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KAITEKI REPORT 2017

Mitsubishi Chemical Holdings Corporation

Printed in Japan 2017

THE KAITEKI COMPANY

KAITEKI REPORT 2017

Integrated Report

Mitsubishi Chemical Holdings Corporation

Contents

KAITEKI REPORT 2017
“Pursue Growth and Continuous Reforms”

Editorial Policy

In addition to reporting on financial results, the Mitsubishi Chemical Holdings (MCHC) Group publishes the KAITEKI Report. With a particular focus on our progress and outlook for corporate activities aimed at the realization of *KAITEKI**, this report summarizes items to be shared with our stakeholders as well as what we determine to be highly pertinent to our criteria for decision making and results of materiality assessments for corporate activities. In preparing this report, we referred to the International Integrated Reporting Framework promoted by the International Integrated Reporting Council.
This report can be perused in conjunction with more detailed information available on MCHC’s website.
For detailed financial information, please refer to our securities reports filed with the Financial Services Agency. For detailed governance information, please refer to our corporate governance report to the Tokyo Stock Exchange.

Period Covered by the Report	Fiscal 2016 (April 2016–March 2017). Some information from fiscal 2017 is included.
Reporting Boundary	This report covers information relating to MCHC and the MCHC Group. For matters with a different reporting scope, we clearly specify the covered reporting scope.
Accounting Standards	MCHC has decided to adopt International Financial Reporting Standards (IFRS), effective from the first quarter of fiscal 2016, the financial year ended March 31, 2017. In this report, consolidated results for the fiscal year ended March 31, 2017 and medium-term targets of management indicators after the fiscal year ended March 31, 2018 are based on IFRS. However, other figures are based on J-GAAP unless otherwise noted.

■**Securities Reports**
http://www.mitsubishichem-hd.co.jp/ir/library/stock_securities_report.html

■**Corporate Governance Reports**
http://www.mitsubishichem-hd.co.jp/english/pdf/governance.pdf

* *KAITEKI* means “a sustainable condition which is comfortable for people, society and the Earth, transcending time and generations.” MCHC aims to contribute to the sustainable development of society while sharing its values with stakeholders through our corporate activities.

Message

The Mitsubishi Chemical Holdings (MCHC) Group is a corporate group striving to become THE KAITEKI COMPANY with global recognition throughout the industry. To that end, from a foundation in chemicals we contribute to sustained worldwide development and achieve our own continued growth by offering solutions to the key issues facing people, society and the Earth across the three business domains of performance products, industrial materials and healthcare. To facilitate understanding of our efforts in this regard, this report highlights our achievements with a focus on business activities in fiscal 2016, and also shares our vision for the future.

Looking back on fiscal 2016, we saw rising protectionism and resistance to globalization around the world. Rising geopolitical risks also became evident through disarray in the Middle East and Asia. Under such an uncertain global political climate, it will continue to be difficult to gauge the direction of the global economy. Moreover, with the issues of climate change and weather disasters attributed to global warming and social issues such as escalation of medical costs due to the aging population, the sustainability of our daily lives is also at risk.

Meanwhile, in the fields of information and communication technology (ICT), artificial intelligence (AI), robotics, mobility, medical and healthcare and so on, advances in science and technology have brought about accelerated change. These areas will potentially lead to profound innovations in the years ahead, and hint at the possibility of reorganizing the power relationships that have persisted to date.

It is during these times of uncertainty that we, the MCHC Group, seek to marshal our combined strength and embrace the basic approach of continually offering solutions to the issues faced by people, society and the Earth. To that end, we believe it is crucial that we steadily implement the action plan laid out in our medium-term management plan *APTSIS 20* and seize opportunities for growth. In fiscal 2016, we largely developed our roadmap for structural reforms of the petrochemical business and other areas. And in fiscal 2017, we find ourselves at the start line of the “high growth, high profit” target of *APTSIS 20*. Moving forward, we will mobilize all manner of measures without ever dropping our guard, seize growth opportunities with our own hands, and faithfully discharge our responsibilities to shareholders and all stakeholders.

We hope you understand the concept of the MCHC Group’s value creation and thank you for your continued support and cooperation.

Numeric data for the MCHC Group

As of the end of March 2017

INPUT

Total assets	4,463.5 billion yen
Number of countries/regions of Group sites	37
Number of employees (consolidated)	69,291
Number of subsidiaries (consolidated)	510
Number of R&D personnel	4,883
Amount of capital expenditures	206.5 billion yen
R&D expenses	126.3 billion yen
Energy consumption	39.0 TWh
Water usage	189 Million m^3

OUTPUT

Revenue	3,376.1 billion yen
Core operating income	307.5 billion yen
Cash dividends	29.0 billion yen
Payout ratio	18.7 % (three years average: 26.6%)
Growth rate of comfort-oriented products (MOS Index)	4.4 %
Provision of products contributing to the achievement of healthy and hygienic lifestyle (MOS Index)	7.0 points
Amount of GHG reduction through products (MOS Index)	45.6 million t-CO_2e
Provision of water available for daily life and industrial use (MOS Index)	160 million tons
GHG emissions (Scope1, 2) — Scope1	7.2 million t-CO_2e
GHG emissions (Scope1, 2) — Scope2	7.0 million t-CO_2e

Review of Fiscal 2016 for the MCHC Group

Continued reform of portfolio for sustainable growth

Measures for sustainable growth	Performance Products domain	High-performance engineering plastics:	Acquisition of U.S.-based Piper Plastics, Inc.
		PET film:	Reinforce production capacity in the U.S. in fiscal 2017
		Lithium-ion battery materials:	Determined to form a joint venture of electrolyte business in China with Ube Industries, Ltd.
		Optical films:	Making The Nippon Synthetic Chemical Industry Co., Ltd. a wholly owned subsidiary
		Performance materials:	Making Nippon Kasei Chemical Company Limited a wholly owned subsidiary
		Carbon fibers:	Reinforce production capacity in Japan from mid-2017
			Acquisition of the SGL Carbon Fibers LLC's plant in the U.S.
	Industrial Materials domain	Industrial gases:	Acquisition of part of the U.S. business of Air Liquide and its assets of related businesses
			Acquisition of Supagas Holdings Pty Ltd. in Australia
	Health Care domain	Vaccine:	Basic agreement on establishment of joint venture for vaccine manufacturing with The Research Foundation for Microbial Diseases of Osaka University (BIKEN Foundation to be established in September, 2017)
		Pharmaceuticals:	U.S. FDA's examination on *Radicava* as the indication for the treatment of amyotrophic lateral sclerosis (ALS) (Approved in May 2017, launched in August)
Measures for continuous reforms	Performance Products domain	PET resins:	Restructuring of production sites for PET resins in Japan
	Industrial Materials domain	Basic petrochemicals:	Retention of single naphtha cracker in Mizushima in cooperation with Asahi Kasei Corporation
		Terephthalic acid:	Business sell-off in India and China
	Health Care domain	Pharmaceutical intermediates:	Sell-off of API Corporation's Fukuroi Plant
		Pharmaceuticals	Sale of generics business
Overall Management		Announcement of the growth strategy of the new-Mitsubishi Chemical Corporation	
		Reinforcement of management and structure:	Clarification of the separate roles of oversight and execution (Replaced the Management Committee with the Corporate Executive Officers Committee)
			Enhancement of Corporate Strategy Division (establishment of four strategy offices* and *KAITEKI* Promotion Office)
			Enhancement of generating of innovation (establishment of Emerging Technology and Business Development Office)

* Performance Products Strategy Office, Industrial Materials Strategy Office, Industrial Gases Strategy Office, Healthcare Strategy Office

Further promotion of *KAITEKI* Management and improvement of the assessment of corporate value to create a virtuous cycle

Assessment results of corporate value including ESG

FY 2016

- Development Bank of Japan Loans based on environmental ratings — Ranked A/Received a special award*1
- Dow Jones Sustainability Indices — Continued improvement of scores. Selected in Asia/Pacific
- FTSE Russell FTSE 4 GOOD — Continued inclusion
- Morningstar Socially responsible investment — Continued inclusion*2
- RobecoSAM CSR ratings — Received Bronze Class Award

FY 2017

- FTSE Blossom Japan Index — New inclusion
- MSCI Japan Empowering Women Index — New inclusion*3

(Notes) 1. In November 2016, we received financing based on the Environmentally Rated Loan Program which was developed by the Development Bank of Japan since our environment-focused measures were evaluated as "particularly advanced" and we were also granted a special award as a model company.
2. As of February 10, 2017
3. The inclusion of Mitsubishi Chemical Holdings Corporation in the MSCI Index and the use of the MSCI logo, trademark, service mark, and the name of the index on this page do not denote the support, recommendation, or promotion of Mitsubishi Chemical Holdings Corporation by MSCI and its affilated companies. MSCI Index is MSCI's exclusive property and MSCI as well as the name and logo of the index are the trademark or service mark of MSCI and its affilated companies.

Transition of Portfolio Transformation

Pursuit of business scale through M&As and integrations, restructuring of unprofitable businesses

October 2005 — Raised the ratio of the pharmaceutical business and strengthened earnings less affected by economic fluctuations
Establishment of MCHC
MCC and Mitsubishi Pharma Corporation (current MTPC) established jointly a holding company through a stock-for-stock exchange

October 2007 — Strengthened the pharmaceutical business
Establishment of MTPC
Tanabe Seiyaku and Mitsubishi Pharma merged

April 2008 — Expanded the Performance Products domain
Integrated MPI, MCC's functional products business, and three affiliate companies

March 2010 — Shifted to a high added-value business portfolio
Conversion of MRC into a consolidated subsidiary
May 2010 Withdrawal from Nylon chain business
March 2011 Withdrawal from PVC chain business; Withdrawal from SM chain business

April 2014 — Strengthened the Health Care domain by concentrating healthcare businesses excluding pharmaceuticals
Establishment of LSII
March 2014 Production optimization of polyolefin (- March 2015)
May Retain a single naphtha cracker at the Kashima Plant (closed one cracker)

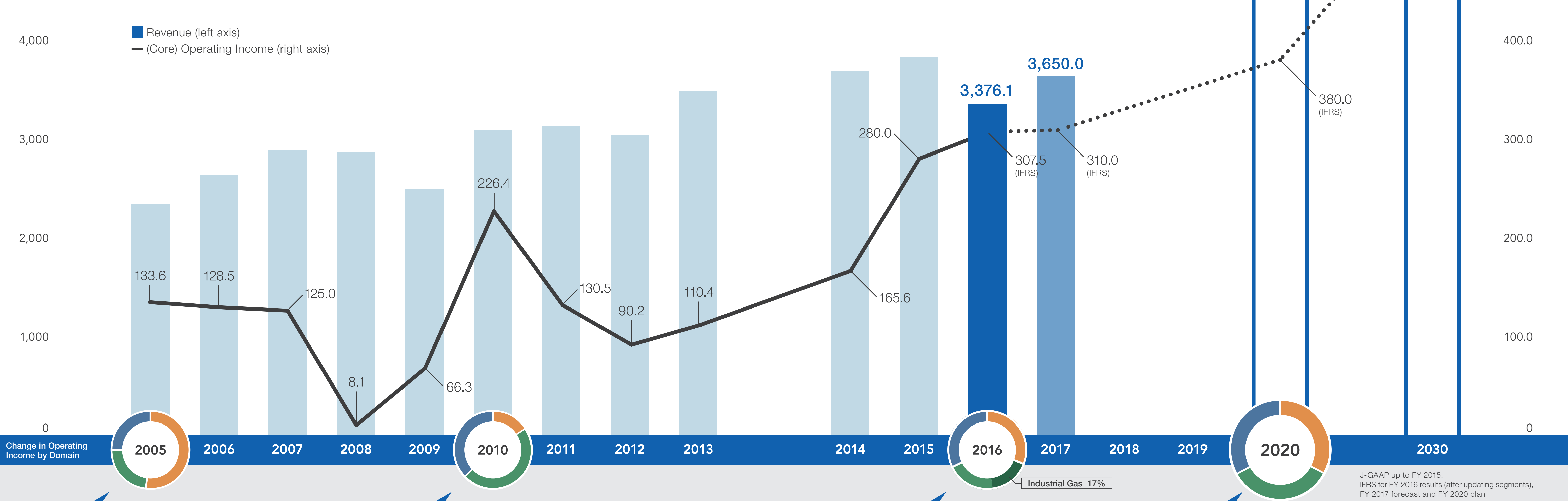
November 2014 — Stabilized earnings of the Industrial Materials domain contributed by the industrial gases business
Conversion of TNSC into a consolidated subsidiary
April 2016 Formed a joint venture to operate the Mizushima naphtha cracker
July Decided on the equity interest transfer of the terephthalic acid business in India and China

April 2017 — Aim to become a corporate group with a high growth and high profitable business structure through the Performance Products, Industrial Materials and Health Care domains
Accelerated in growth of performance product groups through integrations
Establishment of the new-Mitsubishi Chemical Corporation
Integration of the three chemical operating companies (MCC, MPI and MRC)

We promote a value creation cycle in pursuit of sustainable growth -realizing *KAITEKI*-, taking into account social trends and stakeholder's requirements.

MCHC: Mitsubishi Chemical Holdings Corporation
New-MCC: Mitsubishi Chemical Corporation (Apr. 2017-)
TNSC: Taiyo Nippon Sanso Corporation
LSII: Life Science Institute, Inc.
MCC: Mitsubishi Chemical Corporation (current MCC)
MPI: Mitsubishi Plastics, Inc. (current MCC)
MRC: Mitsubishi Rayon Co., Ltd. (current MCC)

Transition of Steady Portfolio Transformation



J-GAAP up to FY 2015.
IFRS for FY 2016 results (after updating segments), FY 2017 forecast and FY 2020 plan

Establishment of MCHC

Performance Products Domain	52%
Petrochemical Domain	23%
Health Care Domain	25%

Stable revenue due to healthy market conditions in Industrial Materials Domain and stronger Health Care Domain

Performance Products Domain	16%
Industrial Materials Domain	47%
Health Care Domain	37%

Industrial Materials Domain stabilized due to structural reforms and linking of industrial gases

Performance Products Domain	31%
Industrial Materials Domain	37%
Health Care Domain	32%

Sustainable growth through a good balance across the three domains

Performance Products Domain	33%
Industrial Materials Domain	34%
Health Care Domain	33%

Value Creation Approach

The MCHC Group's Value Creation Approach

Putting *KAITEKI* Management into Practice

We promote a value creation cycle in pursuit of **sustainable growth -realizing *KAITEKI*-,** taking into account social trends and stakeholders' requirements.

Realizing
THE KAITEKI COMPANY
with a truly global recognition

Vision for 2020

Establish the foundations for "THE KAITEKI COMPANY" through improved profitability, pursuit of innovation and contributions to sustainability.

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Dialog between the President and Investor P17
Message from the CIO P27
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Materiality Assessment

Identify material issues to realize *KAITEKI*

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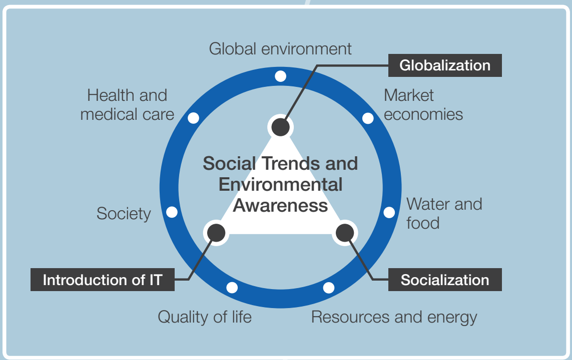

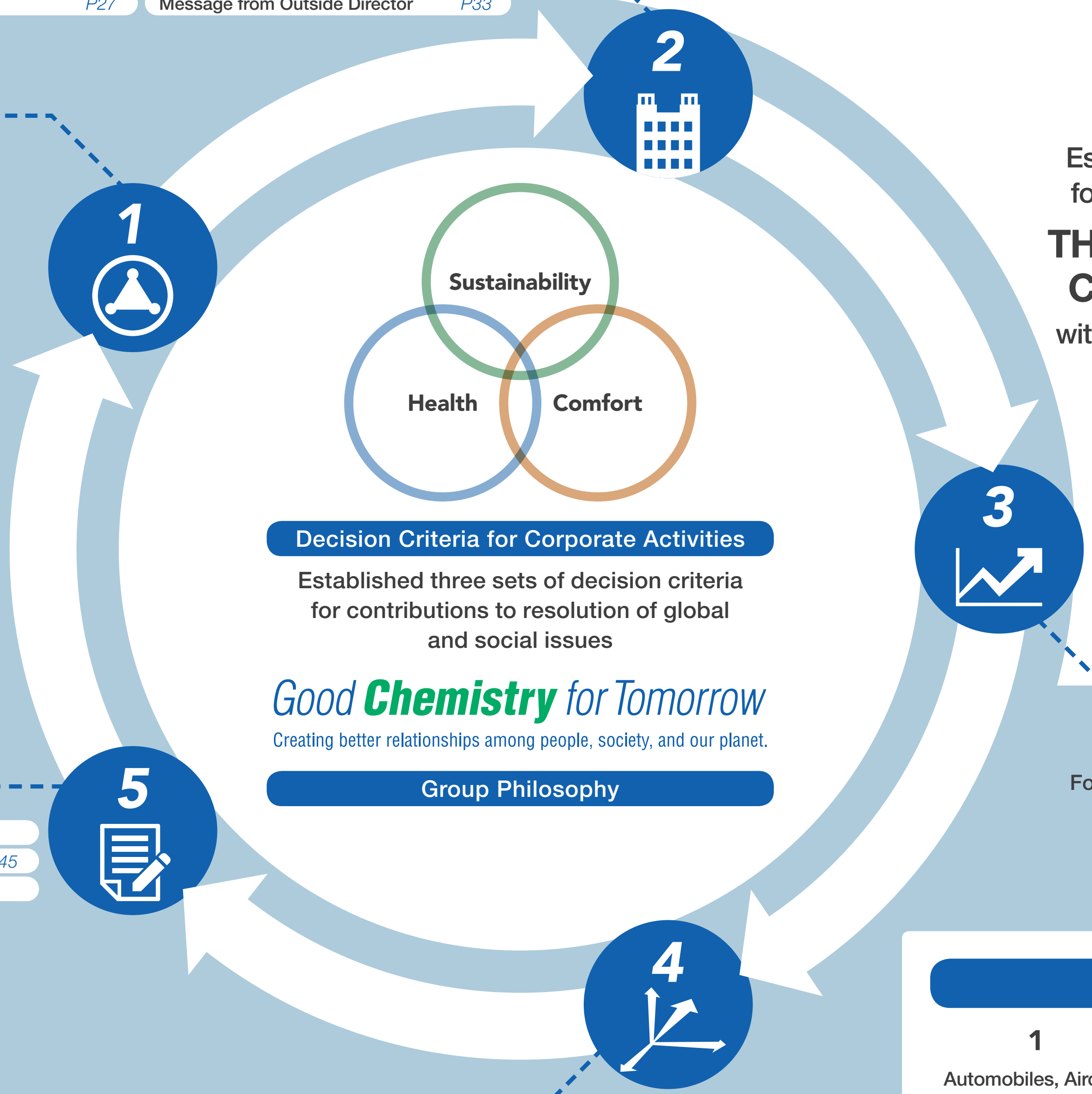

Decision Criteria for Corporate Activities

Established three sets of decision criteria for contributions to resolution of global and social issues

*Good **Chemistry** for Tomorrow*

Creating better relationships among people, society, and our planet.

Group Philosophy

Review

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Execute *KAITEKI* Management

Shared Values

Share the values of three axes and realize sustainable growth with stakeholders

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Establishing the foundations for

THE KAITEKI COMPANY

with a truly global recognition

2020

Contributing to achievement of the SDGs through corporate activities based on innovation

Sustainability P63

2030

Contribution to circular and sustainable society and global well-being

Medium-term Management Plan

New *APTSIS 20* medium-term management plan for FY 2016 to FY 2020

Formulate and implement management plans to realize what we aspire to be

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Overview of Business Domains: Growth Strategies P49 P53 P57

APTSIS 20 The Five Focus Markets and Businesses

1	2	3	4	5
Automobiles, Aircraft (Mobility)	Packaging, Labels, Films	IT, Electronics, Displays including 3D Printing and Robotics	Environment, Energy	Medical, Food, Bio Products
Lightweight composites Environment-friendly materials	Food packaging films Industrial-use films	Flat panel display materials Semiconductor-related materials	Battery materials Water treatment systems and devices	Food ingredients Pharmaceutical materials, medical-related products

Fundamental Materials Petrochemicals / Carbon Products / MMA

Expanding *KAITEKI* Value

Expanding KAITEKI Value

We are expanding solutions to improve both social and economic value, which help to realize *KAITEKI*

Expectation for the development of a circular society which represents itself as a characteristic solution for various issues concerning climate change, resources and energy. The MCHC Group has positioned *KAITEKI* as the responsive approach, and we work to realize it in concert with all stakeholders.

Establishing foundations of sustainable circulation by diversifying raw materials

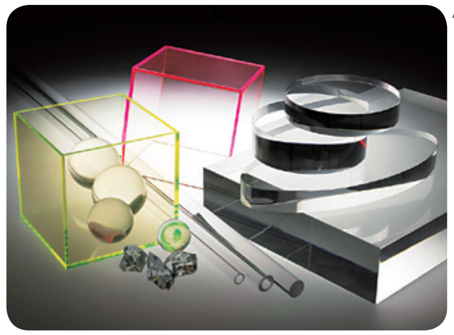
Advancing the diversity of raw materials for chemicals, the basis of a wide range of industries, offers a way to reduce impacts on the environment by greenhouse gas emissions and other factors, and provides a response to the depletion of fossil resources. To the chemical industry, this is an important theme which has significant meanings in both reducing risks and creating growth opportunities.

The MCHC Group employs synthesis technologies, process development technologies and plant control technologies as part of its efforts to diversify the raw materials used in its main chemical products. For instance, MMA now has the top share in the world market. We are exploring manufacturing techniques that use shale gas and biomass as raw materials in addition to naphtha and working to cement our position as the No.1 supplier. Moreover, the new bio-based engineering plastic, *DURABIO*, which takes advantage of the properties of biomass raw materials, is a material boasting performance that could not be achieved through conventional petroleum-derived resins. For instance, *DURABIO* strikes a high-dimensional balance between various properties including transparency, weatherability, strength and optical qualities.

MCHC is also working on the development of artificial photosynthesis, viewing it as the dream technology of the carbon cycle.

Example of *DURABIO* Applications: Car instrument panels

Bio-based engineering plastic, *DURABIO*



Acrylic Resins

MMA

Reducing energy consumption and environmental impact of society as a whole

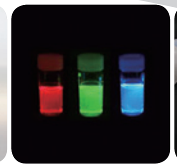
To reduce the energy consumption and environmental impact of a society as a whole, composite and multitiered solutions that consider the big picture of the value chain are essential. The MCHC Group leverages its combined strengths in functional design and molecular design as part of its commitment to providing solutions in which a wide variety of high-performance materials and components play a key role.

For example, in the automotive field, the MCHC lineup includes a broad array of solutions embracing lighter weight, eco-friendliness and added or reinforced functionality as key concepts, including various high-performance polymers, carbon fiber and compound materials, composite products, alumina fiber, *MAFTEC*, lithium-ion battery materials and hydrogen stations. We incorporate the demands of customers and society as we steadily expand our business operations. MCHC also works on developing the key materials contributing to energy-saving and lifestyle-enriching products that have spread throughout society, such as organic EL materials for displays, and gallium nitride substrates for LED lighting.

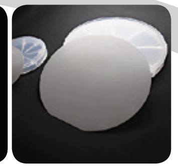
Carbon Fiber Composite Products

Alumina Fiber, *MAFTEC*

Lithium-ion Battery Materials



Organic EL Materials



Gallium Nitride Substrates

Embracing coexistence with nature while protecting biodiversity

GOBIMAT block mat for soil erosion prevention

X-sheet

We regard coexistence with nature, and the conservation of biodiversity in particular, as one of the key shared values not only for sustainability of the global environment but also for corporate sustainability. The MCHC Group selects product lines that contribute to the protection of biodiversity based on scientific grounds, shares this value with customers and works with customers to promote its diffusion in the market.

GOBIMAT prevents the erosion of soil in rivers, ponds and other waterways which are caused by wind, rain and running water. It contains many air cavities, providing an environment for vegetation above the water's surface and a habitat and breeding grounds for fish and aquatic insects below the surface. As technologies offering superior workability, economy and environmental friendliness, *GOBIMAT* is registered with New Technology Information System (NETIS) operated by the Ministry of Land, Infrastructure, Transport and Tourism, and has become a long-running product over more than four decades.

X-sheet, a type of concrete formwork material for construction, leads to the conservation of timber resources as a substitute for wooden formwork that has traditionally been used. As *X-sheet* can be used repeatedly, it offers lower running costs than wooden plywood does. Moreover, since the material is semi-transparent, the work site enjoys natural illumination effects, which helps improve work safety.

Expanding *KAITEKI* Value

Expanding KAITEKI Value

Water is the source of all life on the planet. It is an indispensable resource that is vital to our lives.
The MCHC Group, as "a provider of total solutions for water resource issues,"
is working toward the realization of a sustainable society by developing and providing a broad range of solutions related to water resources.

Global roll-out of water resource management and solution proposal-based projects that utilize distributed water supply systems

Instead of large-scale concentrated facilities including water purification plants, distributed water supply facilities maintain small-scale, independent water supply functions using local sources of water such as rainwater and groundwater. Wellthy Corporation, which provides this system, obtained Resilience Certification operated by the Association for Resilience Japan for the first time in December 2016 as a groundwater purification business.

KENYA

Creating communities with safe water

Working on a joint basis with the United Nations Development Program (UNDP), we installed "slow filtration equipment" that is easy to operate and manage and uses no electricity for a small agricultural community in Kenya that comprises around 40 households. Since 2013 we have been providing local residents with this filtration system, which purifies canal water, making it safe to drink. We also introduced a drip irrigation system. The system reuses the active carbon used in the water purification process to improve soil conditions, enabling the cultivation of high value-added plants and traditional vegetables. In this way, we developed a comprehensive business model where the villagers sell the purified water and vegetables at local markets to earn monetary income.

Traditional leafy green vegetables widely used in the surrounding region

Raw water for slow filtration device (left) and the treated water (right)

Scenes of treated water sales at a market

JAPAN

Creating a robust social infrastructure that is resilient against disasters

It is now possible to ensure water supply lifelines using groundwater membrane filtration systems during a disaster, secure drinking water for local residents and enhance the operational continuity of hospitals and government offices. During the 7.3-magnitude Kumamoto Earthquake that struck in April 2016, all systems were activated in the disaster-stricken region, while the public water supply was cut off. In addition to installed facilities, water was supplied to local residents and hospitals. The system is not only useful during an emergency. Under normal conditions, it is expected to offer the effects of lower water supply and sewage rates, and a lower environmental impact. To date, more than 1,200 systems have been installed in various regions.

Groundwater membrance filtration system that continued to operate during the Kumamoto Earthquake (Musashigaoka Hospital)

Emergency taps used during the Kumamoto Earthquake and a sign about disaster lifeline facilities (Musashigaoka Hospital)

Groundwater membrance filtration system

MYANMAR

Creating a high-reliability water resource infrastructure

As it suffers from the effects of climate change, Myanmar is seeing an impact in the areas of water and hygienic environments with rising river water turbidity due to torrential rains, deteriorating water quality from tap water due to high salinity, and increased river effluent from plant and facility wastewater. Meanwhile, the environmental management technologies to appropriately grasp these impact are still not sufficiently developed. The MCHC Group launched a Myanmar site in 2017 and will contribute to improving the sustainable water resources by developing water resource infrastructure centered around distributed water supply systems in conjunction with water quality analysis projects that ensure high reliability, and through the expanded introduction of environmentally-friendly technologies.

RO unit for desalination

Resilience Certification

Resilience Certification is operated by the Association for Resilience Japan, which the National Resilience Promotion Office of the Cabinet Secretariat established in February 2016 based on the Guidelines Concerning Certification For Groups Contributing to National Resilience. Under the scheme, companies, schools, and various organizations such as hospitals are certified as "groups contributing to national resilience" for supporting the purpose of national resilience and actively engaging in initiatives concerning their own business continuity.

Message from the President

With the limited economic development in this low growth era, we need to grow based on our own efforts. We will steadfastly strive to achieve the medium-term management plan in order to establish a highly profitable financial position.

Hitoshi Ochi
Representative Corporate Executive Officer, President and CEO

Progress of Medium-term Management Plan

APTSIS 20

Fiscal 2016 Results

Earnings achieved good progress due in part to the growth of performance products. As structural reforms have run its course, we have now reached the starting line of establishing a highly profitable earnings structure.

In the fiscal year ended March 2017, the appreciation of the yen had an impact on the MCHC Group's overall results. Nevertheless, in the Performance Products domain, profit increased due to strong sales of high-performance films for displays and battery materials. In the Industrial Materials domain also, in spite of the expansion of periodical turnaround, profit increased due in part to a favorable trend in the market condition of methyl methacrylate (MMA). In the Health Care domain, although sales volume in the pharmaceutical business rose, profit declined, mainly due to the impact of NHI drug price revision and a decrease in lump-sum revenue recorded in the previous fiscal year.

In addition to the above, MCHC implemented measures to review unprofitable businesses such as transferring and withdrawing from the terephthalic acid business (India and China), and to promote integration within the MCHC Group by turning The Nippon Synthetic Chemical Industry Co., Ltd. and Nippon Kasei Chemical Co., Ltd. into wholly-owned subsidiaries. The Group also carried out measures for structural reforms such as the acquisition of an industrial gas business in the U.S. and for strengthening profitability. As a result of these measures, core operating income reached an all-time high of ¥307.5 billion, an increase of 2.4% from the previous fiscal year. In addition, net profit attributable to owners of the parent was ¥156.3 billion, an increase of 204.3% from the previous fiscal year. This mainly reflected the absence of impairment losses related to the terephthalic acid business that were recorded in the previous fiscal year, and lower taxes associated with the recording of deferred tax assets related to the transfer of the same business. Return on equity (ROE) was approximately 15%.

In fiscal 2016, now that the transfer of the terephthalic acid business (India and China) is completed, the structural reforms of unprofitable businesses based on the previous medium-term management plan reached a conclusion. We believe that we have now achieved a transformation to a corporate structure that will enable us to aim for high growth and high profit going forward.

Furthermore, based on the viewpoint of improving sustainability (MOS: Management of Sustainability) for the purpose of sustainable growth, we have created indices to monitor reductions in CO_2, resource saving and energy saving through corporate activities, and we are implementing the initiative of quantitatively evaluating progress in these areas. In fiscal 2016, we enhanced these activities, for example in the process of selecting MOS index items, we closely coordinated with the *APTSIS 20*, and reflected the materiality assessment in the selection. (See Page 63 for details.)

Fiscal 2017 Earnings Forecasts

We forecast profit growth. Thanks to structural reforms, we have shifted to a corporate structure that will be resilient to fluctuations in market conditions. We expect performance products, especially high-performance films, to display a strong upward trend, and we will also put a highly profitable MMA plant into operation in Saudi Arabia in the middle of the year.

Looking at MCHC's business environment for fiscal 2017, while both the Japanese economy and the world economy are likely to continue to record a moderate recovery, there are concerns regarding the rise of protectionism and geopolitical risk.

We expect that foreign exchange rates and crude oil prices will shift to comparative stability if the above risks are not to be realized and that the impact of market changes will remain small compared to the past as a result of the implemented structural reforms. In this environment, we believe that Performance Products domain will achieve higher profit than in the previous fiscal year, as demand is firm for automobile products, flat panel displays, food packaging materials and battery materials. In the Health Care domain, we are forecasting a slight decline in profit due to an increase in R&D and other expenses, but in the Industrial Materials domain, we expect profit to increase due in part to the earnings contribution resulting from the start-up of our highly competitive MMA plant. As a result, we are projecting core operating income of ¥310.0 billion and net profit attributable to owners of the parent of ¥137.0 billion.

Results of Fiscal 2016 and Forecasts

	FY 2015	FY 2016	FY 2017 (Forecast)	FY 2020 (Final Year of medium-term management plan)
Revenue	¥3.5 trillion	¥3.4 trillion	¥3.65 trillion	¥4.5 trillion
Core operating income	¥300.4 billion	¥307.5 billion	¥310.0 billion	¥380.0 billion
Net profit attributable to owners of the parent	¥51.4 billion	¥156.3 billion	¥137.0 billion	¥180.0 billion
ROE	5.2%	15.1%	12.0%	12.0% (10% or higher)

Current and Future Measures under Medium-term Management Plan:

"Pursue Growth and Continuous Reforms"

As a result of the withdrawal from unprofitable businesses and growth in performance products, earnings are increasing steadily. However, as the Japanese economy and the world economy are unlikely to record substantial growth, the MCHC Group will continue the following measures in the current fiscal year in order to achieve growth with our own efforts and solidify our business structure to generate high earnings and to steadfastly achieve the medium-term management plan.

Evolution of the management system and thorough execution of portfolio management

From fiscal 2017, the Management Committee, which was an advisory body to the President, will be changed to the Corporate Executive Officers Committee, which will be a decision-making body where corporate executive officers will make decisions. Thus, it will lead to more decisive and swifter business execution. Furthermore, we will clarify the respective roles of the MCHC and operating companies. The MCHC will formulate fundamental medium- and long-term strategies, while each operating company will devise and execute short- and medium-term strategies based on these fundamental strategies. We will also step up our reform of the business portfolio, and as part of this we will establish management targets such as ROE and ROIC for each business domain.

The birth of Mitsubishi Chemical: "Creating a framework for growth based on our own efforts"

In April 2017, three chemical-related companies under the control of MCHC — Mitsubishi Chemical, Mitsubishi Plastics and Mitsubishi Rayon — merged to form Mitsubishi Chemical Corporation (MCC). Amid the unlikelihood of substantial growth in the world economy, we need to promote growth strategies based on our own efforts. Mainly in Europe and the U.S., customers' needs for products have become more sophisticated. Therefore, the merger of these three companies allows us to combine their technological bases, sales channels and human resources, and I am convinced that we will be able to more immediately provide the market with solutions using excellent materials.

Three former companies were comprised a total of nearly 60 SBUs (Strategic Business Units), but we have concentrated them into fewer than half the number of units and reorganized them into 10 business divisions. We identified five markets that we expect to grow going forward, united SBUs targeting the same markets to form one division if possible, and thereby developed an integrated organization to strive together. (See the diagram below)

Owing to the divisional reorganization based on market category, we will be able to farsightedly view the industry from the perspective of "towards what direction final products for customers should evolve, and how needs for materials and ingredients will change following that direction." At the same time, it will be easier to draw up strategy for R&D, and our ability to respond to technological progress in the market will also be enhanced. We intend to achieve the target of ¥50 billion as business integration synergies by 2020 through such initiatives at the earliest possible stage.

In the Performance Products domain especially, we intend to thoroughly strengthen products that are highly competitive due to their technological prowess such as materials and ingredients with high flexibility in processing and excellent functionality. Strategic priority areas will be materials that lighten the weight of automobiles such as carbon fiber and composite materials and performance polymers, electronics and display materials, high-performance films, battery materials, water treatment systems, and medical-related materials mainly used for artificial joints. The Performance Products domain already generates nearly 50% of MCC's overall operating income, but we aim for further growth of this domain in the future.

The new MCC will focus its marketing activities on five markets, and accelerate growth through orchestration among the 10 business divisions. It will fully utilize management resources (human resources, technology, information, etc.), increase management efficiency and, through higher productivity, stronger competitiveness, it will generate a total of ¥50.0 billion in synergy effects by fiscal 2020.

Focus markets/businesses			Major Business Domains
1	Automobiles, Aircraft (Mobility)	Lightweight composites Environment-friendly materials	Advanced polymers High-performance chemicals Advanced moldings & composites
2	Packaging, Labels, Films	Food packaging films Industrial films	Advanced polymers High-performance films
3	IT, Electronics, Displays (incl. 3D printers, robotics)	Flat panel display materials Semiconductor-related materials	Information, electronics & display Advanced moldings & composites
4	Environment, Energy	Battery materials Water treatment systems and devices	Environment & living solutions New energy
5	Medical, Food, Bio Products	Food ingredients Pharmaceutical materials Medical-related products	Advanced polymers High-performance films Advanced moldings & composites High-performance chemicals Environment & living solutions
Fundamental Materials			Petrochemicals Carbon MMA

Growth Drivers
Promoting orchestration and integration by strengthening market access (Cross-sectional approach and consolidation of organization)
Combination, integration, providing solutions
Enhancing overseas development
M&A, alliance
R&D, innovation
Intensifying competitiveness by improving productivity and efficiency

Acceleration of operating companies' strategies

Mitsubishi Tanabe Pharma Corporation (MTPC) plans to establish its business base in the U.S. Life Science Institute, Inc.(LSII) aims to establish a health and medical ICT business and accelerate R&D in regenerative medicine (Muse cells). Taiyo Nippon Sanso Corporation aims to expand its industrial gases business in the U.S. and Asia and broaden its new product lineup. In the ethical pharmaceuticals business particularly, we see overseas expansion as a really urgent challenge in light of the severity of the business environment in Japan and rapid changes in the market.

In May 2017, MTPC obtained approval for *Radicava*, a treatment for amyotrophic lateral sclerosis (ALS) in the U.S. We plan to expand our presence in the U.S. market with a basis of *Radicava*'s sales. In July 2017, MTPC reached an agreement with NeuroDerm Ltd., which has leading development capability for Parkinson's disease medications, where MTPC initiates the procedure of acquiring NeuroDerm as a wholly owned subsidiary.

Challenge to make use of IoT, AI and big data

In April 2017, we newly established the "Emerging Technology and Business Development Office" at MCHC. It will make use of Internet of Things (IoT), artificial intelligence (AI) and big data, and be responsible for creating new businesses while combining them with our own technologies. It aims to create new business models with free ideas from the angle of data science. It will also target different markets in addition to the mere extension of current businesses such as system control for factories, and make proposals to operating companies. Therefore, as the internal personnel in the Company with conventional ideas are unable to go beyond existing ideas, we will appoint specialists from outside the Company and create new businesses as the world around us changes dramatically in the future.

Health management initiatives

We regard the revitalization of individual employees just as important as business strategy. By building a system in which all duties are reviewed and employees can concentrate on what is truly necessary, we are aiming to increase our employees' sense of fulfillment and sense of satisfaction through efficient ways of working. We believe this will enhance the physical and mental health of every employee. Enhancing the health of individuals and the organization represents two sides of the same coin in terms of improving the efficiency, productivity and creativity of work. Based on the cooperative relationship between management, the manager of each workplace and employees, we aim to produce results in about three years. (See Page 69 for details.)

Security, Safety and Compliance

Whatever kind of corporate management is conducted, the fact that thorough security, safety and compliance are the foundation of all corporate activities of the Group remains unchanged. No matter how many facilities and systems for security, safety and compliance are put in place, they will not be sufficient without the human resources and time to use them effectively. Therefore, it is essential to establish a framework that enables management and every employee to identify problems, and draw up and implement response measures. With this aim, we plan to conduct comprehensive reviews this fiscal year by returning to the starting point and evaluating whether desirable actions and work have been thoroughly established at all work places.

View regarding Shareholder Returns

In regard to shareholder returns, we are aiming for a dividend payout ratio of 30% as a medium-term level, by maintaining an appropriate balance with investment in growth businesses and the reinforcement of the financial structure. In addition, we will consider stable dividends for the implementation. This policy has not been changed since we introduced International Financial Reporting Standards (IFRS) in fiscal 2016. For fiscal 2016, we made payments for the annual dividend of ¥20 per share. For fiscal 2017, we plan to pay an interim dividend of ¥12 per share and a year-end dividend of ¥12 per share, which equates to ¥24 for the full year.

Dialog between the President and Investor

Mr. Hiroyuki Horii
Chief Stewardship Officer and
Head of Stewardship Development Department,
Sumitomo Mitsui Trust Bank

Hitoshi Ochi
Representative Corporate
Executive Officer,
President and CEO

Bringing together wisdom of people and moving into new growth stage

1. Integration of three chemical companies (establishment of MCC)

Horii: Restructuring of unprofitable business, which was one of the main issues of the previous medium-term management plan, was finally concluded, by withdrawal from the terephthalic acid business. As an investor, I highly regard the restructurings that you have executed after Mitsubishi Chemical Holdings Corporation (MCHC) was established, which not only includes exiting from unprofitable businesses but incorporates acquisition of stable businesses such as pharmaceuticals and industrial gases. By merging three chemical-related companies to create MCC in April 2017, you have now finally established a structure to aim at high growth and high profits. In my view, business integration could generally bring negative effects due to differences in corporate culture/climate but could also generate positive effects as blending of different cultures could create diversity. As a member of the management team, how do you plan to control positive and negative effects, which may occur at the workplaces?

Ochi: As a basic premise, society is changing rapidly. Science and technology are advancing at amazing speeds, to meet the requirements of solving problems such as represented by climate change, energy issues, and rising demand for medical care and fiscal issues caused by an aging population. It means that we may miss the opportunity to keep up with trends if we just continue to follow conventional growth trends. We therefore need new ways of looking at things and a different kind of motivation. This is precisely what we have aimed at through the integration of the three companies. In an independently structured entity, they tend to only look at their own products and areas of expertise. However, if people with different technological capabilities and expertise get together, they will necessarily look at products from various aspects and take perspective toward the next generation. The three-company integration has therefore aimed at transforming a homogeneous organization into an organization which consists of diverse human resources, or in other words to create an entity of multiple talents.

Horii: I remember the phrase "bring together the wisdom of people." So you attempted to generate positive effects to encourage a challenging spirit and motivation among employees by breaking down the corporate boundaries.

By the way, you have consolidated 56 SBUs into 26 and

Integration of three chemical-related companies, to form organization of people with different technological capabilities and expertise

Market Business Units (MBUs) into 10 in MCC. Will you explain your core ideas on how you delegate authority to these business divisions, as well as the management structure within the business divisions including the decision making process, and integration of common functions?

Ochi: Since the target market and business category are unified in the newly organized business divisions and these business divisions involve with the businesses of the MCHC Group companies, it is now possible to assemble information which used to be scattered throughout the three operating companies and MCHC Group companies. This facilitates deeper and broader discussions on technologies, business direction and investment judgment and therefore prompt decisions. In addition, as business divisions are business-focused organizations, it is relatively easy to delegate authority. This also engenders a sense of speed in the course of management. In the meantime, common functional departments, such as general affairs and accounting, have been consolidated for rationalization from separate departments in each of the three companies. For example, in the area of human resource management, we can now deliberate on the development of 42,000 employees within a framework of a single organization. In this regard, the Executive Management Meetings can discuss issues from even higher, broader perspectives than in the previous separate three companies, and do so from a more of a medium- and long-term viewpoint.

2. Group management strategies, governance structure, etc.

Horii: What kind of changes are you expecting to occur at MCHC?

I understand that MCHC aims at transition to the "resolute, speedy management" through replacing the Management Committee by the Corporate Executive Officers Committee.

Ochi: Previously, it appeared that the holding company supervised operating companies, but now, going forward, we clarify that it is a MCHC's responsibility to formulate medium- and long-term strategies and based on these strategies, operating companies plan their short- and medium-term strategies. We will make sure that the strategies made by both sides interact properly. As the whole Group has established a stable base with each of our businesses having expanded corporate scale, we are now entering a growth phase. We should have a structure in which MCHC clarifies the future directions so that operating companies can take drastic actions with a sense of speed.

Horii: I see. I would like you to explain financial synergies. Your target is ¥50 billion as synergy effects from the integration of chemical-related companies. In general, integration has the image of slimming down or cost cuts. However, what you said seems to suggest that you aim to generate synergies from topline growth and prompt development of business projects.

Ochi: That is basically correct. Newly-established business divisions have the big mission of developing a new technology market through "orchestration," in addition to pursuing organic growth of existing businesses. Given our expectation for this, out of potential synergies of ¥50 billion, ¥35 billion is estimated to be generated from growth and ¥15 billion, from rationalization.

Horii: You have identified benchmarks for portfolio management. I believe that any business goes through some stages: incubation, success, growth, maturity and decline. These stages can be applied to the markets or technologies. How are you reflecting such business stages in the portfolio management by each business unit?

Ochi: We have reorganized the entire MCHC Group from approximately 60 SBUs into 30, and then to 13 business units. In the past, we have fallen into a vicious cycle wherein

Shift to market-oriented from seeds-oriented development to stimulate discussion for future

businesses in smaller units were forced to slim down in order to achieve their respective performance target which is to be evaluated in each business, and ended up by not growing. By reorganizing these units as business units, each business units can think about how they can grow from a perspective of new technologies and new markets. Eyeing the potential over the next five or ten years, business units can develop mapping for each business stage.

3. Growth strategy and investment

Horii: A company can raise ROE in the short term if it sacrifices future expenditures. However, this is not what medium- and long-term investors want. The same is true for shareholder returns. I want the company to invest for the future as well.

Ochi: Yes, we have been transitioning to the concept of ROIC from the conventional methods with the aim to improve capital efficiency. The UP!20 activities for higher productivity, which will be introduced to MCC (see page 25 for details), specifies the ROIC reverse tree formula, sets the targets, and pursues its optimal figure for each SBU. We consider that this will allow us to lay out a scheme for more proactive uses of money for future development.

Horii: I believe that investment is indispensable for raising corporate value and that the main investment target should be facilities and equipment for the medium term, R&D for the long term, and human resources development for the ultra-long term. Let me now move on to R&D investment. What do you think are the best measures to produce efficient R&D outcome?

Ochi: R&D themes should be thoroughly decided by the management and are currently being discussed between the management and the heads of business divisions. From this year, however, we are changing the approach to managing R&D activities through what we call the Stage Gate Meeting and management by use of the MOT Indices (one of the three management axes of *KAITEKI* Management which aims to create innovation). While the Stage Gate Meeting checks R&D steps of each theme and manages the progresses, what is important is not management but achievement. The Group-wide achievement is monitored by using MOT Indices, such as the number of new themes or projects in progress, rate of development into market application, speed and expenses.

Horii: I have been observing your business for many years and I am impressed with your outstanding technological strength but at the same time, I feel you are facing a challenge on how to apply your technology to actual businesses. Is it fine if I assume that, by becoming an organization to "bring together the wisdom of people" in the form of MCC, it has become easier to apply technology to businesses?

Ochi: First of all, I admit that it was a problem to find business from the seeds. We are now shifting into a market-oriented or solution-oriented approach. For example, the business division that has consolidated teams engaged in automotive related business now accumulate more information on the automobile market and they have begun discussing the outlook for car business in 2025. A medium-term management plan usually covers the upcoming five years at most, but that is not enough anymore. We can come up with new themes for R&D by the long term forecast on five focus markets .

Horii: Next, let us talk in a longer term perspective. I would like to ask about the investment of human resources development. What are your thoughts on nurturing employees for future management roles?

Ochi: Specialists in management tend to be highlighted, but for a manufacturer, specialists in R&D, manufacturing technology, facility management and other areas are just as important. During the high growth period when many people entered the company, experienced various positions and grew, becoming a generalist used to be one of the popular career paths. At present, we need a system to deliberately foster specialists and to motivate them, including personnel we bring in from outside to pursue their career. This may mean changing the existing personnel system. In addition to expertise, we should take into consideration of nationalities and gender.

Horii: Overseas development is another subject of interest. Recently, there have been cases of problems that arose from the acquisition of an overseas company by a Japanese company. As an investor, I am concerned over the management of overseas subsidiaries. Will you share your thoughts, including lessons learned from the past?

Ochi: As a bitter experience of about 20 years ago, we had a situation where we could not see what was going on at some overseas businesses. This was because we delegated responsibility to a regional headquarter (RHQ) in a halfway manner. Since then, we made the business department directly responsible for its overseas business without relying on the RHQ. However, there is still a drawback of not being able to pay attention to the details. We are therefore considering a new structure in which a major RHQ member monitors an overseas group company as an outside director. Going forward, RHQs will be responsible for marketing, personnel management, environment and safety, and other common functions, while business divisions will focus on businesses. Under such a system, information sharing is inevitable. This is why a RHQ is also now required to participate in the Executive Management Meeting in addition to the head of business divisions and the head of the shared function division. I am expecting that this structure will allow more useful information to reach the management with faster speed.

4. IoT, AI and health management

Horii: The current medium-term management plan mentions the use of the IoT and AI. What specific measures do you have in mind?

Ochi: We have just established the Emerging Technology and Business Development Office and appointed Chief Innovation Officer (CIO), Chief Digital Officer (CDO), and Chief Marketing Officer (CMO). Given the rapid progress of the Internet and data technology, there is a need to switch from the conventional logic-driven mindset to a data-based mindset and ideas in the discussions on products and businesses.

Let me give you an example of plant automation. About 25 years ago, there was a dynamic change in plant control method from simple control to multivariable and complex control. Since then, this has logically become so complex that it could not advance any further. In the meanwhile, the Internet and data technology have achieved rapid growth. Pursuing the conventional logic will not make further progress. Instead, we are now required to shift to an inductive approach of improving technology by analyzing data results. The IoT and the AI will promote further rationalization and energy conservation. I am also convinced that chemical synthesis reactions and effectiveness of catalysts will move up to a higher level in five to ten years from now.

Horii: Concerning health management, you aim to achieve results in about three years. What kind of benchmark or indicator are you thinking to use to ensure a good outcome?

Ochi: In deciding on an indicator of health management, we need to make a comprehensive assessment of not only health data, but also work performance, work satisfaction and other factors. Low productivity of Japanese companies is viewed as a problem but what I find more important is to produce creative work, rather than to merely raise the speed of work. When each of us becomes more creative, the organization should get stronger.

Horii: I can see that you truly aim for such corporate culture with the *KAITEKI* management. I think the concept of *KAITEKI* management is quite close to that of Environmental, Social and Governance (ESG). In order to prolong contribution to sustainable society, the company should find a favorable approach for its own sake. Win-win relationships that are good for both society and your company are what you should aim at. I believe that *KAITEKI* management enables you to achieve that.

Ochi: Our *KAITEKI* management seeks "a comfortable condition for people, society and the Earth." I believe this is an important concept for achieving sustainable growth.

Message from the CFO

Toward strengthening “return control” in addition to “risk control”

Kenkichi Kosakai
Representative Corporate Executive Officer,
Deputy CEO, Chief Financial Officer

Q1 Please tell us about the aims and pillars of the financial strategy in the medium-term management plan *APTSIS 20*.

A Establishing a stable and robust financial base

Over the medium-to long-term, we would like to expand our corporate value in a sustainable fashion and meet our commitments to shareholders and all stakeholders.

In *APTSIS 15* (fiscal 2011 to 2015), our previous medium-term management plan, we managed to develop the foundations for sustained growth by expanding the business scale through M&A activities and by conducting structural reforms in businesses with fluctuating revenue. Under *APTSIS 20*, our medium-term management plan that runs from fiscal 2016 to 2020, we are focusing on growth and profitability in the Performance Products domain and Health Care domain, and we are in a stage of transition to an even higher corporate value. Our main goals are ROE of 10% or higher, core operating income of ¥380 billion and net profit of ¥180 billion. We are seeking to expand our corporate value based on a stable and robust financial base even after fiscal 2020, which is the final year of the current medium-term management plan.

In *APTSIS 20*, we clarified the role of MCHC. Specifically, MCHC determines business strategy, devises and manages medium-to long-term management plans, and allocates resources based on them. For portfolio management, by incorporating ROIC Indices in each business domain in addition to growth potential and the core operating margin on revenue (return on sales, or ROS), we aim to strengthen our portfolio while improving profitability (MOE*1) through the appropriate allocation of resources.

Not only by investing in and developing the Performance Products and Health Care domains, both of which contribute high growth and profitability, but by demonstrating business synergy thanks to the integration of the three companies (MCC, MPI and MRC) and improving operational efficiency through workstyle reforms, we will raise profitability and meet the goals laid out in *APTSIS 20*. We will also make use of the cash earned from operations in a well-balanced manner, allocating it in investing in sustainable growth for the future, improving the financial base, and offering appropriate and stable shareholder return. For the investment strategy in *APTSIS 20*, some ¥1.7 trillion for capital expenditures (including ¥500 billion investment in maintaining and updating equipment) and for investment in growth through M&A is planned.

Specific financial targets aimed at bolstering our financial position are as follows.

Shareholders’ Equity Ratio (end of FY 2020)	Net D/E Ratio (end of FY 2020)
30%	0.8 times
(end of FY 2016: 24.5%)	(end of FY 2016: 1.06 times)

Q2 Please explain the progress of *APTSIS 20*.

A Steadily improving KPIs

Results of fiscal 2016

For core operating income*2, which was introduced upon the application of IFRS from fiscal 2016, we posted a record ¥307.5 billion, while ROS was 9.1%. Net profit attributable to owners of the parent also significantly increased to ¥156.3 billion (increased ¥104.9 billion year-on-year). In terms of Key Performance Indicator (KPI) results, we recorded ROE of 15.1% (+9.9% year-on-year), net D/E ratio of 1.06 times (-0.11 year-on-year), and ratio of equity attributable to owners of the parent (equivalent to shareholders’ equity ratio in J-GAAP) of 24.5% (+1.5% year-on-year), showing improvement across all these financial metrics compared to the previous year.

Noting that while ROE achieved a significant improvement up to 15.1% in fiscal 2016, there were special factors involved, including a temporary reduction in tax expenses, we will continue to actively pursue measures aimed at expanding stable earnings.

In terms of cash flow, although we undertook ¥206.5 billion of investments, we managed to maintain free cash flow of ¥103.7 billion in real terms. Based on this, we endeavor to improve our financial position.

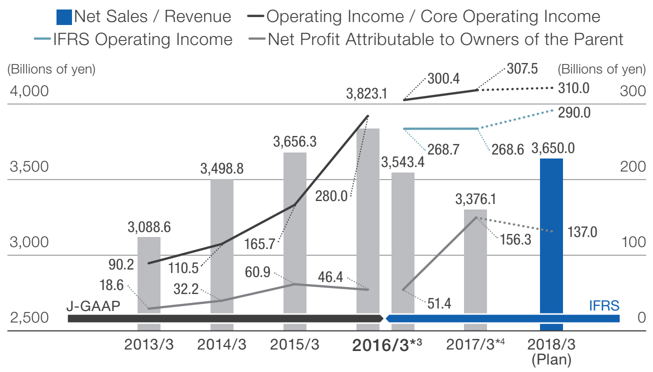
Outlook for fiscal 2017

In the fiscal 2017 outlook we announced at the beginning of the term, the expected core operating income is ¥310 billion (an increase of ¥2.5 billion year-on-year) and the expected net profit attributable to owners of the parent is ¥137 billion (-¥19.3 billion year-on-year).

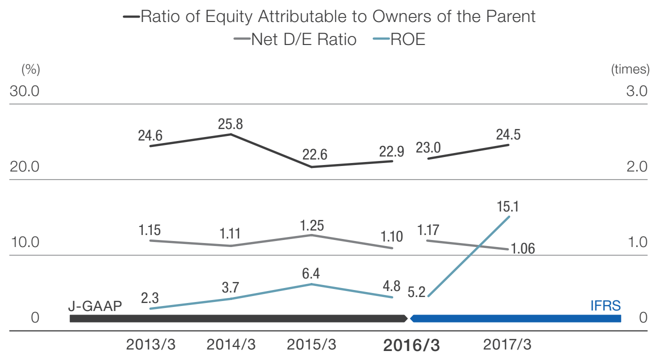
In the Performance Products segment, though we expect higher earnings in optical films, PET films, carbon fiber and alumina fiber and so on, as these are areas where we have boosted production capacity. At the same time we estimate a contraction of sale and purchase difference due to rising raw material costs associated with some products and a higher burden of common administrative expenses. Meanwhile, in the Chemicals segment, we expect steady performance thanks to the contribution of the new Middle Eastern plant for our MMA business scheduled to go online in the middle of the year, and as a result of solving problems which occurred at the domestic petrochemical plant in the previous period.

In terms of fiscal 2017 KPIs, we expect to hit ROS of 8.5% (-0.6% year-on-year), maintaining a level above the 8% target laid out in the medium-term management plan, along with ROE of 12% and net D/E ratio of 1.0 times.

Change in Consolidated Performance



Change in Consolidated Financial Indicators



*1 Stands for “Management of Economics,” one of the three axes of *KAITEKI* Management. This axis aims to enhance economic value, as represented by business performance, through the management with a focus on the efficient allocation of capital.
*2 To ascertain ordinary operating income and loss, expenses associated with structural reforms and income/loss resulting from extraordinary factors such as disasters are deducted to derive “core operating income.” Core operating income is used as an indicator in the external explanation and business administration.
*3, 4 Figures pertaining to non-continuing businesses for March 2016 IFRS and March 2017 have been deducted.

Message from the CFO

Q3 Please explain the details about "strengthening the portfolio."

A Toward strengthening "return control" in addition to "risk control"

Strengthening Management Structure

To coincide with the establishment of Mitsubishi Chemical Corporation following the integration of the three chemical companies in April 2017, we have made changes to the management structure of the Board of Directors and Corporate Executive Officers Committee of MCHC to clarify the roles of MCHC and each operating company. MCHC also set up strategy offices for each of the four segments (Performance Products Strategy Office, Industrial Materials Strategy Office, Industrial Gases Strategy Office, Healthcare Strategy Office), as well as the Emerging Technology and Business Development Office involved with the development of next-generation businesses such as IoT and AI, and the commercialization of cutting-edge technologies. Through these changes, MCHC will bolster its portfolio management by devising medium-term strategies for each business domain, further enhancing its monitoring of the medium-term management plan, and allocating resources appropriately. Under this strengthened management structure, each operating company can focus on carrying out business activities based on its basic strategy.

In the Performance Products segment, we are pursuing growth and high profitability including synergy effects. For the Chemicals segment, we aim to boost profits by developing greater stability and functionality. In the Industrial Gases segment, in addition to stable growth, we are looking to expand into the performance domain. In the Health Care segment, we will accelerate growth, including expansion in the U.S.

Strengthening Portfolio Management

As noted above, we clarified the roles of MCHC and the operating companies as "business management" and "business execution," respectively, and to increase management speed further, we have delegated a great deal of authority to the operating companies.

We reduced the numbers of SBUs we manage from about 60 to 30. Each SBU was reallocated into four quadrants (next-generation businesses, growth businesses, cash-generating businesses and businesses to be restructured). We will adopt management indicators (sales growth rate, ROS, ROIC) that reflect each business domain to enable fine-grained business management and allocate resources more appropriately.

In terms of ROIC management, we will set target figures by domain and manage them as KPIs for improving profit margin. We also include revenue in growth businesses KPI and free cash flow in cash-generating businesses KPI. In the past, we tended to focus on unprofitable businesses as problems, but moving forward, low-profit businesses whose ROIC falls below weighed average capital cost (WACC) will certainly be examined.

We biannually perform numerical investigations and evaluations on progress of action plans and investment plan of the medium-term management plan and management indicators. As for unachieved targets, we discuss in-depth the necessity of structural reforms and then review our portfolio and resource allocation accordingly.

Based on such reinforcement of management structure and portfolio, we endeavor to strengthen the return control system in addition to the traditional risk control system.

Q4 Please specify your measures aimed at improved capital efficiency.

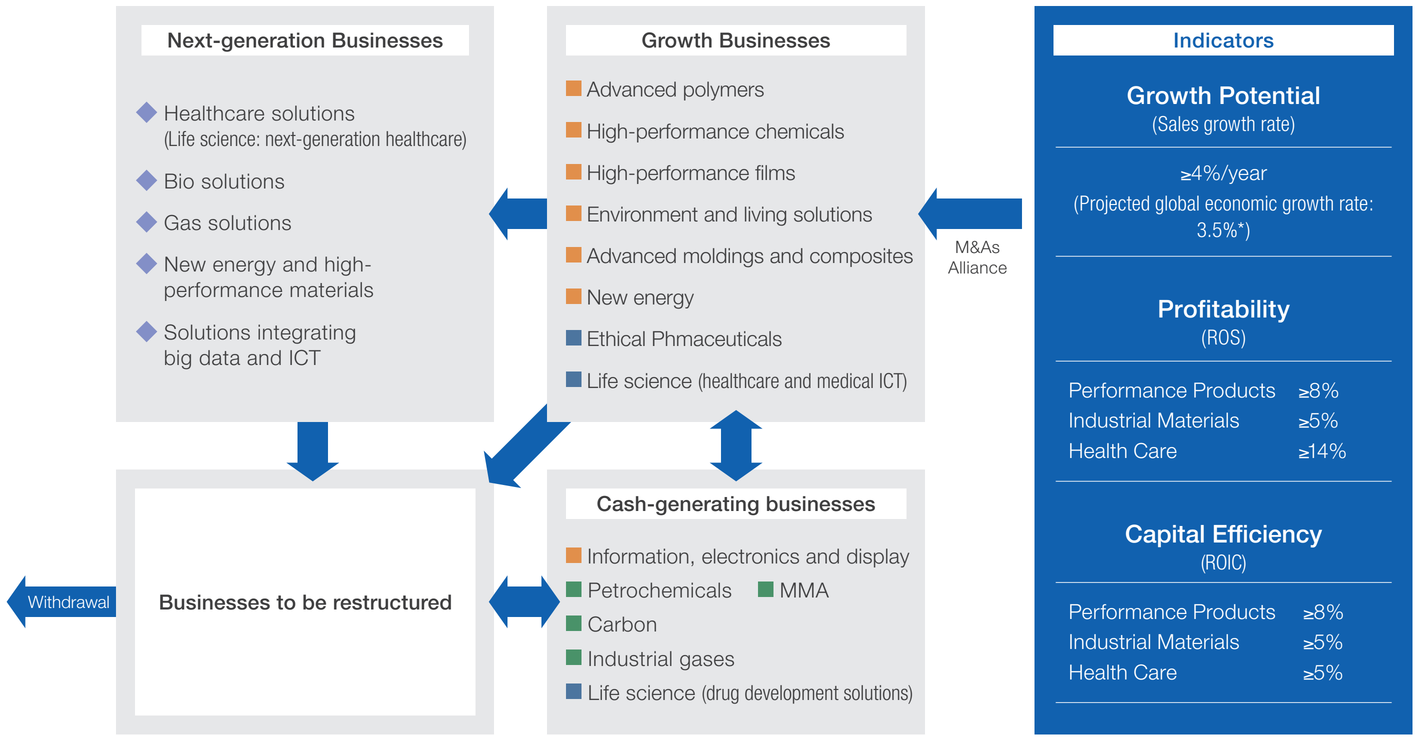
A Toward more advanced utilization of capital

In *APTSIS 20*, to improve capital efficiency we have aimed to squeeze out 300 to 500 billion yen in capital by reducing working capital and selling off assets such as cross-shareholdings reduction. We would like to use the funds obtained through improved capital efficiency in a well-balanced manner, allocating them in investments for future growth, improving financial base, and offering shareholders return.

