets	10,200	3,424	96,009	
Purchase of investments in subsidiaries	(13,236)	(99,388)	(124,586)	
Purchase of other financial assets	(14,276)	(7,451)	(124,375)	
Proceeds from sales and redemption of other financial assets	6,092	35,596	57,342	
Others, net	5,907	111	55,600	
Net cash used in investing activities	(154,520)	(205,697)	(1,454,443)	
Net cash asea in investing activities	(13 1,320)	(203,037)	(1,131,113)	
Cash flows from financing activities:				
Net (decrease) increase in short-term borrowings	(82,586)	109,154	(777,353)	
Net increase (decrease) of commercial paper	34,000	(24,000)	320,030	
Proceeds from long-term borrowings	81,690	33,557	768,919	
Repayments of long-term borrowings	(58,984)	(49,326)	(555,196)	
Proceeds from issuance of bonds	39,790	29,837	374,529	
Redemption of bonds	(55,000)	(55,000)	(517,696)	
Repayments of lease obligations	(3,281)	(2,995)	(30,883)	
Cash dividends paid	(27,797)	(21,258)	(261,643)	
Cash dividends paid  Cash dividends paid to non-controlling interests				
	(15,569)	(16,880)	(146,546)	
Payments for acquisition of subsidiaries' interests from non-controlling interests	(6,588)	(4,475)	(62,011)	
Others, net	61	863	576	
Net cash used in financing activities	(94,264)	(523)	(887,274)	
Effect of exchange rate changes on cash and cash equivalents	(5,832)	(1,892)	(54,895)	
Net increase (decrease) in cash and cash equivalents	38,634	(22,336)	363,648	
Cash and cash equivalents at beginning of year	193,295	215,631	1,819,419	
Cash and cash equivalents at end of year	¥231,929	¥193,295	\$2,183,067	
Cash and Cash equivalents at end of year	TZJ1,7Z7	ナーシン,∠ブン	72,103,007	

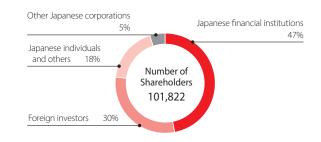
# **Corporate and Investor Information**

(As of March 31, 2018)

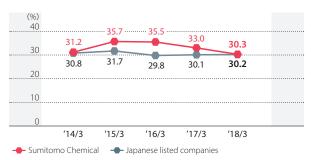
Paid-in Capital	¥89.7 billion
Number of Employees	Non-consolidated: 6,005 Consolidated: 31,837
Common Stock	Authorized: 5,000,000,000 shares Issued: 1,655,446,177 shares
Settlement Date	March 31
Stock Transaction Units	1,000-share units*
Ordinary General Meeting of Shareholders	Within three months from the next day of the settlement date
Number of Shareholders	101,822
Listings	Tokyo
Transfer Agent and Registrar	Sumitomo Mitsui Trust Bank, Limited Stock Transfer Agency Division 4-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8233, Japan
Independent Certified Public Accountants	KPMG AZSA LLC

<sup>\*</sup> Sumitomo Chemical will change the number of shares in each share unit from 1,000 shares to 100 shares on October 1, 2018.

#### Distribution of Shareholders



#### Ownership of Foreign Investors



#### **Major Shareholders**

Major Shareholders	Number of Shares Held (1,000 shares)	Shareholding Ratio (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	104,780	6.40
Japan Trustee Services Bank, Ltd. (Trust Account)	99,098	6.06
Sumitomo Life Insurance Company	71,000	4.34
Nippon Life Insurance Company	41,031	2.50
Sumitomo Mitsui Banking Corporation	32,301	1.97
STATE STREET BANK WEST CLIENT-TREATY 505234	29,874	1.82
Japan Trustee Services Bank, Ltd. (Trust Account No.5)	29,462	1.80
Japan Trustee Services Bank, Ltd. (Sumitomo Mitsui Trust Bank, Ltd. Retrust Account / Sumitomo Life Insurance Company Employee Pension Trust Account)	29,000	1.77
Japan Trustee Services Bank, Ltd. (Trust Account No.4)	28,997	1.77
Japan Trustee Services Bank, Ltd. (Trust Account No.7)	25,741	1.57

#### **Dividend Policy**

We consider shareholder return as one of our priority management issues and have made it a policy to maintain stable dividend payments, giving due consideration to our business performance and a dividend payout ratio for each fiscal period, the level of retained earnings necessary for future growth, and other relevant factors.

The full year dividend for fiscal 2017 was ¥22 per share, an increase of ¥8 per share from the previous fiscal year.

#### IR Calendar

Fiscal 2017 (Year ending March 31, 2018)						
May 2018	Fiscal 2017 Financial Results					
June 2018	137th Ordinary General Meeting of Shareholders					

Fiscal 2018 (Year ending March 31, 2019)				
July 2018	1st Quarter Financial Results			
October 2018	2nd Quarter Financial Results			
February 2019	3rd Quarter Financial Results			
May 2019	Fiscal 2018 Financial Results			
June 2019	138th Ordinary General Meeting of Shareholders			

(Note) This schedule is subject to change.



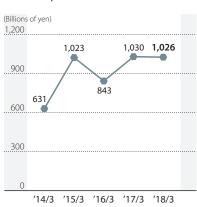


		IFRS			
Fiscal Year	2013	2014	2015	2016	2017
Share price high (yen)	458	631	792	674	875
Share price low (yen)	250	333	443	396	578
Share price at year-end (yen)	381	618	509	622	620
Cumulative trading volume (1,000 shares)	3,164,352	2,489,166	2,785,335	2,515,006	2,418,727

Fiscal Year	2013	2014	2015	2016	2017
Shares outstanding (1,000 shares)	1,655,446	1,655,446	1,655,446	1,655,446	1,655,446
Market capitalization (billions of yen)	631	1,023	843	1,030	1,026
Net income per share*1 (yen)	22.62	31.93	49.84	52.31	81.81
Net assets per share*2 (yen)	393.58	484.17	469.25	501.98	567.04
Price earnings ratio (times)	16.8	19.4	10.2	11.9	7.6
Price book-value ratio*3 (times)	1.0	1.3	1.1	1.2	1.1
Cash dividends per share (yen)	9	9	14	14	22
Ratio of shares owned by foreign investors to shares outstanding (%)	31.2	35.7	35.5	33.0	30.3

<sup>\*1</sup> IFRS/Basic Earnings per Share (yen) \*2 IFRS/Equity attributable to owners of the parent per share (yen) \*3 Figures of the end of FY2017 are calculated using IFRS

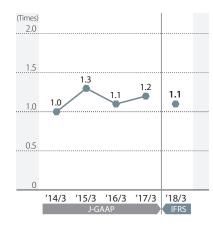
#### Market Capitalization



#### Price Earnings Ratio



#### Price Book-value Ratio



#### SUMITOMO CHEMICAL COMPANY, LIMITED

#### Corporate Communications Dept.

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As a Responsible Care company, Sumitomo Chemical voluntarily implements policies that take safety, the environment, and health into consideration in all processes, from chemical substance development to disposal. The Responsible Care mark and logo may only be used by companies that are members of the Japan Responsible Care Council.