One of our specific measures for capital efficiency is the global roll-out of cash management system (CMS). We will expand the system, which has been deployed in Japan to date, to the sites in the U.S., Europe and Asia, in an effort to develop more advanced capital utilization. One of the primary purposes of the global roll-out is to pool and control the cash uniformly in each region so that governance function of subsidiaries can perform through cash. CMS was introduced in Europe from fiscal 2016. It will be introduced in the U.S. from fiscal 2017 and in Asia, where cash is managed across multiple currencies, we plan to achieve unified management around fiscal 2020. Ultimately, by working to globally centralize the management of these four regions, we will aim to achieve even greater efficiency.

Management Roadmap Toward Achieving the Medium-term Management Plan: Portfolio Management

Positioning of each business and affiliate companies based on domain-specific indicators
Implementation of regular monitoring to accelerate resource allocation and portfolio optimization



■ Performance Products domain ■ Industrial Materials domain ■ Health Care domain ◆ Next-generation business themes

* Average IMF predication for 2016 to 2020

New-Mitsubishi Chemical Corporation

Prevailing ROIC-based Management at Work Sites

Full participation-oriented UP!20 activities aimed at achieving core operating income and ROIC targets

Kanji Okada
Managing Executive Officer,
Mitsubishi Chemical Corporation

On April 1, 2017, former Mitsubishi Chemical, Mitsubishi Plastics (MPI) and Mitsubishi Rayon were merged to form the newly integrated Mitsubishi Chemical Corporation (MCC). As the core operating company of the Mitsubishi Chemical Holdings Group, MCC seeks to provide solutions to environmental and social issues and strive to achieve the concept of *KAITEKI*, which facilitates the sustainable development of people, society and the Earth.

This newly formed MCC maintains diversity of human resources and technology platforms, and operates businesses globally. While leveraging these resources and achieving sustained growth, MCC hopes to steadily achieve the medium-term management plan *APTSIS 20* formulated by MCHC. In addition to growth and cost reductions across existing businesses, MCHC aims to add an additional 50 billion yen in core operating income by fiscal 2020 through business synergy worth 35 billion yen, and efficiency improvements worth 15 billion yen under *APTSIS 20*.

To meet these growth targets, MCC has adopted the task of achieving high-efficiency management as one of its basic policies and has started a full participation-oriented company-wide productivity improvement activity named UP!20. MCC will inherit the structure of activities that were ongoing at the former operating companies, such as the “MoRoic Activities” undertaken at the former MPI to improve ROIC. At the same time, in order to achieve absolute values for core operating income, an important element of MOE axis and a source of competitive strength, and improve ROIC (return on invested capital), the UP!20 activity is aimed to boost business efficiency through the synergetic effect with workstyle reforms under the health management raise productivity by 20% and enhance the creativity.

Each employee is supposed to put figures into ROIC tree so that they can understand how their individual targets lead to higher ROIC. By linking individual goals with management targets and offering greater insight into improvements to core operating income and ROIC, MCC is adopting an innovative approach that will encourage individuals to develop a high level of motivation and pursue UP!20 activities proactively. To ensure the core operating income and ROIC targets set out in *APTSIS 20* are met, each business unit will regularly monitor and take action on the elements that make up ROIC (marginal profit ratio, fixed production cost ratio, SG&A ratio, turnover ratio of working capital turnover ratio of fixed assets, and so on). Meanwhile, MCC headquarters, R&D centers and departments common to business sites and branch offices will target higher productivity and greater operational efficiency.

MCC aims to achieve a 20% boost in productivity and asset efficiency through the UP!20 activities by fiscal 2020, and build a highly profitable business entity based on optimal asset management.

Introduction to Activities Underway at Work Sites

“ROIC Activities” at Ryobi Techno Corporation FY 2016

Ryobi Techno Corporation (RTC) is a group company engaged in the development and manufacturing of construction and housing materials under the Advanced Moldings and Composites Business Domain of MCC. RTC develops and manufactures *Hishicarbo* polycarbonate sheets for exterior use, which are essential for increasingly diverse homes and apartment complexes, as well as the Deckboard eaves system for gutters, gables and fascia board. Its products are trusted and loved by a wide range of customers.

Eaves system


Hishicarbo

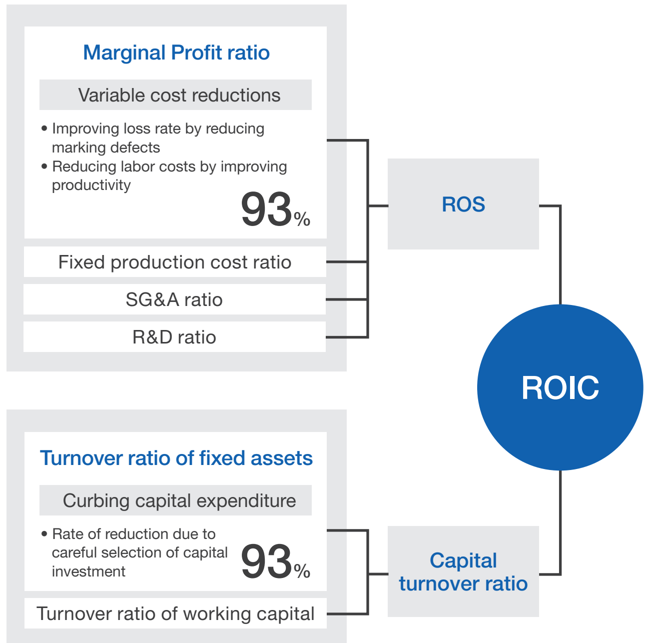

Deckboard


An example of ROIC improvements worked on in fiscal 2016 is an effort to improve marking work on extruded products like Deckboard, where a horizontal printer is used for ink transfer printing of information such as the company name, product name and lot number. In terms of the factors causing defects, marking work ranked the second worst defective followed by molding trouble. If these defects in marking work were reduced to zero, defective goods could be reduced by a scale of ten tons a year, and yield will improve to 96%. Defective marking could involve (1) insufficient definition in the characters, making them hard to read, or (2) having the ink stick and dirty the product. For this reason, production adjustments were required during operation, causing in production losses.

This case had been brought up countless times in the past as an improvement theme, but the true cause had never been found. This time, the manufacturing and administrative sections worked together to thoroughly determine the cause. As a result, improvements were made on the equipment side by properly tuning the roller equipment supplying the ink, and making changes to ink supply methods, ink quality and transfer roller materials. In addition, as it had become difficult to update the plate cylinders both physically and in terms of cost, by using a new material, excellent character legibility was realized ink dregs blockages were eliminated and marking defects were reduced to zero. This achieved one-week unadjusted operation while also helping to reduce capital expenditure.

From April 2017, the MCC began its "UP!20" ROIC activities. To expand company-wide activities and activities involving full participation, a caravan team mainly comprising members from the Corporate Planning Dept., Employee Relations Dept. and Technology Coordination Dept. was formed. The team directly visited 16 business sites, seven R&D centers and four branch offices to explain the need for and importance of ROIC activities and promote UP!20 activities. This is an important activity of realizing “growth and high profitability” as part of the current medium-term management plan, and an area in which MCC is currently making concerted company-wide efforts.

ROIC Tree



Message from the CIO

We will strengthen our innovation capability by introducing new perspectives, embracing risk, and deepening our global connections.

Larry Meixner
Managing Corporate Executive Officer,
Chief Innovation Officer

In April 2017, the MCHC Group implemented two major changes that increase our innovation power in complementary ways. First, the merger of MCC, MPI, and MRC included the integration of R&D resources and capability across these three companies. The resulting shared knowledge and efficiency gains will enable us to better develop adjacent markets, reduce costs, and identify future business strategies.

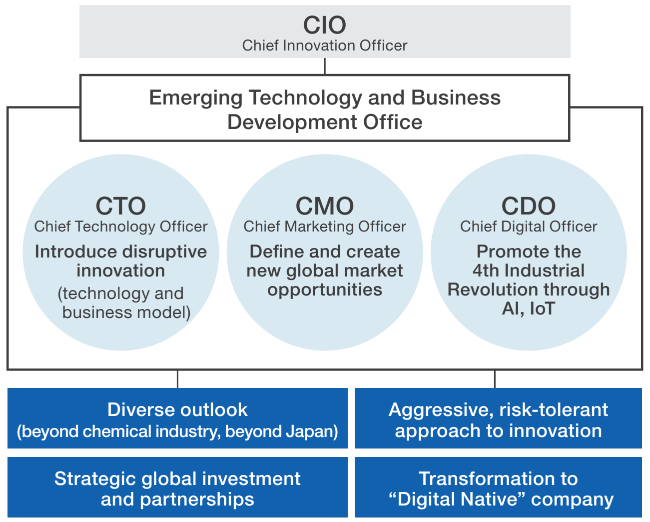
The second change within the MCHC Group reflects the rapidly evolving nature of corporate innovation worldwide. In this new environment, we must consider not only incremental technology development, but also disruptive innovation, which can completely redefine the winners and losers in an industry. Because such developments generally emerge from beyond the incumbents' traditional point of view, they represent a persistent threat even to companies that have provided stable earnings for many years. Indeed, such innovations are often rejected at an early stage precisely because they conflict with the established thinking and processes that were successful in the past. Yet this natural bias interferes both with finding new avenues for business growth and with seeing disruptive threats in time to avoid disaster.

The MCHC Group therefore created the new position of CIO (Chief Innovation Officer), and I was privileged to join the company in April 2017 to serve in this role. Our new Emerging Technology and Business Development Office (ETBDO) aims to significantly extend the innovation capabilities of the MCHC Group by intensifying our engagement with global leaders from both market and technology perspectives. A major difference from the past is the addition of several senior executives from outside the MCHC Group, outside the traditional chemical industry, and even outside of Japan. These changes are designed to expand our world view and our presence as a global innovator.

For example, reflecting the increasing share of disruptive innovation emanating from Information Technology, we created the new role of CDO (Chief Digital Officer) to lead the digital transformation of our company. We are adding data scientists not only to enhance current business operations, but also to conceive new ways of using the vast trove of data from our operations and business transactions. In the area of venturing, the company will set aside resources for strategic investment and partnerships, allowing ETBDO to operate in a risk-tolerant "start-up mode" in potentially disruptive areas.

For large companies in this era of rapid change, simply doing "more of the same" is no longer sufficient to ensure consistent growth, or even survival. By aggressively connecting with global centers of innovation and broadening our approaches to new business development, we aim to create the seeds of a new culture of global innovation within the MCHC Group.

Extending the Innovation Capabilities of the MCHC Group



Message from the CSO

Leveraging 10 years of *KAITEKI* Management, we will orchestrate the challenges of each individual with the advancement of MOS to achieve further growth and maximization of *KAITEKI* Value.

Shushichi Yoshimura
Senior Managing Corporate Executive Officer
Chief Sustainability Officer

The concept of *KAITEKI*, which symbolizes the MCHC Group, was born in 2007 out of a desire to make an essential contribution to a better future for people, society and the Earth. The MCHC Group has defined its corporate value as identifying issues to be addressed for future society and delivering solutions continually. We have performed our corporate activities based upon this *KAITEKI* Value for the last 10 years. Now that internal understanding and empathy for Management of Sustainability (MOS) has been enhanced and a firm basis for promoting MOS has been established, it is possible to conduct corporate activities aimed at maximizing *KAITEKI* Value. We feel that we have gained an understanding and appreciation for our initiatives from our stakeholders.

In recent years, awareness of various environmental and social problems has increased. The idea that countries across the planet will join forces to solve those issues is becoming more widespread, as illustrated by the United Nations Sustainable Development Goals (SDGs). Expectations of businesses are mounting accordingly.

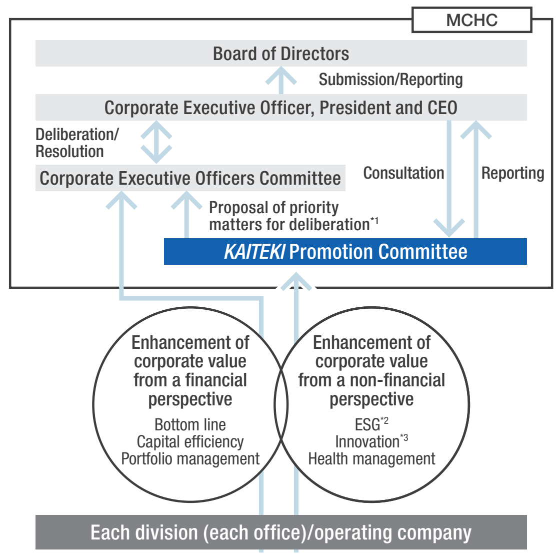
To ensure that the MCHC Group promotes initiatives designed to solve environmental and social issues as a responsible corporate citizen, we newly identified material issues under our current medium-term management plan *APTSIS 20* and set new MOS Indices which reflect materiality. In fiscal 2016, which was the first fiscal year under the medium-term management plan, we reviewed the definition and operation of the *KAITEKI* Promotion Committee, the Group's highest-level body related to *KAITEKI*, and established the structure for maximizing corporate value from a non-financial viewpoint, aiming to further enhance MOS.

Review of *KAITEKI* Promotion Committee

- Oversees improvement in corporate value from a non-financial perspective
- Deliberates and reports matters related to *KAITEKI* as an advisory body of the MCHC President and CEO
- Submits and reports on material proposals to the Corporate Executive Officers Committee and the Board of Directors

In Japan, where the majority of employees of the MCHC Group work, individual workstyles are being reassessed amid the inevitable trends of globalization, diffusion of IT/AI, declining fertility rates and population aging. As uncertainty about the future increases, it becomes more important for each individual employee to take on more challenges through their duties and to cooperate with each other to tackle social issues, resulting in promotion of MOS and enhancement of *KAITEKI* Value. We believe that respecting diversity and supporting the health and workstyles of each individual will drive the growth of the MCHC Group and lead to the creation of social value. Previously, as part of MOS, we have championed workstyle-related initiatives in areas such as work-life balance and promotion of diversity. From fiscal 2017, *KAITEKI* Health and Productivity Management has started in earnest to further push ahead with workstyle reform. We hope that we can rely on your unwavering support for the MCHC Group as it continues to rise to the challenge of creating *KAITEKI* Value.

MCHC Group's *KAITEKI* Management Structure



*1 Where necessary *2 Governance issues are mainly addressed by committees such as the Nominating Committee. *3 Determination of the direction of technologies, etc.

MCHC's New Management and Execution Structure

Starting from April 2017, MCHC launched a new management and execution structure.

To strengthen MCHC's medium- to long-term strategy formulation function, we newly established the Corporate Strategy Division. Within this division, we deployed the offices in charge of four business segments (Performance Products, Industrial Materials, Industrial Gases and Healthcare), and these offices set up the Group's management strategy for each business segment and plan basic policies on resource allocation according to the strategy.

We also replaced the Management Committee which was an advisory body to the President, with the Corporate Executive Officers Committee which is a decision making body based on the consensus of Corporate Executive Officers, thus ensuring transparency in the formulation of Group-wide strategies and decisions on resource allocation.

Furthermore, we actively appointed human resources from outside the company, and newly established the Emerging Technology and Business Development Office, which will explore the latest advanced technologies including IoT, and will promote to utilize these technologies, strengthen business competitiveness through collaboration with outside organizations, and create new businesses.

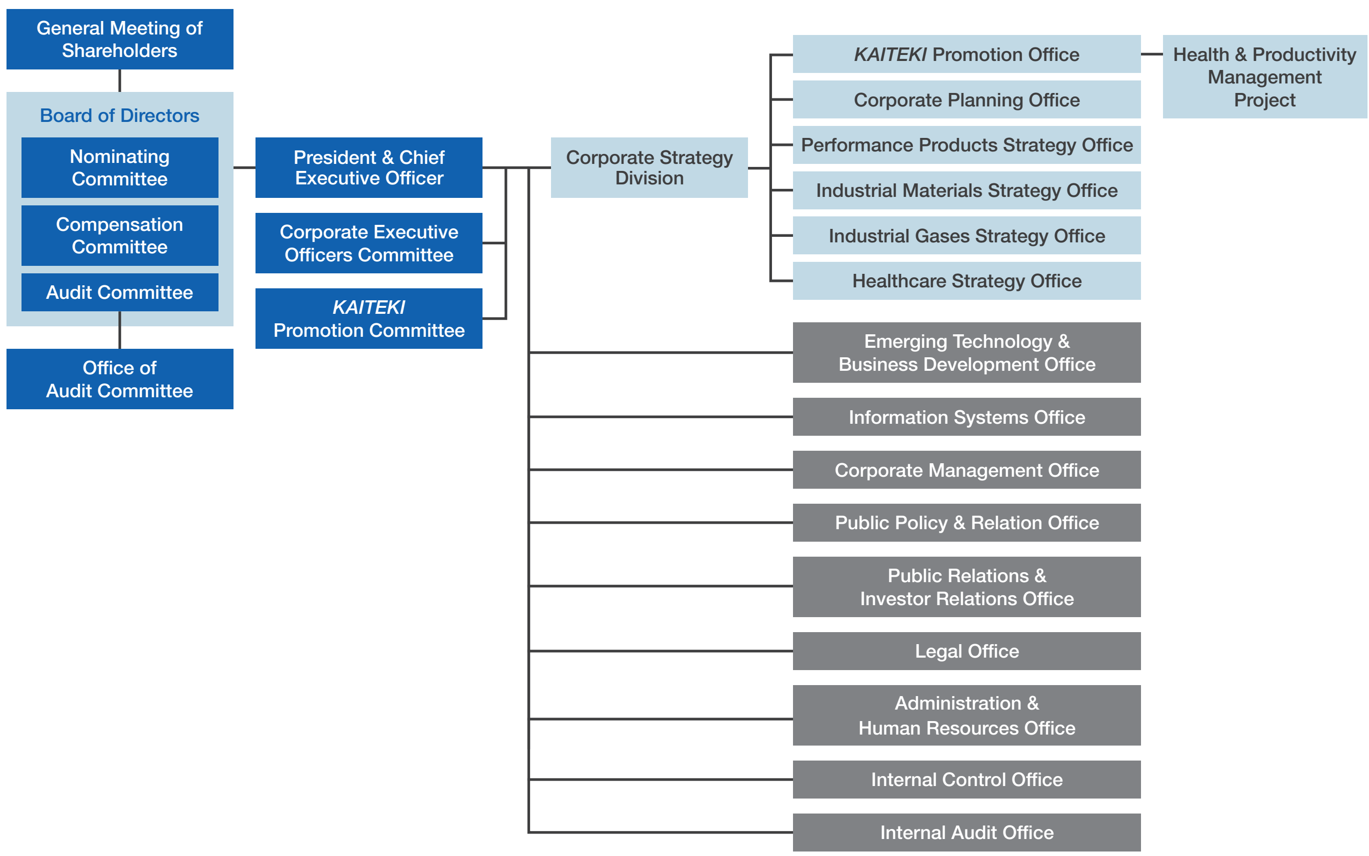
Through the development of this new management structure, we will further clarify the roles and functions of MCHC and operating companies. Each operating company will be responsible for embodying and executing business strategies based on basic strategies set up by MCHC, and MCHC will appropriately monitor their businesses to accelerate the Group's growth strategies.

Structural changes of the Board of Directors

MCHC made some changes to the structure of the Board of Directors based on the approval of the General Meeting of Shareholders held in June 2017, welcoming three Corporate Executive Officers in charge of corporate strategy, corporate management & finance, and compliance & governance as new Directors. The purpose of these changes was to meet the need to strengthen the holding company's management and supervision functions, that is, to promote the group management by clarifying functional differences between the holding company and operating companies within the structure of the Board of Directors, as elsewhere.

With the help of its new members, MCHC's Board of Directors will conduct even livelier discussions to ensure the Group's sustainable development.

Management and Execution Structure



Aiming for realization of sustainable society and enhancement of corporate value

Yoshimitsu Kobayashi
Chairperson

1. Review of Fiscal 2016

MCHC transitioned to a company with a nominating committee, etc., in June 2015. Recognizing supervision of management as the central function of the Board of Directors, MCHC has invited outside directors with extensive experience and high level of expertise in different fields to bring their independent and diverse viewpoints to the Board of Directors so as to improve its effectiveness.

In fiscal 2016, Mr. Takayuki Hashimoto, who had served as the President and the Chairperson at IBM Japan, Ltd. (now Honorary Executive Advisor of IBM Japan, Ltd.) was newly appointed as an outside director of the Board of MCHC. With the addition of Mr. Hashimoto, it seems that discussions at the Board of Directors have been further activated and that it has created a stronger sense of tension on the management execution side.

In this situation, the Board of Directors met 10 times in fiscal 2016, holding lively discussions on issues such as withdrawal from unprofitable businesses and investment in growth overseas.

2. Initiatives for Further Improvement

As a general rule, a company with a nominating committee, etc. delegates decisions on individual business execution to the management execution side to a large extent while the Board of Directors will discuss corporate strategies for the sustainable enhancement of corporate value. For MCHC's Board of Directors, how to improve discussions on the medium- to long-term direction of management was an important issue together with strengthening the management supervision function. Regarding this issue, the Board of Directors repeatedly discussed with the management execution side and in April 2017, MCHC changed the decision-making process for the execution of important businesses. We newly established a decision-making body based on the consensus of the Corporate Executive Officers (Corporate Executive Officers Committee), and by seeking to strengthen the Corporate Strategy Division, MCHC also developed a structure for examining medium- to long-term business strategies from a holding company perspective. The Board of Directors also partially reviewed its structure and in June welcomed new Corporate Executive Officers in charge of corporate strategy, corporate management & finance, and compliance & governance. As a result of these initiatives, discussions at the Board of Directors are now livelier and more in-depth, also covering the proceedings and results of discussions at the Corporate Executive Officers Committee, and information asymmetry is also starting to improve.

Moving forward, we will examine efficient and effective operation of the Board of Directors, including utilizing ICT and holding discussions based on quantified information, to further enhance the timely provision of appropriate information especially to outside directors.

3. Aiming for Realization of *KAITEKI*

In the future, the MCHC Group will also need to utilize technical innovations such as the IoT and AI in our manufacturing technology, and we need to establish business strategies for the realization of a new sustainable society with a speed and impact never seen before.

The Board of Directors will continue to hold thoroughgoing discussions with President Ochi and others on the management execution side, and will support decisive decision-making by senior management to achieve further enhancement of corporate value.

Directors

(As of June 27, 2017)

- Chairperson of the Nominating Committee
- Member of the Nominating Committee
- Chairperson of the Audit Committee
- Member of the Audit Committee
- Chairperson of the Compensation Committee
- Member of the Compensation Committee

Director of the Board, Chairperson

Yoshimitsu Kobayashi

- Dec. 1974 Joined Mitsubishi Chemical Industries Limited
- Jun. 2003 Executive Officer, MCC
- Apr. 2005 Managing Executive Officer, MCC
- Jun. 2006 Director of the Board, MCHC
- Feb. 2007 Director of the Board, Managing Executive Officer, MCC
- Apr. 2007 Director of the Board, President and Chief Executive Officer, MCHC
  Director of the Board, President and Chief Executive Officer, MCC
- Apr. 2012 Director of the Board, Chairperson, MCC (until Mar. 2017)
- Apr. 2015 Director of the Board, Chairperson, MCHC (current)

Director of the Board, Representative Corporate Executive Officer, President and Chief Executive Officer

Hitoshi Ochi

- Apr. 1977 Joined Mitsubishi Chemical Industries Limited
- Jun. 2007 Executive Officer, MCHC
  Executive Officer, MCC (until Mar. 2010)
- Apr. 2009 Director of the Board, MPI (until Mar. 2011)
- Jun. 2009 Director of the Board, Executive Officer, MCHC
- Jun. 2010 Director of the Board, Managing Executive Officer, MCHC
  Director of the Board, MRC (until Jun. 2011)
- Apr. 2011 Director of the Board, MCHC (until Jun. 2011)
  Director of the Board, Managing Executive Officer, MCC (until Mar. 2012)
- Apr. 2012 Director of the Board, President and Chief Executive Officer, MRC (currently MCC) (current)
- Jun. 2012 Director of the Board, MCHC
- Apr. 2015 Director of the Board, President and Chief Executive Officer, MCHC
- Jun. 2015 Director of the Board, Representative Corporate Executive Officer, President and Chief Executive Officer, MCHC (current)

Director of the Board, Representative Corporate Executive Officer, Deputy Chief Executive Officer

Noriyoshi Ohira

- Apr. 1975 Joined Mitsubishi Chemical Industries Limited
- Jun. 2006 Executive Officer, MCHC
  Executive Officer, MCC
- Jun. 2009 Director of the Board, Executive Officer, MCC
- Jun. 2010 Managing Executive Officer, MCHC
  Director of the Board, Managing Executive Officer, MCC
- Apr. 2014 Senior Managing Executive Officer, MCHC
  Director of the Board, Senior Managing Executive Officer, MCC (until Mar. 2015)
  Director of the Board, LSII (current)
- Jun. 2015 Representative Corporate Executive Officer, Senior Managing Corporate Executive Officer, MCHC
- Apr. 2017 Representative Corporate Executive Officer, Deputy Chief Executive Officer, MCHC
- Jun. 2017 Director of the Board, Representative Corporate Executive Officer, Deputy Chief Executive Officer, MCHC (current)

Director of the Board, Representative Corporate Executive Officer, Deputy Chief Executive Officer

Kenkichi Kosakai

- Apr. 1976 Joined Mitsubishi Chemical Industries Limited
- Jun. 2008 Executive Officer, MTPC
- Jun. 2010 Director of the Board, Managing Executive Officer, MTPC
- Apr. 2014 Managing Executive Officer, MCHC
  Director of the Board, MTPC (until Jun. 2015)
- Apr. 2015 Senior Managing Executive Officer, MCHC
  Director of the Board, MRC (until Mar. 2017)
- Jun. 2015 Representative Corporate Executive Officer, Senior Managing Corporate Executive Officer, MCHC
- Jun. 2016 Director of the Board, MPI (until Mar. 2017)
- Apr. 2017 Representative Corporate Executive Officer, Deputy Chief Executive Officer, MCHC
- Jun. 2017 Director of the Board, Representative Corporate Executive Officer, Deputy Chief Executive Officer, MCHC (current)

Director of the Board, Senior Managing Corporate Executive Officer

Shushichi Yoshimura

- Apr. 1979 Joined Mitsubishi Chemical Industries Limited
- Jun. 2008 Executive Officer, MCC
- Apr. 2012 Managing Executive Officer, MCC
- Apr. 2013 Director of the Board, Managing Executive Officer, MCC (until Jun. 2016)
- Jun. 2016 Managing Corporate Executive Officer, MCHC
- Apr. 2017 Senior Managing Corporate Executive Officer, MCHC
- Jun. 2017 Director of the Board, Senior Managing Corporate Executive Officer, MCHC (current)
  Director of the Board, TNSC (current)

Director of the Board

Glenn H. Fredrickson

- Jan. 1990 Associate Professor, Departments of Chemical Engineering and Materials, University of California, Santa Barbara (UCSB)
- Jul. 1991 Professor, Departments of Chemical Engineering and Materials, UCSB (current)
- May 1998 Chairperson, Department of Chemical Engineering, UCSB (until Jul. 2001)
- Mar. 2001 Director of Mitsubishi Chemical Center for Advanced Materials at UCSB (current)
- Apr. 2014 Managing Executive Officer, MCHC
- Jun. 2014 Director of the Board, Managing Executive Officer, MCHC
- Jun. 2015 Director of the Board, Managing Corporate Executive Officer, MCHC
- Apr. 2017 Director of the Board, MCHC (current)

Director of the Board

Yoshihiro Umeha

- Apr. 1977 Joined Mitsubishi Chemical Industries Limited
- Jun. 2008 Executive Officer, MCC
- Apr. 2012 Director of the Board, Managing Executive Officer, MCC (until Mar. 2015)
- Jun. 2015 Director of the Board, MCHC (current)
  Corporate Auditor, MCC (until Mar. 2017)
  Corporate Auditor, MRC (currently MCC) (current)
- Jun. 2016 Corporate Auditor, LSII (until Mar. 2017)

Director of the Board

Hisao Urata

- Jan. 1991 Joined Mitsubishi Kasei Corporation
- Jun. 2011 Executive Officer, MCHC
  Executive Officer, MCC (until Mar. 2014)
- Apr. 2015 Managing Executive Officer, MCHC
- Jun. 2015 Managing Corporate Executive Officer, MCHC (until Mar.2016)
- Jun. 2016 Director of the Board, MCHC (current)
  Corporate Auditor, MPI (until Mar. 2017)
- Apr. 2017 Corporate Auditor, LSII (current)

Outside Director of the Board

Takeo Kikkawa

- Apr. 1987 Associate Professor, School of Business, Aoyama Gakuin University
- Oct. 1993 Associate Professor, Institute of Social Science, The University of Tokyo
- Apr. 1996 Professor, Institute of Social Science, The University of Tokyo
- Apr. 2007 Professor, Graduate School of Commerce and Management, Hitotsubashi University
- Jun. 2013 Outside Director, MCHC (current)
- Apr. 2015 Professor, Graduate School of Innovation Studies, Tokyo University of Science (current)

Outside Director of the Board

Taigi Ito

- Jan. 1970 Joined Tsuji Audit Corporation
- May 1973 Registered as a Certified Public Accountant
- Feb. 1989 Representative Partner, MISUZU Audit Corporation
- Jul. 2004 Deputy Chairperson, The Japanese Institute of Certified Public Accountants (JICPA) (until Jun. 2007)
- May 2006 Executive Board Member, MISUZU Audit Corporation (until Jul. 2007)
- Apr. 2009 Professor, The Graduate School of Accounting, Waseda University (until Mar. 2013)
- Jan. 2012 Chairperson, Disciplinary Committee of JICPA (until Aug. 2016)
- Jun. 2014 Outside Corporate Auditor, MCHC
  Corporate Auditor, MCC (until Mar. 2017)
- Jun. 2015 Outside Director, MCHC (current)

Outside Director of the Board

Kazuhiro Watanabe

- Apr. 1974 Appointed as a Prosecutor
- Jul. 1998 Assistant Vice-Minister of Justice, Ministry of Justice
- Apr. 2001 Prosecutor, The Supreme Public Prosecutors Office
- Jan. 2002 Chief Prosecutor, The Nara District Public Prosecutors Office
- Sep. 2004 Chief Prosecutor, The Maebashi District Public Prosecutors Office
- Sep. 2005 Chief Prosecutor, The Nagoya District Public Prosecutors Office
- Jun. 2007 Chief Prosecutor, The Yokohama District Public Prosecutors Office
- Jul. 2008 Superintending Prosecutor, The Sapporo High Public Prosecutors Office (Retired in Jul. 2009)
- Sep. 2009 Registered as a lawyer
  Professor, The Law School of Tokai University (until Mar. 2017)
- Jun. 2010 Corporate Auditor, MPI (until Mar. 2017)
- Jan. 2011 Lawyer, Counselor, Higashimachi LPC (current)
- Jun. 2014 Outside Corporate Auditor, MCHC
- Jun. 2015 Outside Director, MCHC (current)

Outside Director of the Board

Hideko Kunii

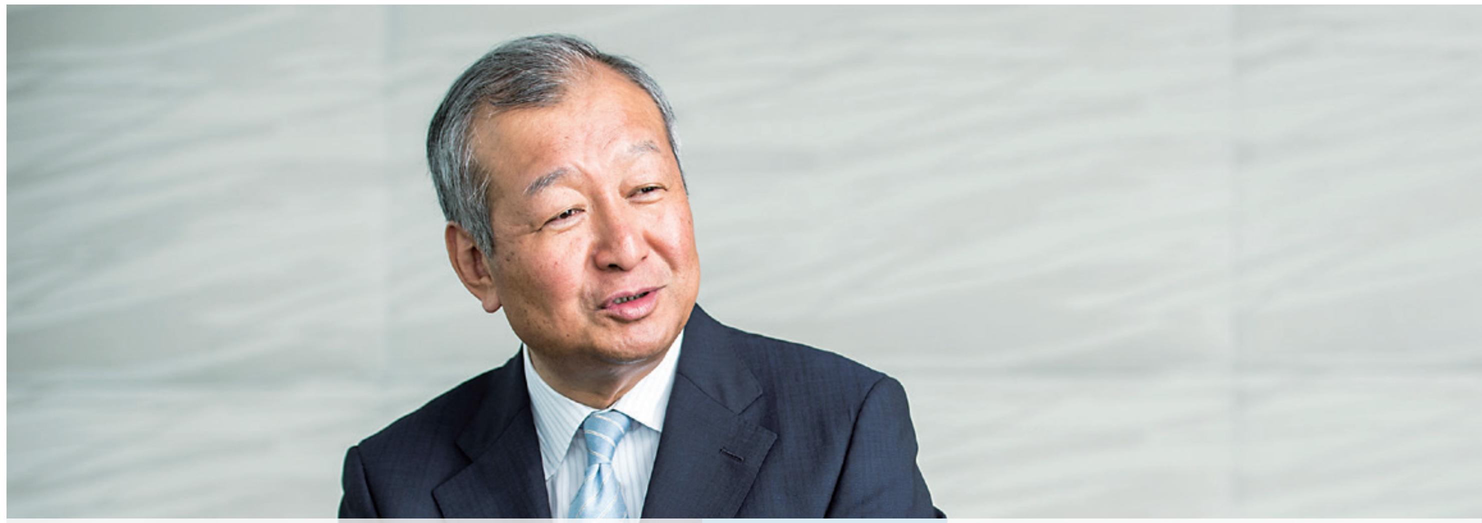
- May 1982 Joined Ricoh Company, Ltd.
- Jun. 2005 Corporate Senior Deputy CEO, Ricoh Company, Ltd. (until Mar. 2008)
- Apr. 2008 Chairperson, Ricoh Software Co., Ltd. (currently Ricoh IT Solutions Co., Ltd.)
- Apr. 2009 Associate Director, Ricoh Company, Ltd. (until Mar. 2013)
- Jul. 2009 Chairperson, Ricoh IT Solutions Co., Ltd. (until Mar. 2013)
- Apr. 2012 Professor, Graduate School of Engineering Management, Shibaura Institute of Technology (current)
- Apr. 2013 Deputy President, Shibaura Institute of Technology (current)
- Oct. 2013 Director, Center for Promotion of Educational Innovation Gender Equality Promotion Office, Shibaura Institute of Technology (current)
- Jun. 2015 Outside Director, MCHC (current)

Outside Director of the Board

Takayuki Hashimoto

- Apr. 1978 Joined IBM Japan, Ltd.
- Apr. 2000 Director of the Board, IBM Japan, Ltd.
- Apr. 2003 Managing Executive Officer, IBM Japan, Ltd.
- Jan. 2007 Senior Managing Executive Officer, IBM Japan, Ltd.
- Apr. 2008 Director of the Board, Senior Managing Officer, IBM Japan, Ltd.
- Jan. 2009 Director of the Board, President, IBM Japan, Ltd.
- May 2012 Director of the Board, Chairman, IBM Japan, Ltd.
- Apr. 2014 Chairperson, IBM Japan, Ltd.
- Jan. 2015 Vice Chairperson, IBM Japan, Ltd.
- Jun. 2016 Outside Director, MCHC (current)
- May 2017 Honorary Executive Advisor, IBM Japan, Ltd. (current)

Message from Outside Director



We will enhance advisory and governance functions in the Board of Directors and support persistent challenges aimed at growth.

Takayuki Hashimoto
Outside Director of the Board

Q1 Current state of MCHC

A year has passed since you assumed the post of outside director in the first year of the medium-term management plan *APTSIS 20*. How do you see the MCHC Group today?

A When I assumed this role, there were two major themes to be discussed. The first was redefining the roles of MCHC and operating companies to clarify what MCHC should do in its capacity. The second was determining how to execute management including the newly integrated company. As a holding company which owns under its umbrella the operating companies with large business scale and different industries, we have thoroughly discussed the major pillars of a growth strategy, namely, portfolio management, delegating authority to operating companies, synergies and management of overseas businesses. Now I recognize that our management framework has been developed over this past year. In that sense, we can move into the execution phase from here on out since the foundations for future growth are established.

Also, my honest impression was that MCHC has long been a bottom-up type company. Up to now, each of the operating companies has delivered various reports and it was the role of MCHC to consolidate them. However, under that structure, each operating company would only do what it was allowed. We have now devised a new management framework, in which MCHC is no longer a mere holding company; it now indicates the direction and goals of management, and plays the role of the headquarters. This is a substantial innovation. The question now is whether these management policies and goals will filter down to the front lines and function properly down the road.

Q2 Status of Board of Directors and Outside Director Liaison Committee

In fiscal 2016, the Board of Directors focused on promoting discussions concerning the medium-to long-term direction of management, strengthening the supervisory functions for the medium-term management plan, and further improving reporting items. How did the actual discussions go?

A Regarding the themes such as utilization of AI, digitization, health management and risk management, MCHC recognizes that it should determine the medium-to long-term direction of these areas and we actually discuss them. Moving forward, we will apply the discussion results across the operating companies and put them into practice.

In monitoring the progress of the medium-term management plan, we consider it indispensable to examine not only the result of KPIs but also the process of KPIs. For the businesses deviating below their targets, I have recommended that process reforms such as discussions with the executive side are necessary. Also, in the interest of enhancing the effectiveness of the Board of Directors, it is important to operate the Board of Directors more efficiently, by providing advance briefings for example, to ensure sufficient time to discuss essential issues. It is also important to thoroughly provide information by properly sharing discussions held by the Corporate Executive Officers Committee for example, in order to eliminate the asymmetry of information.

The directors discuss quite lively at the Board of Directors, where they feel comfortable to speak out. As an outside director, I should offer advice on internal common practices, and to that end, communicating with other outside directors regularly through the Outside Director Liaison Committee is productive. However, in terms of one area where the company needs to exercise caution, I think we need to discuss matters with one another thoroughly to ensure that conflicts do not develop between the inside and outside directors and create new value.

Q3 Your own role as outside director

Having held positions as the President and Chairperson of IBM Japan, Ltd., in light of your insight into corporate management and the utilization of ICT, how do you see your own role as an outside director at MCHC?

A An outside director has two roles. One is to fulfill an advisory role, and the other is a governance role. In the advisory role, I hope to create ideas related to IT, global operations and diversity based on my experiences. Generally, digitization of manufacturing sites and provision of products and services utilizing IT may have been beyond imagination of chemical companies. I would like to discuss with the newly assigned Chief Digital Officer (CDO) on how we can create new value by moving closer to those fields.

In terms of governance role, among other functions, as a member of the Nominating Committee, I proposed interviewing candidates and implementing assessments by a third-party organization as part of the process of appointing the leaders of the next generation. It is extremely important to clarify the nominating process and ensure its objectivity, and this will be the first time MCHC has incorporated third-party perspectives with regard to candidates. In the future, I also hope to explore new systems to provide education if a candidate lacks experience or skills in a certain area.

I have suggested to Chairperson Kobayashi and President Ochi that it is beneficial to make greater use of outside directors. The outside directors at MCHC are highly diverse and each is specialized in his or her own fields. I think that the knowledge of each director should be made the best of.

Q4 Expectations for MCHC Group in future

We started by asking you what you thought about the current state of the MCHC Group. Now we would like to ask you what expectations you have for the Group in the future, now that the foundations for future growth have been established.

A The direction as the Group, to provide solutions that meet the needs of the market, has already been shown, but in any event, in the times ahead we will have to transform from a product-out approach to an issue solution-oriented approach. I think the MCHC Group is highly capable of seeking out what the issues are. It is also engaged in aspirational research such as artificial photosynthesis where solar energy and photocatalysts are used to generate hydrogen and oxygen from water. We have to investigate what technology can be applied to solve an issue, and if such a technology does not exist, acquire it from outside by way of open innovation and suchlike. I expect that kind of process will be applied more in the future.

Another expectation is diversity. Diversity needs "inclusion" (to be accepted) for the first thing. Then, it moves towards the next phase; "innovation." An effect of the integration of the three companies is a mixture of human resources adept in different technologies and specialized fields. When this blend sparks discussion, I expect that new things will be created.

I would also like MCHC to make efforts with a mind to becoming a strong company. Chemical companies tend to be influenced by the external environment such as exchange rates and crude oil market conditions. To survive within that environment, I hope that MCHC maintains an insatiable desire to take on challenges for growth.

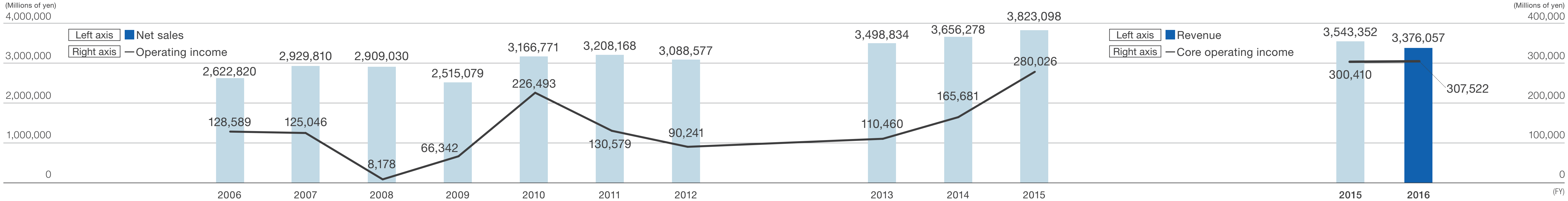
Financial Summary

J-GAAP (FY 2006 – FY 2015)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
For the Year										Millions of yen
Net sales	2,622,820	2,929,810	2,909,030	2,515,079	3,166,771	3,208,168	3,088,577	3,498,834	3,656,278	3,823,098
Operating income	128,589	125,046	8,178	66,342	226,493	130,579	90,241	110,460	165,681	280,026
Income (loss) before income taxes and minority interests in consolidated subsidiaries	137,802	217,791	(44,002)	43,311	169,552	127,474	82,900	116,594	165,621	198,248
Net income (loss) attributable to owners of the parent	100,338	164,064	(67,178)	12,833	83,581	35,486	18,596	32,248	60,859	46,444
Total comprehensive income	—	—	—	37,513	86,742	64,199	94,900	134,016	173,692	7,695
Capital expenditures	130,855	170,051	139,011	119,025	117,806	116,145	132,221	133,339	165,057	176,508
Depreciation and amortization	83,270	102,172	119,230	129,574	148,697	145,695	129,549	131,571	151,253	180,374
R&D expenditures	91,177	112,064	127,802	136,863	130,825	138,545	134,723	134,260	132,217	138,364
Net cash provided by (used in) operating activities	63,343	156,173	76,149	116,073	288,853	217,954	206,504	177,027	329,776	388,663
Net cash provided by (used in) investing activities	(133,434)	(177,985)	(189,233)	(327,006)	(101,064)	(63,404)	(169,758)	(159,789)	(277,223)	(202,796)
Net cash provided by (used in) financing activities	74,492	70,871	179,526	94,437	(149,493)	(164,146)	(26,250)	(8,307)	(2,061)	(156,957)
At Year-end										
Total assets	2,318,832	2,765,837	2,740,876	3,355,097	3,294,014	3,173,970	3,307,758	3,479,359	4,323,038	4,061,572
Property, plant and equipment	724,438	852,806	834,046	1,167,073	1,088,369	1,032,738	1,061,551	1,118,050	1,498,146	1,390,727
Short-term and long-term debt	739,673	822,520	1,033,239	1,454,126	1,304,589	1,164,128	1,198,799	1,258,186	1,603,595	1,465,752
Total net assets	758,752	1,095,927	940,114	1,032,865	1,114,003	1,144,954	1,203,316	1,314,870	1,588,601	1,554,528
Per Share										Yen
Net income (loss)—basic	73.25	119.51	(48.81)	9.32	58.72	24.06	12.61	21.89	41.40	31.70
Net assets	520.05	601.45	486.09	490.99	514.30	522.77	553.54	611.95	669.77	636.43
Cash dividends	14.00	16.00	12.00	8.00	10.00	10.00	12.00	12.00	13.00	15.00
Major Index										
Return on assets (ROA) (%)	6.1	8.5	(1.5)	1.4	5.1	3.9	2.6	3.4	4.2	4.7
Return on equity (ROE) (%)	14.6	21.3	(8.9)	1.9	11.6	4.6	2.3	3.7	6.4	4.8
Shareholders' equity ratio (%)	30.7	29.9	24.4	20.0	23.0	24.2	24.6	25.8	22.6	22.9
Other										
Number of employees	33,447	39,305	41,480	53,907	53,882	53,979	55,131	56,031	68,263	68,988

International Financial Reporting Standards (IFRS FY 2015 – FY 2016)

	2015	2016	Increase or decrease (%)	2016
For the Year		Millions of yen		Thousands of U.S. dollars
Revenue	3,543,352	**3,376,057**	(4.7%)	**30,143,366**
Core operating income	300,410	**307,522**	2.4%	**2,745,732**
Profit before tax	252,791	**258,343**	2.2%	**2,306,634**
Net profit attributable to owners of the parent	51,358	**156,259**	204.3%	**1,395,170**
Comprehensive income	34,302	**226,493**	560.3%	**2,022,259**
Capital expenditures	213,134	**206,482**	(3.1%)	**1,843,589**
Depreciation and amortization	182,656	**174,040**	(4.7%)	**1,553,929**
R&D expenses	126,782	**126,290**	(0.4%)	**1,127,589**
Net cash provided by (used in) operating activities	299,612	**396,643**	—	**3,541,455**
Net cash provided by (used in) investing activities	(234,078)	**(289,056)**	—	**(2,580,857)**
Net cash provided by (used in) financing activities	(40,945)	**1,411**	—	**12,598**
At Year-end				
Total assets	4,223,774	**4,463,547**	5.7%	**39,853,098**
Property, plant and equipment	1,403,437	**1,431,681**	2.0%	**12,782,866**
Interest-bearing debt	1,579,575	**1,693,742**	7.2%	**15,122,696**
Equity attributable to owners of the parent	972,197	**1,091,398**	12.3%	**9,744,625**
Per Share		Yen		U.S. Dollars
Basic earnings per share	35.06	**106.73**	204.4%	**0.95**
Equity attributable to owners of the parent per share	663.71	**758.30**	14.3%	**6.77**
Cash Dividends per share	15.00	**20.00**	33.3%	**0.18**
Major Index				
Return on assets (ROA) (%)	5.9	**5.9**	0%	—
Return on equity (ROE) (%)	5.2	**15.1**	190.4%	—
Ratio of equity attributable to owners of the parent (%)	23.0	**24.5**	6.5%	—
Other				
Number of employees	68,988	**69,291**	0.4%	—



Medium-term management plan transition: 2005–2007 *KAKUSHIN* Plan: Phase 2 | 2008–2010 *APTSIS 10* | 2011–2012 Step 1 | 2013–2015 Step 2 *APTSIS 15* | *APTSIS 20*

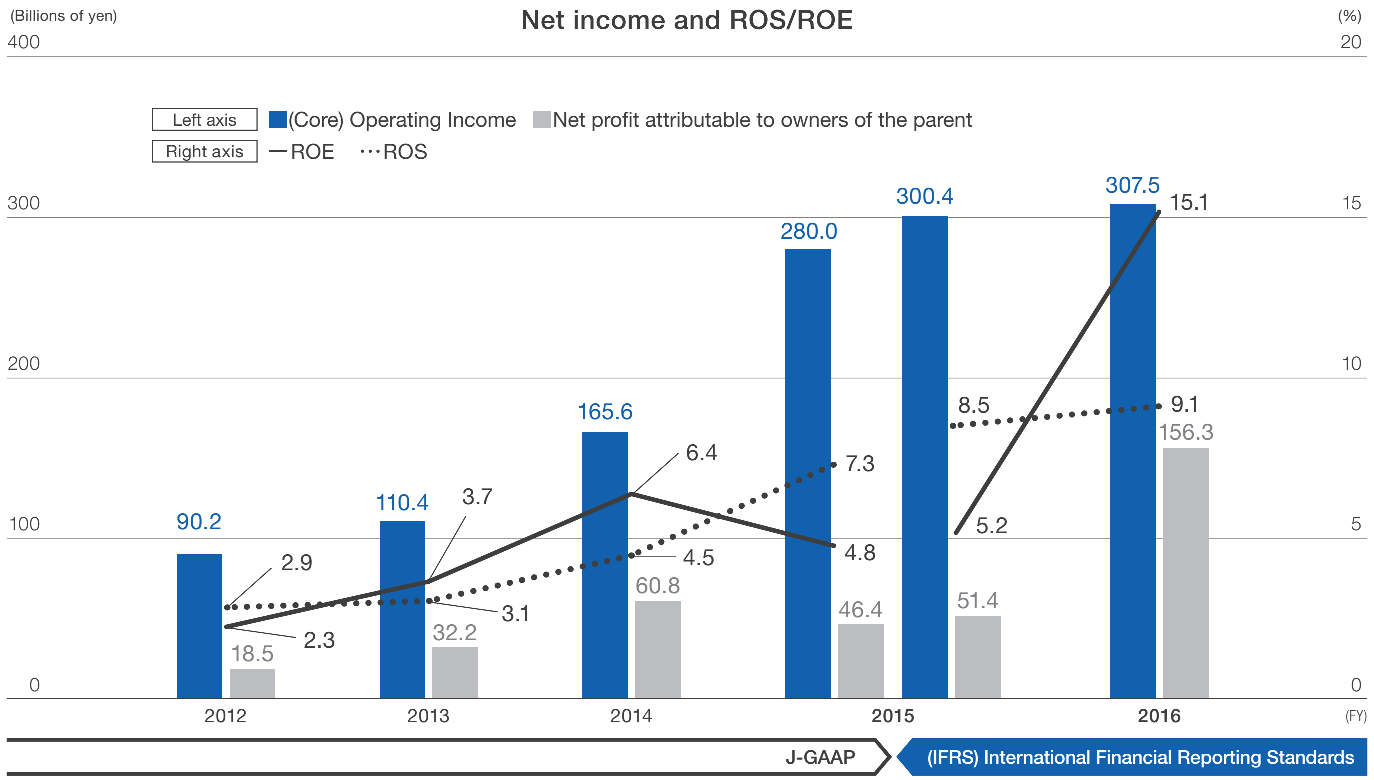
(Notes) 1. In this report, the fiscal year refers to the period beginning April 1 and ending March 31 of the following year. Fiscal 2016 refers to the year ended March 31, 2017.
2. U.S. dollar amounts are converted from yen at the rate of ¥112 = U.S. $1.00.
3. Return on assets (ROA)(%) is calculated by dividing profit before tax and the average of the beginning and ending balances of total assets.
4. Return on equity (ROE)(%) is calculated by dividing net profit attributable to owners of the parent and the average of the beginning and ending balances of equity attributable to owners of the parent.
5. When non-recurring depreciation on non-current assets is recorded, the amount is included in depreciation and amortization.

Financial/Non-Financial Highlights

Financial Index

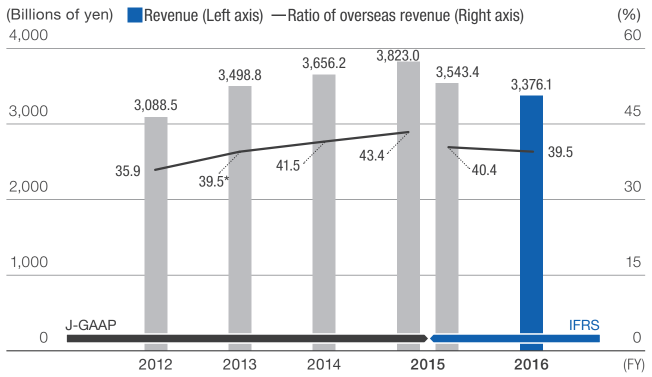
With the start of the new medium-term management plan *APTSIS 20*, we have adopted IFRS (International Financial Reporting Standards) beginning in fiscal 2016. For fiscal 2015, the IFRS-base figures are also indicated for comparison.

Core operating income is calculated as operating income (loss) excluding certain gains and expenses attributable to non-recurring factors (losses incurred by business withdrawal and contraction, etc.). We disclose core operating income as our unique gains/losses incurred by staged gains/losses, considering the comparability with the operating income of J-GAAP.



As a result of the business portfolio reforms along with the previous medium-term management plan *APTSIS 15* for the period from fiscal 2011 to fiscal 2015, we posted record operating income in fiscal 2015 based on the Japanese standards. In fiscal 2016, despite decreased profit associated with a stronger yen, the adverse effect of NHI drug price revision in the Health Care domain and expansion of the scale of periodic repairs in the Industrial Materials domain, we increased core operating income further from fiscal 2015 thanks to the increase in sales volume mainly in the Performance Products domain. As a result, we increased core operating income by ¥7.1 billion (+2.4% y/y) to ¥307.5 billion and improved ROS by 0.6% y/y to 9.1%. Net profit attributable to owners of the parent increased by ¥104.9 billion (+204.3% y/y), to ¥156.3 billion, partly due to much lower taxes associated with the recording of deferred tax assets. As a result, ROE rose substantially to 15.1%.

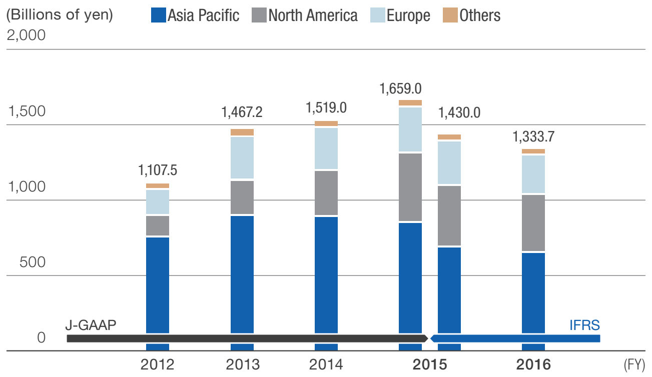
Revenue and ratio of overseas revenue



Revenue decreased by ¥167.3 billion (-5% y/y), primarily because sales prices fell due to lower raw material prices and impacts of the strong yen (-11.5¥/$ y/y). The ratio of overseas revenue also decreased to 39.5% (-0.9% y/y).

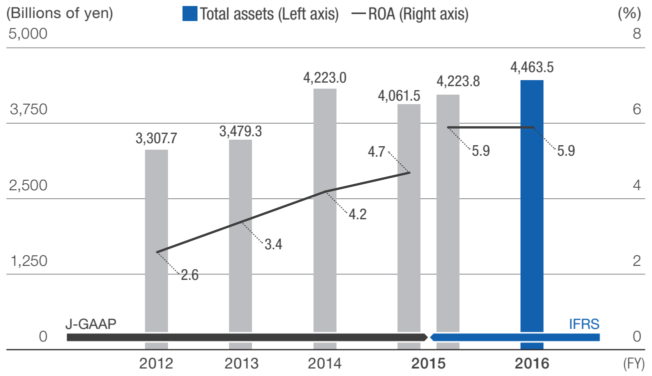
* The influence of ¥145.6 billion due to the unification of the accounting period is excluded.

Overseas revenue by region



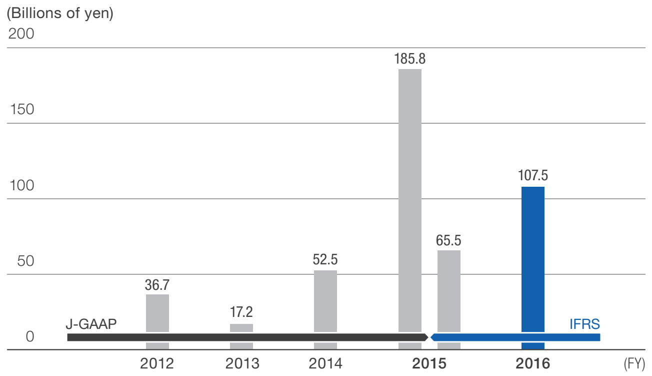
Despite the increase of revenue due to acquisitions in the industrial gases business and growth of the MMA business mainly in Asia, as well as the increase in sales volume principally in the Performance Products domain, overseas revenue decreased from the year earlier, primarily because of the huge impact of exchange loss on foreign currency due to a stronger yen.

Total assets and ROA



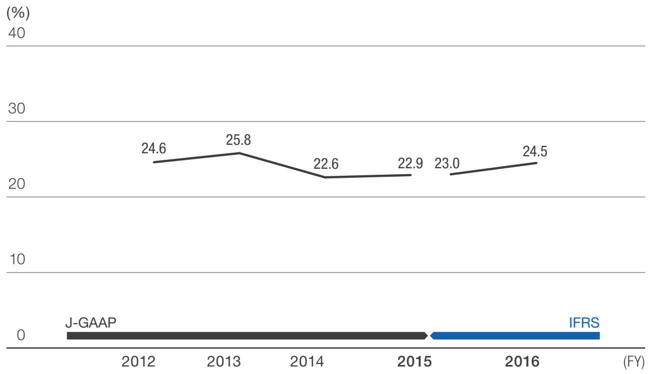
Total assets were ¥4,463.5 billion, rising ¥239.7 billion from the year earlier, primarily because of the increase in assets due to acquisitions in the industrial gases business. ROA was 5.9%, about the same level as in the previous fiscal year, due to the increase in income.

Free cash flow



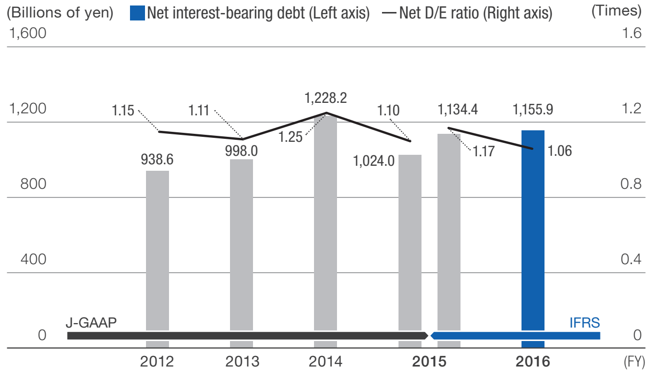
As a result of the increase in profit before tax, cash flows from operating activities improved. In cash flows from investing activities, outflows increased due to investments and loans and capital expenditures associated with M&A mainly in the industrial gases business, but FCF improved by ¥42 billion y/y to ¥107.5 billion, exceeding the target of ¥100 billion at the beginning of the fiscal year.

Ratio of equity attributable to owners of the parent



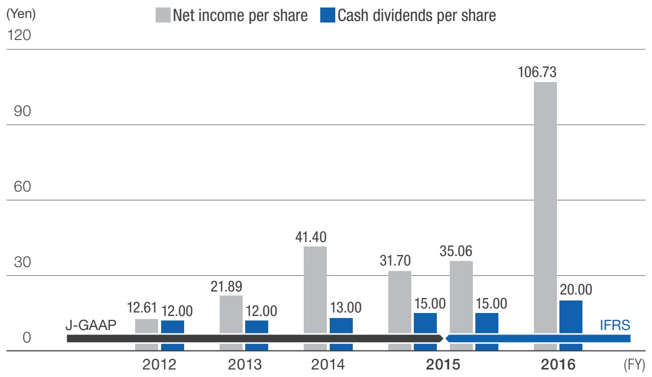
As a result of increase in income, of total liabilities and assets, equity attributable to owners of the parent increased by ¥119.2 billion from the previous fiscal year to ¥1,091.4 billion. Consequently, the ratio of equity attributable to owners of the parent was 24.5%, up 1.5% from the previous fiscal year. We will continuously aim to achieve 30%, the target set in the *APTSIS 20*.

Net interest-bearing debt and Net D/E ratio



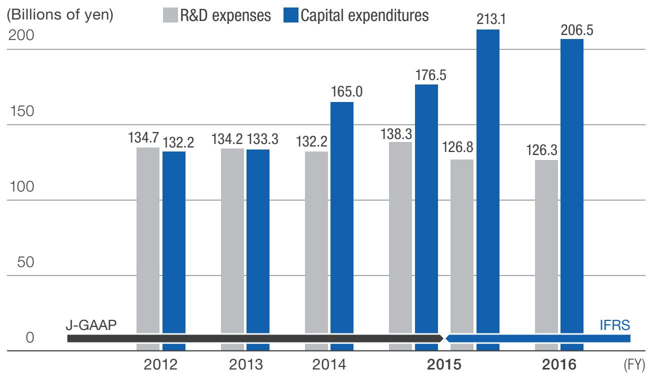
Net interest-bearing debt stood at ¥1,155.9 billion. It was up by ¥21.5 billion y/y because of asset purchases in the industrial gases business, however, partly because of the increase in equity attributable to owners of the parent due to the increase in income, the net D/E ratio was 1.06, improving by -0.11 y/y. We will continue our efforts to achieve the target of 0.8 set in the *APTSIS 20*.

Net income per share and cash dividends per share



Net income per share was ¥106.73, primarily because of growth in income. Cash dividends per share was ¥20 per year, up ¥5 y/y, based on a comprehensive evaluation of our financial situation, future business development and improving shareholder returns.

R&D expenses and capital expenditures

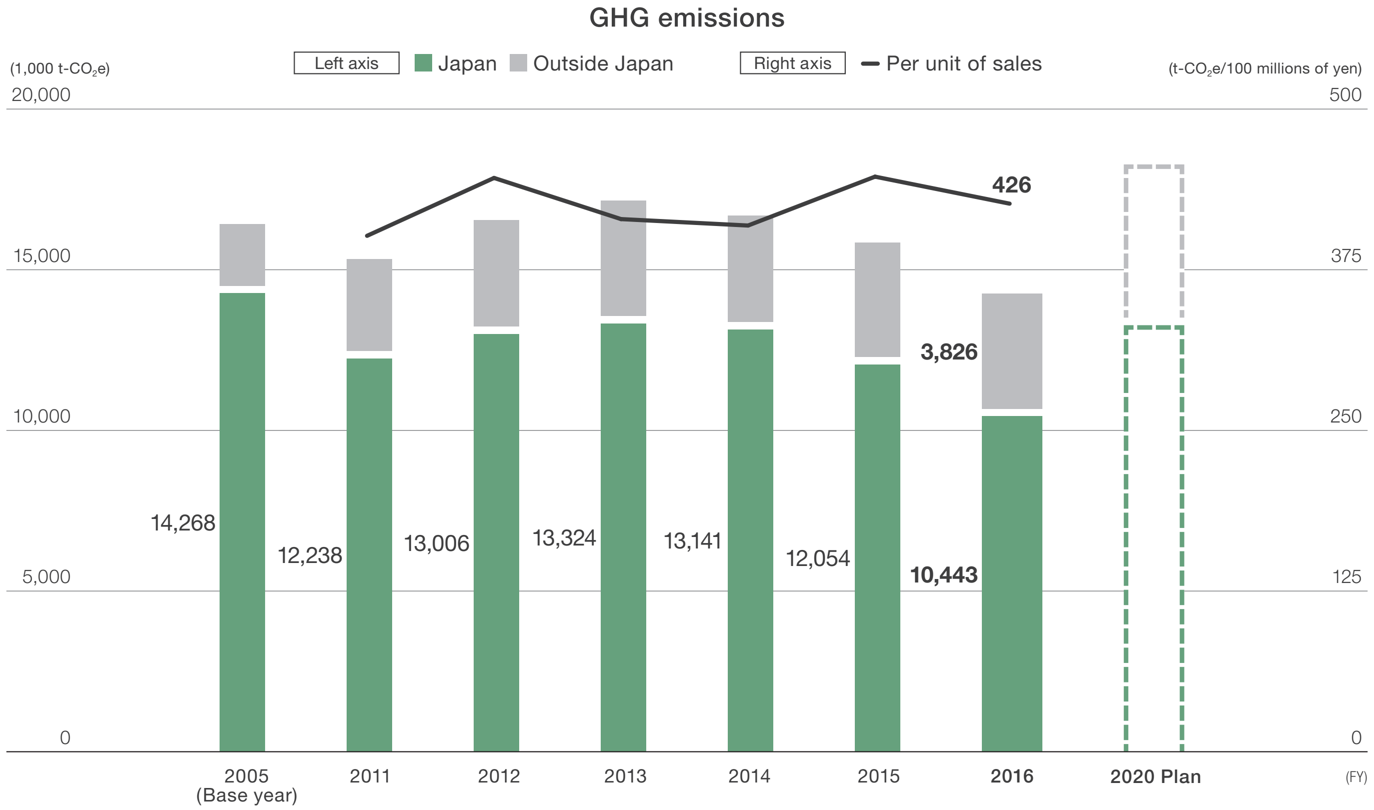


R&D expenses were ¥126.3 billion and we continued to work on improving our current technologies and on developing new technologies. Capital expenditures decreased by ¥6.6 billion y/y, which had recorded an increase in capital expenditures for the introduction of technologies in the Health Care domain in the preceding period. In total, capital expenditures reached ¥206.5 billion, mainly reflecting the maintenance and updating of facilities, especially in the Industrial Materials domain, as well as the construction of a new plant in the Middle East in the MMA business.

Financial/Non-Financial Highlights

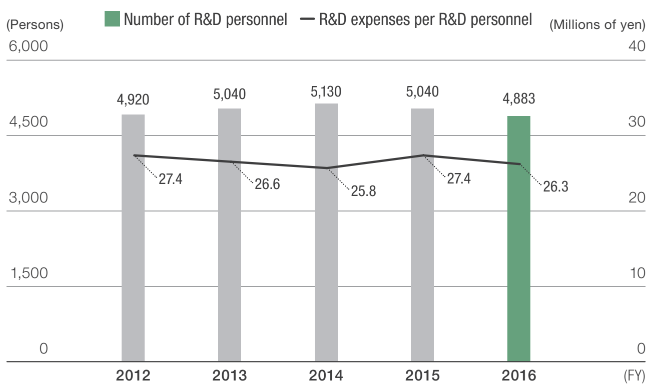
Non-Financial Index

GHG emissions



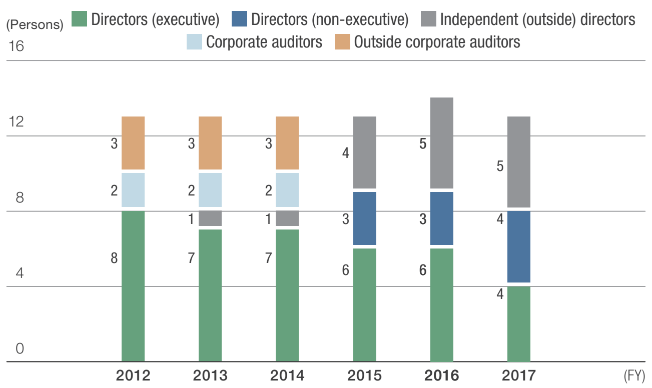
GHG emissions in fiscal 2016 (Scope 1 + Scope 2) were 14,269,000 t-CO$_2$e, per unit of sales was 426t-CO$_2$e/100 millions of yen. Emissions from the four main operating companies and their domestic groups was 10,443,000 t-CO$_2$e, and 1,611,000 t-CO$_2$e decreased from the previous fiscal year. During fiscal 2016, in the course of smooth operations, we steadily implemented measures including energy conservation efforts to reduce GHG emissions, and contributed to reducing overall Group emissions by restructuring the Mizushima naphtha cracker, withdrawing from the terephthalic acid business (in India and China), and so on. Toward achieving the 2030 reduction targets set by the Paris Agreement adopted at COP21, we have devised and promoted measures to reduce GHG emissions.

Number of R&D personnel and R&D expenses per R&D personnel



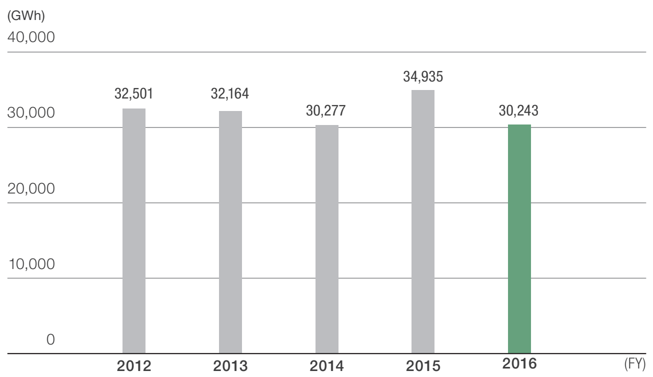
The number of R&D personnel in fiscal 2016 was 4,883, a reduction of 157 from the previous fiscal year. R&D expenses per personnel were ¥26.3 million, a decrease of ¥1.1 million.

Number of directors and outside directors



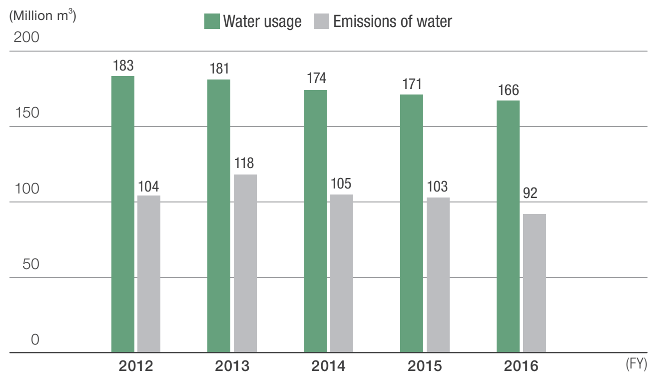
MCHC transitioned to a company with a nominating committee, etc. in June 2015.

Energy consumption



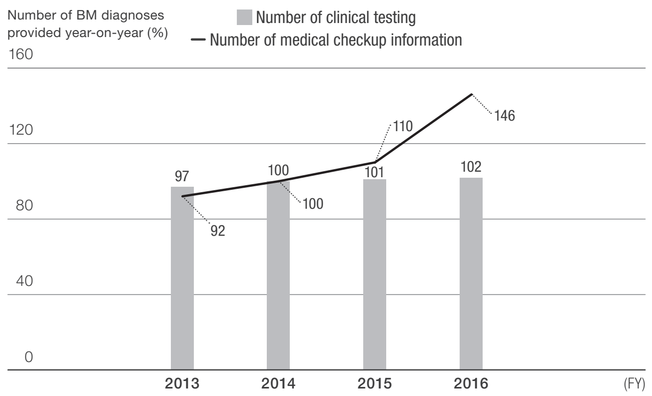
In fiscal 2016, energy consumption in Japan was 30,243GWh. By promoting the stable operation of processes together with energy-saving measures, we will further accelerate the reduction in energy consumption. In fiscal 2016, the calculation method is revised to respond to global standard. Regarding previous period's results, the recalculated figures are plotted in the graph.

Water usage and emissions of water



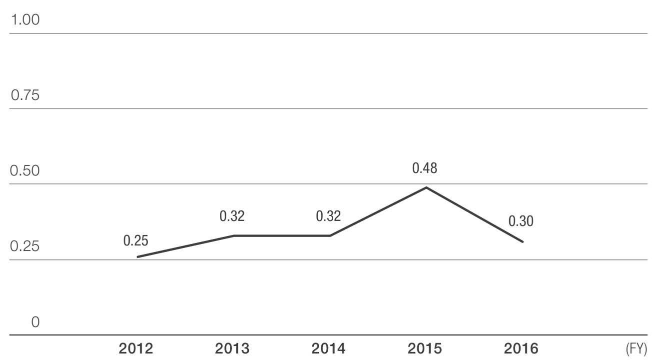
In fiscal 2016, we used 166 million m^3 of water and discharged 92 million m^3 of water in Japan, a reduction of 5 million m^3 and 11 million m^3 from the previous fiscal year, respectively. We will make progress with efforts to effectively utilize water resources and reduce consumption in our corporate activities, and continue to contribute to the improved sustainability of water resources.

Number of clinical testing and medical checkups / Heath information



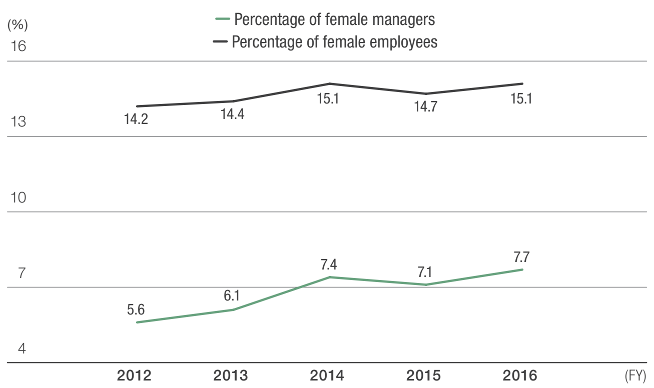
The number of clinical testings and health checkups or health information provided was 102% and 146% respectively for each MOS Indices compared with BM year (fiscal 2014). We will appropriately respond to the rising interest in health and trends such as increased self-medication, and aim to achieve the fiscal 2020 targets set as MOS Indices.

Lost-time injuries frequency rate (LTIFR)



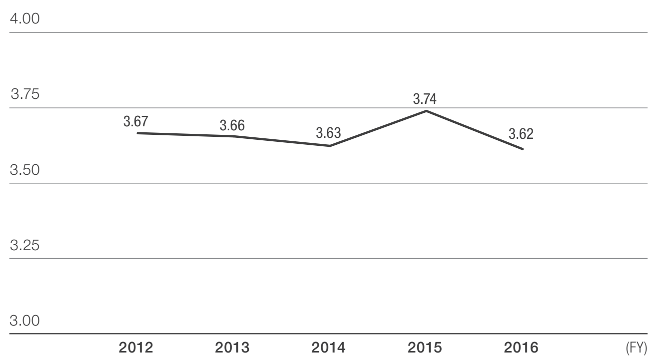
Due to a decrease in the number of lost-time accidents, the index reached 0.30 point, improving by 0.18 point from the previous fiscal year. By thoroughly enforcing measures to prevent recurrence and employing various measures to ensure work safety, we are striving to reduce the risks of accidents and the number of occurrence.

Percentage of female employees / Percentage of female managers



The percentages of female employees and female managers were 15.1%, an increase of 0.4%, and 7.7%, an increase of 0.6% respectively, compared to the previous fiscal year. We have continued to promote a range of measures aimed at female empowerment, and in recent years the percentage of female employees among those joining main career track positions has trended upwards.

Employee satisfaction



Employee satisfaction was 3.62 points, a 0.12 point drop compared to the previous fiscal year. Since fiscal 2011, employee satisfaction has remained at a largely favorable level. We will seek to further improvement by actively promoting related measures including health management and workstyle reform.

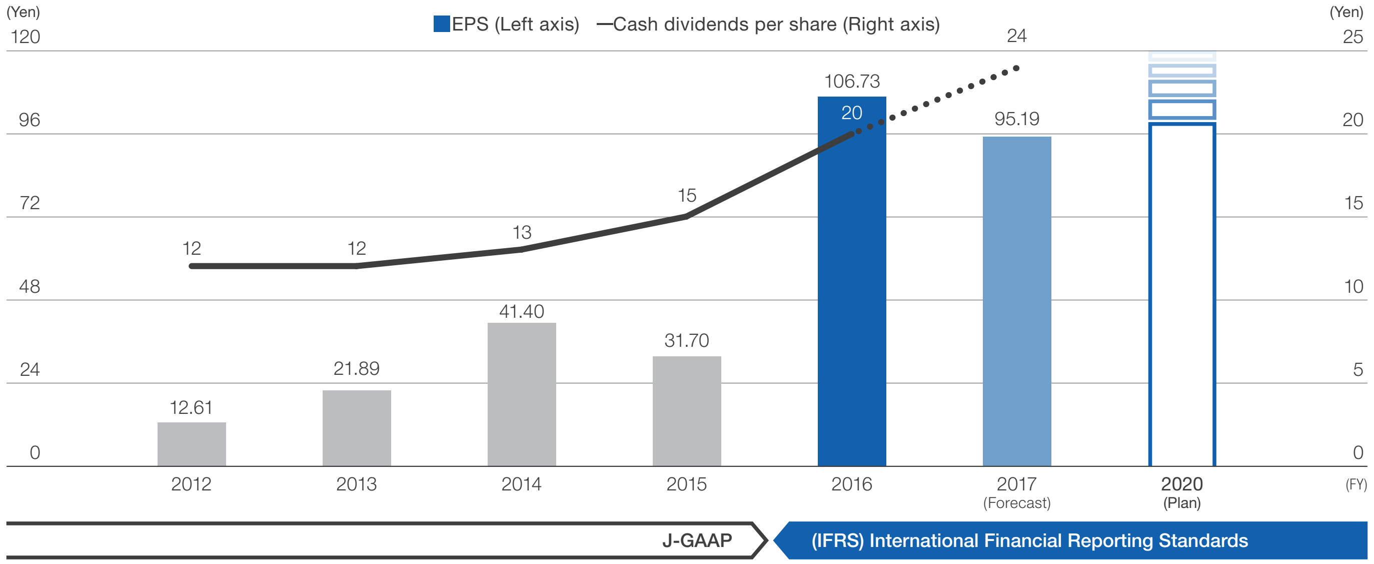
Shareholder Information

Basic Policy on Shareholder Returns

Aim to improve shareholder value by enhancing corporate value
In dividend policy, consider the balance between growth investment and improving financial position

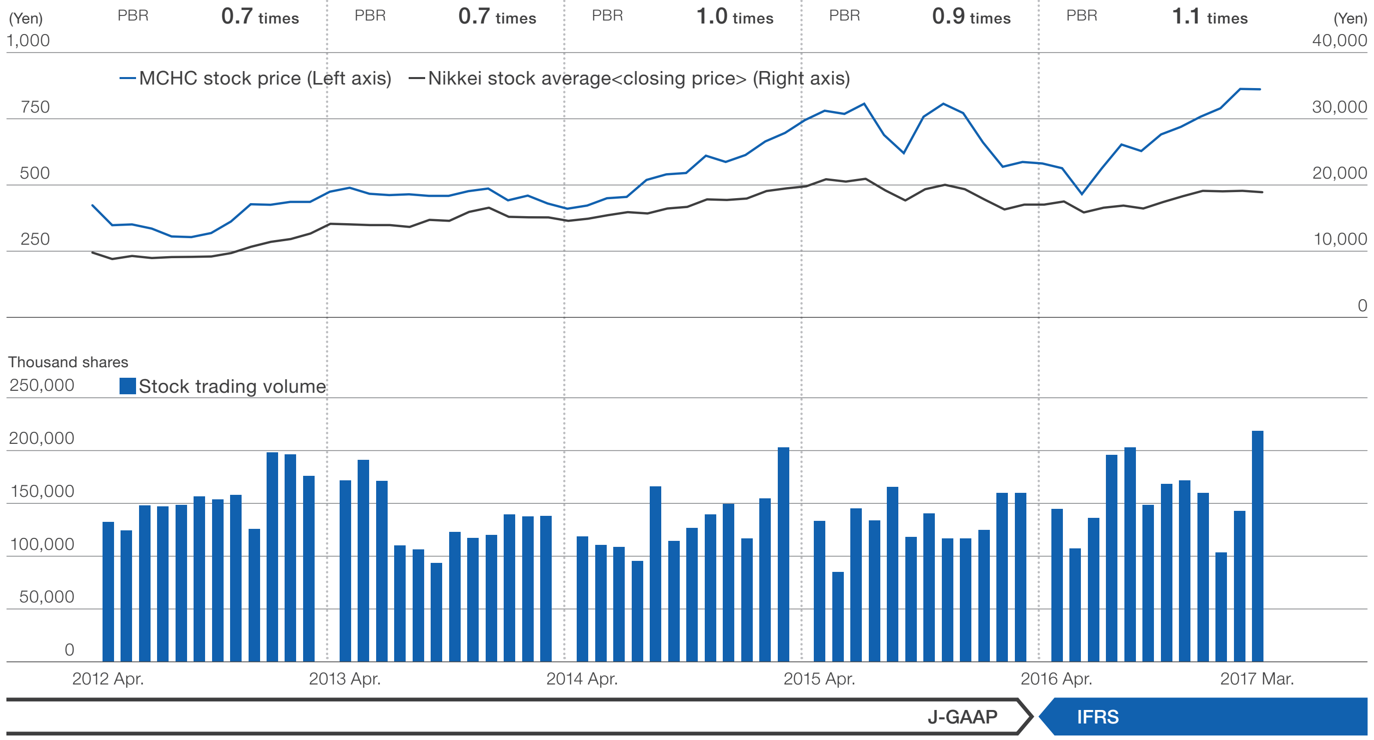
- Target a consolidated dividend payout ratio of 30% as a benchmark, taking the medium-term profit into account
- Aiming for making stable payment of dividends

EPS / Cash dividends per share



Stock Price/Stock Trading Volume

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Stock price	¥435	¥429	¥698.6	¥587.5	¥861.4
PER	34.4 times	19.5 times	16.8 times	18.5 times	8.1 times
PBR	0.7 times	0.7 times	1.0 times	0.9 times	1.1 times



* Stock price: As of March 31 PER: Share price as of end of March/Basic earnings per share (Net income (loss)-basic per share until fiscal 2015) PBR: Share price as of March 31/Equity attributable to owners of the parent per share (Net assets per share until fiscal 2015)

Stock Information (As of March 31, 2017)

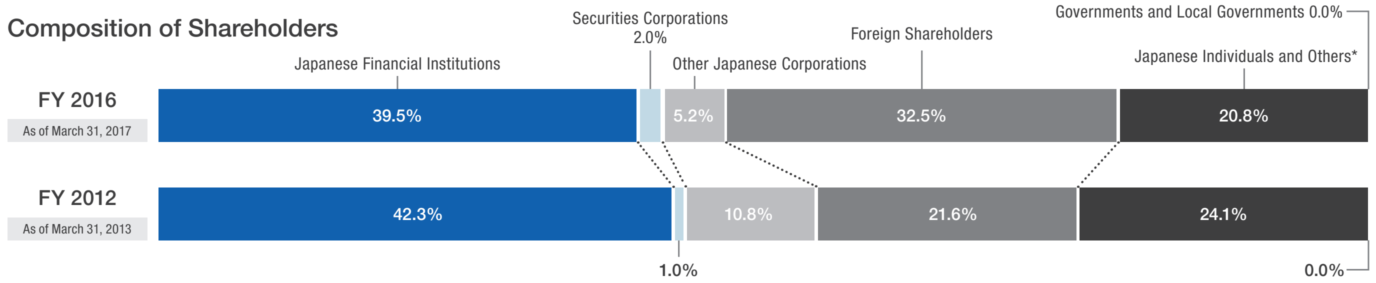
Stock listing	Tokyo Stock Exchange
Securities code	4188
Shares per unit	100
Authorized shares	6,000,000,000
Outstanding shares	1,506,288,107
Number of shareholders	165,467
General meeting of shareholders	Annually in June
Transfer agent	Mitsubishi UFJ Trust and Banking Corporation

Major Shareholders

Name	Number of Shares (Thousands)	Percentage (%)
The Master Trust Bank of Japan, Ltd. (Trust account)	90,090	6.3
Japan Trustee Service Bank, Ltd. (Trust account)	69,593	4.8
Meiji Yasuda Life Insurance Company	64,389	4.5
Nippon Life Insurance Company	42,509	3.0
Japan Trustee Service Bank, Ltd. (Trust account 5)	25,928	1.8
The Bank of Tokyo-Mitsubishi UFJ, Ltd.	24,149	1.7
Tokio Marine & Nichido Fire Insurance Co., Ltd.	23,338	1.6
State Street Bank West Client-Treaty 505234	21,780	1.5
Japan Trustee Service Bank, Ltd. (Trust account 4)	21,411	1.5
State Street Bank and Trust Company 505225	21,037	1.5

(Notes) 1. In addition to the above, MCHC holds 67,025 thousand shares of treasury stock, but these shares are non-voting pursuant to the provisions of Article 308, Paragraph 2 of the Companies Act.
2. Percentage is calculated excluding treasury stock (67,025 thousand shares).
3. In addition to the above, equity investments of The Bank of Tokyo-Mitsubishi UFJ, Ltd. in MCHC include 2,375 thousand shares of stock (representing a percentage of 0.2%) held in the name of "The Nomura Trust and Banking Co., Ltd. (Retirement Benefit Trust The Bank of Tokyo-Mitsubishi UFJ Account)" over which The Bank of Tokyo-Mitsubishi UFJ, Ltd. retains the right to issue instructions regarding the exercise of the relevant voting right.

Composition of Shareholders



* Shares held by the Company as treasury stock (fiscal 2012: 2.0%, fiscal 2016: 4.4%) are included in "Japanese Individuals and Others."

IR Report

MCHC has an active and constructive dialog with shareholders, customers and other stakeholders through various opportunities and aims to cooperate for realization of *KAITEKI* by sharing issues and goals. In dialog with shareholders and investors, we will ensure appropriate disclosure so as to gain the trust of our shareholders and encourage long-term holding of our shares. We also intend to engage in active dialog with shareholders and reflect it in our corporate activities.

Activities		2016 Apr-Jun	2016 Jul-Sep	2016 Oct-Dec	2017 Jan-Mar
1 General Meeting of Shareholders		Held on June 27, 2017 Attendance: 1,535 persons (Reference: 1,714 attended in 2016)			
2 For domestic institutional investors and analysts	IR briefings	June: First IR Day "Briefings on Major Businesses"		Dec: Business briefings "Update on the Medium-term Management Plan"	
	Top management's dialog with investors	May: Small meetings May-Jun: Visits to investors	July-Sep: Visits to investors	Dec: Small meetings Oct: Visits to investors	
	Conference call, following the financial results announcement	Held in May	Held in Aug	Held in Nov	Held in Feb
	Visit to operating sites		Sep: U.S.		Jan: Mizushima, Tokuyama district
3 For individual investors		Held 14 briefings on business summary and future strategy for individual investors (hosted by securities companies) in 14 major cities (Total attendance: 2,249 investors)			
4 For overseas investors	Overseas road show by top management	Jun: HK, Singapore	Jul: U.K., U.S. Jul: Europe Sep: U.S.		
	Dialog at investors conferences	Apr: Credit Suisse Securities (HK)	Sep: Mizuho Securities, Merrill Lynch Japan Securities (Japan)	Nov: Nomura Securities (Japan)	

Overview of Business Domains

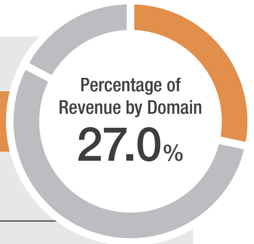
Overview of Business Domains

* Figures for fiscal 2016 do not include discontinued operations.

Percentage of Revenue by Domain | Revenue / Revenue Growth Rate | (Core) Operating Income / (Core) Operating Margin | Total Assets / ROA* | Capital Expenditures / Depreciation and Amortization | R&D expenses / Ratio of R&D expenses to Revenue

* ROA=(Core) Operating income / Total Assets (Annual average)

Performance Products Domain



Revenue

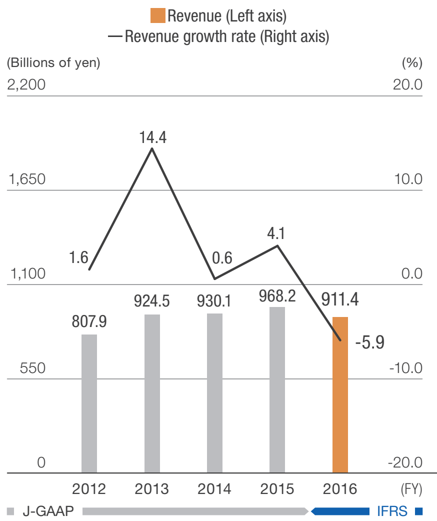
¥911.4 billion

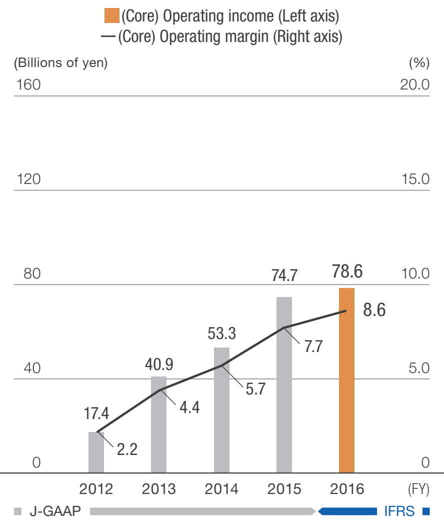
Electronics Applications

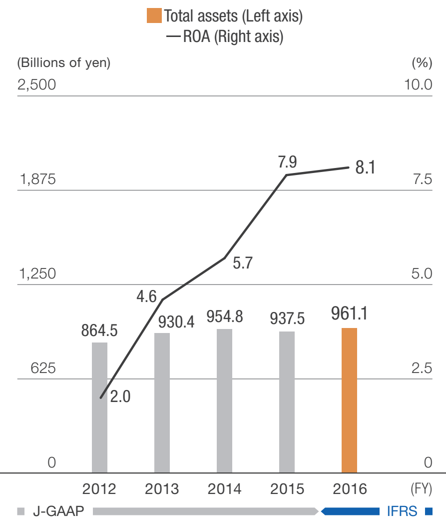
3.1%

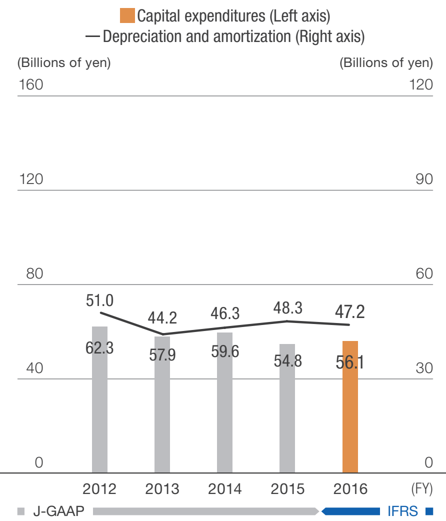
Designed Materials

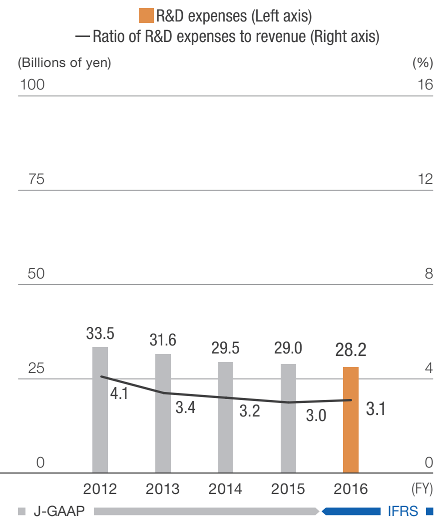
23.9%



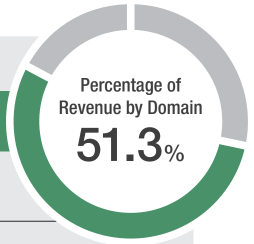








Industrial Materials Domain



Revenue

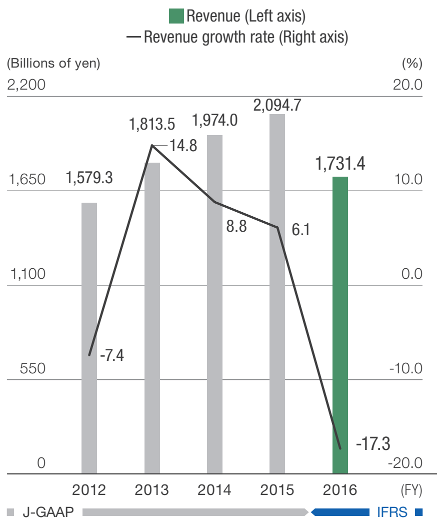
¥1,731.4 billion

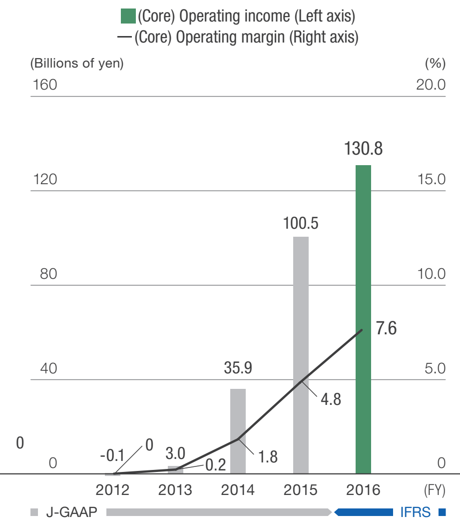
Polymers

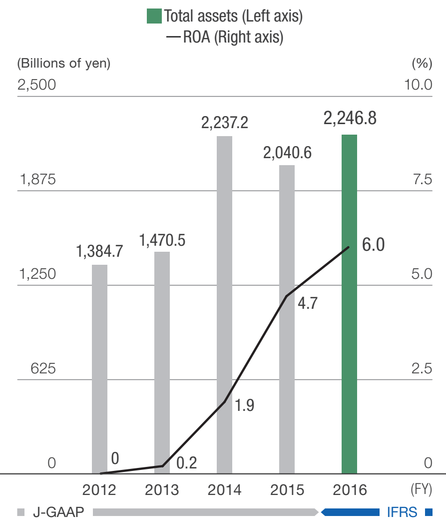
20.9%

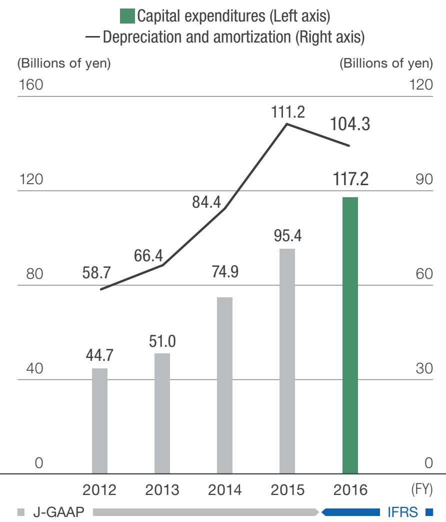
Chemicals

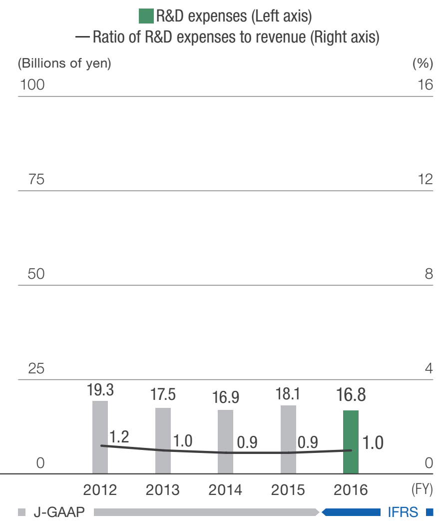
30.4%



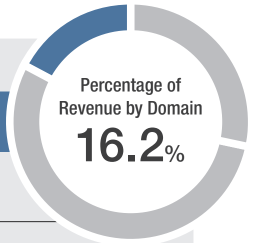








Health Care Domain

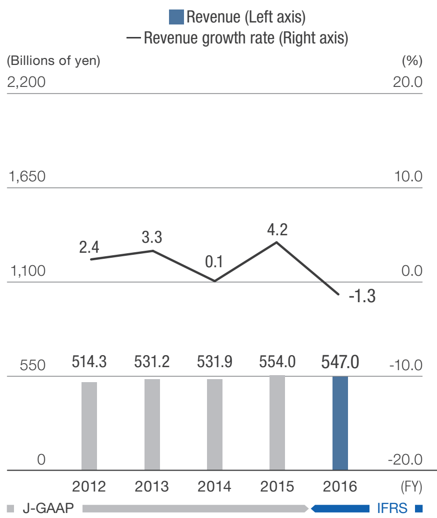


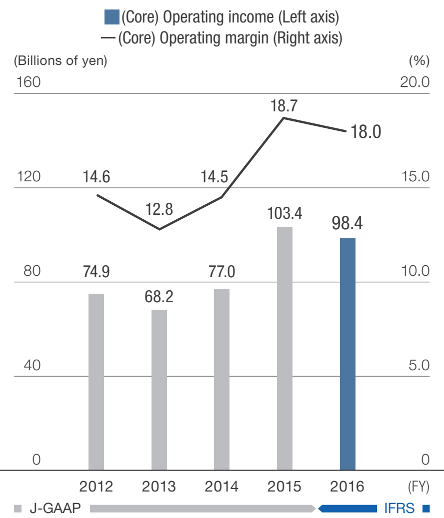
Revenue

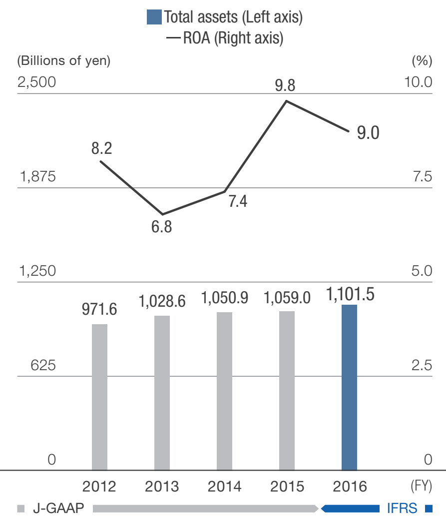
¥547.0 billion

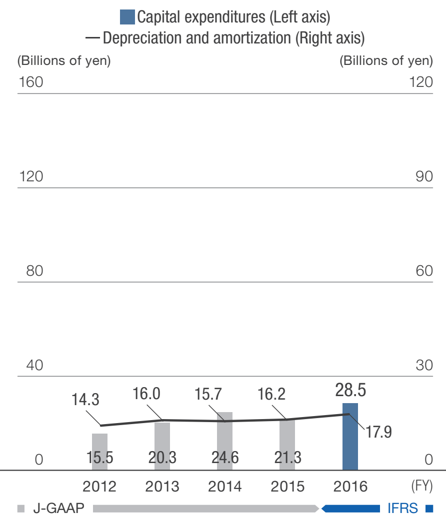
Health Care

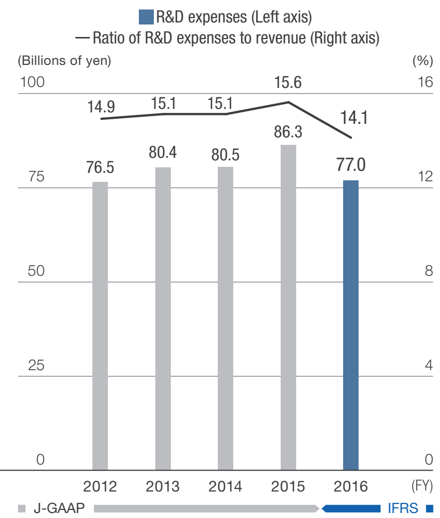
16.2%











Fiscal 2016 Results by Domain

Performance Products Domain

Electronics Applications

The segment posted a decrease in both revenue and income. Revenue fell ¥11.0 billion year-on-year, to ¥104.7 billion, and the core operating loss widened ¥1.9 billion year-on-year, to ¥2.9 billion.

Revenue and core operating income decreased, reflecting lower sales prices in electronics-related materials including display materials and the impact of the strong yen, in addition to lower sales volumes of optical photoconductor (OPC) drums and toners, despite the effects of cost reductions in information materials.

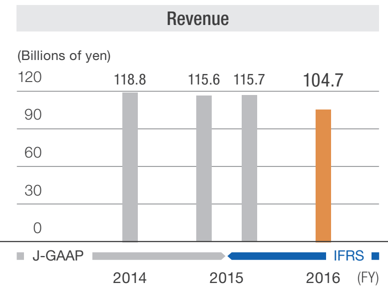
Designed Materials

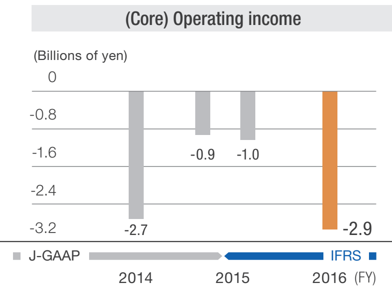
The segment posted decreased revenue and increased income. Revenue was down ¥18.9 billion, at ¥806.7 billion. However, core operating income rose by ¥6.5 billion, to ¥81.5 billion.

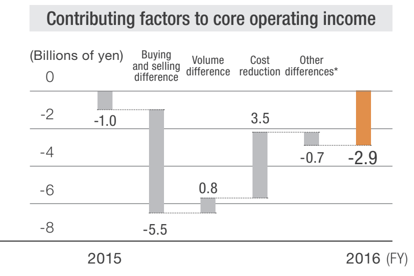
In polymer processing products, revenue decreased due to the impact of the strong yen and lower sales prices, despite higher sales volumes of displays film and other products. In fine chemicals, demand of coating materials and other products remained generally firm. In battery materials, sales volumes for automobile batteries increased. In composite materials, revenue decreased due to the impact of the strong yen, despite higher sales volumes of alumina fibers. In food ingredients, revenue increased, supported by the full-year revenue contribution from Eisai Food & Chemical Co., Ltd. which was made into a consolidated subsidiary in the fourth quarter of fiscal 2015. In fibers, sales volumes decreased substantially mainly due to a deteriorating export environment. Core operating income grew with higher sales volumes as a whole and other factors, despite the impact of the strong yen.

Performance Products

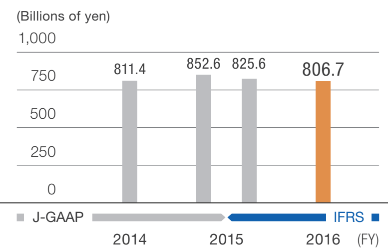
Electronics Applications

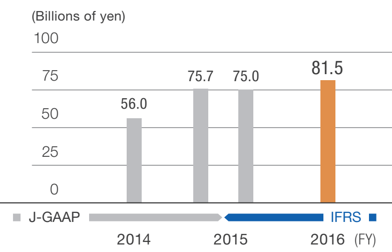


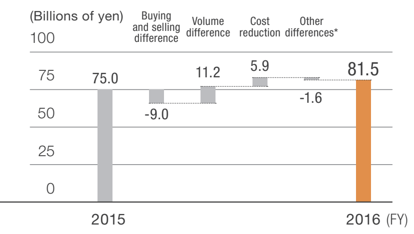




Designed Materials







* Other differences include difference in receipt and delivery, and difference in profit and loss of investments accounted for using the equity-method.

Industrial Materials Domain

Chemicals

The segment recorded decreased revenue and increased income. Revenue decreased by ¥56.4 billion, to ¥1,025.2 billion. Core operating income was up ¥1.2 billion, at ¥58.9 billion.

In basic petrochemicals and chemical derivatives, revenue decreased, reflecting lower sales prices stemming from a decline in raw material prices, as well as a larger scale of periodical turn around at the ethylene facilities compared to the previous year. In carbon products including coke and others, revenue increased due primarily to increasing sales price associated with a sharp rise in coking coal prices. In industrial gases, revenue decreased mainly due to the strong yen, despite the inclusion of the earnings of business which we acquired from Air Liquide in the U.S. starting in the second quarter of fiscal 2016. Core operating income rose due to factors including the effects of business acquisition from Air Liquide and a decline in raw material prices in industrial gases, despite the larger scale of periodical turn around in basic petrochemicals and chemical derivatives, in addition to a slump in the needle coke market.

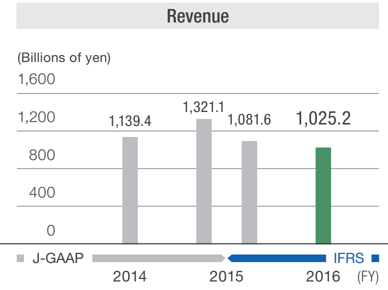
Polymers

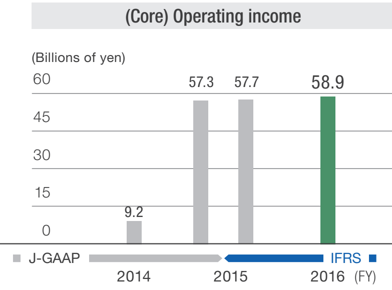
The segment posted decreased revenue and increased income. Revenue was down ¥60.1 billion, at ¥706.2 billion. Core operating income grew ¥15.5 billion, to ¥71.9 billion.

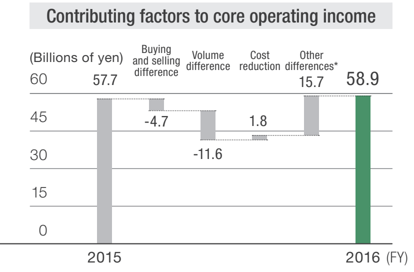
In synthetic resins, revenue decreased due to the facts that sales prices of polyolefin and other synthetic resins declined reflecting a lower raw material prices compared to the previous year and that MMA monomer was affected by the strong yen despite continued steady demand. Core operating income increased due to continued steady market conditions of MMA monomer, despite the impact of a larger scale of periodical turn around of facilities for polyolefin and other synthetic resins.

Industrial Materials

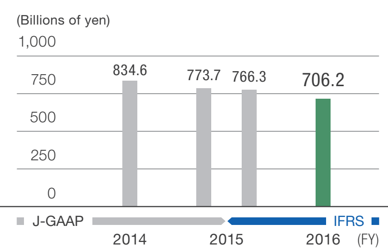
Chemicals

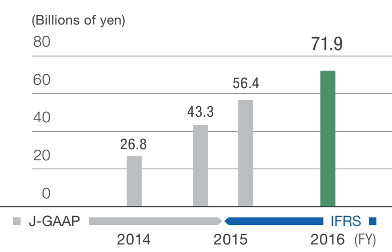


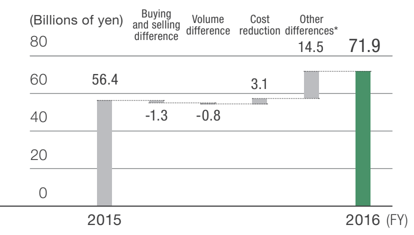




Polymers







Health Care Domain

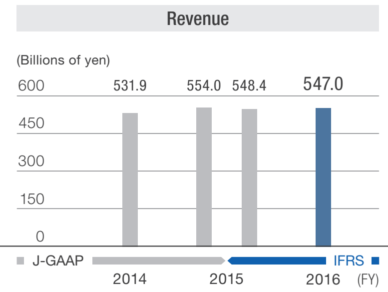
Health Care

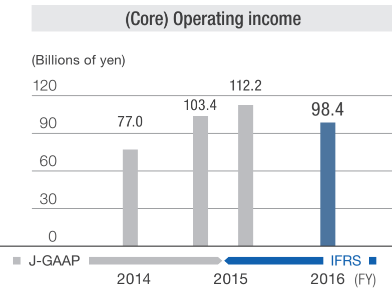
The segment recorded decline in both revenue and income. Revenue totaled ¥547.0 billion, a decrease of ¥1.4 billion. Core operating income was down ¥13.8 billion, at ¥98.4 billion.

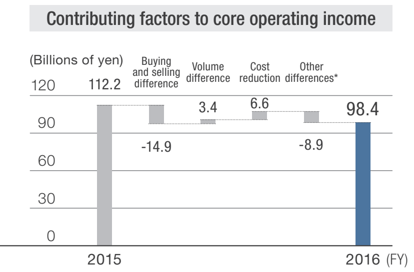
Pharmaceuticals, despite the impact of NHI drug price revision in April 2016, recorded growth in revenue due to higher sales volumes of *Simponi*, a treatment for rheumatoid arthritis, and vaccines in Japan, and thanks to an increase in royalty revenues from *Gilenya*, a treatment for multiple sclerosis, which was launched overseas. Revenue from clinical testing and diagnostic reagents, pharmaceutical development support, and pharmaceutical formulation materials, fell due in part to decreased sales volumes of pharmaceutical formulation materials. Core operating income decreased mainly because of the effect of NHI drug price revision, despite the increased revenue in the pharmaceutical business.

Health Care

Health Care







Overview of Business Segments I Performance Products Domain

Performance Products

Performance Products Domain

Focusing on five growing markets and seeking to orchestrate the Group's wide range of products and technologies while pursuing differentiation and improved performance, we will offer diverse solutions to each market.

	Focus Markets (Domains)	Major Business Domains
1	Automobiles, Aircraft (Mobility) (Lightweight composites, Environment-friendly materials)	Advanced polymers / High-performance chemicals / Advanced moldings & composites
2	Packaging, Labels, Films (Food packaging films, Industrial films)	Advanced polymers / High-performance films
3	IT, Electronics, Displays (Flat panel display materials, Semiconductor-related materials)	Information, Electronics & Display / Advanced moldings & composites
4	Environment, Energy (Battery materials, Water treatment systems and devices)	Environment & living solutions / New energy
5	Medical, Food, Bio Products Food ingredients, Pharmaceutical materials, Medical-related products)	Advanced polymers / High-performance films / Advanced moldings &composites High-performance chemicals / Environment & living solutions

SWOT Analysis

S Strengths

- Optical films: Strong market position and ability to deliver solutions for various optical applications
- High-performance films: Technologies to add functions including gas barrier, porous control and multiple layers
- High-performance engineering plastics: Global network across business groups from materials to mold processing field
- Carbon fibers: Business development through vertically-integrated value chain which covers from carbon fibers to CFRP intermediate base material/composites

W Weaknesses

- Optical films: Ability to adapt to short-term demand fluctuations which exceeds the expectation
- High-performance films: Business development with focus on the domestic market
- High-performance engineering plastics: Widespread and direct impacts from social/economical/foreign exchange risks in different regions around the world
- Carbon fibers: Exchange rate impacts due to the high ratio of overseas sales

O Opportunities

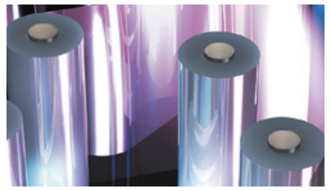
- Optical films: Increase in sophisticated market needs (greater demand for high-performance and high-precision products)
- High-performance films: Roll-out of high-performance products to overseas businesses
- High-performance engineering plastics: Expanded demand in industrial use (aircraft, semiconductors) and medical use
- Carbon fibers: Expanded demand in industrial use (automobiles, wind power generation, pressure vessels and others)

T Threats

- Optical films: Shrinkage of existing market due to destructive technological innovation
- High-performance films: Medium-term decrease in domestic demand
- High-performance engineering plastics: Shrinkage of existing market due to dissemination of new technologies such as 3D printer
- Carbon fibers: Intensified competition due to quality improvement of products of developing countries

Major Businesses and Products

Functional Products Fiscal 2016 Revenue ¥744.6 billion



Information, electronics & display

Optical films

We will swiftly respond to markets expanding globally and increasingly sophisticated needs, such as polyester films and optical clear adhesive sheets, and support the advancement of displays.

Information and Electronics Materials

We will focus on developing and selling products and services that create new value consistent with customers' needs, including various materials for FPD(Flat Panel Display) and precision cleaning for semiconductors.

Optical films
Optical PVOH film
Precision cleaning
Color resist

High-performance films

High-performance films

Through the optimal combination of technologies including polymer material design, film forming, surface treatment and composition, we offer products with added "functionalities" such as gas barrier property, weather resistance, moisture permeability, easy-opening, applied in different markets including food, industrial, and healthcare.

High-performance films (Food packaging materials, Industrial-use films, Medical and sanitary films)

Environment & living solutions

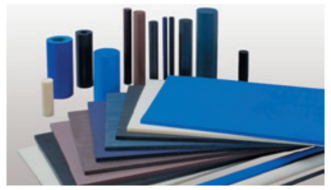
Aqua solutions

Through offerings such as water treatment chemicals, membranes and ion-exchange resins, we cover the total water treatment process from drinking water to wastewater, aiming to provide solutions on a worldwide basis to any and all water-related issues.

Agricultural solutions

We offer agricultural materials such as high performance films with superior durability for greenhouses, and plant factories of cultivating high-quality vegetables stably throughout the year.

Aqua solutions
Separation materials
Separator and aqua chemicals
Agricultural solutions
Infrastructure solutions



Advanced moldings & composites

High-performance engineering plastics

The Quadrant Group offers engineering plastics as a leading global manufacturer that develops business in a wide range of fields such as industrial machinery, automobiles, aircrafts, and medical use.

Carbon fiber and composite materials

We have realized one of the most integrated product chains in the world, covering from PAN-based and pitch-based carbon fibers to intermediates and composite products using fibers as base materials.

High-performance engineering plastics
Carbon fiber and composite materials
Alumina fibers
Functional moldings and composites
Fibers and textiles

Functional Chemicals Fiscal 2016 Revenue ¥327.3 billion

Advanced polymers

Performance polymers

With a broad product range centered around thermoplastic elastomers, performance polyolefins and PVC compounds, we contribute to customers' innovation in areas from healthcare and industry to daily consumer goods.

Phenol and polycarbonate

Integrating our proprietary manufacturing process technologies with polymer design technologies and compound technologies, we have expanded our business globally with one of the largest market shares in Asia.

Performance polymers
Phenol and polycarbonate
Polybutylene terephthalate
Sustainable polymers

High-performance chemicals

Coating materials

We provide added value under strong consciousness of sustainability with polymers for paints, inks, adhesives, hair care materials, and resist materials for semiconductors based on advanced technologies of synthesis, formulation, and evaluation.

Food ingredients

We have expanded our business to a wide range of fields from food to pharmaceuticals and cosmetics in product groups such as emulsifiers—represented by our sugar ester which has the leading global market share —and vitamin E.

Coating materials
Epoxy resins
Resin additives
Food ingredients

New energy

Lithium-ion battery materials

Targeting the increasingly sophisticated needs of customers, we are developing electrolytes and anode materials primarily for the batteries equipped in electric vehicles based on comprehensive high levels of technology and a global supply system covering from material development to safety evaluation.

LED materials & Scintillator

Phosphors used in LED backlights and lighting, gallium nitride (GaN) substrates used in high-performance LED lighting and lasers, and scintillators used for security and medical diagnostic purposes are all widely used.

Lithium-ion battery materials
LED materials
(GaN substrates, phosphors)
Scintillator

Overview of Business Segments | Performance Products Domain

Performance Products Domain *APTSIS 20*

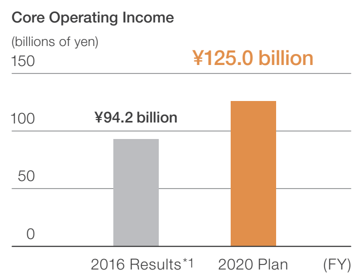
Policies

Accelerate growth by generating synergies, and supply high-performance products/solutions globally to growth markets

Key Strategies

- Expand high-performance, high-value-added products business and solutions business
- Accelerate global development
- Strengthen innovation by integration of three chemical operating companies
- Achieve profitability of new energy businesses at an early stage

Plan Values



Investment amount (Five-year plan, total)

¥390.0 billion *2

(*APTSIS 20* Original planned figures)

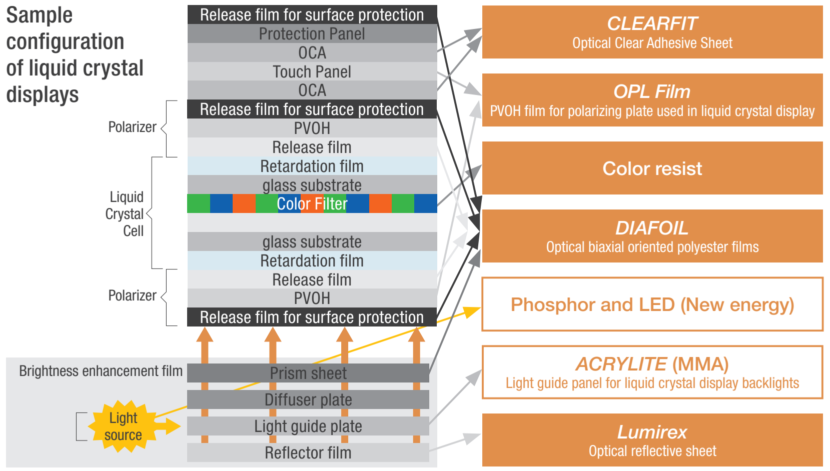
R&D investment (Five-year plan, total)

¥170.0 billion

*1 Since fiscal 2017, changes have been made to some product segments. Fiscal 2016 results have been replaced with figures after the segment changes.
*2 In December 2016, MCHC announced that it would increase investments and loans by between 100 and 200 billion yen on a company-wide basis.

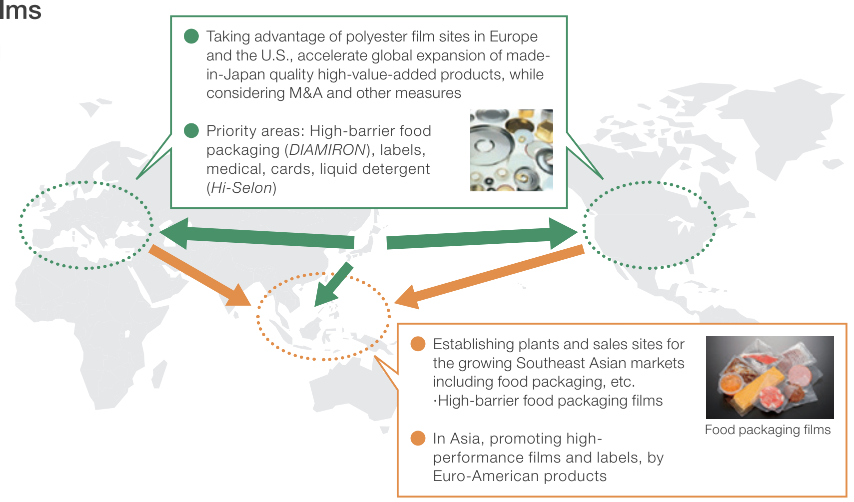
Growth Strategies of Information, Electronics & Display

We will integrate the IT and electronics-related material businesses including color resist and various optical film operations used for display applications, strengthen access to the market by sharing marketing information and customer needs, and adapt to technological innovations in the marketplace in a speedy and seamless fashion by accelerating efforts to develop products that match customer needs. In doing so, we will offer solutions to address many different requirements of customers, such as reduced thickness through a combination of materials and processing technologies, product development in response to the OLED market expansion, and reduced lead times and costs for customers through compounding and integration.



Growth Strategies of High-performance Films

By orchestrating different businesses such as Advanced polymers and High-performance chemicals, we will strengthen its product development capabilities and promote new technologies and products to become a strategic force at an early stage. In addition, for existing businesses, primarily packaging, labels, and films, we will realize growth strategies by fully utilizing the sites in Japan, the U.S. and Europe and our overseas network while actively promoting M&A, alliances and so on. Specifically, we are considering a roll-out of Japanese high-value-added products with food barrier packaging utilizing European and the U.S.'s polyester film plants to the U.S.'s and European markets and expanding food packaging materials aimed at the growing Southeast Asian market.



Growth Strategies of New Energy

We will promote early commercialization and profitability of new energy-related businesses that contribute to the realization of sustainable society, and work to nurture businesses responsible for the next generation. We will respond to the increasingly sophisticated needs for lithium-ion battery materials by developing high-performance electrolyte additives and anode materials. In the area of energy transduction materials, we will launch new types of phosphors at an early stage, develop products that utilize the properties of GaN, and expand the businesses for scintillators used for security and medical diagnostic purposes.

FOCUS

Growth Strategy

Provide various solutions to one of the five focus markets; Automobiles, Aircraft (Mobility)

In the Performance Products domain, we will focus on the five markets of "Automobiles, Aircraft (Mobility)," "Packaging, Labels, Films," "IT, Electronics, Displays," "Environment, Energy," and "Medical, Food, Bio Products," and accelerate growth. Here, we will introduce our growth strategies for one of these five markets in the hope of the MCHC Group's Automobiles, Aircraft (Mobility).

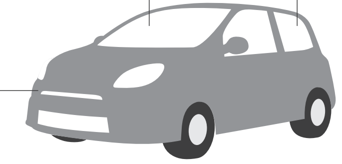
While the automobile market is expected to undergo significant growth in developing markets moving forward, particularly China, it is also expected that environmental measures such as reduced dependence on fossil fuels and lower CO_2 emissions will be further advanced, leading to the widespread adoption of electric vehicles and fuel cell vehicles, along with greater fuel efficiency through reduced vehicle weight.

The MCHC Group carries numerous products that cater to such market environments. For instance, as materials that help reduce weight, we deal with carbon fiber composite materials used as structural components and polyethylene resins used in fuel tanks. We provide a broad range of solutions, in terms of environment-friendly materials including alumina fibers used as support mats for exhaust gas cleaning devices, bio-based engineering plastics used as interior and exterior finishing materials, lithium-ion battery materials, and also functional additive and strengthening material including thermoplastic elastomers used for interior surfaces.

Before the integration, these products had been developed and sold through the independent routes of three different companies. Through the integration of these companies, related business divisions are now working in close coordination and accelerating synergy. For instance, by sharing marketing information, proposing distinctive composite products between businesses and consolidating sales routes, customers can now be presented with unified proposals. In fact, using the sales route of the Quadrant group, a global leader in engineering plastics, has started to yield results, including proposals for carbon fiber composite materials pitched to European automobile manufactures. Moreover, by combining the matrix resins and additives possessed by the High Performance Chemicals Division with carbon fibers, we are considering proposing composite products with distinct qualities to growth markets. While orchestrating the efforts of related business divisions, we will continue to accelerate growth around the most effective growth drivers.

Lightweight
- Polypropylene resins
- Engineering plastics
- Carbon fiber and composite materials
- Performance polymers
- Polyethylene resins
- *ALPOLIC* Aluminum composite material

Environmental Applications
- *DURABIO* bio-based engineering plastic
- *Adblue* high-quality urea aqueous solution for SCR systems
- *AQSOA* high-performance zeolite for SCR catalysts
- Lithium-ion battery materials
- *DIANAL* coating material
- *MAFTEC* alumina fiber



Functional Solutions
- Gas barrier resin films
- *ACRYPLEN* acrylic film
- *GMT, SymaLITE* composite sheet
- *DIAFIX* IMD (In-mold decoration) molding film/sheet
- White LEDs, GaN substrates, LED epitaxial wafers
- *HISHIMETAL* plastic film-laminated steel sheet
- *MC NYLON*
- Carbon black wet master batch
- Water-soluble adhesives
- *ACRYPET* acrylic molding material
- *ACRYLITE* acrylic sheet

Solutions for Environmental and Social Issues

Carbon fiber materials (SMC) used for back doors of Prius PHVs

Carbon fiber materials SMC (Sheet Molding Compound) are used in the frame of the back door of the new Prius PHV released by Toyota Motor Corporation in February 2017.

SMC developed by MCC is a type of intermediate material for CFRPs and a sheet-shaped material in which carbon fibers cut into several-centimeter lengths are dispersed in resin. The SMC offers advantages over other CFRP materials: it can be processed into a component in a short period of time, i.e. roughly 2 to 5 minutes, by press molding, allowing components with complex shapes to be molded. In addition, as its mechanical properties are almost uniform, carbon fibers can be used relatively easily to obtain higher strength based on conventional component design expertise. Moreover, improved fuel efficiency from lighter vehicle weight contributes to reduce CO_2 emissions.

Industrial Materials

Industrial Materials Domain

MCHC will continue to advance the diversification of raw materials, including renewable resources, provide products and technologies through a framework that reflects the needs of the time, and support growing markets.

SWOT Analysis

S Strengths

Petrochemicals
Conducted structural reform of naphtha cracker. Now utility reinforcement and promotion of high-value-added products are in progress

MMA
Possesses three major manufacturing methods. Holds a strong market position with the world's top market share

Industrial Gases
Holds a strong market position with the domestic top market share

Carbon Products
Coking coal blending technologies and Coke quality management technologies

W Weaknesses

Petrochemicals
Susceptible to price fluctuation impacts of commodities such as crude oil

MMA
Fluctuating revenue due to overseas market conditions and raw material trends

Industrial Gases
Relatively expensive domestic cost structure (electricity rates)

Carbon Products
Fluctuating revenue due to volatile coking coal prices

O Opportunities

Petrochemicals
Knowledge business (technology license, catalysts) in overseas growth regions

MMA
Business network positioned to respond to global expansion of demand

Industrial Gases
Greater opportunity to invest in North America, Asia and Oceania. Expanding demand for electronics and medical uses

Carbon Products
Expanding production of crude steel and demands for coke in developing countries such as India

T Threats

Petrochemicals
U.S. shale-based products and Chinese coal-based products flowing into the Japanese market in greater quantities than expected

MMA
Competition with other materials

Industrial Gases
Oligopolization in overseas markets by major European and North American gas producers

Carbon Products
Integration of blast furnace along with the restructuring of steel companies

Major Businesses and Products

MMA Fiscal 2016 Revenue ¥285.9 billion

MMA

We are the only company that employs all three main manufacturing methods* and maintains a leading 40% share of the global market. With a globally established supply system that takes advantage of raw material availability for individual plants and cost competitiveness, we aim to realize the most advanced and sophisticated operations.

* Acetone cyanohydrin (ACH) method, C4 direct oxidation process, and new ethylene process (Alpha Technology)

PMMA

PMMA (acrylic resin) has various excellent characteristics such as superior transparency, strong weatherability and formability. We operate business with a variety of PMMA products including acrylic sheets for signs, display shelves and aquarium tanks, molding materials for automotive products, optical components and home electronic parts, and plastic optical fibers.

MMA, PMMA

Petrochemicals Fiscal 2016 Revenue ¥500.3 billion

Basic petrochemicals and basic chemical derivatives

Our ethylene plants are located in Kashima and Mizushima* in Japan. We provide olefins such as ethylene and propylene, and aromatics such as benzene and toluene. We also deal in various ethylene, propylene and C4 derivatives, terephthalic acid, and more.

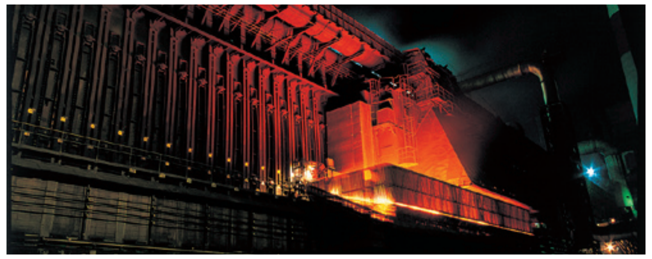
* The Mizushima ethylene plant is owned by Asahi Kasei Mitsubishi Chemical Ethylene, which is jointly owned by Asahi Kasei and Mitsubishi Chemical.

Polyolefins

Our polyolefin (polyethylene and polypropylene) business offers high quality and high performance product lineups in a wide range of fields including automobiles, electrical wires, medical devices and food packaging based on proprietary catalyst and process technologies. We are also expanding its business outside Japan as a global supplier of high performance materials while developing the growing global markets including the automobile industry.

Basic petrochemicals, Basic chemical derivatives, Polyolefins

Carbon Products Fiscal 2016 Revenue ¥197.9 billion



Coke

Coke supports the global steel industries, and various products are also produced from the tar created by the coke manufacturing process. Each year we import coals from countries around the world and produce coke of different qualities by blending around 60-70 types of raw materials in various combinations.

Carbon black

Carbon black is a material used for products found in daily life, such as tires, printing ink, and colored resins. We manufacture carbon black under consistent quality control throughout the process beginning from raw material processing to the final products.

Coke, Carbon material, Carbon black, Synthetic rubber

Industrial Gases Fiscal 2016 Revenue ¥574.6 billion

Industrial gases

We have a leading 40% share of the domestic market for industrial gases, mainly oxygen, nitrogen and argon. We are expanding our business areas overseas while focusing on North America, Asia and Oceania as key markets.

Industrial gas-related equipment and facilities

Besides our domestic production of Japan's first air separation plant, we have earned a stellar reputation as a world's top-class plant manufacturer through the production of space-simulation chambers and liquid helium-related equipment.

Industrial Gases, Industrial Gas-related equipment and facilities

Overview of Business Segments I Industrial Materials Domain

Industrial Materials Domain *APTSIS 20*

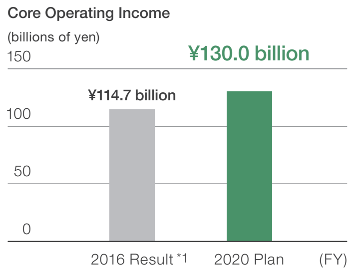
Policies

Stabilization of earnings by strengthening of cost-competitiveness
Acceleration of growth and strengthening of presence in the global market

Key Strategies

- Strengthening of cost-competitiveness
- Acceleration of global development (MMA, industrial gases)
- Business rebuilding

Plan Values



Investment amount (five-year plan, total)

¥580.0 billion *2

(*APTSIS 20* original planned figures)

R&D investment (Five-year plan, total)

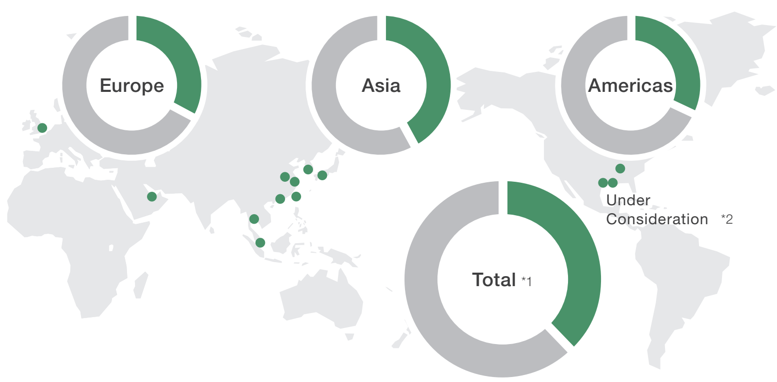
¥80.0 billion

*1 Since fiscal 2017. Changes have been made to some segments. Fiscal 2016 results have been replaced with figures after the segment changes.
*2 In December 2016, MCHC announced that it would increase investments and loans by between 100 and 200 billion yen on a company-wide basis.

Growth Strategies of MMA

To maintain its competitive advantage as the world's leading supplier of MMA monomers with a market share of around 40%, we will seek to boost production capacity and optimize its production system. We have established a joint venture with SABIC(Saudi Basic Industries Corporation) in Saudi Arabia. Under this joint venture, a plant with the world's largest production capacity based on the competitive New Ethylene Method (Alpha Technology) using natural gas-based raw materials, will start its operation in the middle of 2017. Construction of another plant that would use shale gas-based raw materials is being considered for North America. We will continue to optimize its production systems based on the supply and demand environment so as to ensure stable revenue.

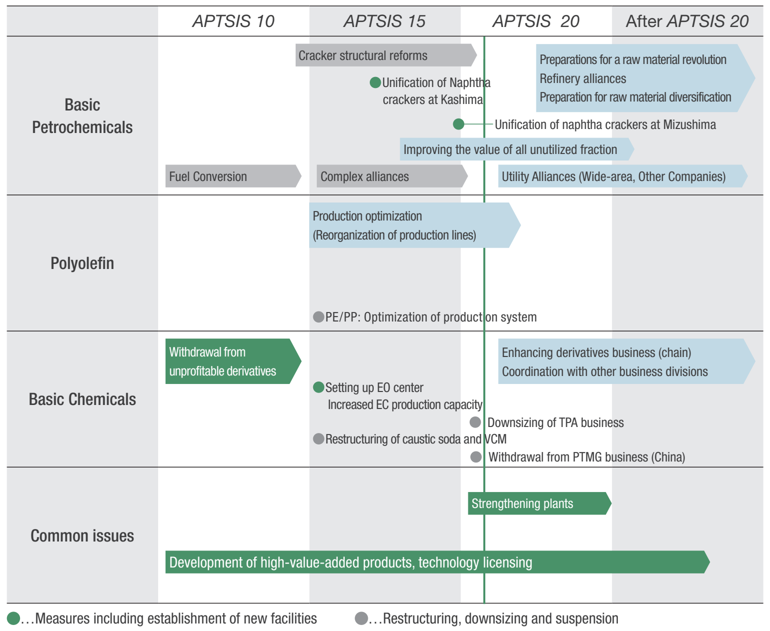
MMA Production Sites and Market Share by Region



*1 Market share prior to launch of SAMAC (The Saudi Methacrylates Company) project
*2 Consideration of shale gas-based North American project

Strategic Approach to Strengthening Competitiveness of Petrochemicals

Up to 2016, we pursued the consolidation of its domestic ethylene centers and the equity interest transfer of its terephthalic acid businesses in India and China. We had specific aims in these structural reforms, preparing ahead of its competitors for the so-called "arrival of black ships" in which competitive products using North American shale gas as raw materials entered the Asian markets. Looking ahead, we will continue to strengthen competitiveness by further reinforcing the foundations of its production sites and optimizing production while seeking to maximize earnings through improved added value targeting the unutilized fraction between cracker and derivatives, the development of high-performance polyethylene and polypropylene, and the expansion of technology licenses through a refinement of possessed technologies.



FOCUS
Growth Strategy

Expansion of overseas business areas for industrial gases business and sustainable growth of domestic businesses

Taiyo Nippon Sanso Corporation ("TNSC") has a leading 40% share of the industrial gas market in Japan. Having expanded its business areas with focus on North America, Asia and Oceania as key markets, the company has developed operations in 19 countries and regions around the world to date.

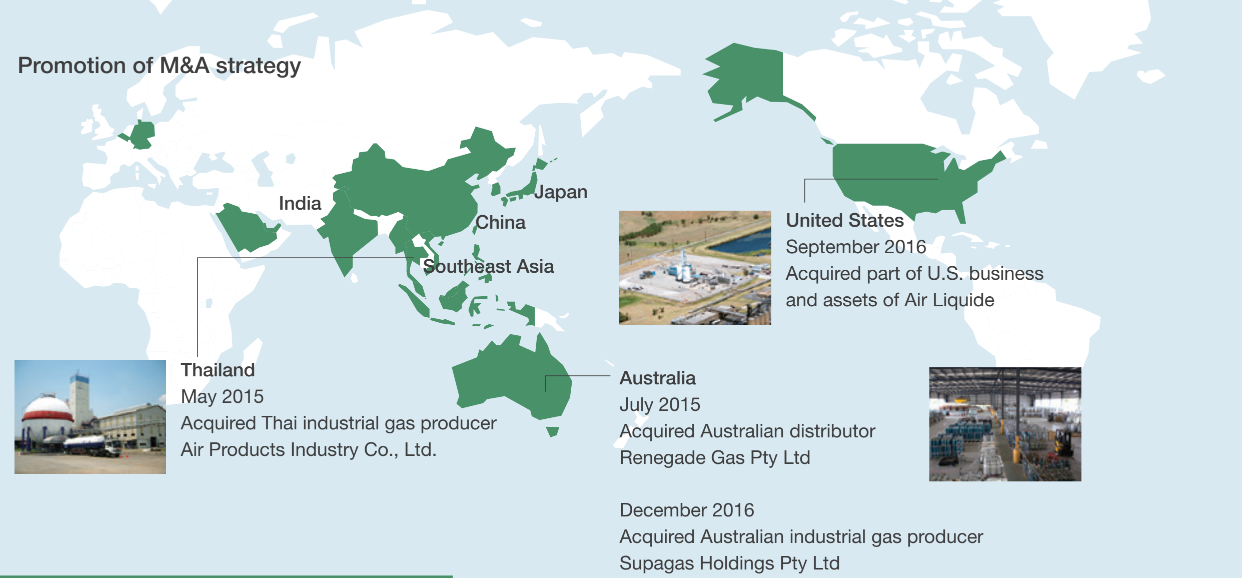
While the domestic industrial gas market has been experiencing the medium-range low growth, in regions such as North America, Asia and Oceania, further growth is expected in the future, and further oligopolization by major industrial gas producers in Europe and North America has been taking place. To compete with those major industrial gas producers in Europe and North America, we will pursue sustained growth domestically and seek to expand our overseas operations.

Specifically, "structural reform," "innovation," "globalization" and "M&A" will form the pillars of our strategy. By maximizing Group synergy through the expansion and structural reforms of gas and gas-related businesses domestically, we will further reinforce our industry-leading position. And overseas, we will aggressively promote capital investment and M&A activities in an effort to expand our business areas.

In fiscal 2016, TNSC acquired the U.S. industrial gas business and assets of Air Liquide S.A., the biggest such acquisition in its history. The acquisition meant that in addition to its existing operations primarily in the southern and Midwestern U.S., TNSC acquired a business network in the Eastern U.S. and a more robust operating network in the Midwest. Moreover, with the acquisition of Supagas Holdings Pty Ltd in Australia, TNSC completed a sales network spanning the entire country.

TNSC plans to invest further ¥340 billion from fiscal 2017 to fiscal 2020, 70% of which it plans to allocate toward strategic investments. TNSC will endeavor to fully utilize these investments to further expand its business areas primarily overseas and achieve sustained growth in its domestic business.

Promotion of M&A strategy



Solutions for Environmental and Social Issues

Established production facilities for liquefied carbon dioxide at Mizushima plant of Nippon Ekitan Corporation

TNSC's group company Nippon Ekitan Corporation handles liquefied carbon dioxide. Roughly 50% of carbon dioxide gas is used in iron welding as a shielding gas. It is also used in various other applications such as beverages, and the freezing or chilling of foods.

In recent years, due to the decreasing demand for fuel oil and the closure of domestic ammonia production facilities, the production of high-concentration carbon dioxide gas as a raw material has declined significantly, which caused tight supply-demand balance of finished products. Particularly, productions in the Chugoku and Shikoku regions have declined drastically, resulting in constant long-distance transport from other regions. Production of high-concentration carbon dioxide gas as a raw material from this business category is expected to decline further in the future.

Nippon Ekitan plans to establish liquefied carbon dioxide production facilities at the Mizushima plant in October 2017. The facilities will be able to collect the low-concentration carbon dioxide generated from the MCC Mizushima site on the same premises and effectively utilize it as high-quality liquefied carbon dioxide. As the production process involves effectively utilizing carbon dioxide gas that would otherwise have been released into the atmosphere instead of generating new carbon dioxide, the facilities significantly contribute to reducing environmental load, and also help to reduce long-distance transportation by ensuring a more stable supply to users in the Chugoku, Shikoku and Kansai areas.

Overview of Business Segments | Health Care Domain

Health Care

Health Care Domain

Leveraging the Group's comprehensive strength and network, we have been providing and developing pharmaceuticals, diagnostic instruments, clinical testing, health support services, pharmaceutical development support services, active pharmaceutical ingredients/intermediates, and pharmaceutical formulation materials.

SWOT analysis

S Strengths

Pharmaceuticals
- Capabilities for drug discovery and drug fostering and evolution in the pharmaceutical business
- Presence in focus areas including autoimmune diseases

Life science
- Broad business foundation covering from sick care to healthcare and life care
- Strong market position in the capsule business
- Provide total solutions in clinical testing area

W Weaknesses

Pharmaceuticals
- Global business expansion (in North America in particular) has been in progress

Life science
- Various products and services that meet customers' needs are insufficient

O Opportunities

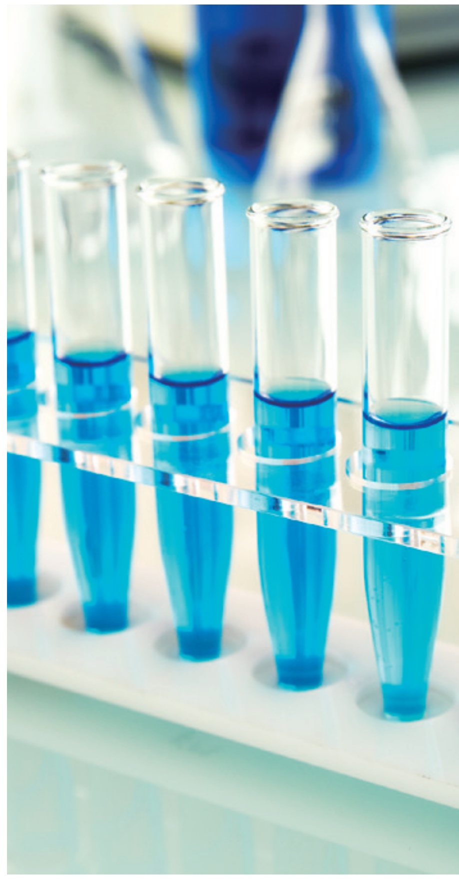
Pharmaceuticals
- Diversification of medical needs
- Expanding demand in the health care domain due to global aging

Life science
- Upward trend in the use of big data through health and medical ICT
- Government incentives to maintain health, to prevent serious cases and to restrain medical expenditure
- Enhancing health awareness such as self-medication

T Threats

Pharmaceuticals
- Declining success rate for new drug development and increasing R&D costs due to stricter drug approval process
- Delayed global expansion
- Various measures to control medical expenditures by governments

Life science
- Lack of economic incentives in the healthcare business



Major Businesses and Products

Pharmaceuticals Fiscal 2016 Revenue: ¥423.9 billion

Autoimmune diseases area

In the autoimmune diseases area, our company has strong sales foundation based on a trust relationship with medical professionals, which has been established through one of our main products, *Remicade* (indication: inflammatory autoimmune diseases such as rheumatoid arthritis). We will continue to maintain the largest market share in this area by maximizing the advantages of both *Remicade* and *Simponi* (indication: rheumatoid arthritis, and others).

Remicade / Simponi / Imusera

Diabetes and kidney diseases area

In the diabetes and kidney diseases area, we will establish our presence by obtaining evidence for *Tenelia* and *Canaglu* (indication: type 2 diabetes mellitus) and by expanding sales channels.

Tenelia / Canaglu

Central nervous system diseases area

In the central nervous system diseases area, the antidepressant *Lexapro* was additionally approved for the treatment of social anxiety disorder in November 2015. Centering on its effect on anxiety, we will further promote this drug, reinforcing the sales base in this area for the launch of new drugs in the future.

Lexapro / Radicut

Vaccines

Regarding vaccines, we reached a basic agreement on the foundation of BIKEN Co., Ltd. (joint venture for the production of vaccines) with the Research Foundation for Microbial Diseases of Osaka University in November 2016 with a plan to start operation in September 2017. Now, we will also strengthen cooperation in production, enhance the production platform for which a larger supply is required and contribute to the stable supply.

Influenza vaccine *Tetrabik*
Varicella vaccine

Life Science Fiscal 2016 Revenue: ¥123.1 billion

Business for pharmaceutical development support and clinical testing

Providing comprehensive solutions including clinical testing and support for testing operations in the clinical testing area, we have been contributing to the medical treatment and prevention/early detection of diseases. We also contribute to international sporting events as the only doping control laboratory in Japan and the first in Asia that is officially accredited by the World Anti-Doping Agency.

Clinical testing
Diagnostic reagents and instruments
Pharmaceutical development support

Business for capsules and pharmaceutical processing equipments

We provide comprehensive solutions based on our production technology accumulated for many years, such as high quality and functional hard capsules and pharmaceutical processing equipments. We have the top global share in HPMC* capsules made from plant-derived raw materials, as the first to successfully commercialize them in the world.

* hydroxypropyl methylcellulose

Capsules
Pharmaceutical processing equipments

Self-health check services

We developed *Jibun Karada Club*, a blood test kit with finger prick by customers at drugstores and contribute to maintain people's health, in addition to other treatment products.

Jibun Karada Club

Overview of Business Segments | Health Care Domain

Health Care Domain *APTSIS 20*

Policies

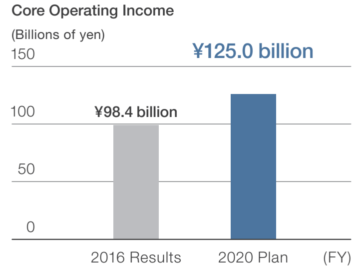
Worldwide growth in pharmaceutical business
Establish and improve the health and medical business utilizing ICT and the regenerative medicine products

Key Strategies

- Promote the development of overseas pharmaceutical business mainly in the U.S.
- Strengthen capabilities for drug discovery
- Maximize values of new drugs and priority products by strengthening capabilities of IKUYAKU (drug fostering and evolution) and marketing
- Expand the healthcare and medical business utilizing ICT
- Expand the regenerative medicine business
- Improve profitability and global expansion of the capsule business

Plan Values

Core Operating Income



Investment amount (five-year plan, total)

¥560.0 billion

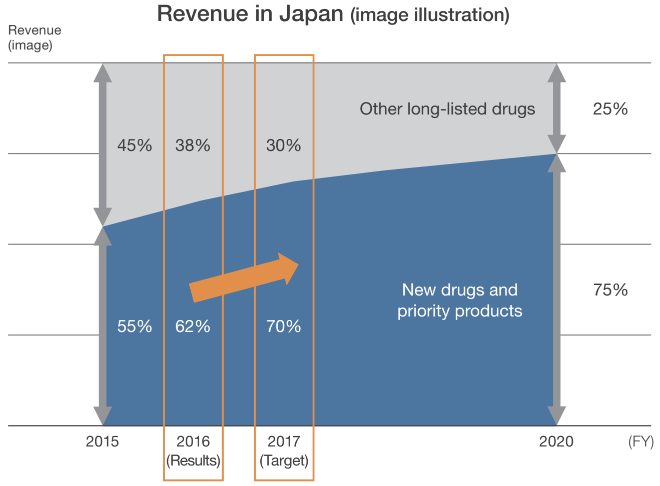
R&D investment (Five-year plan, total)

¥440.0 billion

Growth Strategies in Pharmaceutical Business

Our target for 2020 consists of four strategic priorities: maximizing the value of pipelines, strengthening capabilities of IKUYAKU (drug fostering and evolution) and marketing, accelerating U.S. business development (see details in "3" on page 58) and reforming operational productivity. We will implement strategic investment of more than 400 billion yen in R&D over 5 years, of more than 200 billion yen on the U.S. business expansion such as M&A, and of 100 billion yen on licensing-in and others, aiming to develop a business platform and to establish product lineup in the open shared business. In domestic market, we will enhance area marketing and initiate the development of digital marketing to respond to changes in the Japanese medical environment, in order to strengthen domestic marketing as the fundamental business. With this strategy, we aim to increase domestic revenue to 300 billion yen, and achieve the product ratio of 75% for new drugs and priority products out of total domestic sales in fiscal 2020.

Revenue in Japan (image illustration)



Growth Strategies in Life Science Business

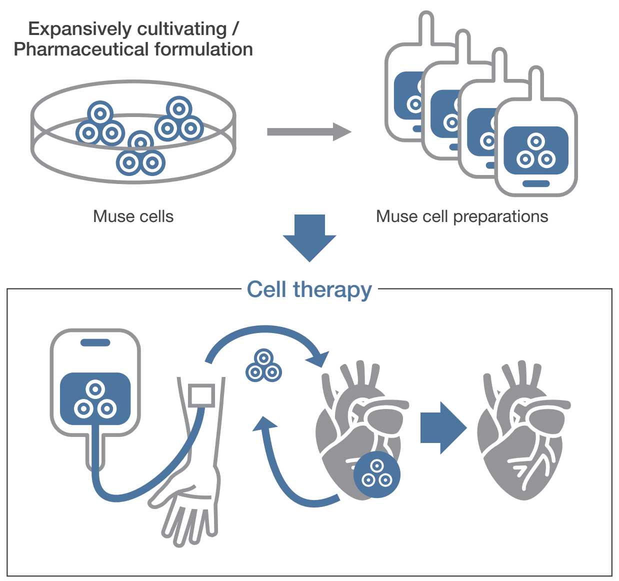
We will expand into the regenerative medical business as a next-generation healthcare business, aiming to obtain early approval for a regenerative medical product using Muse cells. Muse cells were discovered by the team led by Professor Mari Dezawa of Tohoku University in 2009. Muse cells exist in human body, such as bone marrow and skin (dermis), and these stem cells can be differentiated into various cells which build parts of the body. Muse cells migrate to a damaged organ in order to repair the cells when injected into human body.

Muse cell preparations that we are currently under development have the following advantages:

- Intravenous infusion decreases the physical burden
- Less likely to form tumors
- Single Muse cell preparation can be applied to multiple diseases

We are currently investigating the efficacy and safety in animal studies, planning to initiate clinical testing for patients with acute myocardial infarction in fiscal 2017.

Illustration of application to myocardial infarction



FOCUS

Growth Strategy

Establish a sustainable growth platform by expanding business in the U.S. Accelerate business in the U.S. with the approval of *Radicava*, first self-promoting product in the U.S.

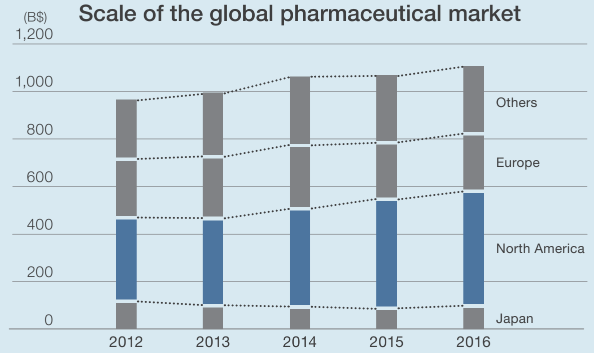
1 Numerical target (revenue in the U.S.)

Fiscal 2020 Target of business scale: **¥80.0 billion**

2 Market trends

The scale of the global pharmaceutical market is about 100 trillion yen. The U.S. is the largest pharmaceutical market in the world and will be the same in the medium-to long-term. It has outstanding ability to discover pharmaceuticals as well. MTPC is accelerating business structural reform there to achieve sustainable growth of pharmaceutical business.

Scale of the global pharmaceutical market



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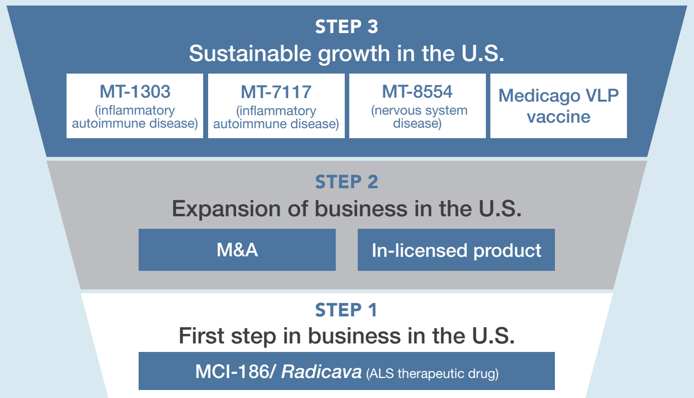
3 Growth Strategy in the U.S. – to achieve the target of the U.S. business

Radicava was approved by the U.S. FDA for the treatment of amyotrophic lateral sclerosis (ALS) on May 5, and started promotion in August, 2017. We will expand our business there based on the sales of *Radicava*.

We will obtain new products in the nervous system disease area and autoimmune disease area, following Radicava by M&A* or from other companies, and will also develop our own products and plant-derived influenza vaccine, in order to strengthen our product lineup.

* In July 2017, MTPC reached a definitive agreement with NeuroDerm Ltd. (Israel), which has research infrastructure for Parkinson's disease and others, pursuant to which MTPC will acquire all of their outstanding shares. NeuroDerm will become a wholly-owned subsidiary in October this year.

Strategic Investment of more than 200 billion yen to achieve revenue of 80 billion yen in the U.S. in fiscal 2020



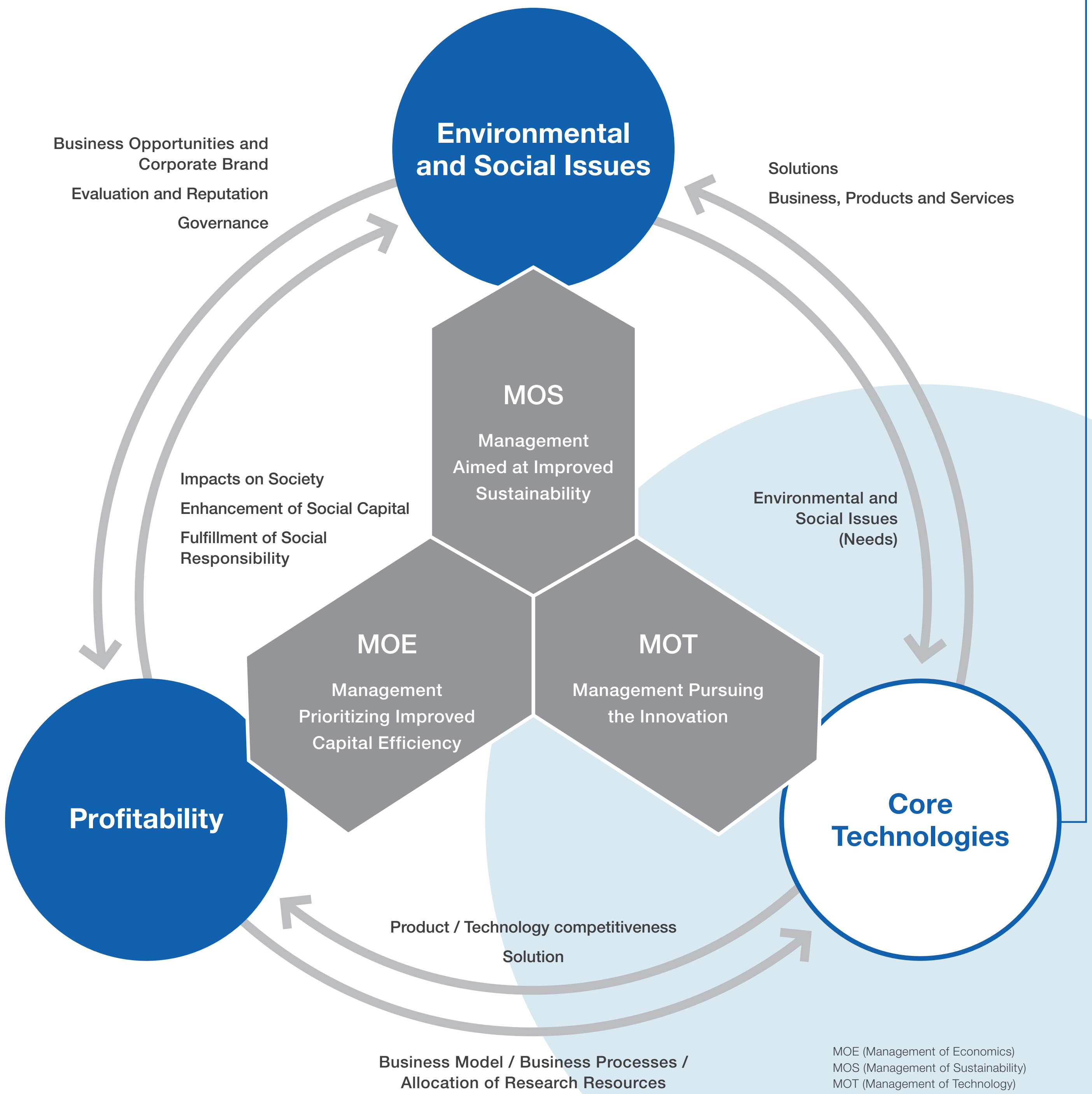
Solutions for social and environmental issues

Establishment of Searchlight Support

Mitsubishi Tanabe Pharm America, Inc., a distributor of *Radicava* in the U.S., will work to provide *Radicava* to all patients who need it, and will also establish Searchlight Support for supporting the patients to whom *Radicava* was prescribed. Searchlight Support provides treatment management system suitable for each patient, support for obtaining insurance reimbursement and 24-hour clinical nurse hotline support.

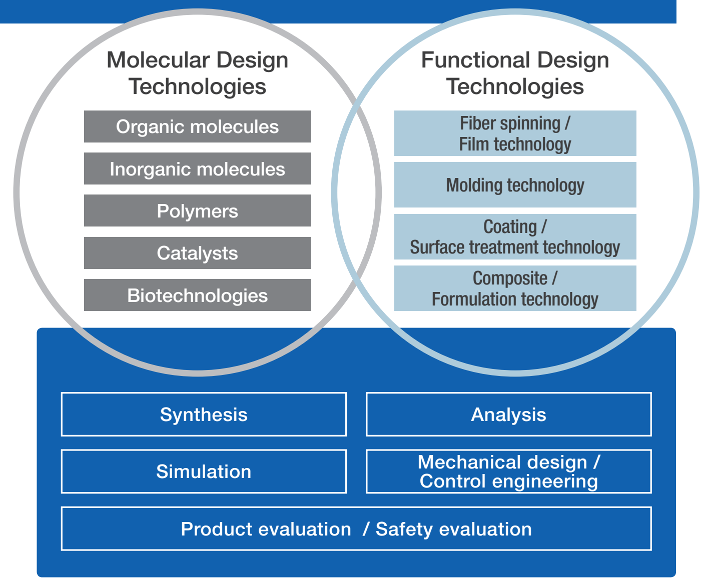
Innovation

At the MCHC Group, we identify environmental and social issues along with market needs, and leverage our core technologies to create new value chains and innovative lifestyles. Thus, we provide and realize comprehensive solutions.
Our efforts extend beyond component and material research and the development of technologies. We pursue innovation in manufacturing processes and distribution channels, and set our sights on proposing new uses of existing solutions. In so doing, we create things of value for customers, our business partners throughout the value chain, and all of the regions in which the MCHC Group is active.



Core Technologies

The MCHC Group maintains a wide range of unique technologies and expertise—its core technologies—which serve as the source of tens of thousands of competitive products and services from materials to consumer goods. Moreover, working on this foundation we are continually striving to strengthen our existing core technologies and create new ones to address rapidly changing market needs and offer solutions to social issues.



Research and Development Management

MCHC embraces various approaches to strengthen core technologies which is the basis of innovation and generate new innovations, including internal R&D, external R&D, venture investments, open shared business (OSB*) and M&A activities.

Moreover, by developing systems to promote information sharing between operating companies and reduce the risk of information leaks, MCHC accelerates the synergy among its core technologies and engages in R&D management that visualizes the progress using the MOT Indices.

The MOT Indices are comprised of twelve indices which were selected from the viewpoint of three indicators: efficiency of research and development (the R&D Index), technological superiority (the Intellectual Property Index), and compatibility with social needs (the Market Index). The indices were introduced on a trial basis in fiscal 2013 and reviewed during formulation of *APTSIS 20*. The new indices began operation from fiscal 2016. (Table on the right shows achievement ratio of the representative indices in fiscal 2016 against the targets)

Examples of MOT Indices and Results

MOT Indices		Success Ratio
R&D Index	Elevated stage success ratio (development stage to launch stage)	105%
Intellectual Property Index	Overseas patent applications ratio (percentage of overseas applications out of total number of applications)	91%
Market Index	New product ratio (percentage of new products and services out of total revenue)	117%

* Open Shared Business (OSB): OSB is the MCHC's original framework where MCHC works with organizations outside the Group to advance collaboration in both R&D and business while developing a distinctive value chain.
"OSB": MCHC registered trade mark No. 5585432

Open Innovation

To provide the products and services demanded by markets and society in a timely fashion, MCHC not only makes full use of its core technologies, but also actively pursues collaboration with partners in possession of sophisticated technologies, efficient production systems, sales channels and so on. Through such collaboration, we fuse our own technologies with those of others in an effort to reach an even higher technological level. In the course of this type of open innovation, across all business domains, we identify the areas to be shut down (closed) and the areas to be put outside (opened) for cooperation with other companies. Thus, we endeavor to quickly develop competitive business models.

Innovation

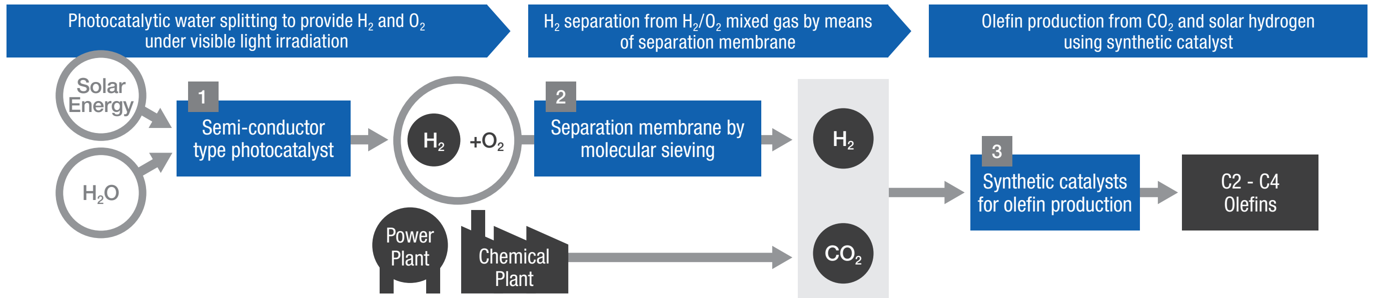
Example of Innovation

Participation in the Artificial Photosynthesis Project

What is artificial photosynthesis?

Artificial photosynthesis is defined as a converting process from energetically little-value materials such as water and carbon dioxide (CO_2) into high energy substances such as hydrogen and organic compounds under the sunlight irradiation. It has attracted a lot of attention as a technology to greatly contribute to the mitigation of CO_2 emissions and fossil resource consumption.

Outline of the Artificial Photosynthesis project

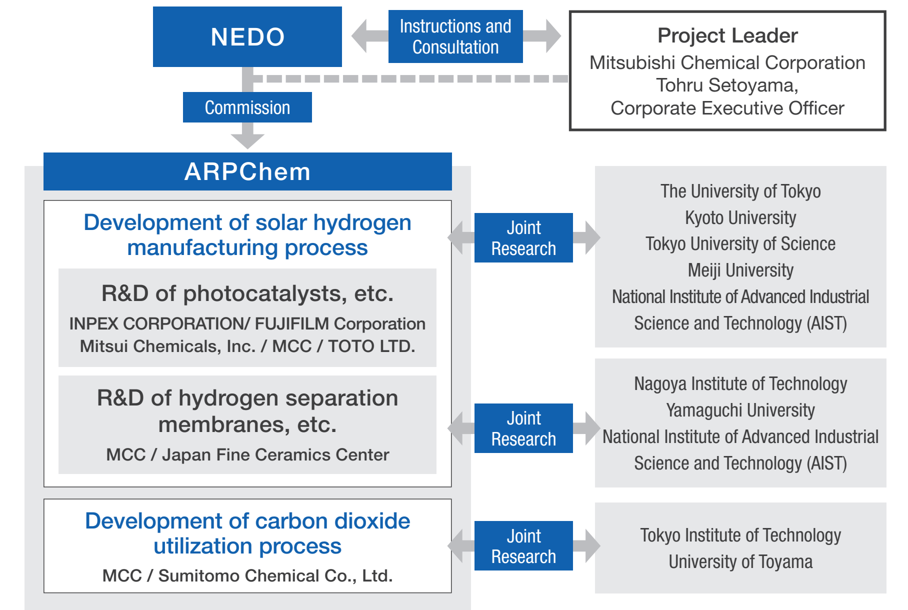


Organization of the Artificial Photosynthesis Project

MCC has been participating in the Artificial Photosynthesis Project commissioned by the New Energy and Industrial Technology Development Organization (NEDO), as a member of the Japan Technological Research Association of Artificial Photosynthetic Chemical Process (ARPChem) established in October 2012.

The Artificial Photosynthesis Project is working on joint research and development with many Japanese companies and research institutions, as shown in the organizational chart on the right, under the direction of the project leader Tohru Setoyama (MCC's Corporate Executive Officer). MCC is working on all subjects of the project.

Organization of the Artificial Photosynthesis Project (FY 2016)



Message from partner

This is truly a dream project involved the conversion of water and CO_2 using solar energy to chemical raw materials necessary for life. I appreciate this process as a technology that should be pursued today for the sake of the future, even though this cannot be practically applied right away.

This project comprises three themes, photocatalyst, separation membrane, and synthetic catalyst, and MCC has participated in every theme through its research and development. In synthetic catalysts for olefin production, MCC has successfully made reliable achievements on schedule from the developments of catalysts and processes to their demonstrations on a small-scale pilot plant. Also, Mr. Setoyama, the project leader, has created worthwhile concepts and scenarios aimed at practical application as well as the directions of the research.

MCC is an integrated chemical company representative Japan, and I have the impression that MCC plays a crucial role as one of suppliers of materials and components that are vital to industry and society. This project enters into its latter half stage, where it is required to establish unprecedented processes, modules and systems, with improving their performances, which would be a keen up-hill research phase in a sense. I hope that MCC contributes to the association with other companies and universities in this project and to the achievements using the wisdom by their integration.

Environment Department, NEDO
Project Manager
Takashi Hattori

Contributions to the Artificial Photosynthesis Project

1 In photocatalyst design, we have developed semi-conductor type photocatalytic materials, co-catalysts and modules that greatly enhance solar energy conversion efficiency. At the beginning of the project, it was only about 0.2%. An intermediate target of 3% in 2016 was realized on schedule. Currently, further research is going on with the aim of achieving energy conversion efficiency of 10%, the final goal of the project in fiscal 2021.

2 For high performance of separation membranes, three types of membrane materials, zeolite, silica and carbon, have been developed, all of which demonstrated the intermediate target for their permeability. In addition, we have started to develop unprecedented methods avoiding the combustion (explosion) of hydrogen and oxygen in module.

3 In the development of high performance synthetic catalysts for olefin production, we have successfully developed a hyper-stable zeolite catalyst for producing light olefins from methanol derived from hydrogen and CO_2 with high yield and high productivity, and confirmed their reliability and the scalability at a small-scale pilot plant. Furthermore, we are developing an innovative catalytic reaction process using separation membranes for methanol synthesis. These technologies are highly expected to contribute to the realization of olefin production process using CO_2 as a resource.

Small-scale pilot plant for the production of light olefins

Utilization of Venture Companies

The MCHC Group actively invests in and coordinates with venture companies with the aim of creating and accelerating innovation.

Examples of Venture Company Utilization in Recent Years

MCC	Acquisition of U.S.-based Gemini Composites LLC (carbon fiber material component designer and manufacturer)
TNSC	Investment in U.S.-based Optomec, Inc. (3D metal printer manufacturer)
	Investment in China-based Jijin OLED Material Tech Co., Ltd. (OLED material manufacturer)
	Investment in U.S.-based Sulfa Trap LLC (desulfurization sorbents manufacturer)
LSII	Acquisition of Japanese firm Clio, Inc. (regenerative medicine) → currently it is taken over

3D Printer Initiatives

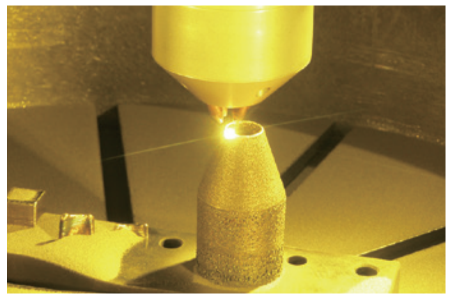
In order to expand its industrial gas business and accelerate the development of new businesses in high growth industrial segment, TNSC is acquiring high-value added products and is providing new services through partnership with venture firms. TNSC has already invested in various segments, such as clean technology, electronics and additive manufacturing (AM) to create synergies with the industrial gas business.

In the projects on desulfurization sorbents with Sulfa Trap and high-purity OLED materials with Jilin OLED, TNSC has been recognized sales record through our global sales network.

In April 2017, TNSC established partnership with 3D metal printer manufacturer Optomec (a U.S.-based venture company) in the AM industry that is growing rapidly in the U.S. and Europe. Since 3D metal printer is also known as micro-welding, TNSC is able to adopt our accumulated welding technologies for the AM businesses and it enables to provide solutions with high quality and higher productivity for customers.

Based on this strategic alliance, TNSC, as an industrial gas company to deliver the innovative solutions for global customers, will be able not only to acquire new customers but also to provide high valued services for existing customers.

Moving forward, TNSC will continue to actively pursue investment and partnership with venture companies having unique technologies and services. TNSC will focus on the fields of gas technology, medical and biotechnology while developing new business models and maximizing operating profit.



Metal processing using a 3D metal printer of Optomec

Sustainability

Sustainability

Based on its unique Management of Sustainability (MOS) management approach, the MCHC Group develops technologies and delivers products and services that contribute to people, society and the sustainability of the planet, and drives corporate activities to improve manufacturing technologies and achieve other advancements.

Materiality Assessment

MCHC has identified the important issues in its materiality assessment for the medium-term management plan *APTSIS 20*, and has prioritized these issues based on their impact on corporate activities and other factors. This materiality assessment and its accompanying matrix are used as a compass for our corporate activities.

PROCESS 1

Set issues to be researched and analyzed

As a starting point, ordered corporate activities under *APTSIS 20* by analyzing macro trends. Reviewed material issues identified in the previous assessment and added new issues.

PROCESS 2

Assess issues from the viewpoint of stakeholders

Ordered and quantitatively assessed the importance of the issues based on public sustainability data, questionnaires, and interviews with experts.

PROCESS 3

Identify and prioritize material management issues the MCHC Group needs to address

MCHC management identified material issues accounting for management strategies, policies and activities under *APTSIS 20* and prioritized them (three issues of highest priority related to the MCHC Group's existence and 21 materiality issues to be addressed).

PROCESS 4

Create the materiality matrix

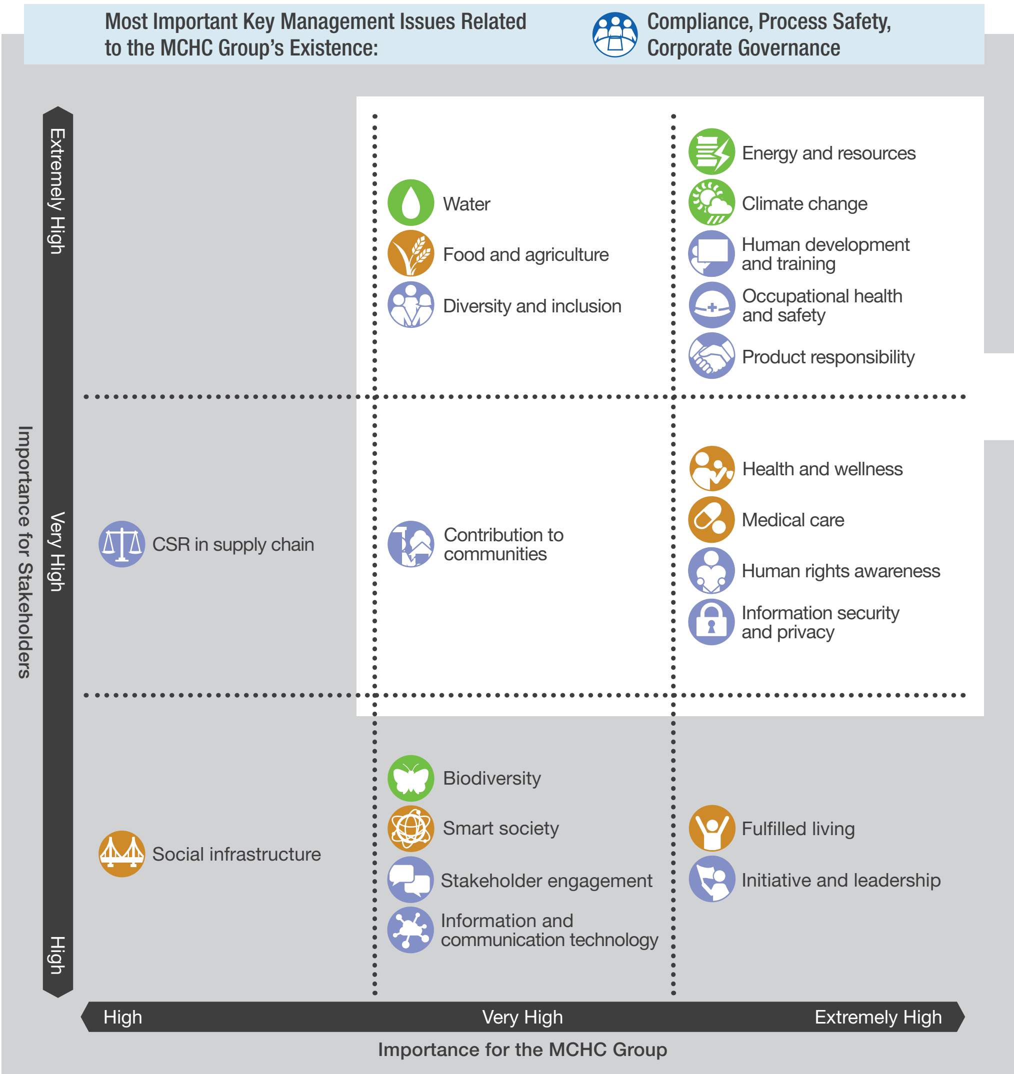
Created the matrix along the two axes of importance (the magnitude of effect) for stakeholders and importance for the MCHC Group.

PROCESS 5

Company approval procedures

Discussed and approved the process of materiality assessment and the materiality matrix in the MCHC Management Committee and the Board of Directors.

Key Issues Related to the Global Environment	Key management issues that the MCHC Group should address through its corporate activities, innovation, and provision of products and services in the aim of achieving comfort for the Earth.
Key Issues Related to Social Systems	Key management issues that the MCHC Group should address through its corporate activities, innovation, and provision of products and services in the aim of creating a more comfortable society.
Key Issues Related to the Company and Its Organizational Structure	Key management issues that the MCHC Group should address in its internal operations and external relations as a corporate group aiming to realize *KAITEKI*.



Connection between the MOS and SDGs

"Transforming our world: the 2030 Agenda for Sustainable Development" adopted by the United Nations in September 2015 and "the sustainable development goals (SDGs)" targets correlates with many aspects of the MCHC Group's *KAITEKI* vision and its efforts to realize a sustainable society.

We have taken U.N. 17 Sustainable Development Goals with 169 associated targets to be achieved by 2030 with the management issues we see as important, arranging them in terms of their relationship to materiality. To maximize its contributions to both solutions, the MCHC Group will continue to promote and advance the MOS.

Materiality	Recognized Opportunities and Risks	MCHC Group Management	Related SDGs
Key Issues Related to the Global Environment			
Energy and resources	- Transformation and diversification of resources and energy supply sources - Practical application of renewable energy and accelerated technological development - Depletion of rare metals and other natural resources	Address the depletion of natural resources and energy-saving by switching to renewable raw materials, curbing the use of rare metals, reducing raw fuel consumption and promoting 3R and zero-emission.	7 AFFORDABLE AND CLEAN ENERGY 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 13 CLIMATE ACTION
Climate change	- Increasing risk of extreme weather events and natural disasters associated with climate change - Formation of international consensus and effectiveness of measures to prevent global warming - Expand products and businesses to adapt and mitigate climate change	Reduce GHG emissions, promote LCA and utilize low-carbon resources and energy, while striving to create and expand business opportunities that mitigate or adapt to climate change.	
Water	- Expanding water stress due to higher demand, climate change and other factors - Increasing health risk due to shortages of hygienic water - Expanding businesses such as water purification and recycling	Work to use water resources efficiently and clean wastewater while contributing in finding solutions to water resource issues by providing safe and clean water through our products and services.	
Key Issues Related to Social Systems			
Health and wellness	- Increasing incidence rate for adult-onset diseases and rising mortality - Increasing risk of failing health insurance systems - Expanding health information service market (shift from treatment to prevention)	Promote the use of health information and disease prevention by improving lifestyle habits through self-medication and expanding healthcare products and services, and contribute to the advancement of people's health.	3 GOOD HEALTH AND WELL-BEING 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
Medical care	- Manifestation of unmet medical needs - Advancing digitization of data on medical treatment and health information through ICT - Growing forays into the medical and healthcare fields from other industries	Improve patient QOL and help people's lives and health by developing pharmaceuticals that respond to unmet medical needs and contributing to the sophistication of medical care through regenerative medicine and remote medicine technologies.	
Food and agriculture	- Population growth and increasing urban lifestyles - Increasing shift to factory-produced foods	Contribute solutions to food and agricultural issues by preserving food resources, resolving maldistribution, and providing products and services that improve agricultural productivity.	
Key Issues Related to the Company and Its Organizational Structure			
Product responsibility	- Growing interest in the quality, safety and environmental performance of products and services - Reducing the use of chemicals and harmful substances, and demands for information disclosure	To ensure that customers can use products and services in relief, pursue initiatives to ensure the quality and safety of products throughout lifecycle and minimize the adverse effect on the environment.	3 GOOD HEALTH AND WELL-BEING 8 DECENT WORK AND ECONOMIC GROWTH 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 17 PARTNERSHIPS FOR THE GOALS
Human development and training	- Developing the capabilities of human resources based on medium-term human resource development policies - Enhancing the return on investment from human resource development	Seek to offer equal opportunity in hiring, placement, advancement and skill development, while pursuing the acquiring and development of human resources based on a medium- to- long-term perspective.	
Occupational health and safety	- Ensure the health and safety of employees, while improving productivity and ensuring business continuity by preventing accidents	Implement safety management in accordance with national and regional laws and regulations and develop safe workplace environments while maintaining and advancing the physical and mental health of employees.	
Human rights awareness	- Rising concerns over human rights violations through corporate activities - Emerging risks to human rights in the supply chain	Respect the dignity and rights of all people in corporate activities and require that business partners refrain from violating human rights or engaging in inappropriate discrimination.	
Information security and privacy	- Digitizing all manner of information including corporate information and personal information - Increasing information security risks due to the widespread adoption of IT/IoT	Recognize the importance and responsibilities associated with protecting information assets and manage information adequately to prevent the confidential information of customers, business partners, MCHC or other parties from being leaked.	
Diversity and inclusion	- Retain and cultivate talented employees based on a human resource strategy that respects diversity	Incorporate a diverse range of human resources and views without regard to their nationality, age or belief, and promote diversity and inclusion through our corporate activities in enhancing corporate value.	
Contribution to communities	- Building relationships of trust by actively engaging in exchanges with and contributing to communities in areas where we conduct business	Broadly contribute to society through business activities while deepening understanding of various communities and continually responding to their requests and expectations.	

Sustainability

APTSIS 20 - Progress of the MOS Indices

Begun in fiscal 2011, the MCHC Group's MOS Indices are management benchmarks for visualizing the degree of contribution to "Sustainability for people, society and the Earth." The MCHC Group has selected and systemized quantifiable initiatives where we can have a large impact on solving environmental and social issues that will emerge in the future.

For the MOS Indices incorporated into the current medium-term management plan *APTSIS 20*, we have made improvements including selection of index items that reflect materiality, upgrading of indices related to products that contribute to *KAITEKI*, and expansion to monitored Group companies inside and outside Japan. In fiscal 2016, the first year of *APTSIS 20* resulted in an annual target achievement rate of 87%, earning 99 points.

Outline of S Indices

With many high-utilization factories, we have strived to achieve stable operation, and by making progress in reducing emissions that place a burden on the environment, we have achieved good progress in reducing environmental impact on the atmosphere and soil environment (S-1-1, 3). However, we did not achieve notable progress in helping to solve food problems (S-3-3).

Related Articles

➡ Promote activities to conserve energy (S-2-1)
Non-financial indicators: (See page 39)

➡ Promote use of renewable energy (S-2-3)
The MOS Indices Topics: (See page 67)

Outline of H Indices

Although we achieved good progress in providing pharmaceuticals, supplying vaccines and offering health management and health checkup information (H-1-1, H-2-1 and H-2-2), we failed to meet our annual targets in terms of providing products in the health, sanitation and medical fields (H-3-1, H-3-2 and H-3-3).

Related Articles

➡ Provide health management and health checkup information (H-2-2)
Non-financial indicators: (See page 39)

➡ Provide vaccines (H-2-1)
The MOS Indices Topics:(See page 67)

Outline of C Indices

In terms of preventing accidents and injuries (C-1-2), where we set ourselves ambitious targets, we surpassed our targets concerning safety incidents but fell far short of the targeted lost-time injuries frequency index. In terms of the employee wellness index (C-2-3), we continued to improve and enhance our performance concerning long working hours, the rate of work absences due to illness and injury, the percentage of female employees advancing to assistant manager level and above and the percentage of female managers, and met our annual targets in these areas. For comfort value provision index (C-3-1), the percentage of monitoring products that satisfy our annual target stalled at 25% and we failed to meet the targets of this index as a whole.

Related Articles

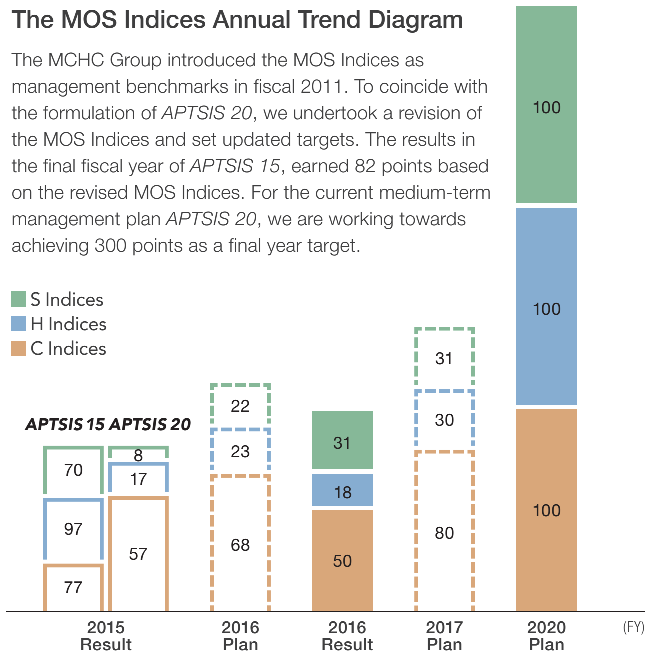
➡ Prevent accidents and injuries: lost-time injuries frequency index (C-1-2)
Non-financial indicators: (See page 39)

➡ Improve evaluation by stakeholders (C-2-2)
The MOS Indices Topics: (See page 67)

In fiscal 2017, the MCHC Group will continue to deepen and broaden the MOS promotion activities it has pursued to date. Further, to coincide with the formation of MCC and the full-scale launch of Health and Productivity Management, we will expand the range of products that contribute to *KAITEKI* in coordination with growth strategies, promote the building of a dynamic and cooperative organization in concert with Health and Productivity Management and proceed with initiatives to strengthen MOS coordination at overseas Group companies as we strive to achieve the annual targets.

The MOS Indices Annual Trend Diagram

The MCHC Group introduced the MOS Indices as management benchmarks in fiscal 2011. To coincide with the formulation of *APTSIS 20*, we undertook a revision of the MOS Indices and set updated targets. The results in the final fiscal year of *APTSIS 15*, earned 82 points based on the revised MOS Indices. For the current medium-term management plan *APTSIS 20*, we are working towards achieving 300 points as a final year target.



APTSIS 20 MOS Indices Performance Evaluation List

Index that need to be achieved — Achieve zero occurrences of serious accidents and compliance violations

	MOS Indices			Assessment Criteria (Units)	FY 2016 Plan	FY 2016 Result	FY 2020 Target	Annual Self-Assessment	Point allocation
S	Contribute to reducing environmental impact	S-1-1	Reduce burden on the atmospheric environment	Per-unit impact on the environment (LIME / ¥100 million)	640.1	563.2	591.9	★★★	10
		S-1-2	Reduce burden on the water environment	Per-unit impact on the environment (LIME / ¥100 million)	7.1	7.3	6.1	★★	8
		S-1-3	Reduce burden on the soil environment	Per-unit impact on the environment (LIME / ¥100 million)	7.0	5.9	5.1	★★★	10
	Efficient use of resources and energy	S-2-1	Promote activities to conserve energy	Energy-saving effects (equivalent tons of heavy oil)	13,969	14,849	66,000	★★★	13
		S-2-2	Convert to resource-saving and reusable materials	Reduction of resource volume (equivalent tons of heavy oil)	2,326	1,965	12,000	★★	13
				Growth rate in provision of resource recycling services (%)	9.2	14.2	28	★★★	
		S-2-3	Promote use of renewable energy	Volume of renewable energy generated and supplied (Mw)	36.2	42.0	50	★★★	13
	Contribute to the sustainability of the environment and resources through products and services	S-3-1	Provide products and services that contribute to reducing GHG emissions	Contribution to the reduction of GHG emissions (hundreds of millions of tons-CO_2 equivalent)	0.56	0.46	1.5	★★	13
		S-3-2	Provide products and services that help solve water resource problems	Volume of reused water supplied (hundreds of millions of tons)	2.05	1.56	17	★★	10
		S-3-3	Provide products and services that help solve food problems	Growth in sales of related products and services (%)	7.1	-0.7	30	★	10
H	Contribute to medical treatment	H-1-1	Pharmaceuticals provision	Contribution index for pharmaceuticals provision (points)	5.25	5.66	15	★★★	15
		H-1-2	Provide clinical testing services	Contribution index for providing clinical testing services (points)	2.25	2.06	15	★★	15
	Contribute to the prevention and early detection of diseases	H-2-1	Provide vaccines	Vaccine provision index (points)	0.41	0.85	14	★★★	14
		H-2-2	Provide health management and health checkup information	Increase frequency of health information provisions (compared to base year, %)	110	145	325	★★★	14
	Contribute to achieving healthy and hygienic lives through products and services	H-3-1	Provide products for the health field	Improve sales of applicable products (points)	5.43	3.02	14	★★	14
		H-3-2	Provide products for the sanitation field	Growth rate in sales of applicable products (%)	20.9	-0.6	60	★	14
		H-3-3	Provide products for the medical field	Growth rate in sales of applicable products (%)	27.7	20.5	60	★★	14
C	Endeavor to earn greater recognition of corporate trust from society	C-1-1	Improve awareness of compliance	Compliance awareness improvement index (points)	21.0	15.8	21	★★	21
		C-1-2	Prevent accidents and injuries	Reduction rate of safety incidents (%)	47.3	57.9	60	★★★	19
				Reduction rate of environmental incidents (%)	80	60	100	★★	
				Improvement rate of lost-time injuries frequency index (%)	52.4	-30.8	50	★	
		C-1-3	Initiatives to provide products and services trusted by society	Customer satisfaction index (points)	47	25	47	★	17
				Improvement rate in the number of complaints (%)	18.3	24.2	50	★★★	
	Promote communication and work in concert with stakeholders	C-2-1	Promote communication with business partners	Communication improvement index (points)	30.4	36.9	83	★★★	7
		C-2-2	Improve evaluation by stakeholders	External evaluation index (points)	11.0	9.3	11	★★	11
		C-2-3	Build a dynamic and cooperative organization	Employee wellness index (points)	3.53	6.57	16	★★★	16
	Contribute to achieving a more comfortable society and better lifestyle	C-3-1	Provide products and services that contribute to a comfortable society and better lifestyles	Growth rate in the comfort value provision index (%)	8.8	4.4	40	★	9

Related materiality theme

Sustainability

FOCUS The MOS Indices

S Indices S-2-3 Promote use of renewable energy

Materiality
Energy and resources

SDGs 7

We set the new MOS Indices as a benchmark for contributions to encouraging the use of renewable energies that poses no concerns over the depletion of resources and promise to prevent global warming. In fiscal 2016, the MCHC Group facilitated the equivalent of 42MW of renewable energy, a 16% increase over the annual planned levels, due to strong supply of large tow carbon fiber for use in wind power generation. In wind power generation for offshore facilities and low wind velocity regions, as generator blades have become larger in recent years, there has been increasing demand for light and rigid blades. This had led to the increased use of high-performance large tow carbon fiber in place of glass fiber. In addition to strengthening its supply system for carbon fiber in fiscal 2016, the MCHC Group established a European joint venture to manufacture and sell carbon fiber composite materials for turbine blades. Thus, the Group is making progress with efforts to further expand the use of renewable energies.

H Indices H-2-1 Provide vaccines

Materiality
Health and wellness

SDGs 3

The vaccine provision index provides a quantitative assessment of the number of infectious disease cases, the number of people vaccinated to prevent increased disease severity and halt the spread in groups, the effective period of pharmaceutical benefits, and other factors. In fiscal 2016, the MCHC Group achieved a 13.9% increase over the annual planned levels and 18.9% of progress toward its medium-term management plan target thanks to strong shipments of *Mearubik*, a measles and rubella combined vaccine. In May 2017, a final agreement was reached on the establishment of BIKEN, a vaccine manufacturing joint venture with the Research Foundation for Microbial Diseases of Osaka University, with plans to commence operations in September. This development will reinforce production infrastructure and contribute to the stable supply of vaccines. Moreover, through the development of more effective vaccines, we will strive to achieve the targets set for fiscal 2020 to realize healthy lifestyles and communities.

C Indices C-2-2 Improve evaluation by stakeholders

Materiality
Stakeholder engagement

SDGs 17

In fiscal 2016, regarding comfort index to improve stakeholder satisfaction, we achieved 84.4% of progress in the final fiscal year of *APTSIS 20*. In recognition of the management we have pursued to date on sustainability, MCHC was the only Japanese company to be awarded Bronze Class in the Chemical Sector of "RobecoSAM's Sustainability Award 2017." MCHC also obtained the highest rank in the Development Bank of Japan's environmental rankings for the first time since 2013, and also received a special commendation. In this environmental ranking assessment, MCHC was regarded highly for strengthening the links with MOE financial information in its MOS Indices while setting quantitative targets related to the provision of products and services in light of international trends such as the Sustainable Development Goals (SDGs).

Case 1 Providing solutions for environmental and social issues through products and services

The MCHC Group handles more than 20,000 products and services and offers a range of solutions to current environmental and social issues. In "the SDG Industry Matrix", which summarizes cases where companies have contributed to the SDGs, *REPELARK* carbon fiber sheets for steel and concrete reinforcement, *BioPBS* biodegradable polymer and *Hydro Shuttle* package type hydrogen station were listed. MCHC also compiled examples of its solutions being used to address issues such as healthcare, biodiversity, disaster prevention and disaster mitigation, and released the information via its website and so on. Products contributing to biodiversity have been recognized by experts from both a scientific and comprehensive perspective, including direct contributions to ecosystems and the environmental impact over the product lifecycle, and selected as products with high levels of contribution. Among these, an "groundwater membrance filtration system "developed by Wellthy Corporation was awarded the Grand Prize in the 4th Platinum Vision Award, while the *X-sheet* from Quadrant Plastic Composites Japan Ltd. won the Let's Select Award in the Biodiversity Action Award Japan 2016. In the areas of disaster prevention and mitigation, selected products were compiled into a booklet along with opinions from experts in the industries, government, academia and private sectors and used as internal and external communication tools. Moving forward, MCHC will strive to find solutions to global agenda items such as SDGs and realize the *KAITEKI* concept by rolling out products that contribute to *KAITEKI* in a deeper and broader fashion.

Case 2 Initiatives to create a future in which anyone can enjoy sports

The MCHC Group is pursuing a number of initiatives aimed at a future in which anyone can enjoy sports. Aiming to create a world in which people with disabilities can embrace their individuality and achieve whatever they desire, The KAITEKI Institute, Inc. is engaged in the development of prosthetic legs for sports. MCHC signed a sponsorship agreement with athlete Kaede Maegawa, who competes in athletics events with a prosthetic leg (placed 2nd in women's long jump T42 and 5th in the women's 100 meter sprint T42 at World Para Athletics Championships London 2017). As well as supporting Maegawa's athletic activities, we receive feedback based on prosthetic leg usage results and advice for product development while pursuing further development in the lead-up to the 2020. On another front, the anti-doping laboratory of LSI Medience Corporation is the first in Asia and the only body in Japan to be certified as a doping test specimen analysis facility by the World Anti-Doping Agency. Through the promotion of anti-doping activities and related research, we are contributing to the sound development of sports.

Case 3 Initiatives to empower local communities

Embracing the concept of "continuing to act ethically to contribute to the development of regional environments and economies and to improving the lives of workers, their families and local communities," PT. Mitsubishi Chemical Indonesia has been undertaking systematic efforts to help improve the living infrastructure, educational environment, health and sanitation in the village of Gerem in Merak, Banten Province, Indonesia, where the company has operated a plant since 2007. With the roadmap extending to 2023, the company's activities to steadily empower the local community have been highly regarded by the local government. In 2012, the company received the "Platinum Award" from the government of the Republic of Indonesia for "the Deep Well Project" to supply water to people living in areas with harsh terrain, helping Indonesia meet its MDG targets. In 2014, the company won the Gold Prize in Indonesia's CSR Awards operated by the government of Indonesia for "the SAUNG AKSARA" CSR program in the village of Gerem. These activities have attracted attention from Japan and overseas, and are visited by many observation groups each year.

MCCI's CSR Roadmap

MCCI have Roadmap of External CSR program for 2007-2023:

Sustainability

KAITEKI Health and Productivity Management

Initiatives to maximize active participation of "workers"

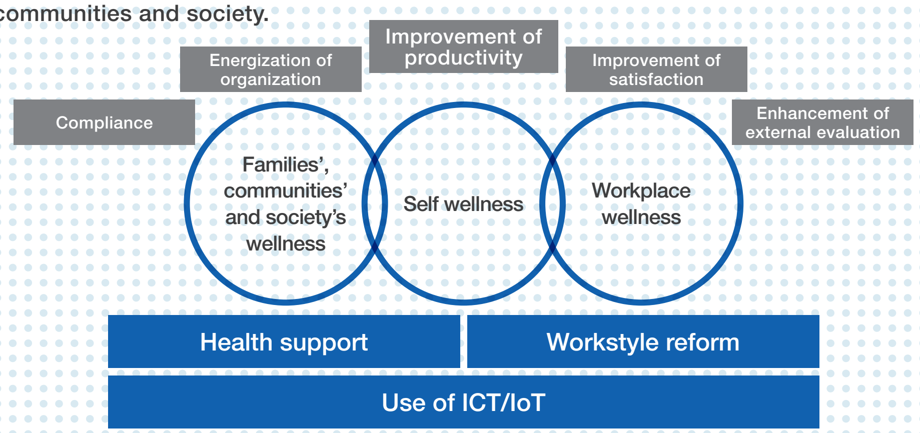
The MCHC Group recognizes that "people" are the driving force behind the sustainable growth of society and business, and considers human resources as one of its most important management resources.
We refer to initiatives that fully utilize people's skills and maximize the active participation of workers as *KAITEKI* Health and Productivity Management*, and we promote such initiatives as part of *KAITEKI* Management.

* "*Kenkokeiei*," which means Health and Productivity Management in Japanese. is a registered trademark of the Workshop for the Management of Health on Company and Employee, an NPO. In terms of using "*KAITEKI* Health and Productivity Management," the trademark is authorized to be used by Workshop for the Management of Health on Company and Employee.

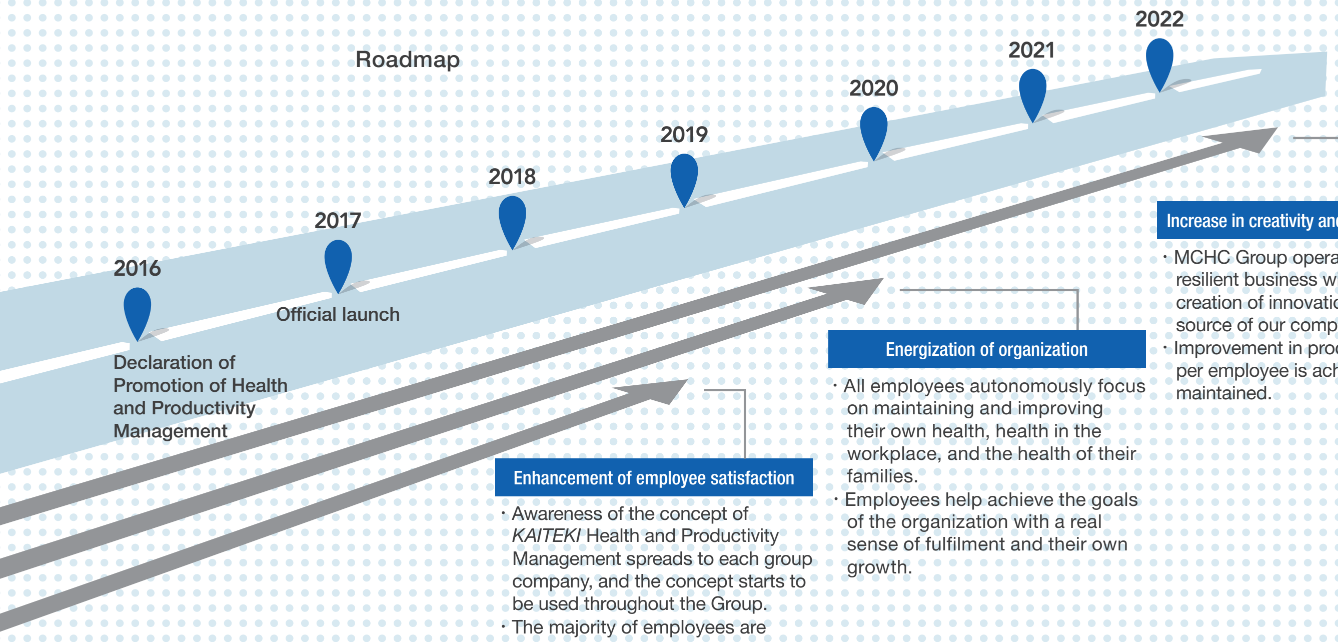
What is KAITEKI Health and Productivity Management?

Definition *KAITEKI* Health and Productivity Management refers to initiatives which maximize the active participation of "workers" - one of the most valuable assets - from the perspective of health. It has two main strands – "health support" and "workstyle reforms" for the employees and the workplaces. To realize *KAITEKI*, we are extending the scope of the Health and Productivity Management to encompass the wellness of families, communities and society as a whole, and we plan to integrate and utilize various innovative technologies such as ICT and IoT in these health-oriented initiatives.

Objectives
- To become a company where diverse human resources work with energy and vitality.
- To become a company with high levels of creativity and productivity.
- To become a company which also contributes to promoting the wellness of families communities and society.



Roadmap



Enhancement of employee satisfaction
- Awareness of the concept of *KAITEKI* Health and Productivity Management spreads to each group company, and the concept starts to be used throughout the Group.
- The majority of employees are proactively engaged in health and a win-win-situation for both employees and the company is established.

Energization of organization
- All employees autonomously focus on maintaining and improving their own health, health in the workplace, and the health of their families.
- Employees help achieve the goals of the organization with a real sense of fulfilment and their own growth.

Increase in creativity and competitiveness
- MCHC Group operates a sound and resilient business with the active creation of innovation, which is the source of our competitiveness.
- Improvement in productivity per employee is achieved and maintained.

Message from Chief Health Officer (CHO)

Every worker get on with their work independently, fully demonstrating their abilities and realizing how much value they have managed to create for society. Such a situation would give each individual a sense of fulfilment and satisfaction, energize the organization, and also lead to high levels of creativity and productivity. This is what we want to achieve through *KAITEKI* Health Management. Following the President's declaration to promote health management in fiscal 2016, MCHC has formulated a roadmap from now through to fiscal 2020, hinging on health support and workstyle reform and has begun taking concrete action.

We are promoting health and productivity management in the basic belief that if the health of employees, health in the workplace and the health of families and society as a whole can positively impact each other, then the entire company will be able to grow and continue to create significant value for society.

Representative Corporate Executive Officer, Deputy CEO, Chief Compliance Officer, Chief Health Officer **Noriyoshi Ohira**

PLAN
What we aim to achieve

Provide support for good health to help diverse human resources work with energy and vitality
Develop high levels of creativity and productivity
Contribute to promoting the health of families, communities and society

DO
Setting themes that embody the target

Health support
Increase in health awareness
Establishment of appropriate lifestyles
Measures against work accidents focusing on human factors
Creation of safe and healthy workplace

Workstyle reform
Work reform
Provision of diverse, flexible ways of working
Effective capability development
Proper management of working hours

ACTION
Proposal and execution of countermeasures

Examples
Health exercise/Promotion of teleworking/
Lights out from 7:00 pm
Improvement of meeting efficiency
Distribution of wearable devices

CHECK
Monitoring and verification of effects

Examples
Management leadership
Level of health of employees
Level of energization of organization
work-life balance
Use of ICT/IoT

Examples of Activities

Promotion of efficient use of time

Challenge to halve duration of meetings

We conducted the survey to find out how managerial personnel, such as section chiefs of manufacturing departments and managers of business departments, allocate their working time. The results revealed that they spend a great deal of time in meetings, preparing documents for meetings and contacting people by email. Based on top-down instructions for improvement, we review the meaning and attendees of meetings, shorten meeting time and simplify meeting documents. Not only for managers but for the entire workforce, we develop the systems including teleworking and promote efficient ways of working so that employees can concentrate on high priority work.

Utilization of ICT

Changing health awareness through visualization of the level of activity and sleep

The first step to good health is to notice your own health condition and lifestyle habits, to recognize them as something that concerns yourself, and to ensure an appropriate amount of exercise, a balanced diet, and good sleep. MCHC is creating an ICT system (i^2 Healthcare) to support this health PDCA cycle. We centralize the data of health condition and workstyle, link those data with exercise and sleep data measured by wearable devices distributed to employees, and visualize the data results in real time, thus helping to improve their health awareness and behavior. We are using this i^2 Healthcare system as the basis for health support.

Sustainability

☑ Indicators with this icon have been assured by KPMG AZSA Sustainability Co., Ltd. for fiscal 2016.

Environmental Data

Scope of data aggregation: The data for fiscal 2014 covers the three operating companies (MCC, MTPC, and LSII) as well as their domestic Group companies. The data for fiscal 2015 covers the three major operating companies, TNSC and their domestic Group companies, and the data for fiscal 2016 covers these four operating companies and their domestic and overseas Group companies. (Group companies are directly-owned consolidated subsidiaries).

	FY 2014	FY 2015	FY 2016
Energy consumption/ Greenhouse gasses (GHG) *1			
☑ GHG emissions (1,000 t-CO_2e) *2	8,764	12,054*4	14,269*4
☑ Energy consumption (GWh) *3	30,277*4	34,935*4	38,950*4

*1 Energy consumption and CO_2 emissions used for generating electricity and steam sold externally had been excluded until fiscal 2015 results, but in conformity with the GHG protocol, they are not excluded starting in fiscal 2016.
*2 The emission factor of the Act on Promotion of Global Warming Countermeasures is used for the calculation of emissions in Japan. Regarding GHG emissions that are not subject to reporting under the Act, a specific calculation rule based on the balance of chemical reactions, etc. is set separately. Regarding emissions overseas, for Scope 1 emissions, the emission factor is based on the Act on Promotion of Global Warming Countermeasures or IPCC, and for Scope 2 emissions, the emission factor specific to each supplier or the emission factor for each country (2014 value) announced by IEA is used for calculation.
*3 The unit heating value of energy is based on the Act on the Rational Use of Energy and IPCC and is indicated as a higher heating value. Regarding electricity, the value converted to the amount of primary energy is used until fiscal 2015 results, but the amount of electricity purchased is used starting in fiscal 2016 results. For comparison with past data, the energy in fiscal 2014 and 2015 is recalculated using the amount of electricity purchased without being converted to primary energy.
*4 The fiscal 2015 results include GHG emissions of 1.65 million tons and energy consumption of 1,942 GWh by affiliate companies that are closely associated in terms of energy management, but the fiscal 2016 results exclude GHG emissions and energy consumption of these companies. In addition, regarding electricity, the value converted to the amount of primary energy is used until fiscal 2015 results, but the amount of electricity purchased is used starting in fiscal 2016. For comparison with past data, the energy in fiscal 2014 and 2015 is recalculated using the amount of electricity purchased without being converted to primary energy.

	FY 2014	FY 2015	FY 2016
Environmental impact			
☑ NOx emissions (1,000 tons)	8.88	8.04	8.96
☑ SOx emissions (1,000 tons)	3.06	3.08	4.77
☑ COD emissions (1,000 tons) *5	1.75	1.74	2.00
☑ Total nitrogen emissions in drained water (1,000 tons) *5	5.68	5.53	6.06
☑ Total phosphorous emissions (1,000 tons) *5	0.06	0.05	0.09

*5 Total COD emissions, total nitrogen emissions and total phosphorous emissions each show total volume of emissions discharged into rivers, lakes and oceans. Exclude emissions into sewage systems.

	FY 2014	FY 2015	FY 2016
Water use			
☑ Water consumption (million m^3) (excluding seawater)	174	171	189

Social Data

		FY 2014	FY 2015	FY 2016
Constitution of employees (MCHC Group)				
Number of consolidated employees		68,263	68,988	69,291
Number of employees by district	In Japan	—	44,858	44,034
	Outside Japan	—	24,130	25,257

Aggregation period: Each fiscal year from April 1 to March 31, or as of March 31

Scope of data aggregation: In fiscal 2014, the figures show those employed by the two operating companies (MCC and MTPC). In fiscal 2015, the figures show those employed by the three operating companies with the addition of TNSC, excluding those seconded to other companies but including those seconded from other companies. There are no employees in LSII other than those seconded from the Group.

		FY 2014	FY 2015	FY 2016
Diversity / Work-Life Balance / Occupational Safety				
☑ Number of employees		20,886	22,508	21,736
☑ Number of employees by gender	Male	17,742	19,194	18,459
☑	Female	3,144	3,314	3,277
☑ Percentage of females (%)		15.1	14.7	15.1
☑ Percentage of female managers (%) *6		7.4	7.1	7.7
☑ Paid leave utilization rate (%)		66.9	66.8	67.6
☑ Lost-time injuries frequency rate (LTIFR) *7,*8		0.32	0.48	0.30

*6 Percentage of female employees out of all employees at assistant manager level and above.
*7 Scope of data aggregation: Figures from domestic operations of the four operating companies (MCC, MTPC, LSII and TNSC) and their Group companies with operating divisions active within Japan.
*8 The LTIFR is the number of lost-time injuries and fatalities per million hours worked.

KPMG

Independent Assurance Report

To the President and CEO of Mitsubishi Chemical Holdings Corporation

We were engaged by Mitsubishi Chemical Holdings Corporation (the "Company") to undertake a limited assurance engagement of the environmental and social performance indicators marked with ☑ for the period from April 1, 2016 to March 31, 2017 (the "Indicators") included in its KAITEKI REPORT 2017 (the "Report") for the fiscal year ended March 31, 2017.

The Company's Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the "Company's reporting criteria"), as described in the Report.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with 'International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information', 'ISAE 3410, Assurance Engagements on Greenhouse Gas Statements', issued by the International Auditing and Assurance Standards Board, and the 'Practical Guidelines for the Assurance of Sustainability Information' of the Japanese Association of Assurance Organizations for Sustainability Information. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing with the Company's responsible personnel to obtain an understanding of its policy for the preparation of the Report and reviewing the Company's reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical reviews of the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company's reporting criteria, and also recalculating the Indicators.
- Visiting to the Yokkaichi Plant of Mitsubishi Chemical Corporation and Huizhou MMA Co., Ltd. selected on the basis of a risk analysis.
- Evaluating the overall statement in which the Indicators are expressed.

Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the Indicators in the Report are not prepared, in all material respects, in accordance with the Company's reporting criteria as described in the Report.

Our Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control 1, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

KPMG AZSA Sustainability Co., Ltd.

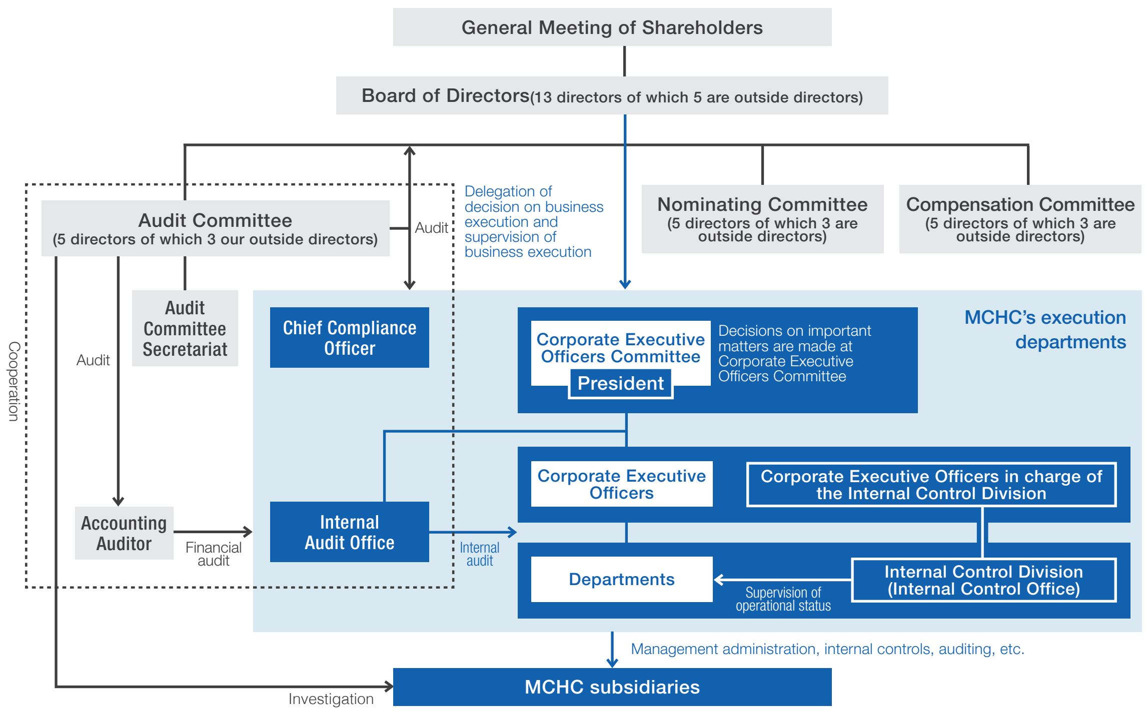
KPMG AZSA Sustainability Co., Ltd.
Tokyo, Japan
September 12, 2017

Corporate Governance

MCHC aims to contribute to the sustainable development of society and the Earth, in addition to solving environmental and social issues through corporate activities for the realization of *KAITEKI*.
With eyes on these objectives, we are focusing efforts on establishing a better corporate governance structure by improving management transparency through proper disclosure and dialog with stakeholders, while updating systems for enhancing both the soundness and efficiency of management.

Corporate Governance Structure for Sound Management and Greater Efficiency (As of June 27, 2017)

MCHC is a company with a nominating committee, etc., which separates functions for the supervision and execution of business in a bid to enhance management transparency and openness, to strengthen supervisory functions, and to improve management agility through prompter decision-making. While management supervision is now undertaken by the Board of Directors and three committees; the Nominating Committee, Audit Committee, and Compensation Committee, corporate executive officers make business decisions and are in charge of business execution.



History of Strengthened Corporate Governance

Month / Year	Initiatives	Objective
June 2006	Introduced stock-based compensation (stock option) plans	To link director's remuneration to share price
June 2013	Appointment and inauguration of an outside director	To strengthen the system of management supervision
June 2014	Appointment and inauguration of a foreign director	To improve diversity in directors
June 2015	Appointment and inauguration of a female director Transition to a company with a nominating committee, etc.	To improve diversity in directors To enhance management transparency and fairness, to strengthen management supervision functions
June 2016	Increase number of outside directors	To improve diversity in directors

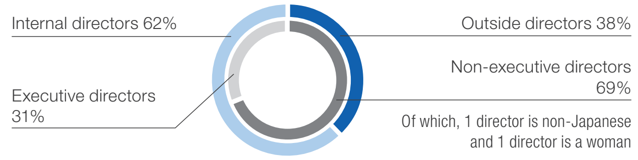
Concept of roles and constitution of Board of Directors

The Board of Directors determines basic management policies such as medium-term management strategies and annual budgets, and supervises the execution of business by the corporate executive officers, who are in principle delegated to responsibility to decide about business execution based on these basic policies, with the exception of matters that must be legally resolved by the Board of Directors.

To reflect diverse opinions in management as well as to strengthen supervisory functions, MCHC has elected not only internal directors who have an intimate knowledge of the Group's business domains along with specialized fields including management planning, finance, general affairs, HR and R&D, but also five outside directors with experience in corporate management, expertise in social and economic issues as well as science and technology, and accreditations as certified public accountants and attorneys. In addition to the outside directors, there are four non-executive directors among the internal directors who do not execute business for MCHC or its core operating companies. Accordingly, a majority of the directors are in non-executive roles, establishing a system enabling the proper supervision of the execution of duties.

MCHC's Articles of Incorporation restrict the number of directors to less than 20. As of June 27, 2017, there were 13 directors, including five outside directors and four directors who also serve as corporate executive officers. The term of each director is one year, which helps to clarify management responsibilities and to establish a management structure that is able to swiftly respond to changes in the business environment.

Constitution of Board of Directors(As of June 27, 2017)



Outline of Evaluation Results on Effectiveness of Board of Directors for Fiscal 2016

1. Implementation of evaluation on effectiveness of the Board of Directors

The Mitsubishi Chemical Holdings Corporate Governance Guidelines require MCHC to evaluate the effectiveness of the Board of Directors each year and disclose an outline of the results. This year, MCHC analyzed and evaluated the effectiveness of the Board of Directors as a whole with "utilizing outside directors" serving as a major theme.

2. Analysis and evaluation method

A written survey was conducted among all directors including the Chairperson (the major question (1) "About the role of outside directors" and (2) "About enhancing discussions on the medium- to- long-term direction of management"). Based on the responses, directors not involved with the execution of business (Chairperson of the Board, outside directors and internal Audit Committee members) analyzed the current situation and discussed future issues and points that need to be improved. In light of these discussions, the Chairperson evaluated the effectiveness of the MCHC Board of Directors and reported the results to the Board of Directors in June 2017.

3. Outline of evaluation results

The evaluation concluded that MCHC's Board of Directors is being managed appropriately and that its effectiveness is being duly maintained, primarily through management supervisory functions. In particular, in response to the previous year's evaluation results, the provision of information to the Board of Directors was improved by taking the measures listed in 4 below. Further, through the facilitation of substantive and lively discussion by having outside directors pose appropriate questions and express their views from diverse viewpoints, the effectiveness of the Board of Directors was confirmed to have improved compared to the previous year.

However, toward enhancing discussions on the medium-to long-term direction of management, it was recognized that there is further room for improvement with regard to (1) and (2) below.

(1) Improvement of provision of information to outside directors
Suggested improvement: To deepen knowledge of the Group's major businesses on the premise of conducting more productive discussions among the Board of Directors, periodic information exchange sessions have been conducted between outside directors and MCHC corporate executive officers. We will revise how these sessions are operated and make use of ICT in information sharing to reduce the asymmetry in internal and external information.

(2) Efficient operation of the Board of Directors
Suggested improvement: We will revise how to provide prior explanation to ensure sufficient time for substantive discussions during board meetings. We will also endeavor to improve the efficiency of meeting operation, by using explanatory materials that clarify points of discussion from the perspective of a holding company.

4. Efforts to address the results of the previous evaluation

The evaluation on effectiveness conducted in the previous year identified the issues; i) enhancement of discussion over the direction of medium-and-long-term direction of management, ii) reinforcement of monitoring over the progress of the medium-term management plan, and iii) further efforts to improve the reporting items.

We took the following measures in response. For i), we newly established the Corporate Executive Officers Committee as a council-format body made up of corporate executive officers, set up departments responsible for managing business strategy in the four business domains, and deepened discussions on the direction of medium- to- long-term management from a holding company's perspective, leading to revitalized discussions in board meetings. With regard to ii), we began managing the progress of the medium-term management plan through the new business monitoring methods introduced from April of this year. For iii), in addition to business plans and progress reports, we revised reporting guidelines to ensure that negative information such as accidents and compliance breaches are reported to officers overseeing the holding company and the Board of Directors in a swift and appropriate manner.

MCHC will continue its efforts to enhance and revise the operation of the Board of Directors and endeavor to make further improvements to its effectiveness.

Corporate Governance

Nominating Committee

The Nominating Committee nominates candidates for directors and corporate executive officers, as well as the presidents of major directly-owned subsidiaries that are not listed subsidiaries: MCC and LSII. In consideration of transparency and fairness in the process of nominating candidates, an outside director serves as the chairperson of the committee.

Compensation Committee

The Compensation Committee determines the remuneration amount of individual director and corporate executive officer. It also determines the amount of remuneration for each of the presidents of major directly-owned subsidiaries that are not listed subsidiaries. Moreover, an outside director serves as the chairperson of the committee to increase transparency and fairness in the decision-making process.

Audit Committee

The Audit Committee audits the execution of duties by corporate executive officers and directors, and reviews the Group's internal control systems, etc. In principle, the committee meets once a month. The Audit Committee consists of five members, including three outside directors. With two full-time members, the Audit Committee collaborates closely with the accounting auditor, the Internal Audit Office which conducts internal audits, and the Internal Control Office which formulates and promotes policies on maintenance of internal control systems, to reinforce the audit system administered by the Audit Committee. An internal director who is a full-time member of the Audit Committee serves as the chairperson of the committee to ensure the smooth collection of information and sufficient cooperation between departments.

Activities of Outside Directors

Name	Activities	Attendance at Meetings of the Board of Directors and Committees (FY 2016)		
Takeo Kikkawa	At Board of Directors meetings, Mr. Kikkawa makes remarks as necessary based on his profound insight into company management from the perspective of business history and his experience as an expert in theories on the energy industry. As the chairperson of the Nominating Committee, he takes care of committee procedures and reports the findings to the Board of Directors. As a member of the Compensation Committee, he expresses his opinion as necessary at meetings.	Board of Directors	9 of 10 meetings	90%
		Nominating Committee	8 of 8 meetings	100%
		Compensation Committee	6 of 6 meetings	100%
Taigi Ito	At Board of Directors meetings, Mr. Ito comments as necessary, utilizing his experience and strong perceptions as a certified public accountant. As a member of the Audit Committee, he proposes audit plans, monitors audits in progress and their results, and expresses his opinions as required. As the chairperson of the Compensation Committee, he oversees meeting procedures and reports the results to the Board of Directors.	Board of Directors	10 of 10 meetings	100%
		Audit Committee	13 of 13 meetings	100%
		Compensation Committee	6 of 6 meetings	100%
Kazuhiro Watanabe	At Board of Directors meetings, Mr. Watanabe makes remarks as needed, utilizing his experience and profound insight as a prosecutor and lawyer. As a member of the Nominating Committee and the Compensation Committee, he expresses his opinion as necessary at meetings. As a member of the Audit Committee, he proposes audit plans, monitors audits in progress and their results, and expresses his opinions if necessary.	Board of Directors	10 of 10 meetings	100%
		Nominating Committee	2 of 2 meetings	100%
		Audit Committee	13 of 13 meetings	100%
		Compensation Committee	6 of 6 meetings	100%
Hideko Kunii	At Board of Directors meetings, Ms. Kunii makes remarks as necessary, utilizing her extensive experience as a corporate manager and an expert in information processing, as well as her profound insight into diversity promotion. As a member of the Nominating Committee, she expresses her opinion as necessary at meetings. As a member of the Audit Committee, she proposes audit plans, monitors audits in progress and their results, and expresses her opinions on necessity.	Board of Directors	10 of 10 meetings	100%
		Nominating Committee	8 of 8 meetings	100%
		Audit Committee	13 of 13 meetings	100%
Takayuki Hashimoto	Utilizing his extensive experience in corporate management and profound insight into ICT, Mr. Hashimoto expresses his opinions as required at Board of Directors meetings. As a member of the Nominating Committee, he also expresses his opinions as needed at Nominating Committee meetings.	Board of Directors	6 of 7 meetings	85.7%
		Nominating Committee	4 of 6 meetings	66.7%

Business Execution System

Corporate executive officers make decisions regarding business execution and take responsibility for business operations based on the basic management policies determined by the Board of Directors (medium-term management plan, annual budgets, etc.). Important matters concerning the management of the MCHC Group are deliberated and decided by the Corporate Executive Officers Committee, a council-format body made up of corporate executive officers. By segregating duties among each corporate executive officer and by clearly defining the decision-making authority of each corporate executive officer in charge of specific areas, we have established a system where decisions are made in an appropriate and efficient manner.

The Corporate Executive Officers Committee is made up of all corporate executive officers. In addition to deliberating and deciding on important matters concerning the management of MCHC and the MCHC Group, the committee monitors MCHC Group's businesses based on the medium-term management plan, annual budgets, and so on.

Audit Committee members and the presidents of operating companies also attend Corporate Executive Officers Committee meetings, where they can freely express their opinions.

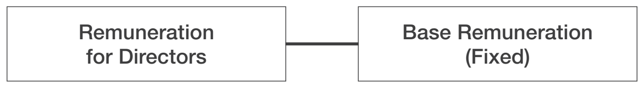
Director Remuneration

The remuneration for each director and corporate executive officer is decided by the Compensation Committee based on the following policies.

The remuneration standards and the ratio of individual remuneration and performance-based remuneration are continually deliberated and the policies are reviewed at the Compensation Committee as necessary.

Policies on Deciding Remuneration for Directors and Corporate Executive Officers

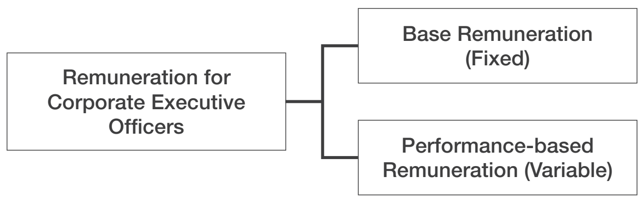
Directors



- Remuneration for directors consists only of basic remuneration (fixed remuneration)
- Basic remuneration is based on title and classification such as full-time or part-time.
- The amount of remuneration is determined at a necessary level for securing personnel suitable for carrying out the responsibilities of a director of a company with nominating committee, etc., while also taking into consideration the levels of other companies.

* When a director concurrently serves as a corporate executive officer, remuneration as a corporate executive officer is applied.

Corporate Executive Officers



* Variable within the range of 0-200%.

- Remuneration for corporate executive officers consists of basic remuneration (fixed remuneration) and performance-based remuneration (variable remuneration).
- Basic remuneration is based on title and duties such as having the right of representation.
- The amount of remuneration is determined at a level necessary for securing outstanding personnel and improving MCHC's competitiveness, while also taking into consideration the levels of other companies.
- Performance-based remuneration entails stock options as stock-based remuneration (¥1 per share stock options) to enhance sustainable medium- to long-term corporate value as well as create incentives associated with shareholder value.

Remuneration Amount

Category	Remuneration, etc. Number of Persons	Remuneration, etc. Amount Paid (millions of yen)
Directors (internal)	8	205
Directors (outside)	5	60
Corporate Executive Officers	8	297
Total	21	562

(Notes) 1. Directors who concurrently serve as corporate executive officers receive remuneration, etc. as a corporate executive officer.
2. The above amount paid as remuneration, etc. to directors (internal) includes ¥6 million of remuneration in the form of stock options. Also note that this remuneration was paid as performance-based remuneration for work performed as a corporate executive officer to directors (internal) who served as corporate executive officers in the preceding period.
3. The above amount paid as remuneration, etc. to corporate executive officers includes performance-based remuneration of ¥29 million in the form of stock options.
4. In addition to the aforementioned remuneration paid to directors (internal) and corporate executive officers, directors (internal) and corporate executive officers who concurrently serve as executive officers of MCHC subsidiaries received the following remuneration from those subsidiaries: directors ¥330 million, corporate executive officers ¥169 million.
5. In addition to the aforementioned remuneration paid to directors (outside), directors (outside) who concurrently serve as corporate auditors of MCHC subsidiaries received remuneration of ¥11 million from MCHC subsidiaries: Mitsubishi Chemical Corporation and Mitsubishi Plastics, Inc.

Risk Management

While the word risk can be defined in various ways, the MCHC Group defines risks as "potential events that could, during the course of corporate activities, undermine public trust in or the corporate value of the MCHC Group".
We recognize, analyze, and evaluate risks and prevent materialization of significant risks. We take measures to minimize the personal, economic and social damage arising in case of materialization.

Charter of Corporate Behavior

The MCHC Group Charter of Corporate Behavior, consisting of thirteen chapters, explicitly declares that we act with sound ethics and good common sense in every aspect of our corporate activities. It also stipulates that we share the fundamental behavioral principles for sustainable development, our approach for major issues in contributing to the realization of *KAITEKI*, and the basic ideas and initiatives on the realization of *KAITEKI*, with our business partners and others.

Awareness and Responsibility	Accountability and Transparency	Legal Compliance and Fairness, Equitability, and Integrity	Valuing Stakeholders	Respecting Human Rights	Employment and Labor	Environment and Safety
Fair Business Practices	Customer Satisfaction	Information Management	Science and Technology	Community Involvement	Shared Standards	

Risk Management

The MCHC Group is engaged in corporate activities with the objective of raising its corporate value. These activities are related to social situations, the global environment and other various external environments, but they involve potential risk.

Risk Management System

MCHC has in place a risk management system whereby the MCHC president is responsible for risk management across the entire Group based on the MCHC Group Risk Management Basic Rules. The status of management of significant risks and policy for risk management that affect the entire MCHC Group are reported and discussed by the Management Committee. The contents of discussion are reported to the Board of Directors, as needed.

The presidents of operating companies are in charge of risk management at their respective Group companies, embedding the risk management systems at their Group and addressing issues through the Risk Management Committees of their respective operating companies.

Recognizing the importance of fostering risk control awareness of all officers, managers and employees, in addition to those in risk management divisions, everyone is expected to be involved in risk management from their respective standpoints.

Risk Management Process

1 **Identification of risks**
Identification of risks is undertaken by each department of every company in the Group based on the degree of impacts and frequency. When identifying risks, due consideration is paid to risks arising from internal conditions based on the type of business and characteristics of each company and external conditions such as the country's political and social situations. Furthermore, a unified system for each operating company has been established to capture the overall risks within the company and to address to them.

2 **Risk assessment and measures**
Each operating company prioritizes identified risks in order of importance for each company, examines countermeasures, and takes action at relevant management departments to mitigate risks. Senior managers also review the risks and undertake screening for risks (major risks) that could have a major impact on Group management via businesses and operations under their control. The relevant departments then implement appropriate risk measures as instructed.

3 **Detailed examination of risk measures**
Risk measures are periodically scrutinized, and measures for major risks in particular are reported to the MCHC president.

4 **Auditing**
To ensure the proper administration of risk management systems, including these related processes, the Internal Audit Office at MCHC periodically audits the risk management system, and reports its findings to the MCHC president.

Measures Against Major Risks

The MCHC Group has isolated the following categories of risks as warranting priority measures. After identification of such risks, we take measures to avoid their incidence or to minimize the resulting damage if the risks materialize.

Compliance

In order to entrench compliance within the Group, we have compiled rules and standards, such as the MCHC Group Charter of Corporate Behavior, published a compliance guidebook, provided education, training and seminars on compliance, performed audits, and opened a compliance hotline. At overseas Group companies as well, we endeavor to strengthen compliance by compiling rules and codes of conduct in accordance with the laws, regulations and social norms of each country.

Accidents in our facilities and injuries in workplace

Each operating site endeavors to prevent facility-related accidents by ensuring the soundness of facilities and equipment and proper operation of them through their appropriate maintenance as well as extensive education and training of operators. If an accident occurs, the Group works to avoid recurrence by analyzing the cause, taking measures, and verifying their effectiveness through inspections or maintenance patrols. Moreover, the Group works to prevent accidents by applying these measures laterally to similar facilities and equipment or operations.

Information security

MCHC has formulated an Information Security Policy in order to protect its information systems and assets from internal and external threats, with the aim of maintaining and improving corporate value. We have established the Information Security Committee according to this policy and charged it with reinforcing the management of information security at our business sites inside and outside Japan. We periodically conduct educational and training sessions for all employees including those overseas on our policy to ensure employee awareness and compliance with the Policy. For example, based on the "Cyber Security Management Guidelines" formulated by the Ministry of Economy, Trade and Industry (METI), we are striving to collect the latest information and establish an emergency response system, in cooperation with outside institutions, so as to prevent problem occurrence as much as possible and keep damage to minimum if anything should occur.

Natural disasters

Learning lessons from the Great East Japan Earthquake in 2011, which damaged a number of our business sites and facilities, MCHC has made improvements to its business continuity plan (BCP). In the event that it is impossible to continue operations at the head office of MCHC (Tokyo), we have made plans to transfer head office functions to a temporary backup site with the aim of minimizing damage and ensuring business continuity in a disaster situation. We are examining ways to maintain the procurement of raw materials and the responsibilities for supply of products by procuring from several suppliers as a part of business continuity plan.

Overseas business development risks

Becoming more active overseas business, we are taking various initiatives to reduce risks related to the particular laws, regulations and systems of the country in which we do business. For example, in the business domain of polyolefin used for food packaging materials, if the raw materials did not conform with the regulations of an export destination country, significant risks of not being able to sell or losing trust of customers could occur. In order to prevent such a case from occurring, we have adopted rules on confirmation procedures and have made them known in all companies and we thoroughly put them into practice.

In order to prevent lapses in awareness of any serious risks including such cases, we have created a Global Risk Map as a collection of publicly available case studies of significant problems and legal violations that have occurred in each country. We distribute this map to overseas Group companies overseas, and in fiscal 2016, delivered it to 22 countries, five more than the previous fiscal year. We aim to enhance these activities. In addition, we have established a communication system for local companies, the head offices of operating companies, and MCHC to use in the event of disruption in the country, such as political turmoil.

FOCUS: Risk Measures at Shinryo Corporation for Kumamoto Earthquake

Shinryo, one of the MCHC Group companies, had prepared its business continuity plan, based on the experience of its Iwate Plant at the time of the Great East Japan Earthquake of March 2011. When Shinryo's Kumamoto Plant was struck by the Kumamoto Earthquake happened in April 2016, we were able to act in accordance with plans, making the initial response after the quake and carrying out restoration work as intended. As a result, damage was minimized. Concerning securing raw materials during the restoration period, Shinryo arranged procurement in coordination with Mitsubishi Chemical Logistics Corporation and other plants within the Group, which resulted in a quick supply of products to respond to the requirements of customers.


Preparation to provide raw materials

Compliance

The MCHC Group recognizes the word "Compliance" as a broad term covering corporate ethics and general social norms, not only basic legal adherence.
We regard compliance as one of the most important managerial issue to achieve continuing existence as a company that merits the trust of the public, and we take measures to embed a compliance culture in the entire Group.

Compliance Promotion Structure

The Chief Compliance Officer (CCO) of the Group is appointed by the Board of Directors of MCHC. The Internal Control Office supports the CCO, acting as a secretariat dealing with compliance matters on a Group-wide basis. To support Group activities, the secretariat compiles standard education tools, arranges training courses, and has established hotline systems for overseas Group companies. Furthermore, it aims to ensure compliance in accordance with regional conditions through the regional control companies established in the Americas, Europe and China. Each operating company has its own Compliance Promotion Committee and internal control promotion department to serve as the secretariat. They operate hotline systems and implement training courses and seminars, business audits and compliance perception surveys based on the MCHC Group Compliance Promotion Rules. In the event that any company within the Group has caused compliance violations, it is required to report to and consult with its internal control promotion department and Internal Control Office of MCHC, and take corrective actions and measures to prevent recurrence.

Initiatives for Fair Business Practices

We established the MCHC Group Global Anti-Bribery Policy and the MCHC Group Global Antitrust Policy in 2014, and drew up the guidelines to supplement the Global Anti-Bribery Policy for China in 2015 and for Asia in fiscal 2016. As a result of these initiatives, there were no major violations of relevant laws and regulations during fiscal 2016.

Going forward, we will continue to take measures to ensure not only to prevent bribery and violations of antimonopoly law from a global perspective and to also ensure legal adherence in each country.

Hotline Systems

The Group operates hotline systems with the internal control promotion departments of MCHC and main operating companies, and with external lawyers as contact points. In fiscal 2016, 127 cases were reported via the hotline systems. We respond to the reported issues through our investigation teams headed by the internal control promotion department managers. In case of any issue, we take corrective measures promptly in line with the MCHC Compliance Hotline Operation Rules under CCO's direction.

Measures and Results in Fiscal 2016

In fiscal 2016 in Japan, we outsource to an external agency surveys of compliance awareness among all employees within the MCHC Group in order to continuously monitor the spread of compliance awareness.

The surveys are conducted overseas as well and we can recognize that our employees' compliance awareness has been growing each year. For example, mainly in the Asian region, we held 20 local training courses to spread and entrench awareness of compliance. Going forward, we will continue compliance promotion activities having viable face-to-face communication with local associates in charge.

Concerning self-guided training, we intend to translate training materials in various languages to further promote initiatives to raise employees' awareness on compliance.

Having established the hotline system in the Americas, Europe, China, Thailand, and Taiwan, the MCHC Group added new contact points in Singapore and Indonesia in 2016.

Looking ahead, Japan, the Americas, Europe, China and Asian regions will exchange more information about compliance, and through this network, we aim to advance compliance further as the Group.

Financial Information

Consolidated Financial Summary

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries
Years ended March 31

	IFRS		
	Millions of yen		
	April 2015 (Transition date)	2016	**2017**
For the Year:			
Revenue	—	¥3,543,352	**¥ 3,376,057**
Profit before tax	—	252,791	**258,343**
Net profit	—	104,858	**216,515**
Net profit attributable to owners of the parent	—	51,358	**156,259**
Total comprehensive income	—	34,302	**226,493**
Total comprehensive income attributable to owners of the parent	—	253	**165,709**
Net cash provided by operating activities	—	299,612	**396,643**
Net cash used in investing activities	—	(234,078)	**(289,056)**
Net cash provided by (used in) financing activities	—	(40,945)	**1,411**
Cash and cash equivalent at end of period	252,749	267,148	**363,510**
At Year-End:			
Equity attributable to owners of the parent	993,011	972,197	**1,091,398**
Total assets	4,368,998	4,223,774	**4,463,547**
	Yen		
Per Share:			
Equity attributable to owners of the parent	¥677.98	¥663.71	**¥758.30**
Net profit attributable to owners of the parent —Basic	—	35.06	**106.73**
Net profit attributable to owners of the parent —Diluted	—	36.03	**105.95**
Ratios:			
Ratio of equity attributable to owners of the parent (%)	22.7	23.0	**24.5**
Ratio of earnings attributable to owners of the parent (ROE) (%)	—	5.2	**15.1**
Price earnings ratio (Times)	—	16.8	**8.1**
Other:			
Number of employees (People)	68,263	68,988	**69,291**
(Temporary employees in parentheses) (People)	(6,101)	(6,967)	**(6,878)**

Notes: 1. The consolidated financial statements have been prepared in keeping with International Accounting Standards ("IFRS") since the fiscal year, ended March 31, 2017.
2. Sales revenues do not include consumption taxes.
3. In line with the July 27, 2016, announcement of a decision to transfer terephthalic acid operations in India and China, the Company classified the businesses in both regions as discontinued, reclassifying its presentation for the fiscal year ended March 31, 2016. Sales revenue and profit before tax accordingly represent amounts for continuing operations after excluding discontinued operations.
4. ROE is calculated as profit attributable to owners of parent divided by average equity attributable to owners of the parent.

Financial Information

	Japan GAAP				
	Millions of yen				
	2013	2014	2015	2016	**2017**
For the Year:					
Net Sales	¥3,088,577	¥ 3,498,834	¥3,656,278	¥3,823,098	**¥3,432,398**
Ordinary income	87,054	103,092	163,059	270,616	**258,073**
Profit attributable to owners of the parent	18,596	32,248	60,859	46,444	**113,237**
Total comprehensive income	94,900	134,016	173,692	7,695	**205,319**
Net cash provided by operating activities	206,504	177,027	329,776	388,663	**333,150**
Net cash used in investing activities	(169,758)	(159,789)	(277,223)	(202,796)	**(264,566)**
Net cash provided by (used in) financing activities	(26,250)	(8,307)	(2,061)	(156,957)	**40,123**
Cash and cash equivalent at end of period	153,120	179,556	243,055	263,770	**360,012**
At Year-End:					
Total net assets	1,203,316	1,314,870	1,588,601	1,554,528	**1,608,324**
Total assets	3,307,758	3,479,359	4,323,038	4,061,572	**4,295,260**
		Yen			
Per Share:					
Net assets	¥553.54	¥611.95	¥669.77	¥636.43	**¥691.18**
Net profit attributable to owners of the parent —Basic	12.61	21.89	41.40	31.70	**77.35**
Net profit attributable to owners of the parent —Diluted	12.11	21.45	41.37	31.68	**76.78**
Ratios:					
Shareholders' equity ratio (%)	24.6	25.8	22.6	22.9	**23.2**
Return on equity (ROE) (%)	2.3	3.7	6.4	4.8	**11.8**
Price earnings ratio (Times)	34.4	19.5	16.8	18.5	**11.1**
Other:					
Number of employees (People)	55,131	56,031	68,263	68,988	**69,291**
(Temporary employees in parentheses) (People)	(5,378)	(5,208)	(6,101)	(6,967)	**(6,878)**

Notes: 1. The consolidated financial statements for the fiscal year ended March 31, 2017, are based on Japanese standards, and have not been audited pursuant to Paragraph 1 of Article 193-2 of the Financial Instruments and Exchange Act.
2. Sales revenues do not include consumption taxes.
3. ROE is calculated as profit attributable to owners of parent divided by average shareholders' equity.
4. Shareholders' equity, when used in the calculation of ROE and shareholders' equity ratio, represents the sum of total shareholders' equity and total accumulated other comprehensive income.

Segment Information

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries
Years ended/as of March 31

The Overview of Reporting Segments is detailed in Note 4 (Segment Information).

	Revenue		Segment Profit (Loss) Core Operating Income	
	Millions of yen		Millions of yen	
REPORTING SEGMENT	2016	**2017**	2016	**2017**
Electronics Applications	¥ 115,731	**¥ 104,707**	¥ (972)	**¥ (2,918)**
Designed Materials	825,631	**806,692**	74,965	**81,515**
Health Care	548,408	**547,032**	112,187	**98,401**
Chemicals	1,081,557	**1,025,229**	57,695	**58,869**
Polymers	766,256	**706,137**	56,387	**71,921**
Others	205,769	**186,260**	7,144	**7,204**
Subtotal	3,543,352	**3,376,057**	307,406	**314,992**
Corporate costs	—	**—**	(6,996)	**(7,470)**
Total	¥3,543,352	**¥3,376,057**	¥300,410	**¥307,522**

* Inter-segment revenue and transfers are not included.

	Segment Assets		Depreciation and Amortization	
	Millions of yen		Millions of yen	
REPORTING SEGMENT	2016	**2017**	2016	**2017**
Electronics Applications	¥ 102,853	**¥ 100,456**	¥ 6,013	**¥ 5,168**
Designed Materials	867,494	**860,650**	41,723	**41,985**
Health Care	1,084,694	**1,101,469**	17,702	**17,930**
Chemicals	1,330,030	**1,443,042**	65,892	**65,821**
Polymers	792,197	**803,803**	42,808	**38,488**
Others	648,015	**950,892**	3,061	**2,918**
Subtotal	4,825,283	**5,260,312**	177,199	**172,310**
Corporate assets and eliminations	(601,509)	**(796,765)**	1,622	**1,564**
Total	¥4,223,774	**¥4,463,547**	¥178,821	**¥ 173,874**

	Capital Expenditures		R&D Expenditures	
	Millions of yen		Millions of yen	
REPORTING SEGMENT	2016	**2017**	2016 (J-GAAP)	**2017**
Electronics Applications	¥ 4,960	**¥ 6,341**	¥ 7,223	**¥ 6,107**
Designed Materials	50,378	**49,763**	21,751	**22,092**
Health Care	32,840	**28,507**	86,339	**76,969**
Chemicals	75,145	**70,216**	4,787	**4,727**
Polymers	44,755	**47,006**	13,247	**12,109**
Others	3,515	**4,266**	341	**298**
Subtotal	211,593	**206,099**	133,688	**122,302**
Corporate R&D and other	1,541	**383**	4,676	**3,988**
Total	¥213,134	**¥206,482**	¥138,364	**¥126,290**

	Employees	
	Number	
REPORTING SEGMENT	2016 (J-GAAP)	**2017**
Electronics Applications	2,529	**2,471**
Designed Materials	17,635	**18,405**
Health Care	12,876	**12,116**
Chemicals	18,915	**19,340**
Polymers	8,052	**8,285**
Others	8,229	**8,016**
Subtotal	68,236	**68,633**
Corporate R&D and other	752	**658**
Total	68,988	**69,291**

Financial Information

	Net Sales	
	Millions of yen	
GEOGRAPHIC SEGMENT	2016	**2017**
Japan	¥2,498,927	**¥2,408,535**
Overseas	1,044,425	**967,522**
Total	¥3,543,352	**¥3,376,057**

	Operating Income	
	Millions of yen	
GEOGRAPHIC SEGMENT	2016	**2017**
Japan	¥232,356	**¥211,456**
Overseas	68,054	**96,066**
Total	¥300,410	**¥307,522**

	Millions of yen	
OVERSEAS SALES	2016	**2017**
Overseas sales	¥1,429,970	**¥1,333,679**
Overseas sales as a percentage of consolidated net sales	40.4%	**39.5%**

Management's Discussion and Analysis

Results of Operations

Revenue and Core Operating Income

Looking at the operating climate for the MCHC Group in fiscal 2016, ended March 31, 2017, results of operations in the Performance Products and Industrial Materials domains were bolstered by strong domestic and overseas demand, despite the effect of a stronger yen compared with the previous fiscal year. Meanwhile, in the Health Care domain, sales remained solid, offsetting negative factors such as the effect of NHI drug price revision in April 2016.

In this environment, revenue in the year under review was ¥3,376.1 billion, falling ¥167.3 billion from the previous fiscal year, reflecting the negative impact of the yen's appreciation and the like.

Core operating income in the year under review was ¥307.5 billion, increasing ¥7.1 billion year on year. The ratio of core operating income to revenue was 9.1%, surpassing the year-ago level of 8.5%.

As a result of its decision to transfer the terephthalic acid business in India and China (announced on July 27, 2016), MCHC classified this business in both regions as discontinued operations. Accordingly, revenue, core operating income and operating income are the figures for continuing operations excluding discontinued operations. The results for the previous fiscal year have also been revised to reflect these changes.

Results by Segment

Electronics Applications

Segment revenue fell ¥11.0 billion year on year, to ¥104.7 billion. The core operating loss increased ¥1.9 billion year on year, to ¥2.9 billion.

In information materials, sales volumes of optical photoconductor drums and toner were down, offsetting the effects of costs reductions. In electronics-related materials, the sales prices of display materials and other products declined. These factors combined with the effect of a stronger yen caused segment revenue and core operating income to decline.

Designed Materials

Segment revenue decreased ¥18.9 billion year on year, to ¥806.7 billion. Core operating income soared ¥6.5 billion, to ¥81.5 billion.

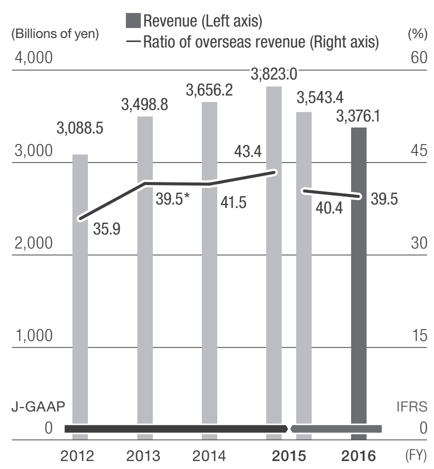
Revenue from polymer processing products fell due to the effect of a strong yen and decline in sales prices, which offset increased sales volumes of displays film and other products. In fine chemicals, demand for products such as coating materials was mostly firm, while in battery materials, sales volumes for automobile batteries increased. Revenue from composite materials fell due to the effect of a stronger yen, despite higher alumina fiber sales volumes. Revenue from food ingredients increased due to a full-year revenue contribution from Eisai Food & Chemical, which was made into a consolidated subsidiary in the fourth quarter of the previous fiscal year. Sales volumes of chemical fibers fell sharply, mainly due to the deterioration of the export environment. Core operating income increased largely owing to overall growth in sales volumes, which offset the impact of a stronger yen.

Health Care

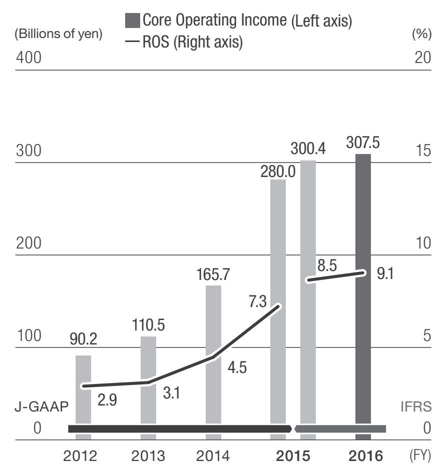
Segment revenue was down ¥1.4 billion year on year, to ¥547.0 billion. Core operating income fell ¥13.8 billion, to ¥98.4 billion.

Revenue from pharmaceuticals increased due to growth in sales volumes of products such as *Simponi*, a treatment for rheumatoid arthritis, and vaccines in Japan, and gains in royalty revenues for *Gilenya*, a treatment for multiple sclerosis, overseas, all of which offset the impact of NHI drug price revision in April 2016. Revenue from clinical testing and diagnostic reagents, pharmaceutical development support, and pharmaceutical formulation materials declined mainly due to lower sales volumes of pharmaceutical formulation materials. Core operating income fell, reflecting the impact of drug price revision, despite higher revenue from pharmaceuticals.

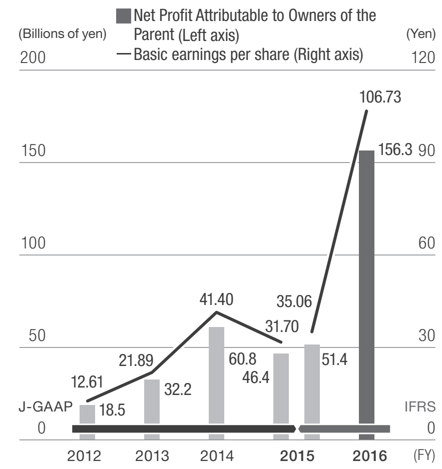
Revenue and Ratio of Overseas Revenue



Core Operating Income and ROS



Net Profit attributable to owners of the parent and Basic earnings per share



* The influence of ¥145.6 billion due to the unification of the accounting period is excluded.

Financial Information

Chemicals

Segment revenue decreased ¥56.4 billion year on year, to ¥1,025.2 billion. Core operating income climbed ¥1.2 billion, to ¥58.9 billion.

Revenue from basic petrochemicals and chemical derivatives was down primarily because sales prices fell to reflect lower raw material prices compared with the previous fiscal year, and because period repairs to ethylene facilities were on a larger scale than in the previous fiscal year. Revenue from coke and other carbon products increased due to higher sales prices associated with soaring coking coal prices. Revenue from industrial gases declined mainly due to the impact of a stronger yen, despite the incorporation of the earnings of business acquired from Air Liquide in the U.S. from the second quarter of the fiscal year under review. Core operating income increased, reflecting the effect of the incorporation of business acquired from Air Liquide in the industrial gases business and the contribution of falling raw materials and fuel prices, offsetting the increased scale of periodic repairs in basic petrochemicals and chemical derivatives, and sluggish market conditions for needle coke in carbon products.

Polymers

Segment revenue declined ¥60.1 billion year on year, to ¥706.2 billion. Core operating income rose ¥15.5 billion, to ¥71.9 billion.

Revenue from synthetic resins declined due to falling sales prices for polyolefin and other synthetic resins, reflecting a drop in raw material prices from the previous fiscal year, and the effect of a strong yen on MMA monomer sales despite firm demand. Core operating income rose thanks to firm market conditions for MMA monomers, which offset decreased profit for polyolefin and other synthetic resins mainly caused by the increased scale of periodic repairs.

Others

Revenue of the Others segment declined ¥19.5 billion year on year, to ¥186.3 billion yen. However, core operating income climbed ¥0.1 billion, to ¥7.2 billion.

Although revenue declined, reflecting fewer orders received from outside the Group in the engineering business and the overall impact of a stronger yen, core operating income was mostly unchanged from a year earlier largely due to cost reductions.

Other Operating Income / Other Operating Expenses / Share of Profit of Investments Accounted for Using the Equity Method and Operating Income

Other operating income in the year under review decreased ¥7.9 billion from a year earlier, to ¥10.7 billion, chiefly due to a decrease in the gain on sales of non-current assets.

Other operating expenses were down ¥6.1 billion year on year, to ¥53.7 billion, primarily due to a decrease in special retirement expenses.

Share of profit of investments accounted for using the equity method rose ¥3.0 billion year on year, to ¥17.0 billion.

As a result of the above factors, operating income for the year under review was down ¥0.1 billion year on year, to ¥268.6 billion.

Finance Income / Finance Costs and Profit Before Tax

Finance income declined ¥1.8 billion year on year, to ¥7.2 billion, primarily due to a decrease in dividend income associated with the sale of share-crossholdings following a review of their significance.

Finance costs decreased ¥7.4 billion, to ¥17.4 billion, largely owing to a decrease in foreign exchange loss.

As a result of the above factors, profit before tax for the consolidated accounting period under review rose ¥5.5 billion year on year, to ¥258.3 billion.

Income Tax Expense / Net Profit Attributable to Owners of the Parent and Net Profit Attributable to Non-Controlling Interests

Income tax expense decreased ¥29.7 billion, to ¥44.4 billion, reflecting lower taxes associated with the recording of deferred tax assets in connection with the transfer of the terephthalic acid business in India and China. The effective rate after applying tax-effect accounting was 17.2%, whose difference from the statutory rate was 13.6%.

Profit from discontinued operations increased ¥76.4 billion year on year, to ¥2.6 billion.

As a result of the above factors, net profit attributable to owners of the parent grew ¥104.9 billion, to ¥156.3 billion. Meanwhile, net profit attributable to non-controlling interests increased ¥6.7 billion, to ¥60.3 billion.

R&D Expenditures

MCHC Group companies maintain independent R&D programs and collaborate closely with each other by sharing technology and market information, conducting joint research, and undertaking and outsourcing R&D. They are also working proactively with businesses outside the Group to refine and develop technologies. The Group has 4,883 R&D employees and, in fiscal 2016, R&D expenditures totaled ¥126.3 billion, down ¥12.0 billion from fiscal 2015.

Liquidity and Sources of Funds

Financial Policies

The medium-term management plan *APTSIS 20*, under which fiscal 2016 is the first fiscal year, sets out a basic policy of "Aim to become a corporate group with a high-growth and high-profit business structure through the Performance Products, Industrial Materials and Health Care domains." The MCHC Group has set numerical targets, core operating income, ROS (ratio of core operating income to revenue), net profit attributable to owners of the parent, ROE (ratio of equity attributable to owners of the parent) and net D/E ratio. While maintaining an appropriate balance between investing in growth businesses, enhancing shareholder returns and strengthening financial position, we seek to improve corporate value.

The MCHC Group funds working capital and capital expenditures largely by drawing on internal reserves, loans and bonds. The Group deployed a cash management system to employ its funds efficiently and cut financial expenses, and also introduced this system to Europe from fiscal 2016. Going forward, management will pursue Group-wide improvements in capital efficiency by consolidating Group fund procurement and management functions.

Financial Position

At March 31, 2017, total assets were ¥4,463.5 billion, up ¥239.7 billion from a year earlier. This increase was due primarily to a temporary increase in cash on hand due to the business transfer of Taiyo Nippon Sanso, a consolidated subsidiary of MCHC and the issuance of bonds with warrants.

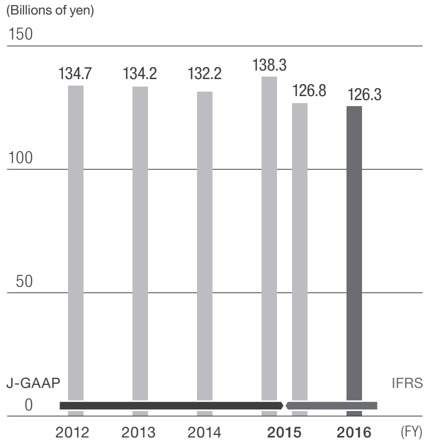
At year-end, total liabilities were ¥2,765.3 billion, up ¥137.7 from a year earlier, mainly due to an increase in interest-bearing debt.

Total equity was ¥1,698.2 billion, up ¥102.0 billion from a year earlier, due to an increase in retained earnings as result of the recording of net profit attributable to the owners of the parent of ¥156.3 billion.

As a result of the above factors, ratio of equity attributable to owners of the parent at the end of fiscal 2016 increased 1.5% from a year earlier, to 24.5%.

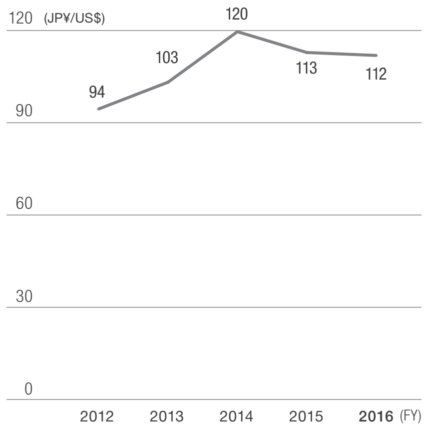
The balance of main account items at March 31, 2017 and details of increases and decreases are as follows.

R&D Expenses

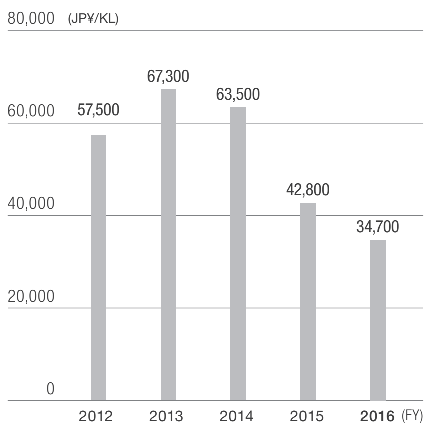


Reference

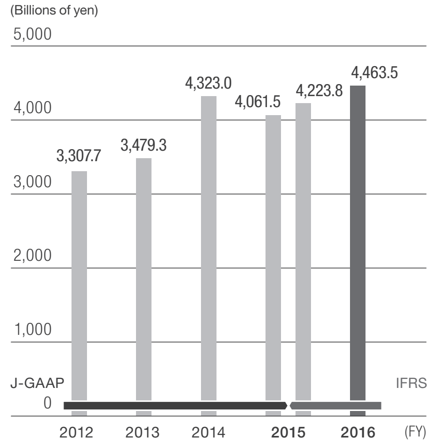
Foreign exchange (Exchange rate at each fiscal year-end)



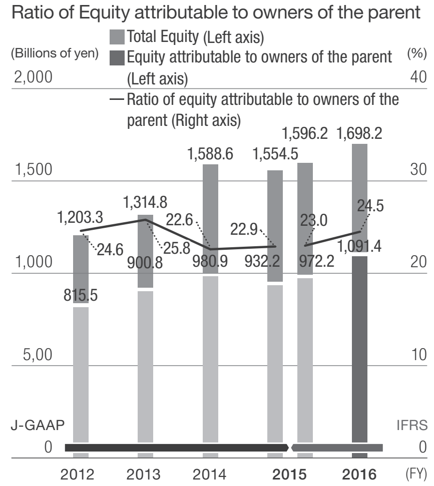
Domestic naphtha average price of each fiscal Year



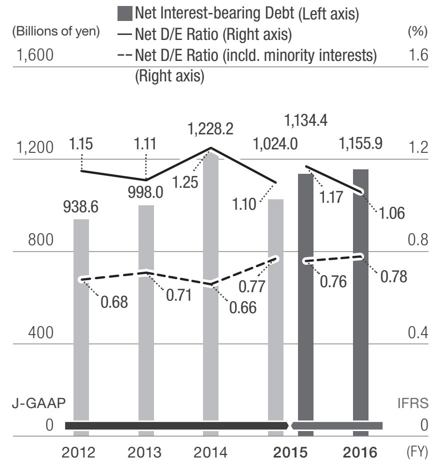
Total Assets



Total Equity and Equity attributable to owners of the parent
Ratio of Equity attributable to owners of the parent



Net Interest-bearing Debt and Net D/E Ratio
Net D/E Ratio (incld. minority interests)



Financial Information

Cash and Cash Equivalents
Cash and cash equivalents rose ¥96.4 billion from the end of the previous fiscal year, to ¥363.5 billion due to a temporary increase in surplus funds within the Group.

Property, Plant and Equipment and Intangible Assets
Property, plant and equipment and intangible assets rose ¥59.9 billion from a year earlier, to ¥1,658.9 billion.

Goodwill
Goodwill increased ¥45.1 billion from the end of the previous fiscal year, to ¥313.0 billion.

Interest-bearing Debt
At March 31, 2017, interest-bearing debt was ¥1,693.7 billion, up ¥114.1 billion from the end of the previous fiscal year.

Retained Earnings
Retained earnings increased ¥150.5 billion year on year, to ¥761.4 billion, mainly due to the recording of net profit attributable to owners of the parent.

Cash Flows

Cash Flows from Operating Activities
Net cash provided by operating activities was ¥396.6 billion, up ¥97.0 billion, owing primarily to inflows from profit before tax, depreciation and amortization and a decrease in working capital associated with higher costs for raw materials and fuel, which offset the impact of income taxes paid, net.

Cash Flows from Investing Activities
Net cash used in investing activities was ¥289.1 billion, up ¥55.0 billion. This reflected outflows for capital expenditures, payments for transfer of business and purchase of investments in subsidiaries, which offset inflows resulting from the sale of shareholdings.

Cash Flows from Financing Activities
Net cash provided by financing activities was ¥1.4 billion yen, up ¥42.3 billion, largely because of inflows from an increase in interest-bearing debt such as bonds, which offset outflows from dividends paid, payment for acquisition of subsidiaries' interests from non-controlling interests, and the acquisition of treasury stock.

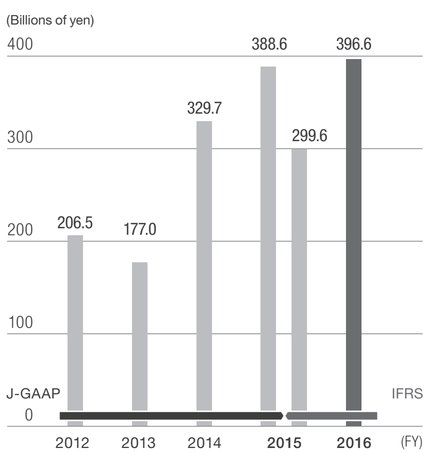
As a result of these factors, free cash flow comprising cash flows from operating and investing activities, was inflow of ¥107.5 billion, up ¥42.0 billion. Cash and cash equivalents at end of period were ¥363.5 billion, an increase of ¥96.4 billion.

Capital Expenditures

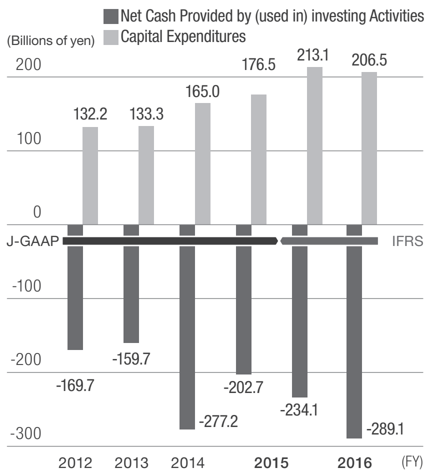
Capital expenditures for the fiscal year ended March 31, 2017 were ¥206.5 billion, a decrease of ¥6.6 billion from a year earlier. These expenditures were largely applied to the construction of new facilities or the expansion and renewal of existing facilities, and rationalization investments in other facilities.

The major new or expanded facilities included carbon fiber manufacturing facilities expansion at Mitsubishi Rayon Carbon Fiber and Composites, Inc. in the U.S, new alumina production facilities at Mitsubishi Plastics, and polyvinyl alcohol film production facilities expansion at The Nippon Synthetic Chemical Industry in the Designed Materials segment, formulation building expansion at Mitsubishi Tanabe Pharma Factory Ltd. in the Health Care segment, the new liquefied carbon dioxide gas production facilities at NIPPON EKITAN Corporation and new air separation facilities at Taiyo Nippon Sanso in the Chemicals Segment, and the new MMA monomer and PMMA production facilities of The Saudi Methacrylates Company in the Polymers segment.

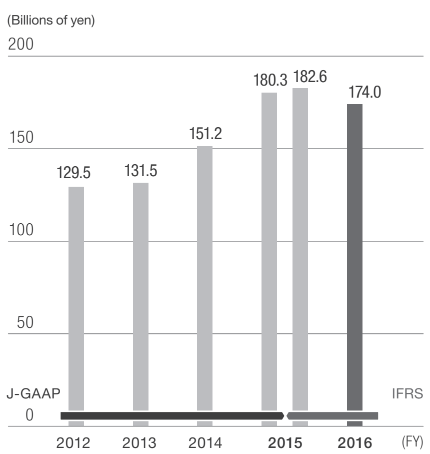
Net Cash Provided by (used in) Operating Activities



Net Cash Provided by (used in) Investing Activities and Capital Expenditures



Depreciation and Amortization



Business Risks

The MCHC Group ("the Group") faces the following key risks, which could adversely affect its operating results and financial position. This section contains forward-looking statements based on information deemed relevant at March 31, 2017. The business risks presented are not all-encompassing. In recognition of exposure to risks such as those detailed below, the Group conducts risk assessments once a year. Based on these assessments, risk management systems are established and revised in consideration of the risks faced by specific businesses. In this manner, the Group is working to prevent the risks from occurring and minimize the impacts of such risks be realized.

Changes Affecting Operating Results

Many of the Group's products can be impacted by demand and product markets domestically and abroad; pricing and procurement volumes for crude oil, naphtha, utilities, and other raw materials and supplies; foreign exchange rates; and relevant laws and regulations. The principal assumed risks for each business domain are as follows.

(a) Performance Products Domain

These products must satisfy high-quality and performance requirements, and the Group must develop and supply them at the appropriate times to meet market needs. Group business results ("results") may be adversely affected if market needs change far more than the Group envisages, or if the Group is unable to ensure the timely supply of products that meet market needs, including issues with the availability of raw materials. If supply is interrupted for raw materials that can only be procured from certain areas or specific suppliers, then this could adversely affect results.

The Group outsources production of most information and electronics-related materials to other Asian manufacturers, so disasters or other issues with those facilities could disrupt the supply structure, adversely affecting results. Specifically, film and sheet products rely greatly on demand for liquid crystal display (LCD) panels, so drastic fluctuations in demand for LCD panels could adversely affect results.

(b) Health Care Domain

The results of the pharmaceuticals business are subject to the Group being unable to reach revenue and earnings targets by adequately expanding sales volumes of existing treatments or rationalizing operations in response to lower prices from periodic revisions in National Health Insurance prices of pharmaceuticals. Results are also subject to government policies in each country to constrain medical expenditures.

In general, lead times for drug research and development are far longer than in other industries, whereas the percentage of drugs receiving approval is not high. It is therefore difficult to produce accurate forecasts for the certainty or timing of commercialization. Results are thus subject to drugs not being commercialized as planned. Even where drugs are commercialized, results are subject to sales volumes being lower because of intensified competition with rival offerings, volumes declining on reports of new side effects when usage of these drugs becomes broad-based, generic drugs are commercialized after patents expire, or when approval is withdrawn.

Results are subject to supply disruptions on some raw materials for which the Group relies on external sources and can be influenced by an inability to secure adequate supplies of pharmaceuticals.

In clinical testing and diagnostic reagents and instruments, results can be affected by periodic revisions in medical treatment fees and drug price revisions. Results in these businesses are subject to the Group being unable to reach revenue and earnings targets by adequately expanding sales volumes of existing treatments or rationalizing operations in response to lower fees or prices. In the pharmaceutical intermediates and active pharmaceutical ingredients business and the capsules for pharmaceutical products, results are subject to lower sales volumes of customers' pharmaceuticals following revisions in National Health Insurance prices or patent expiries on customer products.

(c) Industrial Materials Domain

In this area, MCHC consumes large volumes of naphtha and other raw materials, and uses considerable amounts of electricity and steam in production processes. For those reasons, drastic fluctuations in the costs of naphtha, fuels, and other resources owing to changes in crude oil prices; the demand and supply balance for raw fuels or naphtha; or the impact of foreign exchange rates could adversely affect results if MCHC is not fully able to adjust its product prices, or if there are delays in such adjustments. MCHC relies on suppliers from certain areas for its raw fuels, and an inability to secure required fuels at the right times could adversely affect results. A worldwide recession or increased production capacity among rivals could adversely affect results if it becomes impossible to maintain the product demand and supply balance or MCHC is unable to generate revenues and earnings or reach goals that are commensurate with its capital expenditures.

MCHC relies heavily on certain business partners for some products in the Industrial Materials domain. For example, the coke business depends greatly on specific steelmakers, so if the steel output of those companies declines, such as because of dramatic fluctuations in the demand and supply of raw steel, the performances of such business partners could adversely affect MCHC's results.

Financial Information

(d) Others
The Group includes companies offering engineering and logistics services. Those companies secure some external orders. Significant fluctuations in demand within and outside the Group, or in market conditions worldwide, could adversely affect results.

(e) Overall Operations
The Group aims to grow, innovate, and leap ahead by orchestrating its strengths. It is therefore reinforcing its structure and implementing growth strategies (including to deliver high performance and added value), while cultivating innovative businesses. Changes in the economic or business climates (including social demands relating to climate change measures and other aspects of the environment) that are far greater than projected could adversely affect results.

The Group's broad overseas activities include exporting products and manufacturing around the world. Risks in countries or regions relating to Group businesses, notably of conflicts, terrorism, civil wars, riots, demonstrations, deteriorating security, and other international geopolitical problems, unforeseeable issues with regulations, taxation, working conditions, customs, and other country risks, large-scale natural disasters, difficulties hiring and retaining employees, inadequate supplies from utilities or other infrastructural shortfalls, changes in the economic and financial climates, or other risks impacting specific countries or regions could adversely affect results.

Interest-Bearing Debt
The Group aims to balance its growth and innovation strategies with efforts to enhance its financial position. MCHC's results could be adversely affected in a situation where interest payments on interest-bearing debt rises, such as because interest-bearing debt increases, interest rates rise, or MCHC's credit rating declines owing to fluctuating Group performances. Results could also be adversely affected if it becomes essential to procure funds to upgrade facilities and the Group must obtain financing at unfavorable terms.

Risks Associated with Acquisitions, Mergers, or Restructuring
Results could be adversely affected if mergers, acquisitions, or joint ventures created in Japan or abroad to expand scale or overhaul MCHC's business portfolio fail to deliver anticipated synergies or other benefits, or if the Group's financial burden thereby increases or, if after mergers or acquisitions, the Group encounters new debt or other issues that it did not initially envisage. Other factors that could adversely affect results include reorganizations as part of business selection and concentration initiatives, through which MCHC withdraws from unprofitable businesses or liquidates affiliates.

Deferred Tax Assets
The Group records deferred tax assets for deductible temporary differences on tax loss carryforwards. Deferred tax assets are calculated based on various predictions and assumptions about future taxable income. If results differ from such predictions and assumptions, or if tax rates change in line with changes to the tax system, MCHC would need to recalculate deferred tax assets, which could adversely affect results.

Impairment of Securities
The Group holds marketable securities, mainly as a non-controlling shareholder in customer companies or financial institutions to maintain long-term relationships with them. Major declines in the market values of such securities could adversely affect its financial position.

Impairment of Fixed Assets
Because the Group has applied accounting standards related to fixed asset impairment, it could incur impairment losses owing to dramatically deteriorating performances or major declines in property values, which could adversely affect results. Although the Group conducts impairment tests on goodwill acquired through business integrations, if carrying amounts exceed recoverable amounts owing to lower profitability, it could incur impairment losses, which could adversely affect results.

Pension and Severance Plans
The Group calculates retirement benefit obligations and expenses for current and former employees based on actuarial assumptions, investment returns on plan assets, and other factors. A decline in the value of pension assets, fluctuations in the interest rate climate, and changes in retirement benefit obligations and expenses owing to changes in the retirement plan and pension systems could adversely affect results and its financial position.

Impact of Inventory Valuations
The Group states inventory assets principally at cost based on the moving average method. Declines in the costs of naphtha or raw materials during the fiscal period could detract from earnings by affecting relatively expensive inventories at the start of a term, thereby increasing the cost of sales. Earnings would conversely rise if fuel costs rose during the fiscal period. Changes in fuel costs could therefore affect results. Any book value write-down based on lower profitability could adversely affect results.

Changes in Foreign Exchange Rates
The Group endeavors to minimize the short-term impact of fluctuations in foreign currency transactions, primarily for exports and imports, notably by using forward foreign exchange contracts. Changes in exchange rates in the short, medium, and long terms may affect results.

The Group engages in production and sales in Asia, Europe, North America, and other locations overseas. It translates sales, expenses, assets, and other items denominated in foreign currencies in such regions into yen in its consolidated financial statements. Even if the foreign currency valuations of such items remain unchanged, the yen equivalents could change after conversion from other currencies, so foreign exchange rate fluctuations could affect the Group's results and financial position.

Laws and Regulations
The Group's operations are subject to related laws and regulations in Japan and abroad. Such laws and regulations may govern security and safety, the environment and chemical substances, pharmaceutical safety policies, and other areas relating to Group operations.

The Group maintains voluntary rules that are stricter than legal provisions while pursuing thorough compliance to satisfy laws and regulations in engaging in business activities. Dramatic changes in laws and regulations or strengthened legislation could further restrict the Group's activities or increase its costs. Furthermore, should the Group violate laws or regulations, it could be ordered to halt operations at plants, and trust from society could be lost. All these factors have the possibility of influencing results.

Product Liability
The Group manufactures and sells products that conform with standards as ISO 9001, the international standard for quality management systems. The Group endeavors to prevent product liability problems from arising when launching products or improving quality by previously evaluating such liability risks. The Group cannot guarantee, however, that all of its products will be free of defects. It therefore has product liability insurance to cover possible accidents. Regardless, product defects that could cause major product liability exposure with damages exceeding the range of such insurance could adversely affect results.

Accidents and Disasters
The Group regularly inspects its plants and otherwise endeavors to prevent accidents at facilities. It cannot, however, completely prevent or mitigate accidents at such facilities, nor natural disasters such as earthquakes. Accidents that damage property, cause human suffering or loss of life, or create environmental pollution could adversely impact production activities and reduce social trust in the Group, thereby adversely affecting results. Natural disasters that damage property, cause human suffering or loss of life, or significantly damage or functionally degrade the social infrastructure and chronically affect the Group's activities could affect results.

Information Management
The Group strictly manages corporate and personal information in its possession. Problems resulting from leaks of such information could decrease competitiveness or reduce social trust in the Group, which may adversely affect results. Although the Group has taken various measures to safeguard against cyber attacks, if problems were to arise with the plant control systems of business sites, it would take steps that include adjusting production volumes to maintain safety, which could adversely affect results.

Research and Development
The Group deems research and development as pivotal to supporting sustainable corporate growth, and has long undertaken solid R&D. It intends to deploy resources in a planned and sustainably stable manner from long-term perspectives. Results could be adversely affected, however, if the fruits of R&D are far less than anticipated.

Intellectual Property
The Group takes ample precautions to avoid violating the intellectual property of third parties. Nonetheless, injunctions or damages claims by third parties on the basis of patent or other infringements could adversely affect results.

Litigation
The Group maintains various businesses, as mentioned in Changes Affecting Operating Results. In engaging in business, or in reorganizing or restructuring operations, the Group could face litigation from business partners or other third parties relating to intellectual property or the Group's products. It is impossible to predict or assess the results of such lawsuits, which could adversely affect results.

Litigation proceedings to which the Group is currently subject is as follows:

Mitsubishi Tanabe Pharma Corporation was a codefendant with the Japanese government in damages lawsuits over blood products tainted with hepatitis C virus. In September 2008, the defendants concluded a basic agreement with nationwide plaintiff groups and their attorneys to resolve this case in response to the Act on Special Measures concerning the Payment of Benefits to Relieve the Victims of Hepatitis C Infected through Specified Fibrinogen Concentrates and Specified Coagulation Factor XI Concentrates. The plaintiffs began dropping litigation against the company, and in April 2009 the company decided to pay costs to the hepatitis C sufferers according to the payment apportionment standards of the above act.

Financial Information

Consolidated Statement of Income

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries
Years ended March 31

	Millions of yen	
	Year ended March 31, 2016	**Year ended March 31, 2017**
Continuing operations:		
Revenue (Note 4)	¥3,543,352	**¥ 3,376,057**
Cost of sales	(2,528,303)	**(2,366,658)**
Gross profit	1,015,049	**1,009,399**
Selling, general and administrative expenses	(719,084)	**(714,715)**
Other operating income (Note 9)	18,603	**10,695**
Other operating expenses (Note 9)	(59,805)	**(53,722)**
Share of profit of investments accounted for using the equity method (Note 4)	13,983	**16,964**
Operating profit (Note 4)	268,746	**268,621**
Finance income (Note 10)	8,919	**7,155**
Finance costs (Note 10)	(24,874)	**(17,433)**
Profit before tax	252,791	**258,343**
Income tax expense (Note 11)	(74,064)	**(44,414)**
Profit from continuing operations	178,727	**213,929**
Discontinued operations:		
Profit (loss) from discontinued operations (Note 6)	(73,869)	**2,586**
Net profit	¥ 104,858	**¥ 216,515**
Net profit attributable to:		
Owners of the parent	¥51,358	**¥ 156,259**
Non-controlling interests	53,500	**60,256**
Net profit	¥104,858	**¥ 216,515**
Earnings per share:		
Basic (Note 12):		**(Yen)**
Continuing operations	¥84.15	**¥ 104.97**
Discontinued operations	(49.09)	**1.76**
Basic earnings per share attributable to owners of the parent	¥35.06	**¥ 106.73**
Diluted (Note 12):		**(Yen)**
Continuing operations	¥84.09	**¥ 104.20**
Discontinued operations	(49.06)	**1.75**
Diluted earnings per share attributable to owners of the parent	¥35.03	**¥ 105.95**

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statement of Comprehensive Income

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries
Years ended March 31

	Millions of yen	
	Year ended March 31, 2016	**Year ended March 31, 2017**
Net profit	¥104,858	**¥216,515**
Other comprehensive income:		
Items that will not be reclassified to profit or loss:		
Net gain (loss) on revaluation of financial assets measured at fair value (Note 25)	(8,866)	**14,391**
Remeasurements of defined benefit pensions plans (Note 25)	(22,045)	**17,324**
Share of other comprehensive income (loss) of investments accounted for using the equity method (Note 25)	(55)	**(207)**
Total items that will not be reclassified to profit or loss	(30,966)	**31,508**
Items that may be subsequently reclassified to profit or loss		
Exchange differences on translation of foreign operations (Note 25)	(35,701)	**(20,405)**
Net gain (loss) on derivatives designated as cash flow hedges (Note 25)	346	**840**
Share of other comprehensive income (loss) of investments accounted for using the equity method (Note 25)	(4,235)	**(1,965)**
Total items that may be subsequently reclassified to profit or loss	(39,590)	**(21,530)**
Total other comprehensive income (net of tax)	(70,556)	**9,978**
Total comprehensive income	¥ 34,302	**¥226,493**
Total comprehensive income attributable to:		
Owners of the parent	¥ 253	**¥165,709**
Non-controlling interests	34,049	**60,784**

The accompanying notes are an integral part of these consolidated financial statements.

Financial Information

Consolidated Statement of Financial Position

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries

		Millions of yen		
		April 1, 2015 (Transition date)	March 31, 2016	**March 31, 2017**
Assets	**Current assets:**			
	Cash and cash equivalents (Note 21)	¥ 252,749	¥ 267,148	**¥ 363,510**
	Trade receivables (Note 20)	754,335	769,094	**776,191**
	Inventories (Note 19)	593,780	549,461	**538,131**
	Other financial assets (Note 17)	171,089	214,485	**215,446**
	Other current assets (Note 18)	57,427	53,191	**58,184**
	Subtotal	1,829,380	1,853,379	**1,951,462**
	Assets held for sale (Note 22)	8,752	3,338	**16,916**
	Total current assets	1,838,132	1,856,717	**1,968,378**
	Non-current assets:			
	Property, plant and equipment (Note 14)	1,485,225	1,403,437	**1,431,681**
	Goodwill (Note 13)	245,675	267,850	**312,950**
	Intangible assets (Note 13)	198,345	195,536	**227,169**
	Investments accounted for using the equity method (Note 16)	129,269	129,072	**136,734**
	Other financial assets (Note 17)	339,876	251,802	**252,921**
	Other non-current assets (Note 18)	46,893	30,389	**39,079**
	Deferred tax assets (Note 11)	85,583	88,971	**94,635**
	Total non-current assets	2,530,866	2,367,057	**2,495,169**
	Total assets (Note 4)	¥4,368,998	¥4,223,774	**¥4,463,547**

The accompanying notes are an integral part of these consolidated financial statements.

		Millions of yen		
		April 1, 2015 (Transition date)	March 31, 2016	**March 31, 2017**
Liabilities and Equity				
Liabilities	**Current liabilities:**			
	Trade payables (Note 33)	¥ 452,856	¥ 394,065	**¥ 437,914**
	Bonds and borrowings (Note 29)	742,712	706,705	**577,737**
	Income tax payable	34,181	36,434	**21,287**
	Other financial liabilities (Note 30)	236,783	185,940	**184,909**
	Provisions (Note 28)	3,572	3,603	**6,057**
	Other current liabilities (Note 32)	126,656	114,955	**116,691**
	Subtotal	1,596,760	1,441,702	**1,344,595**
	Liabilities directly associated with assets held for sale (Note 22)	—	—	**5,307**
	Total current liabilities	1,596,760	1,441,702	**1,349,902**
	Non-current liabilities:			
	Bonds and borrowings (Note 29)	859,216	872,870	**1,116,005**
	Other financial liabilities (Note 30)	29,559	29,019	**27,489**
	Retirement benefit liabilities (Note 27)	133,889	144,179	**128,338**
	Provisions (Note 28)	21,372	23,616	**25,018**
	Other non-current liabilities (Note 32)	34,657	41,387	**38,439**
	Deferred tax liabilities (Note 11)	91,165	74,850	**80,159**
	Total non-current liabilities	1,169,858	1,185,921	**1,415,448**
	Total liabilities	2,766,618	2,627,623	**2,765,350**
Equity	Common stock: (Note 23)	50,000	50,000	**50,000**
	Additional paid-in capital (Note 23)	318,185	317,544	**321,703**
	Treasury stock (Note 23)	(16,236)	(16,240)	**(43,587)**
	Retained earnings (Note 23)	582,794	610,909	**761,364**
	Other components of equity (Note 23)	58,268	9,984	**1,918**
	Equity attributable to owners of the parent	993,011	972,197	**1,091,398**
	Non-controlling interests	609,369	623,954	**606,799**
	Total equity	1,602,380	1,596,151	**1,698,197**
	Total liabilities and equity	¥4,368,998	¥4,223,774	**¥4,463,547**

The accompanying notes are an integral part of these consolidated financial statements.

Financial Information

Consolidated Statement of Changes in Equity

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries

Years ended March 31

Millions of yen

	Common stock	Additional paid-in capital	Treasury stock	Retained earnings
Balance at April 1, 2015	¥50,000	¥ 318,185	¥ (16,236)	¥582,794
Net profit	—	—	—	51,358
Other comprehensive income (Note 25)	—	—	—	—
Total comprehensive income	—	—	—	51,358
Purchase of treasury stock (Note 23)	—	—	(48)	—
Disposal of treasury stock (Note 23)	—	(10)	11	—
Cash dividends (Note 24)	—	—	—	(20,507)
Share-based payment transactions (Note 26)	—	58	—	—
Changes in interests in subsidiaries	—	(689)	—	—
Business combinations or business divestitures	—	—	33	—
Changes in scope of consolidation	—	—	—	85
Transfer from other components of equity to retained earnings	—	—	—	(2,821)
Total transactions with owners	—	(641)	(4)	(23,243)
Balance at March 31, 2016	¥50,000	¥317,544	¥(16,240)	¥610,909

	Other components of equity: Net gain (loss) on revaluation of financial assets measured at fair value	Remeasurements of defined benefit pensions plans	Exchange differences on translation of foreign operations	Net gain (loss) on derivatives designated as cash flow hedges	Total	Equity attributable to owners of the parent	Non-controlling interests	Total equity
Balance at April 1, 2015	¥60,322	¥ —	¥ —	¥ (2,054)	¥58,268	¥993,011	¥609,369	¥1,602,380
Net profit	—	—	—	—	—	51,358	53,500	104,858
Other comprehensive income (Note 25)	(7,829)	(18,260)	(25,246)	230	(51,105)	(51,105)	(19,451)	(70,556)
Total comprehensive income	(7,829)	(18,260)	(25,246)	230	(51,105)	253	34,049	34,302
Purchase of treasury stock (Note 23)	—	—	—	—	—	(48)	—	(48)
Disposal of treasury stock (Note 23)	—	—	—	—	—	1	—	1
Cash dividends (Note 24)	—	—	—	—	—	(20,507)	(23,323)	(43,830)
Share-based payment transactions (Note 26)	—	—	—	—	—	58	—	58
Changes in interests in subsidiaries	—	—	—	—	—	(689)	1,864	1,175
Business combinations or business divestitures	—	—	—	—	—	33	1,858	1,891
Changes in scope of consolidation	—	—	—	—	—	85	137	222
Transfer from other components of equity to retained earnings	(15,439)	18,260	—	—	2,821	—	—	—
Total transactions with owners	(15,439)	18,260	—	—	2,821	(21,067)	(19,464)	(40,531)
Balance at March 31, 2016	¥37,054	¥ —	¥(25,246)	¥(1,824)	¥ 9,984	¥972,197	¥623,954	¥1,596,151

The accompanying notes are an integral part of these consolidated financial statements.

Millions of yen

	Common stock	Additional paid-in capital	Treasury stock	Retained earnings
Balance at April 1, 2016	**¥50,000**	**¥ 317,544**	**¥ (16,240)**	**¥610,909**
Net profit	—	—	—	**156,259**
Other comprehensive income (Note 25)	—	—	—	—
Total comprehensive income	—	—	—	**156,259**
Purchase of treasury stock (Note 23)	—	—	**(30,033)**	—
Disposal of treasury stock (Note 23)	—	**3,035**	**2,686**	—
Cash dividends (Note 24)	—	—	—	**(23,437)**
Issue of Convertible bond-type bonds with subscription rights to shares	—	**3,099**	—	—
Share-based payment transactions (Note 26)	—	**71**	—	—
Changes in interests in subsidiaries	—	**(2,046)**	—	—
Changes in scope of consolidation	—	—	—	**117**
Transfer from other components of equity to retained earnings	—	—	—	**17,516**
Total transactions with owners	—	**4,159**	**(27,347)**	**(5,804)**
Balance at March 31, 2017	**¥50,000**	**¥321,703**	**¥(43,587)**	**¥761,364**

	Other components of equity: Net gain (loss) on revaluation of financial assets measured at fair value	Remeasurements of defined benefit pensions plans	Exchange differences on translation of foreign operations	Net gain (loss) on derivatives designated as cash flow hedges	Total	Equity attributable to owners of the parent	Non-controlling interests	Total equity
Balance at April 1, 2016	**¥37,054**	**¥ —**	**¥(25,246)**	**¥(1,824)**	**¥9,984**	**¥972,197**	**¥623,954**	**¥1,596,151**
Net profit	—	—	—	—	—	**156,259**	**60,256**	**216,515**
Other comprehensive income (Note 25)	**12,538**	**14,755**	**(18,640)**	**797**	**9,450**	**9,450**	**528**	**9,978**
Total comprehensive income	**12,538**	**14,755**	**(18,640)**	**797**	**9,450**	**165,709**	**60,784**	**226,493**
Purchase of treasury stock (Note 23)	—	—	—	—	—	**(30,033)**	—	**(30,033)**
Disposal of treasury stock (Note 23)	—	—	—	—	—	**5,721**	—	**5,721**
Cash dividends (Note 24)	—	—	—	—	—	**(23,437)**	**(28,013)**	**(51,450)**
Issue of Convertible bond-type bonds with subscription rights to shares	—	—	—	—	—	**3,099**	—	**3,099**
Share-based payment transactions (Note 26)	—	—	—	—	—	**71**	—	**71**
Changes in interests in subsidiaries	—	—	—	—	—	**(2,046)**	**(49,533)**	**(51,579)**
Changes in scope of consolidation	—	—	—	—	—	**117**	**(393)**	**(276)**
Transfer from other components of equity to retained earnings	**(2,761)**	**(14,755)**	—	—	**(17,516)**	—	—	—
Total transactions with owners	**(2,761)**	**(14,755)**	—	—	**(17,516)**	**(46,508)**	**(77,939)**	**(124,447)**
Balance at March 31, 2017	**¥46,831**	**¥ —**	**¥(43,886)**	**¥(1,027)**	**¥ 1,918**	**¥1,091,398**	**¥606,799**	**¥1,698,197**

The accompanying notes are an integral part of these consolidated financial statements.

Financial Information

Consolidated Statement of Cash Flows

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries

	Millions of yen	
	Year ended March 31, 2016	**Year ended March 31, 2017**
Cash flows from operating activities:		
Profit before tax	¥252,791	**¥258,343**
Earnings(loss) before taxes from discontinued operations	(73,047)	**2,300**
Depreciation and amortization	182,656	**174,040**
Share of net profit of associates	(13,983)	**(16,964)**
Interest and dividend income	(8,837)	**(6,593)**
Interest expense	18,448	**16,060**
Impairment loss	81,058	**16,861**
Loss on sales and retirement of property, plant and equipment	7,037	**7,457**
Environmental measures costs	—	**6,781**
Loss on sales of shares of associates	1,404	**1,007**
Gain on sales of shares of associates	(1,717)	**(2,347)**
Gain on sales of non-current assets	(3,883)	**(1,205)**
Gain on step acquisitions, net	(1,861)	**—**
(Increase) decrease in trade receivables	(15,950)	**(11,264)**
(Increase) decrease in inventories	37,602	**(9,224)**
Increase (decrease) in trade payables	(53,072)	**43,992**
Increase (decrease) in net defined benefit assets and liabilities	(3,275)	**761**
Other, net	(24,612)	**(3,727)**
Subtotal	380,759	**476,278**
Interest received	3,458	**2,809**
Dividends received	13,703	**13,666**
Interest paid	(18,757)	**(15,741)**
Income taxes (paid) received, net	(79,551)	**(80,369)**
Net cash provided by operating activities	299,612	**396,643**
Cash flows from investing activities:		
Purchase of property, plant and equipment	(199,218)	**(197,100)**
Proceeds from sales of property, plant and equipment	11,114	**8,905**
Purchase of intangible assets	(19,714)	**(8,684)**
Purchase of other financial assets	(149,245)	**(314,982)**
Proceeds from sales/redemption of other financial assets	250,193	**207,280**
Purchase of investments in subsidiaries	(38,519)	**(26,276)**
Proceeds from sales of investments in subsidiaries	—	**10,748**
Net (increase) decrease in time deposits	(92,195)	**117,294**
Payments for transfer of business	(156)	**(77,774)**
Other, net	3,662	**(8,467)**
Net cash used in investing activities	(234,078)	**(289,056)**
Cash flows from financing activities:		
Net increase (decrease) in short-term borrowings	2,237	**(129,692)**
Net increase (decrease) in commercial papers	4,000	**10,000**
Proceeds from long-term borrowings	143,374	**217,446**
Repayment of long-term borrowings	(183,222)	**(143,867)**
Proceeds from issuance of bonds	59,707	**220,408**
Redemption of bonds	(20,040)	**(40,010)**
Net (increase) decrease in treasury stock	(47)	**(30,035)**
Dividends paid	(20,507)	**(23,437)**
Dividends paid to non-controlling interests	(23,323)	**(28,453)**
Proceeds from stock issuance to non-controlling interests	3,695	**2,812**
Payment for acquisition of subsidiaries' interests from non-controlling interests	(2,764)	**(48,837)**
Other, net	(4,055)	**(4,924)**
Net cash used in financing activities	(40,945)	**1,411**
Effect of exchange rate changes on cash and cash equivalents	(10,497)	**(13,144)**
Net increase (decrease) in cash and cash equivalents	14,092	**95,854**
Cash and cash equivalents at beginning of period	252,749	**267,148**
Net increase (decrease) in cash and cash equivalents resulting from transfer to assets held for sale	—	**(247)**
Net increase (decrease) in cash and cash equivalents resulting from change in scope of consolidation	307	**728**
Net increase in cash and cash equivalents resulting from merger and acquisition	—	**27**
Cash and cash equivalents at end of period (Note 21)	¥267,148	**¥363,510**

The accompanying notes are an integral part of these consolidated financial statements.

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Notes to Consolidated Financial Statements

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries

Note 1

Reporting Entity

Mitsubishi Chemical Holdings Corporation (the "Company") is a corporation domiciled in Japan, whose shares are listed on the First Section of the Tokyo Stock Exchange. The registered address of its Head Office is presented on its website (http://www.mitsubishichem-hd.co.jp/). The Company's Consolidated Financial Statements for the years ended March 31, 2017 comprise those of the Company, its subsidiaries and associates, and interests under joint arrangements (collectively, the "Group"). The Group's three principal domains are Performance Products, Health Care, and Industrial Materials. Further details are presented in Note 4 Segment Information.

Note 2

Basis of Presentation

1. Compliance with IFRS

The accompanying consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board. The provisions of Article 93 of the Ordinance on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements apply, as the Company meets the requirements for a "Specified Company applying Designated International Financial Reporting Standards" prescribed in Article 1-2 of said ordinance.

The Group adopted IFRS from the fiscal year beginning April 1, 2016. The date of transition to IFRS (the "transition date") was April 1, 2015. The effects of the transition to IFRS on the Group's financial position, results of operations, and cash flows on the transition date and comparative periods are presented in Note 39 First-Time Adoption.

2. Approval of Consolidated Financial Statements

The Group's consolidated financial statements were approved on June 27, 2017, by Hitoshi Ochi, Representative Corporate Executive Officer, President and Chief Executive Officer, and Kenkichi Kosakai, Representative Corporate Executive Officer, Deputy CEO, and Chief Financial Officer.

3. Basis of Measurement

The consolidated financial statements are prepared on a historical cost basis, except for certain financial instruments measured at fair value presented in Note 3 Significant Accounting Policies.

4. Presentation Currency

The consolidated financial statements are presented in Japanese yen, which is the Company's functional currency, rounded to the nearest million yen.

5. Use of Judgments, Estimates and Assumptions

Management has made a number of judgments, estimates and assumptions relating to the application of accounting policies, reporting of revenues and expenses and assets and liabilities in the preparation of these consolidated financial statements in accordance with IFRS.

Estimates and underlying assumptions are continually evaluated. The effect of changes to accounting estimates is recognized in the reporting period in which the revision was made and in future periods.

Information regarding judgments, estimates, and assumptions used in applying accounting policies that could materially affect the Company's consolidated financial statements is included in the following notes:

- Impairment of Non-Financial Assets (Note 13, Goodwill and Intangible Assets, Note 14, Property, Plant and Equipment and Note 15, Impairment Losses)
- Recoverability of Deferred Tax Assets (Note 11, Income Taxes)
- Measurement of Defined Benefit Obligations (Note 27, Retirement Benefits)
- Fair Value of Financial Instruments (Note 34, Financial Instruments)
- Contingent Liabilities (Note 38, Contingent Liabilities)

6. Early Application of New Standard

The Group applied IFRS 9 "Financial Instruments" in its entirety at the IFRS transition date.

7. New Standards and Interpretations Not Yet Applied

Standards and interpretations that have not been applied by the Group as of March 31, 2017 because application was not mandatory among key standards and interpretations issued by the date of approval of the consolidated financial statements are as follows.

The impacts on the Group's consolidated financial statements from applying such standards and interpretations are being evaluated and cannot currently be estimated.

Standards and Interpretations		Mandatory Application (Hereafter, Starting Year)	Year of Application by the Group	Overview of Introduction or Revision
IFRS 15	Revenue from Contracts with Customers	January 1, 2018	Year ending March 31, 2019	Accounting standards and disclosure methods for revenue recognition have been revised. Specifically, revenue is recognized based on the rights expected to be received in exchange for transferring goods or services to customers.
IFRS 16	Leases	January 1, 2019	Year ending March 31, 2020	Accounting standards and disclosure methods for handling leases have been revised. Specifically, under a single model, the financial statements must generally reflect asset usage rights and payment obligations for borrower leases exceeding 12 months.

Note 3

Significant Accounting Policies

1. Basis of Consolidation

(1) Subsidiaries

Subsidiaries are entities controlled by the Group. The Group has control over an entity if it has exposure or rights to variable returns from its involvement with the investee and has the ability to affect those returns through its influence over the investee.

In preparing its consolidated financial statements, the Company based the financial statements of each Group company prepared as of the same closing date based on common Group accounting policies. Subsidiaries' financial statements are adjusted, if necessary, when their accounting policies differ from those of the Group.

The Group consolidates entities from the date on which it acquires control until the date on which it loses control.

All intergroup balances, outstanding receivables and obligations, unrealized gains and losses are eliminated on consolidation.

A change in ownership interest of a consolidated subsidiary, without a loss of control, is accounted for as an equity transaction. Differences between adjusted non-controlling interest amounts and fair value are recognized directly as equity attributable to owners of the parent.

In the event of a loss of control, the Group measures and recognizes any remaining investments at fair value. Any gain or loss arising from a loss of control is recognized in profit or loss.

Non-controlling interests in a subsidiary's net assets are recognized separately from those under the Group's control. The comprehensive income of consolidated subsidiaries is attributed to owners of the parent and non-controlling interests even if this results in the non-controlling interests having a deficit balance.

(2) Associates

Associates are entities in which the Group has significant influence over the financial and operational policies but does not have control or joint control. Normally, the Group is assumed to be able to exercise significant influence when it holds 20% to 50% ownership. Other factors considered in assessing whether or not the Group can exercise significant influence include sending any of its officers being on the Board of Directors. In such cases, the Group may be considered to be able to exercise significant influence over an associate

Financial Information

even if its investment accounts for less than 20% of voting rights.

The Group accounts for investments in associates under the equity method. Such investments are recognized at cost upon acquisition. After acquisition, the Group's share of net assets of associates is adjusted and recorded in the consolidated statement of financial position.

The consolidated financial statements reflect the Group's share of earnings in associates. If amounts recognized in other comprehensive income of associates change, the Group's share with respect to those changes is also recognized in other comprehensive income.

The Group's consolidated financial statements have been adjusted to eliminate its share in unrealized gains and losses arising from transactions between it and associates.

Associates prepare their financial statements for the same reporting period as the Group, adjusting their accounting policies to align with those of the Group.

In the event that the Group loses significant control over an associate, it assesses and recognizes the remaining investment at fair value as of the day on which it lost such influence. Gains and losses arising from the loss of significant influence are recognized in profit or loss.

In preparing the consolidated financial statements, the requirements of local laws and shareholder agreements made it effectively impossible to match reporting dates of all associates to that of the Group. For certain associates for which it was impracticable to provisionally settle accounts on the Group's reporting date owing to business or other factors, the Group uses relevant provisional financial statements for the period ending December 31. Significant transactions or events between the reporting dates of those associates and the consolidated closing date are reflected in the consolidated financial statements.

(3) Joint Arrangements

A joint arrangement is an arrangement in which unanimous consensus from the parties that have joint control of decision-making over related activities is required.

A joint venture is a joint agreement through which parties with joint control over an arrangement have rights to the net assets of an arrangement.

The Group uses the equity method to account for its equity interests in joint ventures.

A joint operation is one in which parties with joint control of an arrangement have rights to assets and obligations for liabilities relating to the joint arrangement.

If the Group holds an interest in a joint operation, the Group recognizes assets, liabilities, revenues and expenses generated from joint operating activities only to the extent of its interest. Inter-company transactions among the Group’s companies as well as receivable and payable balances and unrealized gains and losses arising from such transactions are eliminated.

The principal joint operation is The Saudi Methacrylates Company, in which the Group and Saudi Arabia have a 50-50 interest. That company is constructing production facilities, and plans to manufacture methyl methacrylate monomer, acrylic resin, and other offerings (Manufacturing facilities are under construction as of the end of March 2017, scheduled to start commercial operation in the middle of the same year).

2. Business Combinations

The Group uses the acquisition method to account for business combinations.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts and adjusts the amounts in a measurement period that does not exceed one year from the acquisition date.

The Group measures the cost of an acquisition as the aggregate of the consideration transferred, measured at acquisition-date fair value and the amount of any non-controlling interest in the acquiree.

For each business combination, the Group measures components of non-controlling interests in the acquiree at fair value or the amounts of non-controlling interests in the acquiree's identifiable net assets.

The Group accounts for acquisition-related costs as expenses in the periods in which such costs are incurred.

When the Group acquires a business, the Group classifies or designates the identifiable assets acquired and liabilities assumed on the basis of the contractual terms, economic conditions and other pertinent conditions as they exist at the acquisition date. In principle, the Group generally measures the identifiable assets acquired and the liabilities assumed at their acquisition-date fair values.

If a business combination is achieved in stages, the Group reassesses the equity of the acquiree before acquisition of control at fair value on the acquisition date, and recognizes the resulting gain or loss in profit or loss. The Group accounts for the equity interest of the acquiree booked in other comprehensive income before the acquisition on the same basis as would be required if the Group had disposed directly of the previously held equity interest.

Goodwill is measured as the difference by which total value recognized as transferred consideration and non-controlling interests exceeds the net value of identifiable assets acquired and liabilities assumed.

If the total amount recognized as transferred consideration and non-controlling interests is less than net amount of identifiable assets acquired and liabilities assumed, the Group recognizes the difference as profit or loss.

After initial recognition, the Group does not amortize goodwill acquired through a business combination, but records goodwill at cost less any accumulated impairment loss. The Group conducts impairment tests annually or when there are signs of impairment.

3. Foreign Currency Translations

The consolidated financial statements of the Group are presented in Japanese yen, which is the Company's functional currency.

In addition, each company in the Group determines its individual functional currency and measures transactions using these functional currencies.

Foreign currency denominated transactions are translated into functional currencies at spot exchange rates as of the transaction dates or at similar rates.

Foreign currency monetary assets and liabilities are translated into the functional currency using the spot exchange rate on the date of end of the consolidated reporting period. Exchange differences arising from translations or settlement are recognized in profit or loss. However, exchange differences arising from financial instruments designated as hedging instruments of net investments in foreign operations (foreign subsidiaries, etc.), financial assets measured through other comprehensive income and cash flow hedges are recognized in other comprehensive income.

The Group translates assets and liabilities of foreign operations using the spot exchange rate at the end of the reporting period, and revenue and expenses using the spot exchange rate on the transaction date or an approximate rate in Japanese yen, respectively. The Group accounts for any exchange differences arising in such retranslation in other comprehensive income.

On the disposal of a foreign operation, accumulated exchange differences related to the foreign operation are recognized in profit or loss in the corresponding period of disposal.

4. Revenue

(1) Recognition of Revenue

The Group recognizes revenue when it is probable that future economic benefits will flow to the Group and these benefits can be measured reliably. The Group measures revenue at the fair value of a consideration received or receivable after deducting the amount of any trade discounts, volume rebates and value-added taxes.

(2) Sale of Goods

The Group recognizes revenue from the sale of goods when it has transferred the significant risks and rewards of ownership of the goods to the buyer, it retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold, the amount of revenue can be measured reliably, it is probable that the economic benefits associated with the transaction will flow to the Group, and the costs incurred or to be incurred in respect of the transaction can be measured reliably.

(3) Rendering of Services

When the outcome of a transaction involving the rendering of services can be estimated, revenue associated with the transaction is recognized according to the stage of the transaction's completion. In principle, the Group applies the method to estimate the stage of completion in proportion of the incurred cost at the closing date to the estimated total cost. If a milestone is specified at the start of a contract, the Group applies measurements using that milestone. When the stage of completion cannot be estimated reliably, the Group recognizes costs incurred as an expense in the reporting period and recognizes revenue only to the extent that recognized expenses are recoverable.

(4) Interest and Dividends
The Group recognizes interest using the effective interest method and recognizes dividends when shareholder rights to receive payments are established.

(5) Construction Contracts
If the outcome of a construction contract can be estimated reliably, revenue associated with the contract is recognized according to the stage of completion of the construction at the end of the reporting period. If the outcome of a construction contract cannot be estimated reliably, revenue is recognized only to the extent that it is probable contract costs incurred will be recoverable. If total contract costs will likely exceed total contract revenue, the expected loss is immediately recognized as an expense.

5. Government Grants
Government grants are recognized at fair value when there is reasonable assurance that the Group will comply with grant terms and that the grant will be received.

Government grants related to income are recognized as income on a systematic basis over the periods in which the Group recognizes as expenses the related costs for which the grants are intended to compensate.

Government grants relating to assets are deducted from asset acquisition costs.

6. Borrowing Costs
The Group capitalizes borrowing costs that are directly attributable to the acquisition, construction or production of assets that require considerable time before use as intended or sale as part of the cost of that asset. The Group recognizes all other borrowing costs as expenses in periods incurred.

7. Income Taxes
The Group calculates current tax liabilities or assets for the current and prior periods as amounts that it expects to pay to or recover from taxation authorities. The Group uses tax rates and tax laws enacted or substantively enacted by the end of a reporting period to determine tax amounts.

The Group uses the asset and liability method to record deferred taxes for differences between carrying amounts of assets or liabilities on the accounts at the end of the reporting period and the tax basis (temporary differences).

In principle, the Group recognizes deferred tax liabilities for all future taxable temporary differences. Deferred tax assets are recognized to the extent that it is probably that taxable income will be available against which deductible temporary differences and for tax credits and tax loss carryforwards can be used.

As exceptions, however, the Group does not recognize deferred tax assets or deferred tax liabilities for the following temporary differences:

- The initial recognition of goodwill
- The initial recognition of assets or liabilities in transactions that are not business combinations and do not affect profits in the accounts at the time of transactions or taxable profits or losses.
- Deductible temporary differences arising from investments in subsidiaries and associates, and interests in joint ventures to the extent that it is probable that the timing of the reversal of the temporary difference in the foreseeable future and it is not probable that future taxable profits will be available against which they can be utilized.
- Taxable temporary differences arising from investments in subsidiaries and associates, and interests in joint ventures to the extent that the timing of the reversal of the temporary difference is controlled and that it is probable the temporary difference will not reverse in the foreseeable future.

The Group reviews the carrying amount of deferred tax assets and liabilities (including unrecognized deferred tax assets) at the end of each reporting period. The Group calculates deferred tax and liabilities based on tax rates that have been enacted or substantively enacted by the end of the reporting period, estimating tax rates at the time assets materialize or liabilities are settled.

8. Earnings per Share
The Company calculates basic earnings per share by dividing the profit attributable to ordinary shareholders by the weighted average number of ordinary shares, adjusted for treasury stock during that period. The Company calculates diluted earnings per share by adjusting the effects of all potentially dilutive shares.

9. Cash and Cash Equivalents
Cash and cash equivalents comprise cash on hand, demand deposits, and short-term investments that are readily convertible to cash, which are subject to insignificant risks of changes in value, and whose maturities are three months or less from the date of acquisition.

10. Inventories
The cost of inventories comprises all purchase costs, processing costs, and all costs incurred in bringing the inventories to their present location and condition.
Inventories are measured at the lower of acquisition cost and net realizable value. The Company mainly uses the weighted average cost formula to calculate costs. The Company calculates net realizable value by deducting the estimated selling price in the ordinary course of business from the estimated costs required to make a sale.

11. Non-Current Assets Held for Sale and Discontinued Operations
The Company classifies a non-current asset (or disposal group) as held for sale if its carrying amount is expected to be recovered principally through a sale transaction rather than through continuing use. This applies only if the asset (or disposal group) is available for immediate sale in its present condition and a sale is highly probable within one year. The Company measures a non-current asset (or disposal group) classified as held for sale at the lower of the carrying amount and fair value, less the cost to sell.

The Group does not depreciate or amortize property, plant or equipment or intangible assets classified as held for sale.

Discontinued operations include units that have been disposed of or are classified as held for sale. The Group recognizes an operation as discontinued if it is a Group business and is scheduled for disposal.

12. Property, Plant and Equipment
The Group applies the cost model to measure property, plant and equipment.

The Group carries property, plant and equipment at cost less accumulated depreciation and accumulated impairment losses.

The acquisition cost includes direct costs of acquisition, estimated costs of dismantlement, removal and restoration, and borrowing costs that satisfy capitalization criteria.

Except for land, property, plant and equipment, less the residual value at the end of the reporting term, is depreciated using the straight-line method.

Depreciation is computed over the following estimated useful lives for the following major classes of assets:

Buildings and structures	3 to 50 years
Machinery, equipment and vehicles	2 to 22 years
Tools, furniture and fixtures	2 to 25 years

13. Intangible Assets
The Group uses the cost model to measure intangible assets.

Intangible assets are stated at cost less accumulated amortization and impairment losses.

Separately acquired intangible assets are initially recognized at cost. The acquisition cost of an intangible asset acquired in a business combination is measured at fair value at the acquisition date.

Expenditure on an internally generated intangible asset is recognized as an expense when it is incurred, excluding development expenditures that satisfy the criteria for capitalization.

The Group amortizes intangible assets with finite useful lives on a straight-line basis over their useful lives. It tests intangible assets when there are indications of impairment. Amortization periods and methods for intangible assets with finite useful lives are reviewed at year-end. Any changes are applied to the future as changes in accounting estimates.

Amortization is over the following estimated useful lives for the following major classes of intangible assets:

Technology-related intangible assets	4 to 20 years
Customer-related intangible assets	5 to 20 years
Software	3 to 5 years

The Group does not amortize intangible assets with indefinite useful lives, and annually conducts impairment tests individually or by cash-generating unit (or groups of cash-generating units) where there are indications of impairment.

14. Impairment of Assets

(1) Impairment of Non-Financial Assets

The Group assesses whether indications of asset impairment exist at the end of each reporting period. If there are such indications and annual impairment testing is necessary, the Group estimates recoverable amounts, which are the higher amount of fair value less costs of disposal and value in use. If a recoverable amount of an asset cannot be estimated, the Group estimates the recoverable amount of each cash-generating unit or group of cash-generating units of the asset class. If the carrying amount of an asset exceeds its recoverable amount, the Group recognizes an impairment loss and reduces the carrying amount of the asset to its recoverable amount. In measuring value in use, the Group determines the present value of estimated future cash flows, discounted by pre-tax rates reflecting current market assessments of the time value of money and risks specific to the asset. The Group estimates future cash flows using a business plan for five years or less, in principle. Cash flow projections beyond the business plan period use long-term-average growth rates according to individual circumstances.

The Group uses an appropriate valuation model supported by an available fair value index to measure fair value less costs of disposal.

The Group allocates goodwill after acquisition dates to individual or groups of cash generating units expected to benefit from corporate combination synergies.

For goodwill, intangible assets with indefinite useful lives and intangible assets not yet available for use, the Group tests for impairment annually and when there are indications of impairment.

(2) Reversal of Impairment Loss

For assets other than goodwill, at the end of each reporting period the Group evaluates whether assumptions used to measure recoverable amounts have changed for impairment losses recognized in prior periods and if there are indications that such losses have decreased or disappeared.

If such indications exist, the Group reverses impairment losses if recoverable amounts exceed the Group's carrying amounts of assets or cash-generating units. Any reversal is limited to the lower of the estimated recoverable amount or the carrying value that would have been determined, net of accumulated depreciation, had no impairment loss been recognized in prior periods.

Impairment loss reversals are recognized in profit or loss.

Goodwill impairment losses are not reversed.

15. Leases

A lease contract is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of a leased asset to the Group. An operating lease is a lease other than a finance lease.

In finance lease transactions, leased assets and lease obligations are recognized in the consolidated statement of financial position at the lower of the fair value of the leased property or the present value of the minimum lease payments, each determined at the inception of the lease. Lease payments are apportioned between the financial cost and reduction of lease obligations based on the interest method. Financial costs are recognized in profit or loss. Leased assets are depreciated on a straight-line basis over the useful lives or lease term, whichever is shorter.

In operating lease transactions, lease payments are recognized as an expense in the Consolidated Statement of Income on a straight-line basis over the lease terms. Contingent rents are charged as expenses in the period when they are incurred.

Determining whether an arrangement is, or contains, a lease is based on the substance of the arrangement regardless of whether it takes the legal form of a lease.

16. Provisions

A provision is recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and the amount of the obligation can estimated reliability.

Where the effect of the time value of money is material, the provision is measured at the present value of the expenditures expected to be required to settle obligations. The discount rate used in measuring the present value is a pre-tax rate that reflects current market assessments of the time value of money and risks inherent in the liability.

17. Retirement Benefits

The Group operates a defined benefit plan and defined contribution plan as employee retirement benefit plans.

The Group uses the projected unit credit method to determine the present value of its defined benefit obligations and the related current and past service costs for each plan.

The rate used to discount post-employment benefit obligations is determined by referring to market yields at the end of the reporting period on high quality corporate bonds.

The fair value of any plan assets is deducted from the present value of the defined benefit obligation in determining the amount of the net defined benefit liabilities or assets of defined benefit plans.

Remeasurements of liabilities and assets associated with defined benefit retirement plans are recognized in other comprehensive income in the period incurred and immediately reflected in retained earnings. Prior service costs are recognized as expenses in the periods incurred.

The Group recognizes contributions payable to defined contribution plans as expenses at the time of contribution.

18. Capital

(1) Ordinary Shares

The Company allocated the issue price of ordinary shares between common stock and additional paid-in capital.

(2) Treasury Shares

Acquired treasury stock is recognized at cost and deducted from equity, while the difference between the carrying value of treasury stock and its value at the time of sale is recognized in additional paid-in capital.

19. Share-Based Payment

The Group calculates fair value of share options as of the grant date using the Black-Scholes model as an appropriate valuation model.

The fair value measured as of share option grant dates after considering projected numbers of vested stock option shares is recorded as an expense using the straight-line method over the vesting period and is recognized in additional paid-in capital.

The Group revises the estimated number of share options expected to be vested each period. Revisions to estimates corresponding to the effects of revised estimates are recognized in profit or loss in the period such that the revised estimates are reflected in accumulated expenses.

20. Financial Instruments

(1) Financial Assets (Except Derivatives)

(i) Initial Recognition and Measurement

The Group initially recognizes trade receivables at the date of occurrence. The Group initially recognizes all other financial assets on the transaction dates on which the Group becomes a contract party.

Financial assets are classified as financial assets measured at fair value through profit or loss or other comprehensive income and financial assets measured at amortized cost. The Group determines classifications at initial recognition.

Debt financial instruments are classified as financial assets measured at amortized cost if both of the following conditions are met.

- Financial assets are based on a business model where the aim is to hold financial assets to recover contractual cash flows
- Contractual terms of financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on principal amounts outstanding

Debt financial instruments meeting the following conditions and measured at fair value are classified as financial assets measured at fair value through other comprehensive income. Otherwise, they are classified as financial assets measured at fair value through profit or loss.

- Financial assets are based on a business model where the aim is to hold financial

Financial Information

assets to collect contractual cash flows and sell assets
- Contractual terms of financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on principal amounts outstanding

Equity instruments other than those for trading purpose are designated as measured at fair value through profit or loss or as measured at fair value through other comprehensive income. Such designations are applied subsequently on a consistent basis.

Except for financial assets measured at fair value through profit or loss, financial instruments are measured at fair value plus transaction costs attributable directly to them.

(ii) Subsequent Measurements

After initial recognition, financial assets are measured based on the following classifications:

(a) Financial Assets Measured at Amortized Cost

Financial assets measured at amortized cost are measured at amortized cost using the effective interest method.

(b) Other Financial Assets

Financial assets other than those measured at amortized cost are measured at fair value.

Changes in the fair value of financial assets measured at fair value are recognized in profit or loss or in other comprehensive income.

Changes in the fair value of equity instruments designated as measured at fair value through other comprehensive income are recognized in other comprehensive income and the amount in other comprehensive income is transferred to retained earnings when equity instruments are derecognized or when the fair value of equity instruments declines significantly.

(iii) Derecognition

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the financial asset expire or when the Group transfers the financial asset and the substantially all the risks and rewards of ownership of the financial asset are transferred.

If the Group neither transfers nor retains substantially all the risks and rewards of ownership of a transferred asset and retains control of the transferred asset, the Group recognizes the residual interest in the transferred asset and the associated liability to be payable to the extent of the Group's continuing involvement.

(iv) Impairment

At each closing date, the Group assesses whether the credit risk on a financial asset or a financial asset group measured at amortized cost or a financial guarantee contract has increased significantly since initially recognizing the impairment of a financial asset or financial guarantee contract.

If, at the closing date, the credit risk of a financial asset or a financial asset group has not increased significantly since initial recognition, the Group measures the loss allowance for that financial asset at an amount equal to 12-month expected credit losses. However, the Group recognizes the expected credit losses of trade receivables over the remaining period from the initial recognition.

If a credit risk has increased significantly since initial recognition, the Group recognizes an expected credit loss over the remaining period as a loss allowance.

The Group assesses whether the credit risk has increased significantly using the change in the risk of default, and assesses whether the default risk has changed mainly using delinquent (past due information).

The Group measures a credit loss using the discounted present value of the difference between the contractual amount receivable and the estimate amount receivable based on the past credit loss.

(2) Financial Liabilities (Except Derivatives)

(i) Initial Recognition and Measurement

Financial liabilities are classified into financial liabilities measured at fair value through profit or loss and financial liabilities measured at amortized cost. The Group determines classifications at initial recognition.

Although all financial liabilities are measured at fair value at initial recognition, financial liabilities measured at amortized cost are measured at cost after deducting, from the fair value, transaction costs that are directly attributable to the financial liabilities.

(ii) Subsequent Measurement

After initial recognition, financial liabilities are measured based on classifications as follows:

(a) Financial Liabilities Measured at Fair Value through Profit or Loss

Financial liabilities measured at fair value through profit or loss are measured at fair value. After initial recognition, portions of changes in fair value and interest cost attributed to the change in credit risk of the Group are recognized in other comprehensive income, and the balance is recognized in profit or loss.

(b) Financial Liabilities Measured at Amortized Cost

After initial recognition, financial liabilities measured at amortized cost are measured at amortized cost using the effective interest method. Amortization under the effective interest method and gains or losses on derecognition is recognized in profit or loss.

(iii) Derecognition

Financial liabilities are derecognized when the obligation is discharged, canceled or expired, or when they are exchanged with substantially different terms or their terms are modified substantially.

(3) Complex Financial Instruments

The Group measures and initially recognizes hybrid financial instrument liabilities at the fair value of similar liabilities that do not have equity conversion options. Equity is measured and initially recognized at fair value after deducting the fair value of the liabilities of complex financial instruments overall. Direct transaction costs are allocated according to initial book value ratio of liabilities and equity. After initial recognition, complex financial instruments liabilities are measured at amortized cost using the effective interest method. The Company does not remeasure complex financial instrument equity after initial recognition.

(4) Offsetting of Financial Instruments

Financial assets and financial liabilities are offset and presented as a net amount in the consolidated statement of financial position only when there is a legally enforceable right to set off the recognized amounts and the Group intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

(5) Derivatives and Hedge Accounting

The Group uses derivatives, including forward foreign exchange contracts and interest rate swap contracts, to hedge foreign exchange and interest rate risks. These derivatives are initially measured at fair value when contracts are entered into and are subsequently remeasured at fair value.

Changes in the fair value of derivatives are recognized in profit or loss, although gains or losses on hedging instruments relating to the effective portions of cash flow hedges and hedges of net investments in foreign operations are recognized in other comprehensive income.

At the inception of hedging relationships, the Group formally designates and documents relationships to which hedge accounting applies and the objectives and strategies of risk management for undertaking the hedges. The documentation includes identifying hedging instruments, the hedged items or transactions, the nature of the risks being hedged and how the hedging instrument effectiveness (including its analysis of the sources of hedge ineffectiveness and how it determines the hedge ratio) is assessed in offsetting the exposure to changes in hedged item fair value or cash flows attributable to hedged risks. When designating a hedging relationship and on an ongoing basis, the Group analyses whether a derivative used to a hedge transaction is effective to offset the change in the fair value or the cash flow of a hedged item. The Group specifically determines that a hedge is effective when the economic relationship between the hedged item and the hedging instrument is offset.

Hedges that meet the requirements for hedge accounting are classified in the following categories and accounted for in accordance with IFRS 9 "Financial Instruments".

(a) Fair Value Hedges

Changes in the fair value of derivatives are recognized in profit or loss. For changes in the fair value of hedged items attributable to the hedged risks, carrying amounts of hedged items are adjusted, with changes recognized in profit or loss.

(b) Cash Flow Hedges

The effective portion of gains or losses on hedging instruments is recognized in other comprehensive income, while the ineffective portion is recognized immediately in profit or loss.

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Hedging instrument amounts recognized in other comprehensive income are reclassified to profit or loss when the transactions of the hedged items affect profit or loss. Where hedged items result in the recognition of non-financial assets or liabilities, the amounts recognized in other comprehensive income are accounted for as adjustments to the original carrying amount of non-financial assets or liabilities.

When forecast transactions are no longer expected to occur, any related cumulative gain or loss that has been recognized in equity as other comprehensive income is reclassified to profit or loss. When hedging instruments expire, are sold, terminated or exercised without the replacement or rollover of other hedging instruments, or when the hedge designation is revoked due to change in the risk management objective, accumulated amounts that have been recognized in other comprehensive income continue to be recognized in other comprehensive income until the forecast transactions occur.

(c) Hedges of Net Investments in Foreign Operations

Translation differences resulting from hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. The effective portion of gains or losses on hedging instruments is recognized in other comprehensive income. The ineffective portion is recognized in profit or loss. At the time of the disposal of the foreign operations, any related cumulative gain or loss recognized in equity as other comprehensive income is reclassified to profit or loss.

(6) Fair Value of Financial Instruments

The fair value of financial instruments that are traded in active financial markets at the fiscal year-end refers to quoted prices or dealer quotations.

If there is no active market, the fair value of financial instruments is determined referring to appropriate valuation models or prices presented by related financial institutions.

Note 4

Segment Information 1. Overview of Reporting Segments

The Group's reporting segments are the components for which separate financial information is available, and the Board of Directors regularly assesses this information in deciding how to allocate resources and evaluate results. No operating segments or components have been aggregated in preparing the reporting segment information.

The Company is a holding company for the corporate groups of the following six key subsidiaries: Mitsubishi Chemical Corporation, Mitsubishi Tanabe Pharma Corporation, Mitsubishi Plastics, Inc., Mitsubishi Rayon Co., Ltd., Life Science Institute, Inc., and Taiyo Nippon Sanso Corporation. The Company coordinates Group operations, categorizing each company's businesses by product and managing its portfolio based on those categories. Accordingly, the reporting segments comprise product-specific business categories. The five principal reporting segments are Electronics Applications, Designed Materials, Health Care, Chemicals, and Polymers.

The main products in each reporting segment are as follows.

Reporting Segment	Main Products
Electronics Applications	Recording media, Information and electronics-related materials, Imaging supplies
Designed Materials	Food ingredients, Battery materials, Fine chemicals, Polymer processing products, Composite materials, Inorganic chemicals, Fibers
Health Care	Pharmaceuticals, Diagnostic reagents and instruments, Clinical testing, Pharmaceutical formulation materials
Chemicals	Basic petrochemicals, Chemical derivatives, Synthetic fiber materials, Carbon products, Industrial gases
Polymers	Synthetic resins

Accounting policies for reportable segments are identical to those Group accounting policies stated in Note 3, Significant Accounting Policies. Inter-segment sales and transfers are based mainly on prevailing market prices.

In line with a decision announced on July 27, 2016, to transfer equity interests in purified terephthalic acid businesses in India and China, the Company classified both businesses as discontinued operations. Segment information for the years ended March 31, 2016 and 2017 includes revenues and other operating results from continuing operations, excluding those of discontinued operations. Details of discontinued operations are described in Note 6, Discontinued Operations.

2. Revenues and Operating Results for the Group's Reporting Segments

The Group evaluates results based on segment profits.

As of April 1, 2015 (Transition date)

Millions of yen

	REPORTING SEGMENT						Others (Note 1)	Subtotal	Adjustments (Note 2)	Consolidated
	Electronics Applications	Designed Materials	Health Care	Chemicals	Polymers	Total				
Segment assets	¥117,598	¥ 842,067	¥1,059,056	¥ 1,412,781	¥839,400	¥ 4,270,902	¥ 589,520	¥ 4,860,422	¥ (491,424)	¥ 4,368,998
Other items Investments accounted for using the equity method	474	12,147	264	58,223	52,902	124,010	5,259	129,269	—	129,269

Notes:

1. The Others category consists of businesses not included in reporting segments and mainly includes engineering, transportation, and warehousing operations.
2. The segment asset adjustment of ¥(491,424) million includes corporate assets of ¥249,477 million not allocated to reporting segments and inter-segment eliminations of ¥(740,901) million. Corporate assets include financial assets not allocated to reporting segments.

Financial Information

Year ended March 31, 2016

Millions of yen

	REPORTING SEGMENT						Others (Note 1)	Subtotal	Adjustments (Note 2)	Consolidated
	Electronics Applications	Designed Materials	Health Care	Chemicals	Polymers	Total				
Revenue										
External revenue	¥115,731	¥825,631	¥548,408	¥1,081,557	¥766,256	¥3,337,583	¥205,769	¥3,543,352	¥ —	¥3,543,352
Inter-segment revenue	4,296	33,657	2,264	121,277	69,024	230,518	125,128	355,646	(355,646)	—
Total	¥120,027	¥859,288	¥550,672	¥1,202,834	¥835,280	¥3,568,101	¥330,897	¥3,898,998	¥(355,646)	¥3,543,352
Segment profit (loss) Core operating income (Note 3)	¥ (972)	¥ 74,965	¥112,187	¥ 57,695	¥ 56,387	¥ 300,262	¥ 7,144	¥ 307,406	¥ (6,996)	¥ 300,410
Segment assets	102,853	867,494	1,084,694	1,330,030	792,197	4,177,268	648,015	4,825,283	(601,509)	4,223,774
Other items										
Depreciation and amortization	6,013	41,723	17,702	65,892	42,808	174,138	3,061	177,199	1,622	178,821
Share of profit of investments accounted for using the equity method	(121)	749	23	3,877	9,423	13,951	32	13,983	—	13,983
Investments accounted for using the equity method	332	12,192	257	52,617	63,318	128,716	356	129,072	—	129,072
Capital expenditures	4,960	50,378	32,840	75,145	44,755	208,078	3,515	211,593	1,541	213,134

Notes:
1. The Others category consists of businesses not included in reporting segments and mainly includes engineering, transportation, and warehousing operations.
2. The segment profit (loss) adjustment of ¥(6,996) million includes corporate costs of ¥(6,749) million not allocated to reporting segments and inter-segment eliminations of ¥(247) million. Corporate costs include expenditures on basin testing, research, and other activities not allocated to reporting segments.
The segment assets adjustment of ¥(601,509) million includes corporate assets of ¥167,810 million not allocated to reporting segments and inter-segment eliminations of ¥(769,319) million. Corporate assets include financial assets not allocated to reporting segments.
3. Segment profit (loss) is Operating profit in accordance with IFRS after excluding earnings from non-recurring factors, such as losses from business withdrawals and downsizings, representing core operating income.

Year ended March 31, 2017

Millions of yen

	REPORTING SEGMENT						Others (Note 1)	Subtotal	Adjustments (Note 2)	Consolidated
	Electronics Applications	Designed Materials	Health Care	Chemicals	Polymers	Total				
Revenue										
External revenue	**¥104,707**	**¥806,692**	**¥547,032**	**¥1,025,229**	**¥706,137**	**¥3,189,797**	**¥186,260**	**¥3,376,057**	**¥ —**	**¥3,376,057**
Inter-segment revenue	**4,648**	**34,487**	**2,345**	**101,743**	**60,081**	**203,304**	**128,509**	**331,813**	**(331,813)**	**—**
Total	**¥109,355**	**¥841,179**	**¥549,377**	**¥1,126,972**	**¥766,218**	**¥3,393,101**	**¥314,769**	**¥3,707,870**	**¥(331,813)**	**¥3,376,057**
Segment profit (loss) Core operating income (Note 3)	**¥ (2,918)**	**¥ 81,515**	**¥ 98,401**	**¥ 58,869**	**¥ 71,921**	**¥ 307,788**	**¥ 7,204**	**¥ 314,992**	**¥ (7,470)**	**¥ 307,522**
Segment assets	**100,456**	**860,650**	**1,101,469**	**1,443,042**	**803,803**	**4,309,420**	**950,892**	**5,260,312**	**(796,765)**	**4,463,547**
Other items										
Depreciation and amortization	**5,168**	**41,985**	**17,930**	**65,821**	**38,488**	**169,392**	**2,918**	**172,310**	**1,564**	**173,874**
Share of profit of investments accounted for using the equity method	**(29)**	**880**	**24**	**5,872**	**12,121**	**18,868**	**39**	**18,907**	**—**	**18,907**
Investments accounted for using the equity method	**274**	**13,819**	**244**	**52,623**	**69,390**	**136,350**	**384**	**136,734**	**—**	**136,734**
Capital expenditures	**6,341**	**49,763**	**28,507**	**70,216**	**47,006**	**201,833**	**4,266**	**206,099**	**383**	**206,482**

Notes:
1. The Others category consists of businesses not included in reporting segments and mainly includes engineering, transportation, and warehousing operations.
2. The segment profit (loss) adjustment of ¥(7,470) million includes corporate costs of ¥(7,314) million not allocated to reporting segments and inter-segment eliminations of ¥(156) million. Corporate costs include expenditures on basin testing, research, and other activities not allocated to reporting segments.
The segment assets adjustment of ¥(796,765) million includes corporate assets of ¥191,916 million not allocated to reporting segments and inter-segment eliminations of ¥(988,681) million. Corporate assets include financial assets not allocated to reporting segments.
3. Segment profit (loss) is Operating profit in accordance with IFRS after excluding earnings from non-recurring factors, such as losses from business withdrawals and downsizings, representing core operating income

Adjustments to profit before tax from segment operating results are as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Segment operating results	¥300,410	**¥307,522**
Gain on sales of non-current assets	3,522	**862**
Gain on step acquisitions, net	1,861	**—**
Gain on sale of shares of associates	1,717	**—**
Impairment loss	(13,638)	**(15,024)**
Environmental measures costs	—	**(6,781)**
Loss on sales and retirement of non-current assets	(1,459)	**(2,865)**
Early retirement program expenses	(15,502)	**(2,501)**
Loss during business interruption largely stemming from earthquakes in Japan	—	**(2,252)**
Share of loss of investments accounted for using the equity method	—	**(1,943)**
Loss on sale of shares of associates	(1,404)	**(1,006)**
Other	(6,761)	**(7,391)**
Operating profit	268,746	**268,621**
Finance income	8,919	**7,155**
Finance costs	(24,874)	**(17,433)**
Profit before tax	¥252,791	**¥258,343**

3. Geographic Information

The breakdown of external revenue and non-current assets is as follows:

External revenue

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Japan	¥2,113,382	**¥2,042,378**
U.S.A.	385,896	**348,361**
PRC	270,438	**246,464**
Other	773,636	**738,854**
Total	¥3,543,352	**¥3,376,057**

Note: Revenue are based on the locations of customers.

Non-current assets

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Japan	¥1,214,677	¥1,212,391	**¥1,203,583**
U.S.A.	281,644	272,588	**366,745**
Other	447,827	393,892	**410,653**
Total	¥1,944,148	¥1,878,871	**¥1,980,981**

Note: Non-current assets are based on the locations of the assets and do not include financial instruments, deferred tax assets and retirement benefit asset.

4. Information about Major Customers

This information has been omitted because no external customers account for more than 10% of revenue.

Financial Information

Note 5

Business Combinations

Year ended March 31, 2016

1. Acquisition of Renegade Gas Pty Ltd. by Taiyo Nippon Sanso Corporation

On July 21, 2015, the Board of Directors of consolidated subsidiary Taiyo Nippon Sanso Corporation decided to acquire all of the shares of Renegade Gas Pty Ltd. (RGP), which sells LPG and industrial gases in Australia, through TNSC (Australia) Pty Ltd. (in which Taiyo Nippon Sanso has 85% ownership), which was established to acquire and hold RGP's shares. RGP became a consolidated subsidiary of the Company on July 31, 2015.

(1) Overview of business combination

1. Name and business description of acquired company

Name: Renegade Gas Pty Ltd

Business description: Filling and sales of LPG and industrial gases, and sales and rentals of related equipment

2. Main reason for business combination

Consolidated subsidiary Taiyo Nippon Sanso Corporation is exploring ways to expand its operations into new countries to broaden its regional scope as part of efforts to reach the globalization objectives that are part of its Ortus Stage 1 medium-term management plan. Australia has the 12th largest GDP in the world and a population growth rate of 1% to 2% annually, a high level among advanced nations. Its economy is set to expand at around 3% annually over the next few years, reflecting growth in housing investment and personal consumption. The industrial gas market should benefit from steady growth in housing construction and infrastructure-related demand and from new demand from mining and energy sectors.

Taiyo Nippon Sanso will position RGP as a step in developing the industrial gas markets of Australia and the rest of Oceania, leveraging that company's existing network to broaden its product lineup and expanding its geographic reach.

The Group will launch efforts to materialize synergies from RGP and establish a solid footing in the Australian industrial gas business.

3. Acquisition date

July 31, 2015

4. Method for gaining control of acquired company

Acquisition of shares for cash and exchange of shares through consolidated subsidiary TNSC (Australia)

5. Percentage of voting rights acquired

100%

(2) Fair value of consideration transferred

Millions of yen

	Acquisition date (July 31, 2015)
Cash	**¥12,717**
TNSC (Australia) shares	**2,244**
Cost of the acquisition	**¥14,961**

(3) Share exchange ratio by share class and its calculation method, and number of shares issued

1. Share exchange ratio by share class

1 share of RGP common stock for 100 shares of TNSC (Australia) common stock

2. Calculation method for share exchange ratio

Calculated as a result of discussions with the relevant parties referring to stock valuation reports submitted by third-party appraisal institutions and other sources.

3. Number of shares issued

TNSC (Australia) shares: 15,868,013

(4) Goodwill, assets acquired and liabilities assumed, principally at fair value

Millions of yen

	Acquisition date (July 31, 2015)
Current assets:	
Cash and cash equivalents	**¥ 249**
Trade receivables	**1,338**
Inventories	**279**
Other	**88**
Non-current assets:	
Property, plant and equipment	**7,787**
Intangible assets	**700**
Acquired assets	**10,441**
Current liabilities	**1,796**
Non-current liabilities	**4,623**
Liabilities assumed	**6,419**
Net assets acquired and liabilities assumed	**4,022**
Goodwill (see note)	**10,939**

Note: Goodwill mainly comprises anticipated synergies and excess earnings capabilities arising from acquisition that do not match specific recognition criteria. Goodwill is not tax-deductible.

(5) Acquisition-related costs

Acquisition-related costs were ¥305 million, and are included in selling, general and administrative expenses in the Consolidated Statement of Income.

(6) Impact on the Group's results

The revenue, and profit or loss subsequent to the acquisition date and pro forma information assuming that the business combination was completed on April 1, 2015 is immaterial.

Year ended March 31, 2017

1. Acquisition of Industrial Gas Operations by Matheson Tri-Gas

Matheson Tri-Gas, Inc., a wholly owned subsidiary of consolidated subsidiary Taiyo Nippon Sanso Corporation, purchased part of the American industrial gas operations and related business assets of Air Liquide Industrial U.S. LP and Airgas, Inc.

(1) Overview of business combination

1. Name and business description of acquired company

Names: Air Liquide Industrial U.S. LP and Airgas, Inc.

Business description: Gas separation, carbon dioxide, packaged gases and nitrous oxide businesses

2. Main reason for business combination

The objective was to become a national supplier by expanding Matheson's gas separation business network in the East and Midwest of the United States, solidifying its position as a manufacturer, improving its supply stability and customer trust nationwide, reinforcing production capacity for its carbon dioxide business, and entering the packaged gas business in Alaska and the nitrous oxide business, thereby expanding into new domains and solidifying Matheson's foundations and profitability through expansion in the United States, the world's largest industrial gas market.

3. Acquisition date

September 8, 2016

4. Method for gaining control of acquired company

Consolidated subsidiary Matheson Tri-Gas acquired part of the American industrial gas operations and related business assets of Air Liquide Industrial and Airgas.

(2) Fair value of consideration transferred

Millions of yen

	Acquisition date (September 8, 2016)
Cash	**¥77,402**
Cost of the acquisition	**¥77,402**

Financial Information

(3) Goodwill, assets acquired and liabilities assumed, principally at fair value

Millions of yen

	Acquisition date (September 8, 2016)
Current assets:	
Inventories	¥ 406
Other	369
Non-current assets:	
Property, plant and equipment (see note 1)	28,911
Intangible assets (see note 1)	24,502
Acquired assets	54,188
Current liabilities	12
Non-current liabilities	3,744
Liabilities assumed	3,756
Net assets acquired and liabilities assumed	50,432
Goodwill (see note 2)	26,970

The acquisition cost is allocated to acquired assets and liabilities assumed on the acquisition date based on fair value. As the cost allocation has yet to be completed, the amounts above are provisional fair values based on prevailing best estimates. Amounts may be revised one year after acquisition following an assessment of additional information relating to facts and circumstances at the acquisition date.

Notes:
1. Property, plant and equipment mainly include machinery and vehicles of ¥23,346 million. Intangible assets include customer-related intangible assets of ¥24,502 million.
2. Goodwill mainly comprises anticipated synergies and excess earnings capabilities arising from acquisition that do not match specific recognition criteria. Goodwill is deductible for a certain period under full taxation.

(4) Acquisition-related costs

Acquisition-related costs were ¥421 million, and are included in selling, general and administrative expenses in the Consolidated Statement of Income.

(5) Impact on the Group's results

The revenue, and profit or loss subsequent to the acquisition date and pro forma information assuming that the business combination was completed on April 1, 2016 is immaterial.

2. Acquisition of Supagas Holdings Pty Ltd by TNSC (Australia) Pty Ltd

Consolidated subsidiary Taiyo Nippon Sanso Corporation acquired Supagas Holdings Pty Ltd, an Australian industrial gases and LPG company, through subsidiary TNSC (Australia) Pty Ltd., making Supagas Holdings a consolidated subsidiary.

(1) Overview of business combination

1. Name and business description of acquired company

Name: Supagas Holdings Pty Ltd and related properties
Business description: Sells LPG, industrial gases (including oxygen, nitrogen, argon, and carbon dioxide), and related equipment

2. Main reason for business combination

Consolidated subsidiary Taiyo Nippon Sanso Corporation acquired Renegade Gas Pty Ltd. in July 2015 to fully enter the Australian industrial gas market. Renegade Gas operates principally in New South Wales, Queensland, and elsewhere on Australia's east coast. Taiyo Nippon Sanso Corporation planned to further expand its operations in Australia. In acquiring Supagas Holdings, Taiyo Nippon Sanso augmented existing operations, including in Victoria and Western Australia, to complete a nationwide sales network. It was thereby able to reinforce its national account efforts and its user supply structure. In leveraging a nationwide sales network, Taiyo Nippon Sanso is positioned to capitalize on infrastructural demand, which should continue to expand solidly, while cultivating new resources and energy-related demand. That company should also materialize synergies with Renegade Gas to boost earnings and undertake activities to further expand its Australian business.

3. Acquisition date

December 16, 2016

4. Method for gaining control of acquired company

Consolidated subsidiary TNSC (Australia) acquired all of the shares and related properties of Supagas Holdings by purchasing shares for cash and exchanging shares.

5. Percentage of voting rights acquired

100%

(2) Fair value of consideration transferred

Millions of yen

	Acquisition date (December 16, 2016)
Cash	¥20,737
TNSC (Australia) shares	841
Cost of the acquisition	¥21,578

Note: In addition, the Group also made a cash loan of ¥7,686 million to the acquired company. This loan, which is repayable by the acquired company, is classified in the Consolidated Statements of Cash Flows within cash flows from investing activities as "Other, net." The acquired company is using this loan to fund repayment of its debts.

(3) Number of shares transferred and method for measuring fair value thereof

A total of 9,158,348 shares of common stock were transferred to the former owners of Supagas Holdings Pty Ltd and the fair value, based on the financial position, results, and other numbers for TSNC (Australia), was agreed between the parties.

(4) Goodwill, assets acquired and liabilities assumed, principally at fair value

Millions of yen

	Acquisition date (December 16, 2016)
Current assets:	
Cash and cash equivalents	¥ 717
Trade receivables	1,566
Inventories	334
Other	112
Non-current assets:	
Property, plant and equipment	10,048
Intangible assets	4,577
Other	125
Acquired assets	17,479
Current liabilities	1,189
Non-current liabilities	8,382
Liabilities assumed	9,571
Net assets acquired and liabilities assumed	7,908
Goodwill (see note)	13,670

The acquisition cost is allocated to acquired assets and liabilities assumed on the acquisition date based on fair value. As the cost allocation has yet to be completed, the amounts above are provisional fair values based on prevailing best estimates. Amounts may be revised one year after acquisition following an assessment of additional information relating to facts and circumstances at the acquisition date.

Note:
Goodwill mainly comprises anticipated synergies and excess earnings capabilities arising from acquisition that do not match specific recognition criteria. Goodwill is not tax-deductible.

(5) Acquisition-related costs

Acquisition-related costs were ¥542 million, and are included in selling, general and administrative expenses in the Consolidated Statement of Income.

(6) Impact on the Group's results

The revenue, and profit or loss subsequent to the acquisition date and pro forma information assuming that the business combination was completed on April 1, 2016 is immaterial.

Financial Information

Note 6

Discontinued Operations

1. Outline of Discontinued Operations

On July 27, 2016, the Company announced its decision to transfer its interests in terephthalic acid businesses in India and China, completing the transfer in the period. The Company accordingly classified Materials Chemicals and Performance Intermediaries Private Limited (formerly, MCC PTA India Corp. Private Limited) and earnings related to Ningbo Mitsubishi Chemical Co., Ltd., as discontinued operations in the year ended March 31, 2017, and presents corresponding information on discontinued and continuing operations in the consolidated financial statements.

2. Profit or Loss from Discontinued Operations

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Profit or Loss from Discontinued Operations:		
Revenue	¥ 128,933	**¥ 66,794**
Cost of sales	(131,051)	**(63,062)**
Gross profit (loss)	(2,118)	**3,732**
Selling, general and administrative expenses	(4,402)	**(2,588)**
Other operating income (Note 1)	452	**2,872**
Other operating expenses (Note 2)	(63,777)	**(436)**
Operating profit	(69,845)	**3,580**
Finance income	231	**58**
Finance costs	(3,433)	**(1,338)**
Profit (loss) before tax	(73,047)	**2,300**
Income tax expense	(822)	**286**
Profit (loss) from discontinued operations	¥ (73,869)	**¥ 2,586**
Net profit (loss) attributable to:		
Owners of the parent	¥ (71,902)	**¥ 2,586**
Non-controlling interests	¥ (1,967)	**¥ —**
Earnings (loss) per share:		**(Yen)**
Basic	¥ (49.09)	**¥ 1.76**
Diluted	¥ (49.06)	**¥ 1.75**

Notes:
1. In the year ended March 31, 2017, this included ¥2,347 million from the sale of shares of a subsidiary from the transfer of the terephthalic acid business.
2. In the year ended March 31, 2016, other operating expenses included the following impairment losses.

Use	Location	Category	Reporting Segment	Impairment loss
Terephthalic acid production facilities	MCC PTA India Corp. Private Limited (West Bengal State, India)	Machinery and equipment, Others	Chemicals	¥43,217 million
Terephthalic acid production facilities	Ningbo Mitsubishi Chemical Co., Ltd. (Zhejiang Province, China)	Machinery and equipment, Others	Chemicals	¥20,435 million

Composition of Impairment Losses

• Terephthalic acid facilities (India)

The impairment loss of ¥43,217 million includes ¥37,100 million for machinery and equipment, and ¥6,117 million for others.

Performance was sluggish at the terephthalic acid production facilities of MCC PTA India Corp. Private Limited, and a recovery in the business climate was unlikely. Because it was unlikely that investments would therefore be recoverable, the book value was reduced to nominal amounts. The recoverable amount was based on the value in use, however discounted future cash flows were negative. Accordingly, the discount rate is not presented.

• Terephthalic acid production facilities (China)

The impairment loss of ¥20,435 million includes ¥18,652 million for machinery and equipment, and ¥1,783 million for others.

Performance was sluggish at the terephthalic acid production facilities of Ningbo Mitsubishi Chemical Co., Ltd., in China, and a recovery in the business climate was unlikely. Because it was unlikely that investments would therefore be recoverable, the book value was reduced to recoverable amount. The recoverable amount was measured at fair value after deducting the cost of disposal. The fair value after such deduction was mainly calculated in line with valuation techniques based on the market approach and classified as Level 3 in the fair value hierarchy.

Cash flows from discontinued operations are as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Cash flows from operating activities	¥ (13,950)	**¥ (709)**
Cash flows from investing activities	(1,454)	**3,327**
Cash flows from financing activities	(10,501)	**(60,829)**
Total	¥ (25,905)	**¥ (58,211)**

Note 7

Employee Benefit Expenses

The breakdown of employee benefit expenses is as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Wages and salaries	¥ 543,430	**¥ 538,417**
Retirement benefit costs	44,835	**29,464**
Total	¥ 588,265	**¥ 567,881**

Note 8

Research and Development Expenses

Research and development expenses recognized in the years ended March 31, 2016 and 2017 were ¥126,782 million and ¥126,290 million, respectively.

Note 9

Other Operating Income and Other Operating Expenses

The breakdown of other operating income is as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Rent income	¥ 2,690	**¥ 2,583**
Insurance income	1,650	**1,901**
Gain on sales of non-current assets	3,883	**1,205**
Gain on step acquisitions, net	1,861	**—**
Gain on sales of shares of associates	1,717	**—**
Other	6,802	**5,006**
Total	¥ 18,603	**¥ 10,695**

Financial Information

The breakdown of other operating expenses is as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Impairment loss	¥17,406	**¥16,822**
Loss on sales and retirement of property, plant and equipment	7,003	**7,451**
Environmental measures costs	—	**6,781**
Early retirement program expenses	15,367	**2,349**
Loss during business interruption largely stemming from earthquakes in Japan	—	**2,252**
Loss on sales of shares of associates	1,404	**1,007**
Other	18,625	**17,060**
Total	¥59,805	**¥53,722**

Note 10

Financial Income and Financial Costs

The breakdown of financial income is as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Financial income		
Interest income		
Financial assets measured at amortized cost	¥2,815	**¥2,527**
Financial assets at fair value through profit or loss	309	**63**
Dividend income		
Financial assets measured at fair value through other comprehensive income	5,480	**3,948**
Other	315	**617**
Total	¥8,919	**¥7,155**

The breakdown of financial costs is as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Financial costs		
Interest expenses		
Financial liabilities measured at amortized cost	¥17,263	**¥15,605**
Foreign exchange losses	5,478	**502**
Other	2,133	**1,326**
Total	¥24,874	**¥17,433**

Note 11

Income Taxes

1. Deferred Tax Assets and Liabilities

As of March 31, 2016 and 2017, significant components of deferred tax assets and liabilities are as follows:

Year ended March 31, 2016

Millions of yen

	April 1, 2015	Amounts recognized in profit or loss	Amounts recognized in other comprehensive income	Other (Note)	March 31, 2016
Deferred tax assets:					
Tax loss carryforwards	¥ 62,596	¥(17,305)	¥ —	¥ (1,214)	¥ 44,077
Net defined benefit liabilities	36,044	(442)	8,815	(789)	43,628
Property, plant and equipment	17,775	(1,641)	—	(119)	16,015
Employees' bonuses	13,018	539	—	(16)	13,541
Employees' paid leave	7,635	(199)	—	—	7,436
Inventory	5,233	241	—	(77)	5,397
Other	55,241	7,886	135	1,054	64,316
Total	¥ 197,542	¥(10,921)	¥ 8,950	¥ (1,161)	¥ 194,410
Deferred tax liabilities:					
Property, plant and equipment	¥ (71,823)	¥ 5,532	¥ —	¥ 4,206	¥ (62,085)
Valuation of assets	(52,287)	5,561	—	(1,743)	(48,469)
Securities and other investments	(47,301)	124	5,434	11,330	(30,413)
Other	(31,713)	(7,253)	343	(699)	(39,322)
Total	¥(203,124)	¥ 3,964	¥ 5,777	¥13,094	¥(180,289)
Net deferred tax assets	¥ (5,582)	¥ (6,957)	¥14,727	¥11,933	¥ 14,121

Year ended March 31, 2017

Millions of yen

	April 1, 2016	Amounts recognized in profit or loss	Amounts recognized in other comprehensive income	Other (Note)	March 31, 2017
Deferred tax assets:					
Tax loss carryforwards	¥ 44,077	¥20,416	¥ —	¥(129)	¥ 64,364
Net defined benefit liabilities	43,628	1,979	(6,775)	(695)	38,137
Property, plant and equipment	16,015	1,255	—	(109)	17,161
Employees' bonuses	13,541	62	—	(10)	13,593
Employees' paid leave	7,436	(609)	—	(13)	6,814
Inventory	5,397	(957)	—	(20)	4,420
Other	64,316	(9,615)	568	440	55,709
Total	¥ 194,410	¥12,531	¥ (6,207)	¥(536)	¥ 200,198
Deferred tax liabilities:					
Property, plant and equipment	¥ (62,085)	¥ (3,424)	¥ —	¥ 102	¥ (65,407)
Valuation of assets	(48,469)	1,925	—	347	(46,197)
Securities and other investments	(30,413)	639	(3,561)	186	(33,149)
Other	(39,322)	(618)	(662)	(367)	(40,969)
Total	¥(180,289)	¥ (1,478)	¥ (4,223)	¥ 268	¥(185,722)
Net deferred tax assets	¥ 14,121	¥11,053	¥(10,430)	¥(268)	¥ 14,476

Note: Other includes exchange differences on translation of foreign operations.

In recognizing deferred tax assets, the Group considers whether it can use all or part of future deductible temporary differences or unused tax loss carryforwards with respect to future taxable income. In evaluating the recoverability of deferred tax assets, the Group considers the planned reversal of deferred tax liabilities, expected future taxable income, and tax planning. There is a high probability of collecting recognized deferred tax asset benefits based on historical taxable income levels and on future taxable income projections for the period in which it can recognize deferred tax assets.

Future deductible temporary differences not recognized as deferred tax assets as of April 1, 2015 (the transition date), March 31, 2016, and March 31, 2017 were ¥437,556 million, ¥522,104 million and ¥417,201 million, respectively. The unrecognized deferred tax assets were ¥143,366 million, ¥160,368 million, and ¥123,209 million, respectively.

Tax loss carryforwards not recognized as deferred tax assets as of April 1, 2015 (the transition date), March 31, 2016, and March 31, 2017 amounted to ¥467,801 million (¥227,366 million for carryforwards exceeding five years), ¥441,687 million (¥171,730 million for carryforwards exceeding five years), and ¥444,675 million (¥174,094 million for carryforwards exceeding five years). The unrecognized deferred tax assets were ¥88,185 million, ¥95,650 million, and ¥71,595 million, respectively.

As of April 1, 2015 (the transition date), March 31, 2016, and March 31, 2017, total temporary differences related to undistributed earnings of subsidiaries for which deferred tax liabilities were not recognized were ¥781,370 million, ¥792,640 million, and ¥908,573 million, respectively.

The Group does not recognize deferred tax liabilities related to temporary differences when it can control the timing of the reversal of the temporary differences and it is highly probable that temporary differences will not be reversed in the foreseeable future.

2. Income Taxes

The breakdown of income taxes is as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Income taxes	¥67,107	**¥55,467**
Deferred income taxes	6,957	**(11,053)**
Total	¥74,064	**¥44,414**

Deferred income taxes decreased by ¥3,284 million in the year ended March 31, 2016, reflecting changes in domestic and foreign tax rates. The impact on deferred income taxes in the year ended March 31, 2017 was immaterial.

3. Effective Tax Rate Reconciliation Schedule

The Company is principally subject to corporate taxes, resident taxes and business taxes. The statutory effective tax rates that are the bases for these taxes were 33.1% and 30.8% for the years ended March 31, 2016 and 2017, respectively. For overseas subsidiaries, local corporate income taxes are imposed.

A reconciliation of the statutory tax rates to the effective tax rates for the years ended March 31, 2016 and 2017, was as follows:

	Year ended March 31, 2016	**Year ended March 31, 2017**
Statutory tax rate	33.1%	**30.8%**
Unrecognized deferred tax assets	(2.5)	**(7.5)**
Tax credits for research and development costs	(2.5)	**(2.1)**
Share of profit of investments accounted for using the equity method	(1.4)	**(2.0)**
Difference of statutory tax rate in overseas subsidiaries	(1.4)	**(1.9)**
Permanent differences	2.2	**0.5**
Foreign taxes	0.5	**0.3**
Other	1.3	**(0.9)**
Effective tax rate	29.3%	**17.2%**

Note 12

Per Share Information

The bases for calculating basic and diluted earnings per share attributable to owners of the parent were as follows:

1. Basic Earnings per Share

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Profit used to calculate basic earnings per share attributable to owners of the parent		
Profit from continuing operations attributable to owners of the parent	¥123,260	**¥153,673**
Profit (loss) from discontinued operations attributable to owners of the parent	(71,902)	**2,586**
Profit attributable to owners of the parent	¥ 51,358	**¥156,259**
Average number of ordinary shares during period (thousands of shares)	1,464,812	**1,464,004**
Basic earnings per share		**(Yen)**
Continuing operations	¥ 84.15	**¥104.97**
Discontinued operations	(49.09)	**1.76**
Basic earnings per share	¥ 35.06	**¥106.73**

2. Diluted Earnings per Share

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Profit used to calculate diluted earnings per share attributable to owners of the parent		
Profit from continuing operations used to calculate basic earnings per share	¥123,260	**¥153,673**
Adjustment	—	**1**
Profit from continuing operations used to calculate diluted earnings per share	123,260	**153,674**
Profit (loss) from discontinued operations used to calculate diluted earnings per share	(71,902)	**2,586**
Profit used to calculate diluted earnings per share attributable to owners of the parent	¥ 51,358	**¥156,260**
Average number of diluted common shares during period (thousands of shares)		
Average number of ordinary shares during period	1,464,812	**1,464,004**
Impact of potentially dilutive ordinary shares		
Convertible bond-type bonds with subscription rights to shares	—	**9,866**
Subscription rights to shares	887	**964**
Average number of diluted ordinary shares during period	1,465,699	**1,474,834**
Diluted earnings per share		**(Yen)**
Continuing operations	¥ 84.09	**¥104.20**
Discontinued operations	(49.06)	**1.75**
Diluted earnings per share	¥ 35.03	**¥105.95**

Financial Information

Note 13

Goodwill and Intangible Assets

1. Schedule of Goodwill and Intangible Assets

The acquisition cost, accumulated amortization, accumulated impairment losses and carrying amount of goodwill and intangible assets were as follows:

Year ended March 31, 2016

Acquisition cost

Millions of yen

	Goodwill	Intangible assets: Technology-related intangible assets	Customer-related intangible assets	Software	Other	Total
As of April 1, 2015	¥245,675	¥122,535	¥79,205	¥61,372	¥50,020	¥313,132
Individual acquisition	—	11,775	56	1,065	380	13,276
Acquisition through business combinations	24,276	2,480	4,938	269	16	7,703
Transfer	—	42	—	4,892	(58)	4,876
Exchange differences on translation of foreign operations	(2,101)	(5,090)	(1,067)	(2,073)	(2,311)	(10,541)
As of March 31, 2016	¥267,850	¥131,742	¥83,132	¥65,525	¥48,047	¥328,446

Accumulated amortization, accumulated impairment losses

Millions of yen

	Goodwill	Intangible assets: Technology-related intangible assets	Customer-related intangible assets	Software	Other	Total
As of April 1, 2015	¥—	¥32,540	¥15,644	¥43,601	¥23,002	¥114,787
Amortization	—	6,372	5,278	6,624	2,965	21,239
Impairment losses	—	2,014	18	118	1,828	3,978
Exchange differences on translation of foreign operations	—	(1,305)	(769)	(3,181)	(1,839)	(7,094)
As of March 31, 2016	¥—	¥39,621	¥20,171	¥47,162	¥25,956	¥132,910

Carrying amount

Millions of yen

	Goodwill	Intangible assets: Technology-related intangible assets	Customer-related intangible assets	Software	Other	Total
As of April 1, 2015	¥245,675	¥89,995	¥63,561	¥17,771	¥27,018	¥198,345
As of March 31, 2016	¥267,850	¥92,121	¥62,961	¥18,363	¥22,091	¥195,536

Year ended March 31, 2017

Acquisition cost

Millions of yen

	Goodwill	Intangible assets: Technology-related intangible assets	Customer-related intangible assets	Software	Other	Total
As of April 1, 2016	**¥267,850**	**¥131,742**	**¥83,132**	**¥65,525**	**¥48,047**	**¥328,446**
Individual acquisition	**—**	**8,005**	**—**	**2,359**	**1,221**	**11,585**
Acquisition through business combinations	**44,599**	**2,535**	**31,586**	**296**	**892**	**35,309**
Transfer	**—**	**(39)**	**—**	**7,882**	**(168)**	**7,675**
Exchange differences on translation of foreign operations	**501**	**(3,787)**	**919**	**(5,979)**	**2,308**	**(6,539)**
As of March 31, 2017	**¥312,950**	**¥138,456**	**¥115,637**	**¥70,083**	**¥52,300**	**¥376,476**

Accumulated amortization, accumulated impairment losses

Millions of yen

	Goodwill	Intangible assets: Technology-related intangible assets	Customer-related intangible assets	Software	Other	Total
As of April 1, 2016	**¥—**	**¥39,621**	**¥20,171**	**¥47,162**	**¥25,956**	**¥132,910**
Amortization	**—**	**5,816**	**6,308**	**7,188**	**476**	**19,788**
Impairment losses	**—**	**42**	**39**	**131**	**65**	**277**
Exchange differences on translation of foreign operations	**—**	**720**	**36**	**(4,613)**	**189**	**(3,668)**
As of March 31, 2017	**¥—**	**¥46,199**	**¥26,554**	**¥49,868**	**¥26,686**	**149,307**

Carrying amount

Millions of yen

	Goodwill	Intangible assets: Technology-related intangible assets	Customer-related intangible assets	Software	Other	Total
As of April 1, 2016	**¥267,850**	**¥92,121**	**¥62,961**	**¥18,363**	**¥22,091**	**¥195,536**
As of March 31, 2017	**¥312,950**	**¥92,257**	**¥89,083**	**¥20,215**	**¥25,614**	**¥227,169**

There were no material internally generated assets in the years ended March 31, 2016 and 2017.

The amortization of intangible assets is included in Cost of sales and Selling, general and administrative expenses in the Consolidated Statement of Income.

The carrying amounts of intangible assets above for which useful lives could not be determined were ¥37,622 million, ¥44,562 million and ¥48,285 million as of the April 1, 2015 (the transition date), March 31, 2016 and March 31, 2017, respectively. The main item was in-process research and development expenses recognized when Mitsubishi Tanabe Pharma Corporation acquired Medicago Inc. (in the Health Care segment) in 2013, and which was included in Technology-related intangible assets. Given that the assets are at the research and development stage, have yet to obtain marketing approval from regulatory authorities, and cannot be used, the period in which they could deliver economic benefits is unforeseeable, so the assets are classified as intangible assets for which the useful lives cannot be determined.

2. Significant Intangible Assets

Significant intangible assets in the Consolidated Statement of Financial Position include technology-related intangible assets that the Company obtained in acquiring Mitsubishi Rayon Co., Ltd., in March 2010. The carrying amounts of these intangible assets were ¥30,375 million as of April 1, 2015 (the transition date), ¥26,803 million as of March 31, 2016, and ¥23,835 million as of March 31, 2017. The remaining amortization periods were 8 to 12 years.

The carrying amounts of technology-related intangible assets of Medicago Inc., which Mitsubishi Tanabe Pharma Corporation acquired in September 2013, were ¥29,781 million as of April 1, 2015 (the transition date), ¥27,271 million as of March 31, 2016, and ¥26,410 million as of March 31, 2017. Impairment tests are conducted every year, as these items are classified as intangible assets whose useful lives cannot be determined.

For customer-related intangible assets of Taiyo Nippon Sanso Co., Ltd., which the Company acquired in November 2014, the carrying amounts were ¥36,603 million as of April 1, 2015 (on the transition date), ¥34,499 million as of March 31, 2016, and ¥32,395 million as of March 31, 2017. The remaining amortization periods were 11 to 16 years.

3. Impairment Losses

The Company conducts impairment tests at certain times of the year for intangible assets whose useful lives cannot be determined, regardless of whether there are signs of impairment.

In the impairment tests, the recoverable value of intangible assets is measured based on its value in use.

The Company calculates value in use by using future cash flow estimates based on management-approved business plans. These plans are based on historical experience and external information. Except on justifiable grounds, the plans are, in principle, for up to five years. The Company uses a pretax weighted average cost of capital (discount rate) of 6.2% to 10.5%.

The Group has recognized impairment losses of ¥3,978 million during the year ended March 31, 2016 and ¥277 million during the year ended March 31, 2017, in other operating expenses in the Consolidated Statement of Income.

Note 14

Property, Plant and Equipment

The acquisition cost, accumulated depreciation, accumulated impairment losses and carrying amount of property, plant and equipment were as follows:

1. Schedule of property, plant and equipment

Year ended March 31, 2016

Acquisition cost

Millions of yen

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
As of April 1, 2015	¥1,077,236	¥2,966,112	¥300,935	¥292,423	¥115,838	¥4,752,544
Individual acquisition	28,205	125,396	18,597	1,644	26,523	200,365
Acquisition through business combinations	2,876	27,861	7,400	2,219	1,444	41,800
Transfer of business	—	(65)	(844)	—	(43)	(952)
Sale or disposal	(25,281)	(82,873)	(13,062)	(3,755)	(1,004)	(125,975)
Transfer	(978)	11	(54)	(550)	(9,544)	(11,115)
Exchange differences on translation of foreign operations	(13,440)	(70,156)	(8,205)	(298)	(7,136)	(99,235)
As of March 31, 2016	¥1,068,618	¥2,966,286	¥304,767	¥291,683	¥126,078	¥4,757,432

Accumulated depreciation, accumulated impairment losses

Millions of yen

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
As of April 1, 2015	¥724,200	¥2,299,906	¥236,208	¥5,012	¥1,993	¥3,267,319
Acquisition through business combinations	1,127	17,256	1,941	—	—	20,324
Transfer of business	—	(5)	(805)	—	—	(810)
Depreciation	25,773	119,316	16,328	—	—	161,417
Impairment losses	6,935	65,137	441	518	4,049	77,080
Sale or disposal	(20,979)	(73,282)	(12,389)	(1,557)	(559)	(108,766)
Transfer	(857)	13	(59)	—	—	(903)
Exchange differences on translation of foreign operations	(7,619)	(50,158)	(4,754)	1,284	(419)	(61,666)
As of March 31, 2016	¥728,580	¥2,378,183	¥236,911	¥5,257	¥5,064	¥3,353,995

Carrying amount

Millions of yen

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
As of April 1, 2015	¥353,036	¥666,206	¥64,727	¥287,411	¥113,845	¥1,485,225
As of March 31, 2016	¥340,038	¥588,103	¥67,856	¥286,426	¥121,014	¥1,403,437

Year ended March 31, 2017

Acquisition cost

Millions of yen

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
As of April 1, 2016	**¥1,068,618**	**¥2,966,286**	**¥304,767**	**¥291,683**	**¥126,078**	**¥4,757,432**
Individual acquisition	**29,585**	**118,354**	**18,172**	**1,392**	**29,966**	**197,469**
Acquisition through business combinations	**5,600**	**53,185**	**11,419**	**2,360**	**1,242**	**73,806**
Transfer of business	**(4,445)**	**(28,152)**	**(1,818)**	**—**	**(1,538)**	**(35,953)**
Sale or disposal	**(9,783)**	**(50,662)**	**(12,168)**	**(3,519)**	**(629)**	**(76,761)**
Transfer	**(2,353)**	**(4,505)**	**(323)**	**(1,831)**	**(12,589)**	**(21,601)**
Exchange differences on translation of foreign operations	**(11,442)**	**(146,384)**	**(5,707)**	**(3,170)**	**(1,314)**	**(168,017)**
As of March 31, 2017	**¥1,075,780**	**¥2,908,122**	**¥314,342**	**¥286,915**	**¥141,216**	**¥4,726,375**

Accumulated depreciation, accumulated impairment losses

Millions of yen

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
As of April 1, 2016	**¥728,580**	**¥2,378,183**	**¥236,911**	**¥5,257**	**¥5,064**	**¥3,353,995**
Acquisition through business combinations	**2,803**	**21,929**	**4,282**	**—**	**—**	**29,014**
Transfer of business	**(4,011)**	**(26,330)**	**(1,747)**	**—**	**—**	**(32,088)**
Depreciation	**25,003**	**112,193**	**17,056**	**—**	**—**	**154,252**
Impairment losses	**6,012**	**7,372**	**318**	**2,346**	**536**	**16,584**
Sale or disposal	**(8,534)**	**(46,131)**	**(11,591)**	**—**	**—**	**(66,256)**
Transfer	**(1,132)**	**(3,405)**	**(248)**	**(105)**	**—**	**(4,890)**
Exchange differences on translation of foreign operations	**(8,815)**	**(141,124)**	**(3,394)**	**(2,257)**	**(327)**	**(155,917)**
As of March 31, 2017	**¥739,906**	**¥2,302,687**	**¥241,587**	**¥5,241**	**¥5,273**	**¥3,294,694**

Carrying amount

Millions of yen

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
As of April 1, 2016	**¥340,038**	**¥588,103**	**¥67,856**	**¥286,426**	**¥121,014**	**¥1,403,437**
As of March 31, 2017	**¥335,874**	**¥605,435**	**¥72,755**	**¥281,674**	**¥135,943**	**¥1,431,681**

Depreciation of property, plant and equipment is included in the Cost of sales and Selling, general and administrative expenses in the Consolidated Statement of Income. Expenditure on construction work in progress for property, plant and equipment is included in construction in progress.

2. Leased Assets

The carrying amounts of leased assets included in property, plant and equipment were as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Buildings and structures	¥1,758	¥1,561	**¥1,621**
Machinery and vehicles	4,333	3,830	**3,673**
Tools, furniture and fixtures	2,448	2,093	**2,013**
Total	¥8,539	¥7,484	**¥7,307**

Financial Information

Note 15

Impairment Losses

In principle, the Group determines its cash-generating units considering operational, production processes, regions, and other factors based on business units. The Group recognizes impairment losses for idle assets by individual assets.

Impairment losses recognized in the years ended March 31, 2016 and 2017 are as follows. Impairment losses are included in Other operating expenses in the Consolidated Statement of Income.

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Property, plant and equipment		
Buildings and structures	¥ 4,674	**¥ 6,012**
Machinery and vehicles	7,355	**7,333**
Tools, furniture and fixtures	234	**318**
Land	518	**2,346**
Construction in progress	647	**536**
Total of property, plant and equipment	¥13,428	**¥16,545**
Intangible assets	3,978	**277**
Total impairment losses	¥17,406	**¥16,822**

The main assets for which impairment losses were recognized are as follows:

Year ended March 31, 2016

Use	Location	Category	Reporting segment	Impairment loss
Toner production facilities, product warehousing, and common buildings	Mitsubishi Kagaku Imaging Corp. (Virginia, USA)	Buildings and structures, Machinery and equipment, Others	Electronics Applications	¥2,033 million
Electrolyte production facilities	MC Ionic Solutions UK, Ltd. (Stockton-on-Tees, United Kingdom)	Machinery and equipment, Others	Designed Materials	¥3,076 million
Recombinant human serum albumin production facilities	Bipha Corporation (Chitose, Hokkaido)	Buildings and structures, Machinery and equipment, Vehicles, Land, Others	Health Care	¥3,156 million
Industrial gases production facilities	Leeden National Oxygen Ltd. (Singapore)	Machinery and equipment	Chemicals	¥1,386 million
Specialty resin production facilities	Lucite International Inc. (West Virginia, USA)	Machinery and equipment, Others	Polymers	¥1,145 million

Composition of Impairment Losses

• Toner production facilities, product warehousing, and common buildings
The impairment loss of ¥2,033 million includes ¥1,668 million for buildings and structures, ¥255 million for machinery and equipment, and ¥110 million for others.
Management decided to halt operations at the Mitsubishi Kagaku Imaging Corp.'s toner production facilities, product warehousing, and common buildings because profitability plummeted amid a deteriorating market environment. Because it was unlikely that investments would therefore be recoverable, the book value was reduced to the recoverable amount. That amount was based on the value in use and calculated by discounting future cash flows by 12.5%.

• Electrolyte production facilities
The impairment loss of ¥3,076 million includes ¥2,804 million for machinery and equipment, and ¥272 million for others.
Sales volume had not grown at the electrolyte production facilities of MC Ionic Solutions UK, Ltd., and management decided to remit operations at the facilities because a large increase was unlikely in the foreseeable future. Because it was unlikely that investments would therefore be recoverable, the book value was reduced to nominal amounts. The recoverable amount was based on the value in use, however discounted future cash flows were negative. Accordingly, the discount rate is not presented.

• Recombinant human serum albumin production facilities
The impairment loss of ¥3,156 million includes ¥2,019 million for buildings and structures, ¥548 million for machinery and equipment and vehicles, ¥421 million for land, and ¥168 million for others.
As the Mitsubishi Tanabe Pharma Group pushed ahead with preparations to restart production of recombinant human serum albumin, it became clear that there would be delays with these plans during the year ended March 31, 2016, prompting its management to revise such plans. With a resulting shift in focus away from therapeutic to non-therapeutic applications, it became likely that there would be a greater business scaling back than originally planned for the recombinant human serum albumin production facilities of Bipha Corporation. Because the future cash flow estimate was below the book value, which was therefore reduced to nominal amounts.

• Industrial gases production facilities
The impairment loss of ¥1,386 million is all for machinery and equipment.
It became apparent that the profitability of industrial gases production facilities at Leeden National Oxygen Ltd. in Singapore would decline owing to changes in the business climate. Because the future cash flow estimate was below the book value, which was therefore reduced to the recoverable amount. That amount was based on the value in use and calculated by discounting future cash flows by 10.1%.

• Specialty resin production facilities
The impairment loss of ¥1,145 million includes ¥1,102 million for machinery and equipment, and ¥43 million for buildings and structures.
Management decided to shut down specialty resin production facilities at Lucite International Inc. Because it was therefore unlikely that investments would be recoverable, the book value was reduced to nominal amounts. The recoverable amount was based on the value in use, however discounted future cash flows were negative. Accordingly, the discount rate is not presented.

Year ended March 31, 2017

Use	Location	Category	Reporting segment	Impairment loss
Polytetramethylene ether glycol production facilities	MCC Advanced Polymers Ningbo Co., Ltd. (Zhejiang Province, China)	Machinery and equipment, Buildings and structures, Others	Chemicals	¥3,121 million
High-performance film production facilities	Nagahama and Asai plants of Mitsubishi Plastics, Inc. (Nagahama, Shiga prefecture)	Machinery and equipment Buildings, Others	Designed Materials	¥3,017 million

Composition of Impairment Losses

• Polytetramethylene ether glycol production facilities
The impairment loss of ¥3,121 million includes ¥1,765 million for machinery and equipment, ¥1,005 million for buildings and structures, and ¥351 million for others.
With the business climate changing, there was no prospect of an improvement in earnings for MCC Advanced Polymers Ningbo Co., Ltd. It would also become necessary to make new investments for that company to continue operations independently after divestment, as it obtains utility supplies on the premises of Ningbo Mitsubishi Chemical Co., Ltd., where it is located. Management therefore decided to halt operations at MCC Advanced

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Polymers Ningbo and sell its stake in that company, reducing the book value to the recoverable amount. The recoverable amount was measured at fair value after deducting selling costs. Fair value is based on a price negotiated with the buyer and classified as Level 3 of the fair value hierarchy.

• High-performance film production facilities
The impairment loss of ¥3,017 million includes ¥1,966 million for machinery and equipment, ¥800 million for buildings and structures, and ¥251 million for others.

Mitsubishi Plastics, Inc., is restructuring operations because it expects that sales of some high-performance films will decline substantially amid sluggish sales volumes. The book value of facilities that were unlikely to be of use was reduced to nominal amounts.

The recoverable amount was based on the value in use, however future cash flows were negative. Accordingly, the discount rate is not presented.

The carrying amounts of goodwill allocated to cash-generating units (groups of cash-generating units) are as follows:

Millions of yen

Reporting segment	Cash-Generating Unit (Groups of Cash-Generating Units)	March 31, 2016	**March 31, 2017**
Designed Materials	High performance engineering plastics	¥ 18,121	**¥ 20,649**
	Performance chemicals	12,256	**12,256**
	Other	14,146	**14,166**
	Total	¥ 44,523	**¥ 47,071**
Health Care	Pharmaceuticals business	¥ 48,117	**¥ 47,934**
	Pharmaceutical formulation materials	33,396	**33,502**
	Other	212	**191**
	Total	¥ 81,725	**¥ 81,627**
Chemicals	Industrial gases	¥101,505	**¥144,276**
Polymers	MMA/PMMA	36,813	**36,813**
	Other	3,284	**3,163**
	Total	¥ 40,097	**¥ 39,976**
Total		¥267,850	**¥312,950**

The recoverable value of goodwill in cash-generating units and groups of cash generating units is based on the value in use.

The value in use is based on a management-approved five-year plan reflecting previous experience and external information. After considering future uncertainties after the five-year period, the Company assumed a zero growth rate, with value equaling cash flows in the fifth year.

The discount rates used for calculating recoverable value are as follows:

Reporting segment	Cash-Generating Unit (Groups of Cash-Generating Units)	March 31, 2016	**March 31, 2017**
Designed Materials	High performance engineering plastics Performance chemicals	7.3%	**7.7%**
Health Care	Pharmaceuticals business Pharmaceutical formulation materials	6.7%	**6.2%**
Chemicals	Industrial gases	5.3%	**5.4%**
Polymers	MMA/PMMA	5.3%	**5.4%**

Even if fluctuations in principal assumptions used to determine impairment are reasonably predictable, management believes that there is a low probability of material impairment.

Note 16

Individually Insignificant Investments Accounted for Using Equity Method

The carrying amounts of individually insignificant investments in joint ventures accounted for using the equity method are as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Carrying amounts of investments in joint ventures	¥56,731	¥60,492	**¥65,380**

Equity in earnings of joint ventures accounted for using the equity method for current comprehensive income is as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Share of profit using equity method	¥ 6,154	**¥9,003**
Share of other comprehensive income using equity method	(3,172)	**(595)**
Share of total shareholders' equity in total comprehensive income	¥ 2,982	**¥8,408**

Carrying amounts of individually insignificantly investments in associates accounted for using the equity method are as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Carrying amounts of investments in associates	¥72,538	¥68,580	**¥71,354**

Equity in earnings of associates accounted for using the equity method for current comprehensive income is as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Share of profit using equity method	¥ 7,829	**¥7,961**
Share of other comprehensive income using equity method	(1,118)	**(1,577)**
Share of total shareholders' equity in total comprehensive income	¥ 6,711	**¥6,384**

Financial Information

Note 17

Other Financial Assets

The breakdown of other financial assets is as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Stocks and investments	¥270,824	¥190,812	**¥200,835**
Certificate of deposits	83,500	53,500	**168,500**
Accounts receivable	40,910	30,684	**31,736**
Time deposits	30,131	121,012	**3,852**
Bonds	20,160	7,169	**7,150**
Structured bonds	6,062	2,025	**1,014**
Other	60,826	62,453	**56,740**
Allowance for doubtful accounts	(1,448)	(1,368)	**(1,460)**
Total	¥510,965	¥466,287	**¥468,367**
Current assets	¥171,089	¥214,485	**¥215,446**
Non-current assets	339,876	251,802	**252,921**
Total	¥510,965	¥466,287	**¥468,367**

Stocks and investments are mainly equity financial assets measured at fair value through other comprehensive income. Certificate of deposits, accounts receivable, time deposits and bonds are financial assets mainly measured at amortized cost. Structured bonds are financial assets measured at fair value through profit or loss.

The major issues and fair values of equity financial assets measured at fair value through other comprehensive income are as follows:

As of April 1, 2015 (Transition date)

Company name	Millions of yen
JFE Holdings Corporation	¥12,927
Mitsubishi UFJ Financial Group, Inc.	8,993
TOHO HOLDINGS CO., LTD.	7,254
Mitsubishi Materials Corporation	7,240
Mitsubishi Corporation	6,753
Daicel Corporation	6,220
SUZUKEN CO., LTD.	5,674
Mitsubishi Estate Co., Ltd.	5,362
T&D Holdings, Inc.	5,244
Alfresa Holdings Corporation	3,773

As of March 31, 2016

Company name	Millions of yen
TOHO HOLDINGS CO., LTD.	¥8,605
ONO PHARMACEUTICAL CO.,LTD.	7,556
JFE Holdings Corporation	7,384
Mitsubishi UFJ Financial Group, Inc.	6,105
SUZUKEN CO., LTD.	5,922
Alfresa Holdings Corporation	4,806
Daicel Corporation	3,946
Mitsubishi Research Institute, Inc.	3,866
MEDIPAL HOLDINGS CORPORATION	3,788
Mitsubishi Corporation	3,004

As of March 31, 2017

Company name	Millions of yen
TOHO HOLDINGS CO., LTD.	**¥8,326**
Mitsubishi UFJ Financial Group, Inc.	**6,144**
SUZUKEN CO., LTD.	**5,651**
JFE Holdings Corporation	**4,662**
Tosoh Corporation	**4,354**
Alfresa Holdings Corporation	**4,294**
MEDIPAL HOLDINGS CORPORATION	**3,712**
ONO PHARMACEUTICAL CO.,LTD.	**3,655**
Daicel Corporation	**3,441**
Mitsubishi Corporation	**3,356**

As stocks are held mainly to maintain and strengthen business and collaborative ties and financial transactions, they are designated as equity financial assets measured at fair value through other comprehensive income.

The Company endeavors to enhance the efficiency and effective use of its assets by selling (derecognizing) equity financial assets measured at fair value through other comprehensive income. Fair values upon sales and cumulative gains or losses on sales are as follows. Cumulative gains or losses (after tax) recognized in other components of equity are transferred to retained earnings at the time of sale.

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Fair value	¥55,207	**¥11,475**
Cumulative gains or losses	26,416	**1,275**

Dividend income from equity financial assets measured at fair value through other comprehensive income is as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Derecognized financial assets	¥1,460	**¥ 343**
Financial assets held at year-end	4,020	**3,605**

Note 18

Other Assets

The breakdown of other assets is as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	As of March 31, 2017
Net defined benefit assets	¥ 31,990	¥18,341	**¥29,898**
Prepaid expenses	31,954	28,323	**25,596**
Accrued income tax	10,508	13,476	**20,068**
Advance payment	11,221	9,630	**7,694**
Other	18,647	13,810	**14,007**
Total	¥104,320	¥83,580	**¥97,263**
Current assets	57,427	53,191	**58,184**
Non-current assets	46,893	30,389	**39,079**
Total	¥104,320	¥83,580	**¥97,263**

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Note 19

Inventory

The breakdown of inventory is as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	As of March 31, 2017
Finished goods	¥336,574	¥301,839	**¥295,903**
Raw materials and supplies	174,458	171,320	**169,291**
Work in process	82,748	76,302	**72,937**
Total	¥593,780	¥549,461	**¥538,131**

Inventories measured at net realizable value as of April 1, 2015 (the transition date), March 31, 2016, and March 31, 2017 were ¥127,747 million, ¥83,455 million and ¥79,989 million, respectively.

In the years ended March 31, 2016 and 2017, write-downs of inventories recognized as expenses were ¥8,655 million and ¥8,281 million, respectively.

Note 20

Trade Receivables

The breakdown of trade receivables is as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	As of March 31, 2017
Accounts receivable	¥758,554	¥773,126	**¥780,542**
Allowance for doubtful accounts	(4,219)	(4,032)	**(4,351)**
Total	¥754,335	¥769,094	**¥776,191**

Trade receivables are classified as financial assets measured at amortized cost.

Note 21

Cash and Cash Equivalents

The breakdown of cash and cash equivalents is as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	As of March 31, 2017
Cash and deposits	¥181,324	¥176,441	**¥236,523**
Short-term investments	71,425	90,707	**126,987**
Total	¥252,749	¥267,148	**¥363,510**

Note 22

Assets Held for Sale and Liabilities Related Directly to Assets Held for Sale

The breakdowns of assets held for sale and directly related liabilities are as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Assets held for sale:			
Trade receivables	¥ —	¥ —	**¥ 6,535**
Inventories	2,767	—	**4,879**
Property, plant and equipment	5,983	230	**2,443**
Other financial assets	—	3,108	**2,256**
Other	2	—	**803**
Total	¥8,752	¥3,338	**¥16,916**
Liabilities related directly to assets held for sale:			
Trade payables	¥ —	¥ —	**¥ 2,160**
Bonds and borrowings	—	—	**1,676**
Other	—	—	**1,471**
Total	¥ —	¥ —	**¥ 5,307**

Major assets held for sale as of April 1, 2015 (the transition date) are those for the transfer of the Kashima Plant assets to reorganize domestic manufacturing units at consolidated healthcare subsidiary Mitsubishi Tanabe Pharma Corporation and for the related transfer of property by Mitsubishi Chemical Corporation, another consolidated subsidiary.

Assets held for sale as of March 31, 2017 and the directly related liabilities stemmed from Mitsubishi Tanabe Pharma concluding a share transfer agreement accompanied by a loss of control in that subsidiary.

Mitsubishi Tanabe Pharma resolved to transfer part of its generic drugs and some of its long-listed products to wholly owned subsidiary Tanabe Seiyaku Hanbai Co., Ltd., through an absorption-type split. The move encompasses manufacturing and marketing approval, manufacturing contracts and related agreements, joint development agreements, inventories, trademark rights, copyrights, and safety management information. On March 28, 2017, Mitsubishi Tanabe Pharma also concluded an agreement to transfer all shares in Tanabe Seiyaku Hanbai. Assets and liabilities subject to the absorption split, and all assets and liabilities held by the company, are presented as assets held for sale and liabilities directly related thereto as of March 31, 2017.

Assets and liabilities are measured at book value, as the fair value exceeds the book value.

As of March 31, 2016 and 2017, other components of equity relating to assets held for sale stood at ¥(591) million and ¥238 million, respectively.

Note 23

Capital

1. Common stock and Treasury Stock

Number of shares authorized and issued is as follows:

Thousands of shares

	Year ended March 31, 2016	**Year ended March 31, 2017**
Number of shares authorized	6,000,000	**6,000,000**
Number of shares issued:		
At the beginning of the term	1,506,288	**1,506,288**
Increase (decrease)	—	**—**
At the end of the term	1,506,288	**1,506,288**

The Company's shares are ordinary shares without par value. The shares issued were fully paid.

Financial Information

Changes in the number of shares of treasury stock during the year are as follows:

	Year ended March 31, 2016	**Year ended March 31, 2017**
		Thousands of shares
At the beginning of the term	41,624	**41,485**
Increase (note 1)	64	**33,418**
Decrease (note 2)	(203)	**(7,878)**
At the end of the term	41,485	**67,025**

Note: 1. The increase in the number of treasury shares came from the purchase of 64 thousand shares constituting less than one unit in the year ended March 31, 2016. The increase in the number of treasury shares came from the purchase of 48 thousand shares constituting less than one unit and the acquisition of 33,370 thousand shares by the resolution of the Board of Directors in the year ended March 31, 2017.
Note: 2. The decrease in the number of such shares was from the sale of 2 thousand shares constituting less than one unit, a payout of 28 thousand shares from the exercise of stock options, and 173 thousand shares of investments accounted for using the equity method in the year ended March 31, 2016. The decrease in the number of such shares was from the sale of 1 thousand shares constituting less than one unit, a payout of 133 thousand shares from the exercise of stock options, and a payout of 7,744 thousand shares from a share exchange in the year ended March 31, 2017.

2. Additional paid-in capital and Retained Earnings
Additional paid-in capital comprises amounts arising from capital transactions that are not included in common stock. The main component is legal capital surplus and other capital surplus. Retained earnings comprise legal retained earnings and other retained earnings.

The Japanese Company Law mandates that at least half of paid-in capital be appropriated as common stock and the rest be appropriated as a legal reserve within the legal capital surplus. Under that law, the legal capital surplus can be incorporated in common stock by resolution at a shareholders' meeting.

Amounts classified as equity elements at the time of issuance of convertible bond type bonds with stock acquisition rights are included in other capital surplus as a capital element of compound financial products.

That law requires that 10% of the surplus appropriated for dividends be retained until the total amount of the legal capital surplus and legal retained earnings reaches a quarter of the normal value of common stock. The accumulated legal retained earnings can be appropriated for deficit disposition, and legal retained earnings may be available for dividends by resolution at a shareholders' meeting.

3. Other Components of Equity
Other components of equity are as follows:

(Financial Assets Measured at Fair Value through Other Comprehensive Income)
Unrealized gains on financial assets are measured at fair value through other comprehensive income.

(Remeasurement of Defined Benefit Pension Plans)
This remeasurement is for differences between actuarial assumptions at the beginning of the year and actual experience and the effects of changes in actuarial assumptions. This amount is recognized in other comprehensive income when it occurs and is immediately transferred from other components of equity to retained earnings.

(Exchange Differences on Translation of Foreign Operations)
These adjustments result from consolidating the financial statements of foreign operations.

(Effective Portion of Net Change in Fair Value of Cash Flow Hedges)
This is the cumulative amount of effective portions of hedges from gains or losses arising from changes in the fair value of hedging instruments relating to cash flow hedges.

Note 24

Dividends

Dividends paid to shareholders are as follows:

Year ended March 31, 2016

Date of approval	Resolution approved by	Type of shares	Amount (Millions of yen)	Amount per share (Yen)	Entitlement date	Effective date
June 24, 2015	Annual general meeting of shareholders	Common stock	¥10,253	¥7	March 31, 2015	June 25, 2015
November 5, 2015	Board of Directors	Common stock	¥10,253	¥7	September 30, 2015	December 2, 2015

Year ended March 31, 2017

Date of approval	Resolution approved by	Type of shares	Amount (Millions of yen)	Amount per share (Yen)	Entitlement date	Effective date
May 18, 2016	Board of Directors	Common stock	¥11,718	¥8	March 31, 2016	June 3, 2016
November 8, 2016	Board of Directors	Common stock	¥11,718	¥8	September 30, 2016	December 2, 2016

Dividends with a record date in the year ended March 31, 2017, and an effective date in the following fiscal year are as follows:

Year ended March 31, 2017

Date of approval	Resolution approved by	Type of shares	Amount (Millions of yen)	Paid from	Amount per share (Yen)	Entitlement date	Effective date
May 17, 2017	Board of Directors	Common stock	¥17,271	Retained earnings	¥12	March 31, 2017	June 6, 2017

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Note 25

Other Comprehensive Income

Changes in each item of other comprehensive income during the year are as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Financial assets measured at fair value through other comprehensive income:		
Amounts arising during term	¥(14,454)	**¥ 17,360**
Tax effects	5,588	**(2,969)**
Net amount	¥ (8,866)	**¥ 14,391**
Remeasurements of defined benefit pension plans:		
Amounts arising during term	¥(31,462)	**¥ 24,739**
Tax effects	9,417	**(7,415)**
Net amount	¥(22,045)	**¥ 17,324**
Exchange differences on translation of foreign operations:		
Amounts arising during term	¥(35,668)	**¥ (8,463)**
Reclassification adjustments	—	**(12,198)**
Tax effects	(33)	**256**
Net amount	¥(35,701)	**¥(20,405)**
Effective portion of net change in fair value of cash flow hedges:		
Amounts arising during term	¥ (2,139)	**¥ (1,893)**
Reclassification adjustments	2,730	**3,035**
Tax effects	(245)	**(302)**
Net amount	¥ 346	**¥ 840**
Share of other comprehensive income (loss) of investments accounted for using equity method:		
Amounts arising during term	¥ (4,306)	**¥ (2,172)**
Reclassification adjustments	16	**—**
Net amount	¥ (4,290)	**¥ (2,172)**
Total other comprehensive income	¥(70,556)	**¥ 9,978**

Note 26

Stock-based Remuneration

1. Details of Equity-Settled Share-Based Compensation System

Based on a resolution of the Remuneration Committee, the Company issues share-based compensation stock options as a form of performance-related payment to its corporate executive officers and executive officers who will share with shareholders not only the benefits due to a rise in the Company's stock price but also losses due to a decline in the stock price as an incentive to boost corporate performance and enhance medium- to long-term corporate value taking into consideration the Company's financial results for each fiscal year as well as the status of achieving of business targets by the corporate executive officers or executive officers (including those who have the retired) based on their degree of contribution, etc.

Until the 10th fiscal period, the Company issued stock-based compensation stock options to directors (excluding outside directors) and executive officers (including those who retired) for the same purpose with respect to corporate performance for each fiscal year taking into consideration the status of achieving business targets by the directors or the executive officers based on their degree of contribution, etc.

All stock options that the Company issues are equity-settled share-based compensation. There are no vesting terms. The exercise period is principally 20 years from the date of grant, and is, in principle, effective for 5 years from the day after the first year after recipients lose their status as director, executive officer, executive, or corporate auditor of the Company and/or its subsidiaries.

2. Changes in the Number of Stock Options

Number of shares

	Year ended March 31, 2016	**Year ended March 31, 2017**
Outstanding at the beginning of the term	834,550	**915,650**
Granted	109,500	**155,400**
Exercised	(28,400)	**(133,950)**
Forfeited	—	**—**
Expired	—	**—**
Outstanding at the end of the term	915,650	**937,100**
Exercisable stock options outstanding at the end of the term	104,750	**216,100**

The exercise price for all stock options is ¥1 per share.

The weighted average share prices for exercised stock options were ¥653.2 and ¥620.0 in the years ended March 31, 2016 and 2017, respectively.

The weighted average remaining contractual years of stock options outstanding at year-end were 10.6 years and 11.4 years as of March 31, 2016 and 2017, respectively.

3. Fair Value of Stock Options

The weighted average fair value of stock options granted in years ended March 31, 2016 and 2017 as of the measurement date were ¥530 and ¥455, respectively.

The Company employs the Black-Scholes model to calculate the fair value of stock options, using the following assumptions.

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Share price	¥613.1	**¥523.7**
Share price volatility (note 1)	33.643%	**33.744%**
Expected term (note 2)	6.75 years	**4.81 years**
Expected dividends (note 3)	¥13 per share	**¥15 per share**
Risk-free interest rate (note 4)	0.092%	**(0.318)%**

Notes: 1. Calculated based on the daily share price over the past 6.75 years and 4.81 years for the fiscal years ended March 31, 2016 and 2017, respectively.
2. Using a period up to the expected average exercise time from the grant date.
3. Based on the latest dividends for each fiscal year.
4. The yield on Japanese government bonds for the expected term.

4. Stock-Based Compensation Expenses

Stock option-related expenses were ¥ 58 million and ¥71 million, respectively, in the years ended March 31, 2016 and 2017,respectively, and were posted in Selling, general and administrative expenses in the Consolidated Statement of Income.

For stock options that do not have vesting conditions, bulk expenses are applied at the time of grant.

Note 27

Retirement Benefits

The Company's consolidated subsidiaries maintain lump-sum retirement and retirement benefit plans. The retirement benefit plans are defined benefit (fund- and contract-type) and defined contribution plans. Some consolidated subsidiaries also maintain welfare pension plans.

1. Defined Benefit Plans

The defined benefit plans of the Company's consolidated subsidiaries are mainly cash balance pension plans. Benefits under these plans are based on such conditions as years of service, points gained from results and contributions during employment. Investment yields are determined after taking into consideration the yields of 10-year national government bonds.

Cash balance pension plans are managed by corporate pension funds that are legally separated from the consolidated subsidiaries of the Company pursuant to Japan's Defined Benefit Corporate Pension Plan Act. Consolidated subsidiaries, or pension fund directors,

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and pension investment management institutions are legally required to accord top priority to plan participants, and must manage plan assets based on prescribed policies.

Contract-type cash balance plans are run in line with Bureau of Health and Welfare-approved pension provisions. The management and operation of reserve funds is through contracts with trust banks and other entrusted management institutions on the basis of duty of care and damages stipulations for trustees.

Funded cash balance pension plans are run by corporate pension funds. If fund directors neglect to faithfully discharge their duties concerning reserve management and operations, they assume liability for fund damages.

Defined benefit plan amounts in the Consolidated Statement of Financial Position are as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Present value of the defined benefit obligation	¥654,978	¥651,053	**¥630,280**
Fair value of the plan assets	(553,079)	(525,215)	**(531,840)**
Net defined benefit liabilities	¥101,899	¥125,838	**¥ 98,440**
Retirement benefit liabilities	¥133,889	¥144,179	**¥128,338**
Retirement benefit assets	(31,990)	(18,341)	**(29,898)**
Net defined benefit liabilities	¥101,899	¥125,838	**¥ 98,440**

For defined benefit plans, amounts recognized as expenses in the Consolidated Statement of Income are as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Current service cost	¥19,208	**¥20,102**
Prior service cost	(268)	**891**
Interest expense	7,132	**4,782**
Interest income	(7,307)	**(6,830)**
Total	¥18,765	**¥18,945**

Changes in the present value of the defined benefit obligation are as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Outstanding at the beginning of the term	¥654,978	**¥651,053**
Current service cost	19,208	**20,102**
Interest expense	7,132	**4,782**
Remeasurements:		
Actuarial gains and losses arising from changes in demographic assumptions	(139)	**(945)**
Actuarial gains and losses arising from changes in financial assumptions	18,048	**2,193**
Other	(99)	**(71)**
Benefits paid	(39,001)	**(39,894)**
Prior service cost	(268)	**891**
Exchange differences on translation of foreign operations	(8,806)	**(7,831)**
Outstanding at the end of the term	¥651,053	**¥630,280**

Changes in the fair value of plan assets are as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Outstanding at the beginning of the term	¥553,079	**¥525,215**
Interest income	7,307	**6,830**
Remeasurements:		
Return on plan assets	(13,652)	**25,916**
Contributions by the employer	19,229	**14,784**
Benefits paid	(31,833)	**(31,932)**
Exchange differences on translation of foreign operations	(8,915)	**(8,973)**
Outstanding at the end of the term	¥525,215	**¥531,840**

The principal actuarial assumptions used to calculate present values of defined benefit obligations are as follows:

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Discount rate	0.66%	0.72%	**0.56%**

In the event of a 0.5% increase or decrease in the discount rate, the principal actuarial assumption, the impact on the present value of defined benefit obligation as of March 31, 2016 and 2017 would be as follows. This sensitivity analysis assumes that all actuarial assumptions other than that subject to analysis are held constant.

Millions of yen

	As of March 31, 2016	**As of March 31, 2017**
Increase by 0.5%	¥(37,387)	**¥(35,873)**
Decrease by 0.5%	29,754	**31,639**

Note: The discount rate is determined by referring to yields on high-quality bonds with maturities similar to periods in which benefits are anticipated. The sensitivity analysis is therefore based on a minimum reasonable discount rate of 0%.

The fair value of plan assets are as follows:

As of April 1, 2015 (Transition date)

Millions of yen

	Fair value with quoted prices in active markets	Fair value without quoted prices in active markets	Total
Cash and cash equivalents	¥ 14,125	¥ —	¥ 14,125
Equity instruments			
Domestic equities	65,747	—	65,747
Foreign equities	43,223	—	43,223
Other	—	83,567	83,567
Debt instruments			
Domestic bonds	16,839	—	16,839
Foreign bonds	13,610	—	13,610
Other	—	209,275	209,275
General accounts of life insurance companies	—	73,670	73,670
Other	—	33,023	33,023
Total	¥153,544	¥399,535	¥553,079

As of March 31, 2016

Millions of yen

	Fair value with quoted prices in active markets	Fair value without quoted prices in active markets	Total
Cash and cash equivalents	¥ 43,187	¥ —	¥ 43,187
Equity instruments			
Domestic equities	49,757	—	49,757
Foreign equities	32,132	—	32,132
Other	—	62,414	62,414
Debt instruments			
Domestic bonds	14,612	—	14,612
Foreign bonds	24,162	—	24,162
Other	—	172,555	172,555
General accounts of life insurance companies	—	93,564	93,564
Other	—	32,832	32,832
Total	¥163,850	¥361,365	¥525,215

As of March 31, 2017

Millions of yen

	Fair value with quoted prices in active markets	Fair value without quoted prices in active markets	Total
Cash and cash equivalents	**¥ 20,469**	**¥ —**	**¥ 20,469**
Equity instruments			
Domestic equities	**57,629**	**—**	**57,629**
Foreign equities	**30,926**	**—**	**30,926**
Other	**—**	**75,858**	**75,858**
Debt instruments			
Domestic bonds	**6,251**	**—**	**6,251**
Foreign bonds	**30,878**	**—**	**30,878**
Other	**—**	**163,006**	**163,006**
General accounts of life insurance companies	**—**	**95,641**	**95,641**
Other	—	**51,182**	**51,182**
Total	**¥146,153**	**¥385,687**	**¥531,840**

The Company's consolidated subsidiaries secure the total investment returns required within an acceptable range of risk to sufficiently fund payments of pension benefits and lump-sum payments, and endeavor to minimize long-term contributions and amass financing for payments of benefits.

To achieve targeted rates of return, management sets percentages of policy assets based on medium- to long-term perspectives, reviewing them regularly, and endeavors to maximize returns in keeping with risk assumptions.

Standard and special contributions to defined benefit plans cover the expenses necessary to provide benefits.

In keeping with laws and regulations, the Company regularly recalculates pension financing to balance pension funding for the future. The recalculations review basal rates (including projected mortality, withdrawal, and interest rates) related to setting contributions, and validating premiums.

Scheduled contributions to plan assets for the year ending March 31, 2018 are ¥10,244 million.

The Company's consolidated subsidiaries may pay premium benefits to employees on retirement.

Some domestic consolidated subsidiaries have established retirement benefits trusts.

The weighted average durations of defined benefit plan obligations as of April 1, 2015 (the transition date), March 31, 2016, and March 31, 2017 were 13.0 years, 12.7 years, and 12.7 years, respectively.

2. Defined Contribution and Public Plans

Amounts recognized as expenses under defined contribution and public plans are as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Defined contribution plan cost	¥ 6,819	**¥ 5,874**
Public plan cost	17,649	**18,643**

Note 28

Provisions

The breakdowns and schedule of provisions are as follows:

Year ended March 31, 2016

Millions of yen

	Asset retirement obligations	Provision for litigation	Provision for environmental measures	Other	Total
As of April 1, 2015	¥12,485	¥6,631	¥2,338	¥ 3,490	¥24,944
Arising during the year	182	3,751	—	3,150	7,083
Interest cost associated with passage of time	362	—	—	—	362
Utilized	(819)	(1,103)	(1)	(1,458)	(3,381)
Unused amounts reversed	—	(55)	—	(432)	(487)
Exchange differences on translation of foreign operations	(556)	(8)	—	(107)	(671)
Other	(766)	—	—	135	(631)
As of March 31, 2016	¥10,888	¥9,216	¥2,337	¥ 4,778	¥27,219
Current liabilities	¥ 84	¥ —	¥ 3	¥ 3,516	¥ 3,603
Non-current liabilities	10,804	9,216	2,334	1,262	23,616
Total	¥10,888	¥9,216	¥2,337	¥ 4,778	¥27,219

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Year ended March 31, 2017

Millions of yen

	Asset retirement obligations	Provision for litigation	Provision for environmental measures	Other	Total
As of April 1, 2016	**¥10,888**	**¥9,216**	**¥2,337**	**¥4,778**	**¥27,219**
Arising during the year	**4,137**	**415**	**20**	**2,304**	**6,876**
Interest cost associated with passage of time	**409**	**11**	**—**	**68**	**488**
Utilized	**(170)**	**(1,530)**	**(4)**	**(1,287)**	**(2,991)**
Unused amounts reversed	**(5)**	**(79)**	**—**	**(1,193)**	**(1,277)**
Exchange differences on translation of foreign operations	**963**	**(2)**	**2**	**(65)**	**898**
Other	**(638)**	**(70)**	**70**	**500**	**(138)**
As of March 31, 2017	**¥15,584**	**¥7,961**	**¥2,425**	**¥5,105**	**¥31,075**
Current liabilities	**¥132**	**¥71**	**¥2,333**	**¥3,503**	**¥ 6,039**
Non-current liabilities	**15,452**	**7,890**	**92**	**1,602**	**25,036**
Total	**¥15,584**	**¥7,961**	**¥2,425**	**¥5,105**	**¥31,075**

Asset retirement obligations
The Company covers recovery obligations for the rental real estate of the Group by recording projected payments based on historical amounts. These expenses are expected to be paid after one year or more; however, they may be affected by future business plans.

Reserves for Possible Losses in Connection with Litigation
Reserves for possible losses in connection with litigation are set aside for payments to settle lawsuits and in preparation for payments that may arise in the future.

(1) Reserve for Health Management Allowances for HIV Compensation
To provide for future payments of health management allowances and settlement payments (including attorney fees) in connection with a lawsuit for damages filed by plaintiffs infected with HIV, the consolidated subsidiary, Mitsubishi Tanabe Pharma Corporation (MTPC) has set aside an estimated amount for such future payments.

In accordance with the finalization of the settlement concluded in March 1996, regarding the health management allowances, the present value of the estimated amounts to be paid in the future calculated based on the actual payment record up to the present time for AIDS patients who have reached a settlement is recognized. Regarding settlements, the corresponding estimated amounts calculated based on the actual settlements record up to the present time for HIV plaintiffs as of March 31, 2017 and HIV-infected patients due to anti-haemophilia preparations (unheated concentrate) who have not filed lawsuits are recognized.

(2) Reserve for Health Management Allowances for Sub-acute Myelo-Optical Neuropathy (SMON) Compensation
MTPC has made a provision in the accompanying consolidated financial statements for the estimated future medical treatment payments to be made over the remaining lives of the parties entitled to such payments under the compromise settlement.

(3) Reserve for HCV Litigation
To provide for losses that may arise in the future from a settlement of lawsuits filed by plaintiffs infected with HCV (hepatitis C virus), MTPC has set aside an estimated amount for payments related to such settlement based on estimates of the number of people receiving relief and the amount of relief payments required under a law which stipulates that relief be provided to people who contacted hepatitis C from specific fibrinogen products or specific coagulation factor IX products.

Reserve for environmental measures
The Company records estimated losses to cover future losses from construction and environmental remediation activities. These expenses are expected to be paid after one year or more; however, they may be affected by future business plans.

Note 29

Bonds and Borrowings

The breakdown of bonds and borrowings is as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Short-term borrowings	¥ 495,867	¥ 381,090	**¥ 294,547**
Current portion of long-term borrowings	183,408	137,941	**141,024**
Commercial paper	26,000	30,000	**40,000**
Current portion of bonds	20,040	40,010	**40,000**
Loans due to the transfer of trade receivables	—	96,690	**55,150**
Loans due to the transfer of trade receivables of subsidiaries	17,397	20,974	**7,016**
Bonds	305,010	325,000	**355,000**
Convertible bond-type bonds with subscription rights to shares	—	—	**147,652**
Long-term borrowings	554,206	547,870	**613,353**
Total	¥1,601,928	¥1,579,575	**¥1,693,742**
Current liabilities	¥742,712	¥706,705	**¥577,737**
Non-current liabilities	859,216	872,870	**1,116,005**
Total	¥1,601,928	¥1,579,575	**¥1,693,742**

Bonds and borrowings are classified as financial liabilities measured at amortized cost.

The average interest rates for short- and long-term borrowings as of April 1, 2015 (the transition date) were 0.850% and 1.271%, respectively.

The average interest rates for short- and long-term borrowings as of March 31, 2016 were 0.971% and 1.256%, respectively.

The average interest rates for short- and long-term borrowings as of March 31, 2017 were 0.881% and 1.182%, respectively.

Repayment terms for long-term borrowings are from 2017 to 2035.

Loans due to the transfer of trade receivables are liabilities for transfers that do not meet the criteria for derecognition as financial assets.

Borrowings by consolidated subsidiaries from trade receivable transfers are liabilities related to transfers to consolidated subsidiaries.

Financial Information

The breakdown of bonds is as follows:

Millions of yen

Note	Name of bond	Term	Interest rate	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
1	1st unsecured bond	2011-2016	0.499%	¥ 20,000	¥ 20,000	**¥ —**
1	2nd unsecured bond	2011-2021	1.204%	10,000	10,000	**10,000**
1	3rd unsecured bond	2012-2017	0.366%	15,000	15,000	**15,000**
1	4th unsecured bond	2012-2019	0.556%	10,000	10,000	**10,000**
1	5th unsecured bond	2012-2017	0.439%	15,000	15,000	**15,000**
1	6th unsecured bond	2012-2019	0.665%	10,000	10,000	**10,000**
1	7th unsecured bond	2013-2018	0.615%	20,000	20,000	**20,000**
1	8th unsecured bond	2013-2020	0.948%	10,000	10,000	**10,000**
1	9th unsecured bond	2013-2023	1.226%	10,000	10,000	**10,000**
1	10th unsecured bond	2013-2018	0.319%	10,000	10,000	**10,000**
1	11th unsecured bond	2013-2020	0.604%	15,000	15,000	**15,000**
1	12th unsecured bond	2013-2023	0.918%	15,000	15,000	**15,000**
1	13th unsecured bond	2014-2019	0.319%	25,000	25,000	**25,000**
1	14th unsecured bond	2014-2021	0.482%	15,000	15,000	**15,000**
1	15th unsecured bond	2014-2024	0.800%	15,000	15,000	**15,000**
1	16th unsecured bond	2015-2022	0.433%	—	10,000	**10,000**
1	17th unsecured bond	2015-2025	0.755%	—	10,000	**10,000**
1	18th unsecured bond	2015-2020	0.281%	—	20,000	**20,000**
1	19th unsecured bond	2015-2022	0.476%	—	10,000	**10,000**
1	20th unsecured bond	2015-2025	0.711%	—	10,000	**10,000**
1	21st unsecured bond	2016-2021	0.120%	—	—	**10,000**
1	22nd unsecured bond	2016-2026	0.320%	—	—	**10,000**
1	23rd unsecured bond	2016-2036	0.850%	—	—	**20,000**
2	33rd unsecured bond	2006-2016	2.010%	20,000	—	**—**
2	35th unsecured bond	2006-2016	2.050%	10,000	10,000	**—**
2	37th unsecured bond	2008-2018	2.030%	20,000	20,000	**20,000**
2	38th unsecured bond	2009-2019	2.020%	10,000	10,000	**10,000**
3	6th unsecured bond	2009-2019	1.940%	5,000	5,000	**5,000**
4	9th unsecured bond	2012-2017	0.554%	10,000	10,000	**—**
4	10th unsecured bond	2012-2017	0.437%	10,000	10,000	**10,000**
4	11th unsecured bond	2014-2019	0.319%	15,000	15,000	**15,000**
4	12th unsecured bond	2014-2021	0.558%	10,000	10,000	**10,000**
4	13th unsecured bond	2016-2021	0.140%	—	—	**15,000**
4	14th unsecured bond	2016-2026	0.390%	—	—	**15,000**
	Other bond			50	10	**—**
	Subtotal			¥325,050	¥365,010	**¥395,000**
1	Zero coupon convertible bond-type bonds with subscription rights to shares due 2022	2017-2022	0.196%	—	—	**74,269**
1	Zero coupon convertible bond-type bonds with subscription rights to shares due 2024	2017-2024	0.312%	—	—	**73,383**
	Subtotal			—	—	**147,652**
	Total			¥325,050	¥365,010	**¥542,652**

Notes:
1. These corporate bonds are issued by the Company.
2. These corporate bonds are issued by Mitsubishi Chemical Corporation, a domestic consolidated subsidiary. As of March 31, 2016, the Company began managing the bonds because the company took over them based on the absorption-type company split.
3. This corporate bond is issued by Mitsubishi Plastic, Inc., a domestic consolidated subsidiary. As of March 31, 2016, the Company began managing the bond because the company took over it based on the absorption-type company split.
4. These corporate bonds are issued by Taiyo Nippon Sanso Corporation, a domestic consolidated subsidiary.

Assets pledged as collateral and collateralized obligations are as follows:

Assets pledged as collateral

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Buildings and structures	¥ 9,857	¥ 8,085	**¥ 7,483**
Machinery and vehicles	51,066	10,115	**9,836**
Land	10,343	10,191	**7,824**
Other	27,691	26,364	**1,542**
Total	¥98,957	¥54,755	**¥26,685**

Collateralized obligations

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Trade payables	¥ 190	¥ 340	**¥ 435**
Short-term borrowings	3,184	4,272	**3,219**
Current portion of long-term borrowings	4,474	2,085	**408**
Long-term borrowings	4,883	6,323	**7,836**
Other	176	64	**46**
Total	¥12,907	¥13,084	**¥11,944**

Note 30

Other Financial Liabilities

The breakdown of other financial liabilities is as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Account payable-other	¥ 96,188	¥ 87,255	**¥ 96,061**
Accrued expenses	71,605	67,176	**63,480**
Lease obligations	15,697	18,135	**16,930**
Deposits	52,435	14,048	**10,981**
Other	30,417	28,345	**24,946**
Total	¥266,342	¥214,959	**¥212,398**
Current liabilities	¥236,783	¥185,940	**¥184,909**
Non-current liabilities	29,559	29,019	**27,489**
Total	¥266,342	¥214,959	**¥212,398**

Other financial liabilities are mainly classified as financial liabilities measured at amortized cost.

Note 31

Lease Transactions

1. Finance Leases (Lessee)

Future minimum lease payments and the present value of future minimum lease payments are as follows:

Millions of yen

	As of April 1, 2015 (Transition date)			As of March 31, 2016			**As of March 31, 2017**		
	Total future minimum lease payments	Future finance costs	Present value	Total future minimum lease payments	Future finance costs	Present value	**Total future minimum lease payments**	**Future finance costs**	**Present value**
Due within one year	¥ 3,781	¥ (279)	¥ 3,502	¥ 4,742	¥ (346)	¥ 4,396	**¥ 4,146**	**¥ (277)**	**¥ 3,869**
Due after one year and not later than five years	8,604	(718)	7,886	9,904	(844)	9,060	**9,222**	**(623)**	**8,599**
Later than five years	4,790	(481)	4,309	5,046	(367)	4,679	**4,696**	**(234)**	**4,462**
Total	¥17,175	¥(1,478)	¥15,697	¥19,692	¥(1,557)	¥18,135	**¥18,064**	**¥(1,134)**	**¥16,930**

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2. Operating Lease (Lessee)

Future minimum lease payments under noncancellable operating lease contracts are as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Due within one year	¥12,935	¥12,991	**¥12,339**
Due after one year and not later than five years	22,005	23,439	**19,320**
Later than five years	7,729	6,417	**7,610**
Total	¥42,669	¥42,847	**¥39,269**

In the years ended March 31, 2016 and 2017, lease fees recognized as expenses were ¥19,901 million and ¥19,873 million, respectively.

Note 32

Other Liabilities

The breakdown of other liabilities is as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Employees' bonuses	¥ 39,214	¥ 42,566	**¥ 42,233**
Employees' paid leave related obligations	29,289	29,910	**30,079**
Advances received	18,659	14,067	**15,582**
Accrued consumption taxes	17,455	12,346	**10,003**
Deferred income from out-licensing agreements	6,272	12,209	**4,944**
Social insurance premiums received	6,888	5,081	**6,053**
Other	43,536	40,163	**46,236**
Total	¥161,313	¥156,342	**¥155,130**
Current liabilities	¥126,656	¥114,955	**¥116,691**
Non-current liabilities	34,657	41,387	**38,439**
Total	¥161,313	¥156,342	**¥155,130**

Note 33

Trade Payables

Trade payables are as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Accounts payable	¥452,856	¥394,065	**¥437,914**

Trade payables are classified as financial liabilities measured at amortized cost.

Note 34

Financial Instruments

1. Capital Management

Under the *APTSIS* 20 medium-term management plan, which commenced from the year ended March 31, 2017, the Group aims to become a fast-growing, highly profitable corporate entity through its business domains in Performance Products, Health Care and Industrial Materials. The Company aims to balance efforts to invest in growth business, bolster shareholder returns, and reinforce its financial position and thereby enhance enterprise value. Key benchmarks are core operating income, core operating income return on sales, net profit attributable to owners of the parent, return on equity, and the net debt-to-equity ratio.

	As of April 1, 2015 (Transition date)	As of or year ended March 31, 2016	**As of or year ended March 31, 2017**
Return on Equity (ROE) (Note 1)	—	5.2%	**15.1%**
Net D/E ratio (Note 2)	1.23	1.17	**1.06**

Notes:

1. Net profit attributable to owners of the parent / equity interest attributable to owners of the parent (averages of beginning and end of fiscal years)

2. Net interest-bearing debt ÷ Equity attributable to owners of the parent
Net interest-bearing debt = Interest-bearing debt - (cash and cash equivalents + cash reserves)

2. Financial Risk Management

The Group is exposed to financial risks in the course of doing business in an array of fields around the world. It manages risks based on certain policies to reduce or avoid such risks. The policy with derivatives transactions is to restrict their use to actual demand. The Group does not enter into derivative transactions for speculative purposes. The relevant officers are informed about contract balances, fair value, and other elements of these transactions based on internal regulations for transaction authority and limits.

3. Credit Risk

The Group is exposed to customer credit risk for trade and other receivables acquired in the course of business. The securities that the Group holds are exposed to the credit risk of issuers. Derivatives transactions that the Group conducts to hedge financial risks are exposed to the credit risks of counterparty financial institutions.

In keeping with its credit management rules, the Group regularly monitors the trade receivables and long-term loans of major customers, oversees due dates and balances for each counterparty, and endeavors to swiftly identify and mitigate collections concerns arising from deteriorating financial positions. The Group only invests in bonds with high ratings, so credit risk is inconsequential. Derivatives transactions are only entered into with financial institutions with high credit ratings to minimize credit risk from nonperformance by counterparties. The Group prevents excessive concentrations of credit risk through special management procedures.

At the end of the fiscal year, the Group recognizes impairment losses based on historical rates to the Allowance for doubtful accounts, for significant uncollectible financial assets, and for insignificant financial assets. The Allowance for doubtful accounts relating to such assets is included in Trade receivables and Other financial assets in the Consolidated Statement of Financial Position.

Changes in the Allowance for doubtful accounts, measured at amounts equivalent to projected losses for the entire term, are as follows.

There were no significant differences between projected 12-month credit losses on loans and the projected credit losses for the entire term.

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Outstanding at the beginning of the term	¥5,667	**¥5,400**
Addition	1,136	**1,859**
Decrease (intended use)	(344)	**(811)**
Decrease (reversal)	(832)	**(752)**
Other	(227)	**115**
Outstanding at the end of the term	¥5,400	**¥5,811**

The maximum exposure to the credit risks of financial assets is the carrying amount after impairment presented in the Consolidated Statement of Financial Position.

The Group holds real estate, securities, etc. as collateral for receivables against certain customers.

Maximum exposure on credit risk of financial guarantee contracts is the amount of guarantee obligations etc. described in "Note 38 Contingent Liabilities".

4. Liquidity Risk

The Group's trade payables obligations and borrowings are exposed to liquidity risk. The Group manages this risk by producing cash plan and ensuring liquidity by maintaining commitment lines with several financial institutions.

Outstanding financial liabilities (including derivative financial instruments) by fiscal year are as follows:

As of April 1, 2015 (Transition date)

Millions of yen

	Carrying amount	Contractual cash flow	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Non-derivative financial liabilities:								
Trade payables	¥452,856	¥452,856	¥452,856	¥ —	¥ —	¥ —	¥ —	¥ —
Short-term borrowings	513,264	513,264	513,264	—	—	—	—	—
Commercial paper	26,000	26,000	26,000	—	—	—	—	—
Bonds	325,050	325,050	20,040	40,010	40,000	65,000	60,000	100,000
Long-term borrowings	737,614	737,614	183,408	139,952	130,739	97,159	111,603	74,753
Accounts payable-other	96,188	96,188	96,188	—	—	—	—	—
Accrued expenses	71,605	71,605	71,605	—	—	—	—	—
Other	96,318	97,796	67,532	7,781	3,634	1,877	1,500	15,472
Derivative liabilities:								
Foreign exchange forward contracts	¥ 924	¥ 924	¥ 924	¥ —	¥ —	¥ —	¥ —	¥ —
Currency swaps	14	14	14	—	—	—	—	—
Interest rate swaps	1,293	1,480	1,057	250	76	74	19	4

As of March 31, 2016

Millions of yen

	Carrying amount	Contractual cash flow	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Non-derivative financial liabilities:								
Trade payables	¥394,065	¥394,065	¥394,065	¥ —	¥ —	¥ —	¥ —	¥ —
Short-term borrowings	498,754	498,754	498,754	—	—	—	—	—
Commercial paper	30,000	30,000	30,000	—	—	—	—	—
Bonds	365,010	365,010	40,010	40,000	65,000	60,000	55,000	105,000
Long-term borrowings	685,811	685,811	137,941	134,055	99,791	159,488	82,195	72,341
Accounts payable-other	87,255	87,255	87,255	—	—	—	—	—
Accrued expenses	67,176	67,176	67,176	—	—	—	—	—
Other	57,588	59,146	31,756	4,189	2,939	2,529	1,964	15,769
Derivative liabilities:								
Foreign exchange forward contracts	¥ 261	¥ 261	¥ 261	¥ —	¥ —	¥ —	¥ —	¥ —
Interest rate swaps	2,679	3,049	1,255	730	555	464	7	38

As of March 31, 2017

Millions of yen

	Carrying amount	Contractual cash flow	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Non-derivative financial liabilities:								
Trade payables	¥437,914	¥437,914	¥437,914	¥ —	¥ —	¥ —	¥ —	¥ —
Short-term borrowings	356,713	356,713	356,713	—	—	—	—	—
Commercial paper	40,000	40,000	40,000	—	—	—	—	—
Bonds	542,652	542,652	40,000	65,000	60,000	55,000	124,269	198,383
Long-term borrowings	754,377	754,493	141,183	118,222	183,740	106,189	63,605	141,554
Accounts payable-other	96,061	96,061	96,061	—	—	—	—	—
Accrued expenses	63,480	63,480	63,480	—	—	—	—	—
Other	51,087	52,228	24,853	4,193	3,762	2,223	1,637	15,560
Derivative liabilities:								
Foreign exchange forward contracts	¥ 970	¥ 970	¥ 970	¥ —	¥ —	¥ —	¥ —	¥ —
Currency swaps	3	3	1	1	1	—	—	—
Interest rate swaps	790	1,254	605	391	211	6	—	41
Other	7	7	7	—	—	—	—	—

For financial guarantee agreements, maximum amounts based on performance requests are the outstanding guaranteed liabilities described in Note 38 Contingent Liabilities.

The total commitment line and borrowing balance is as follows:

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
			Millions of yen
Total commitment line	¥234,358	¥230,821	**¥249,575**
Borrowing balance	53,183	43,050	**39,082**
Unused balance	¥181,175	¥187,771	**¥210,493**

5. Foreign Exchange Risk
Foreign currency denominated receivables and payables from the Group's global operations are exposed to foreign exchange fluctuation risk. The Group uses foreign exchange forward contracts and currency swaps as needed to hedge against the foreign currency risk associated with such receivables and payables.

Foreign Exchange Sensitivity Analysis
If the yen at the end of the fiscal year was 1% higher against the U.S. dollar and the euro for the foreign currency denominated financial instruments that the Group held at the year end, the impact on profit before tax in the Consolidated Statement of Income would be as follows.

This analysis is based on multiplying each currency risk exposure by 1%, based on the assumption that other variables (including other foreign exchange rates and interest rates) are held constant.

	Year ended March 31, 2016	**Year ended March 31, 2017**
		Millions of yen
U.S. dollar (1% appreciation of yen)	¥(398)	**¥(380)**
Euro (1% appreciation of yen)	(75)	**(77)**

6. Interest Rate Risk
Interest rate risk within the Group arises from interest-bearing debt net of cash equivalents. The Group raises funds needed to do business and make capital investments through borrowings and the issuance of corporate bonds. Borrowings and corporate bonds with floating rates are exposed to interest rate fluctuation risk.
The Group uses derivatives transactions (interest rate swaps) to hedge against interest rate fluctuation risk.

Interest Rate Sensitivity Analysis
In the event the interest rate on financial instruments that the Group holds at the end of each fiscal year increases by 100 basis points, the impact on profit before tax in the Consolidated Statement of Income would be as follows:

The analysis is for financial instruments affected by interest rate fluctuations and assumes that other factors, including the impacts of foreign exchange fluctuations, are held constant.

	Year ended March 31, 2016	**Year ended March 31, 2017**
		Millions of yen
Profit before tax	¥(1,790)	**¥(2,010)**

7. Market Price Fluctuation Risk
The Group's securities holdings are exposed to market price fluctuation risk.

With respect to securities, the Group regularly reviews the fair value and financial positions of issuers (business partners), and constantly reviews holdings by taking into account its relationships with business partners.

8. Fair Value of Financial Instruments
Financial instruments are classified into the following three-level fair value hierarchy:

Level 1: Unadjusted quoted prices for identical assets or liabilities in active markets
Level 2: Valuations measured by direct or indirect observable inputs other than Level 1
Level 3: Valuations measured by significant unobservable inputs

Whether any financial instruments are determined to have been transferred between levels is considered at year-end. There were no significant transfers between levels in the years ended March 31, 2016 and 2017.

(1) Financial instruments measured at fair value on a recurring basis
Financial assets and liabilities measured at fair value on a recurring basis were as follows:

As of April 1, 2015 (Transition date)

	Level 1	Level 2	Level 3	Total
				Millions of yen
Assets				
Stocks and investments	¥190,649	¥ —	¥80,175	¥270,824
Structured notes	—	—	6,062	6,062
Derivatives	—	1,653	—	1,653
Total	¥190,649	¥1,653	¥86,237	¥278,539
Liabilities				
Derivatives	¥ —	¥2,231	¥ —	¥ 2,231
Total	¥ —	¥2,231	¥ —	¥ 2,231

As of March 31, 2016

	Level 1	Level 2	Level 3	Total
				Millions of yen
Assets				
Stocks and investments	¥115,046	¥ —	¥75,766	¥190,812
Stocks and investments held for sale	3,108	—	—	3,108
Structured notes	—	—	2,025	2,025
Derivatives	—	3,171	—	3,171
Total	¥118,154	¥3,171	¥77,791	¥199,116
Liabilities				
Derivatives	¥ —	¥2,940	¥ —	¥ 2,940
Total	¥ —	¥2,940	¥ —	¥ 2,940

As of March 31, 2017

	Level 1	Level 2	Level 3	Total
				Millions of yen
Assets				
Stocks and investments	**¥121,090**	**¥ —**	**¥79,745**	**¥200,835**
Stocks and investments held for sale	**869**	**—**	**1,116**	**1,985**
Structured notes	**—**	**—**	**1,014**	**1,014**
Derivatives	**—**	**2,155**	**—**	**2,155**
Total	**¥121,959**	**¥2,155**	**¥81,875**	**¥205,989**
Liabilities				
Derivatives	**¥ —**	**¥1,770**	**¥ —**	**¥ 1,770**
Total	**¥ —**	**¥1,770**	**¥ —**	**¥ 1,770**

Stocks and investments
The fair value of marketable shares classified as Level 1 is based on unadjusted quoted prices in active markets for identical assets or liabilities.

The fair value of Level 3 unlisted shares and investments for which quoted prices in active markets are unavailable is calculated by using reasonably available inputs

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through similar company comparisons or other appropriate valuation techniques.

Structured notes

The fair value of Level 3 structured notes is calculated based on the prices provided by counterparty financial institutions. Significant unobservable inputs for measuring structured notes include information on parameters based on which counterparty financial institutions calculate prices, with fluctuations causing the fair value of structured notes to change.

Derivative assets and liabilities

The fair value of Level 2 derivative assets and liabilities is based on such observable inputs as prices provided by counterparty financial institutions or exchange and interest rates and such like.

The fair value of Level 3 financial instruments is calculated by valuation specialists determining valuation methods for each relevant financial instrument in accordance with valuation policies and procedures that include valuation methods for fair value calculations approved by suitably authorized personnel.

Changes in Level 3 financial instruments are as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Balance at beginning of period	¥86,237	**¥77,791**
Other comprehensive income (Note)	(331)	**4,171**
Purchases	1,464	**3,901**
Sales or redemptions	(5,121)	**(2,221)**
Other	(4,458)	**(1,767)**
Balance at end of period	¥77,791	**¥81,875**

Note: Included in “Financial assets measured at fair value through other comprehensive income” in the Consolidated Statement of Comprehensive Income

(2) Financial instruments measured at amortized cost

The carrying amounts and estimated fair values of the financial instruments measured at amortized cost are as follows:

As of April 1, 2015 (Transition date)

Millions of yen

	Carrying amounts	Fair value Level 1	Level 2	Level 3	Total
Assets:					
Debt securities	¥ 20,160	¥3,213	¥ 11,453	¥5,810	¥ 20,476
Total	¥ 20,160	¥3,213	¥ 11,453	¥5,810	¥ 20,476
Liabilities:					
Long-term borrowings	¥ 737,614	¥ —	¥ 740,561	¥ —	¥ 740,561
Bonds	325,050	—	331,337	—	331,337
Total	¥1,062,664	¥ —	¥1,071,898	¥ —	¥1,071,898

As of March 31, 2016

Millions of yen

	Carrying amounts	Fair value Level 1	Level 2	Level 3	Total
Assets:					
Debt securities	¥ 7,169	¥2,900	¥ 3,438	¥1,010	¥ 7,348
Total	¥ 7,169	¥2,900	¥ 3,438	¥1,010	¥ 7,348
Liabilities:					
Long-term borrowings	¥ 685,811	¥ —	¥ 690,862	¥ —	¥ 690,862
Bonds	365,010	—	372,515	—	372,515
Total	¥1,050,821	¥ —	¥1,063,377	¥ —	¥1,063,377

As of March 31, 2017

Millions of yen

	Carrying amounts	Fair value Level 1	Level 2	Level 3	Total
Assets:					
Debt securities	**¥ 7,150**	**¥2,777**	**¥ 3,415**	**¥1,011**	**¥ 7,203**
Total	**¥ 7,150**	**¥2,777**	**¥ 3,415**	**¥1,011**	**¥ 7,203**
Liabilities:					
Long-term borrowings	**¥ 754,377**	**¥ —**	**¥ 755,119**	**¥ —**	**¥ 755,119**
Bonds	**542,652**	**—**	**547,702**	**—**	**547,702**
Total	**¥1,297,029**	**¥ —**	**¥1,302,821**	**¥ —**	**¥1,302,821**

The carrying amounts of financial assets and liabilities measured at amortized cost, other than debt securities, long-term borrowings and bonds presented in the tables above, are approximately the same as the fair values of such financial assets and liabilities.

Debt securities

The fair value of Level 1 bonds is based on the market price.

The fair value of Level 2 bonds is based on prices provided by counterparty financial institutions. The fair value of Level 3 subordinated and other bonds is calculated with reference to prices provided by counterparty financial institutions.

Long-term borrowings

The fair value of Level 2 long-term loans is based on the present value, calculated by discounting the total principal and interest by the interest rate assumed for similar new borrowings.

Bonds

The fair value of Level 2 corporate bonds is based on the market price.

9. Transfers of Financial Assets

The Group transfers some operating receivables to a business entity comprising third-party financial institutions. The entity operates as part of these institutions and purchases a large amount of assets from customers other than those of the Group, so trade receivables that the Group transferred constitute a small proportion of the entity's total assets. The relevance of the Group to the assessment of exposure to the risks of this entity is therefore low.

(1) Transfers of financial assets that are not derecognized overall

As of March 31, 2016 and 2017, Trade receivables included ¥76,386 million and ¥38,288 million, respectively, of trade receivables that were transferred without satisfying financial asset derecognition requirements. Bonds and borrowings included ¥96,690 million and ¥55,150 million in transfers. These fair values approximate their carrying values. The net positions mainly stem from differences in periods for retained portions relating to sales of trade receivables and deposits of trade receivables and repayments of borrowings. If debtors defaulted on these trade receivables, the Group would be deemed to hold most of the risks and economic value of ownership of the transferred assets, as payment obligations would revert to the Group.

(2) Transfers of financial assets that are derecognized overall

In the years ended March 31, 2016 and 2017, expenses arising from transfers of trade receivables that were derecognized in their entirety were ¥119 million and ¥121 million, respectively.

10. Derivative Transactions

(1) Derivative transactions to which hedge accounting is applied

The analysis of contract amounts of derivative transactions by due dates is as follows:

Financial Information

As of April 1, 2015 (Transition date)

Millions of yen

	Contract amount	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Cash flow hedges							
Foreign exchange risk:							
Foreign exchange forward contracts	¥ 53,434	¥53,381	¥ 53	¥ —	¥ —	¥ —	¥ —
Currency swaps	88	88	—	—	—	—	—
Interest rate risk:							
Interest rate swaps	199,165	85,479	24,959	52,738	19,627	15,362	1,000
Interest rate currency swaps	14,000	—	—	—	14,000	—	—
Other	215	215	—	—	—	—	—

As of March 31, 2016

Millions of yen

	Contract amount	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Cash flow hedges							
Foreign exchange risk:							
Foreign exchange forward contracts	¥ 17,009	¥17,009	¥ —	¥ —	¥ —	¥ —	¥—
Interest rate risk:							
Interest rate swaps	159,869	25,444	53,167	19,398	59,860	2,000	—
Interest rate currency swaps	14,000	—	—	14,000	—	—	—
Other	172	172	—	—	—	—	—

As of March 31, 2017

Millions of yen

	Contract amount	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Cash flow hedges							
Foreign exchange risk:							
Foreign exchange forward contracts	**¥ 95,975**	**¥95,975**	**¥ —**	**¥ —**	**¥ —**	**¥ —**	**¥ —**
Interest rate risk:							
Interest rate swaps	**135,760**	**53,394**	**18,976**	**59,813**	**2,287**	**287**	**1,003**
Interest rate currency swaps	**14,000**	**—**	**14,000**	**—**	**—**	**—**	**—**
Other	**213**	**213**	**—**	**—**	**—**	**—**	

The principal rates on forward exchange contracts and currency swap transactions and the principal rates on payments under interest rate swaps are as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Cash flow hedges			
Foreign exchange risk:			
Foreign exchange forward contracts			
U.S. dollars	¥100.54-120.75	¥100.07-122.24	**¥101.02-116.71**
Euros	¥129.18-147.77	¥123.96-136.39	**¥112.94-127.35**
Interest rate risk			
Interest rate swaps			
Pay fixed rate, receive floating rate	0.34%-4.80%	0.23%-3.19%	**0.34%-3.19%**
Interest rate currency swaps			
Pay fixed rate, receive floating rate	0.59%-2.03%	0.59%	**0.59%**

Amounts for derivatives designated as hedges are as follows:

As of April 1, 2015 (Transition date)

Millions of yen

	Contract amount	Carrying amount		Items in Consolidated Statement of Financial Position
		Assets	Liabilities	
Cash flow hedges				
Foreign exchange risk:				
Foreign exchange forward contracts	¥ 53,434	¥ 201	¥ 696	Other financial assets Other financial liabilities
Currency swaps	88	8	14	Other financial assets Other financial liabilities
Interest rate risk:				
Interest rate swaps	199,165	32	1,293	Other financial assets Other financial liabilities
Interest rate currency swaps	14,000	1,400	—	Other financial assets
Other	215	1	—	Other financial assets

As of March 31, 2016

Millions of yen

	Contract amount	Carrying amount		Items in Consolidated Statement of Financial Position	Change in fair value of hedged item used as the basis for recognizing hedge ineffectiveness
		Assets	Liabilities		
Cash flow hedges					
Foreign exchange risk:					
Foreign exchange forward contracts	¥17,009	¥ 101	¥ 250	Other financial assets Other financial liabilities	¥346
Currency swaps	—	—	—	—	6
Interest rate risk:					
Interest rate swaps	159,869	65	2,679	Other financial assets Other financial liabilities	(1,353)
Interest rate currency swaps	14,000	1,829	—	Other financial assets	429
Other	172	2	—	Other financial assets	1

Financial Information

As of March 31, 2017

Millions of yen

	Contract amount	Carrying amount: Assets	Carrying amount: Liabilities	Items in Consolidated Statement of Financial Position	Change in fair value of hedged item used as the basis for recognizing hedge ineffectiveness
Cash flow hedges					
Foreign exchange risk:					
Foreign exchange forward contracts	**¥ 95,975**	**¥ 77**	**¥924**	Other financial assets Other financial liabilities	**¥ (698)**
Interest rate risk:					
Interest rate swaps	**135,760**	**1**	**790**	Other financial assets Other financial liabilities	**1,825**
Interest rate currency swaps	**14,000**	**1,941**	**—**	Other financial assets	**112**
Other	**213**	**—**	**7**	Other financial liabilities	**(9)**

Amounts for items designated as hedges are as follows:

Millions of yen

	As of April 1, 2015 (Transition date)	As of March 31, 2016		**As of March 31, 2017**	
	Cash flow hedge reserve	Change in fair value of hedged item used as the basis for recognizing hedge ineffectiveness	Cash flow hedge reserve	Change in fair value of hedged item used as the basis for recognizing hedge ineffectiveness	Cash flow hedge reserve
Cash flow hedges					
Foreign exchange risk:					
Planned to purchase	¥ (103)	¥ 99	¥ (4)	**¥ (538)**	**¥(542)**
Foreign-currency-denominated liabilities and interest	—	(1)	(1)	**1**	**—**
Interest rate risk:					
Interest on borrowings	(1,963)	126	(1,837)	**1,329**	**(508)**
Other	12	6	18	**5**	**23**

The breakdown of cash flow hedges is as follows:

Year ended March 31, 2016

Millions of yen

	Changes in fair value of hedges recognized in other comprehensive income	Ineffective portions of hedges recognized in profit or loss	Consolidated Statement of Income items in which ineffective portions of hedges are included in t profit or loss	Reclassification adjustments from cash flow hedge reserve to profit or loss	Consolidated Statement of Income items including profit from reclassification adjustments
Cash flow hedges					
Foreign exchange risk:					
Foreign exchange forward contracts	¥276	¥—	—	¥306	Financial cost
Currency swaps	5	—	—	5	Financial cost
Interest rate risk:					
Interest rate swaps	122	—	—	915	Financial cost
Interest rate currency swaps	(58)	—	—	745	Financial cost
Other	1	—	—	—	—

Year ended March 31, 2017

Millions of yen

	Changes in fair value of hedges recognized in other comprehensive income	Ineffective portions of hedges recognized in profit or loss	Consolidated Statement of Income items in which ineffective portions of hedges are included in profit or loss	Reclassification adjustments from cash flow hedge reserve to profit or loss	Consolidated Statement of Income items including profit from reclassification adjustments
Cash flow hedges					
Foreign exchange risk:					
Foreign exchange forward contracts	**¥ (641)**	**¥—**	—	**¥1,425**	Financial cost
Interest rate risk:					
Interest rate swaps	**1,350**	**—**	—	**721**	Financial cost
Interest rate currency swaps	**137**	**—**	—	**(52)**	Financial cost
Other	**(6)**	**—**	—	**—**	—

(2) Derivative transactions to which hedge accounting is not applied

Amounts relating to items not designated as hedges are as follows:

	As of April 1, 2015 (Transition date)			As of March 31, 2016			**As of March 31, 2017**		
	Contract amount	Over one year	Fair value	Contract amount	Over one year	Fair value	Contract amount	Over one year	Fair value
Foreign exchange forward contracts	¥24,878	¥19	¥(192)	¥118,500	¥—	¥1,169	**¥ 4,122**	**¥ —**	**¥(46)**
Currency swaps	1,473	0	(25)	—	—	—	**864**	**727**	**133**
Currency options	—	—	—	135	—	(6)	**7,702**	**—**	**—**
Total	¥26,351	¥19	¥(217)	¥118,635	¥—	¥1,163	**¥12,688**	**¥727**	**¥87**

Financial Information

Note 35

Subsidiaries

Subsidiaries with significant non-controlling interests are as follows:

Name of subsidiary	Location	Non-controlling interest ownership ratios: As of April 1, 2015 (Transition date)	As of March 31, 2016	**As of March 31, 2017**
Mitsubishi Tanabe Pharma Corporation	Japan, other	43.6%	43.6%	**43.6%**
TAIYO NIPPON SANSO CORPORATION	Japan, other	49.4%	49.4%	**49.4%**

Net profit attributable to non-controlling interests of relevant subsidiaries and dividends paid to non-controlling interests are as follows:

Millions of yen

	Year ended March 31, 2016		**Year ended March 31, 2017**	
	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION
Net profit attributable to non-controlling interests	¥23,779	¥15,284	**¥28,729**	**¥17,359**
Dividends paid to non-controlling interests	10,877	3,378	**11,823**	**4,539**

Cumulative non-controlling interests of relevant subsidiaries are as follows:

Millions of yen

	As of April 1, 2015 (Transition date)		As of March 31, 2016		**As of March 31, 2017**	
	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION
Cumulative non-controlling interests amounts	¥319,033	¥172,954	¥331,897	¥174,829	**¥351,618**	**¥190,167**

Summary financial information on relevant subsidiaries is as follows. Summary financial information below is calculated based on the amounts before elimination in consolidation, adjusting goodwill and other items recognized at the time of a business combination.

Summary Consolidated Statements of Financial Position

Millions of yen

	As of April 1, 2015 (Transition date)		As of March 31, 2016		**As of March 31, 2017**	
	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION
Current assets	¥596,084	¥264,664	¥650,179	¥258,036	**¥683,759**	**¥ 268,132**
Non-current assets	310,948	609,706	279,161	622,677	**271,673**	**746,320**
Total	¥907,032	¥874,370	¥929,340	¥880,713	**¥955,432**	**¥1,014,452**
Current liabilities	112,396	188,997	98,911	216,953	**88,407**	**213,602**
Non-current liabilities	29,111	262,876	34,412	238,174	**25,894**	**345,558**
Total	¥141,507	¥451,873	¥133,323	¥455,127	**¥114,301**	**¥ 559,160**
Equity	765,525	422,497	796,017	425,586	**841,131**	**455,292**
Total	¥907,032	¥874,370	¥929,340	¥880,713	**¥955,432**	**¥1,014,452**

Summary Consolidated Statements of Income and Consolidated Statements of Comprehensive Income

Millions of yen

	Year ended March 31, 2016		**Year ended March 31, 2017**	
	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION
Revenue	¥425,764	¥594,421	**¥423,977**	**¥581,586**
Net profit	57,205	28,673	**68,922**	**34,520**
Total comprehensive income	52,507	8,303	**69,309**	**44,782**

Summary Consolidated Statements of Cash Flows

Millions of yen

	Year ended March 31, 2016		**Year ended March 31, 2017**	
	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION
Cash flows from operating activities	¥80,842	¥73,347	**¥59,785**	**¥ 74,596**
Cash flows from investing activities	(42,213)	(74,253)	**(10,566)**	**(147,083)**
Cash flows from financing activities	(22,236)	(2,385)	**(24,408)**	**80,777**
Effect of exchange rate changes on cash and cash equivalents	(811)	(569)	**(507)**	**(5,404)**
Net increase (decrease) in cash and cash equivalents	¥15,582	¥(3,860)	**¥24,304**	**¥ 2,886**

Note 36

Related Parties

1. Related Party Transactions

Transactions with major related parties are as follows. For sales of goods and services, the principal transactions are product sales, while the main transactions for goods purchases are purchases of raw materials. The terms for transactions with related parties are similar to those of independent third-party transactions.

Millions of yen

	Year ended March 31, 2016		**Year ended March 31, 2017**	
	Joint venture	Associates	Joint venture	Associates
Sales of goods and services	¥67,128	¥21,881	**¥61,722**	**¥20,509**
Purchases of goods and services	14,596	21,132	**17,531**	**36,041**

Financial Information

Receivables and obligations to major related parties as a result of the above transactions are as follows:

Millions of yen

	As of April 1, 2015 (Transition date)		As of March 31, 2016		**As of March 31, 2017**	
	Joint venture	Associates	Joint venture	Associates	Joint venture	Associates
Receivables						
Accounts receivable	¥16,647	¥5,724	¥17,303	¥5,078	**¥15,415**	**¥5,219**
Other	1,895	825	1,584	764	**1,505**	**583**
Total	¥18,542	¥6,549	¥18,887	¥5,842	**¥16,920**	**¥5,802**
Obligations						
Accounts payable	¥ 3,002	¥ 563	¥ 2,833	¥1,101	**¥ 3,320**	**¥2,310**
Other	716	183	542	156	**265**	**656**
Total	¥ 3,718	¥ 746	¥ 3,375	¥1,257	**¥ 3,585**	**¥2,966**

Compensation for key Group executives is as follows:

Millions of yen

	Year ended March 31, 2016	**Year ended March 31, 2017**
Remuneration and bonuses	¥2,686	**¥2,728**
Stock-based compensation	27	**35**
Total	¥2,713	**¥2,763**

Note 37

Commitments

Commitments relating to acquisitions of property, plant and equipment and intangible assets are as follows:

Millions of yen

	As of March 31, 2016	**As of March 31, 2017**
Acquisitions of property, plant and equipment and intangible assets	¥176,107	**¥195,088**

Note 38

Contingent Liabilities

Guarantee Obligations

Guarantees and similar undertakings for borrowings from joint ventures, associates and financial institutions of general business partners are as follows.

Millions of yen

	As of March 31, 2016	**As of March 31, 2017**
Joint ventures	¥18,741	**¥11,945**
Associates	126	**560**
General business partners	1,860	**1,622**
Other	1,705	**1,549**
Total	¥22,432	**¥15,676**

Note 39

First-Time Adoption

The Group began disclosing its consolidated financial statements in accordance with IFRS from the first quarter of the year ended March 31, 2017. The most recent consolidated financial statements for the fiscal year ended March 31, 2016 were prepared in conformity with Japanese generally accepted accounting principles (Japanese GAAP). The transition date to IFRS was April 1, 2015.

In principle, IFRS requires that companies adopting IFRS for the first time apply the standards retrospectively, although IFRS 1 “First-time Adoption of International Financial Reporting Standards” provides some exemptions to that requirement.

The Group applied the following exemptions in transitioning from J-GAAP to IFRS.

- Business Combinations
  A company can elect not to apply IFRS 3 “Business Combinations” retrospectively to transactions prior to the IFRS transition date. The Group has elected to adopt this exemption, and conducted goodwill impairment tests at the transition date regardless of whether or not there were indications of impairment.
- Deemed Cost
  IFRS 1 permits companies to use fair value as of the IFRS transition date as the deemed cost for property, plant and equipment and intangible assets as of that date. The Group used fair value as of the transition date for certain property, plant and equipment as a deemed cost under IFRS.
- Foreign Currency Translation Adjustments
  As permitted under IFRS 1, the Group has elected to deem that cumulative foreign currency translation adjustments for overseas businesses are zero at the date of transition to IFRS.
- Designation of Financial Instruments Recognized Prior to IFRS Transition Date
  For classifications under IFRS 9, IFRS 1 permits companies to make assessments based on facts and circumstances that exist as of the transition date instead of facts and circumstances that existed at the time of initial recognition of the financial instrument. Companies are also permitted to designate financial assets with the characteristics of equity as financial assets measured at fair value through other comprehensive income based on facts and circumstances existing at the transition date. Accordingly, considering the facts and circumstances existing at the transition date for classification under IFRS 9, the Group elected to designate certain financial assets with the characteristics of equity as measured at fair value through other comprehensive income.

The reconciliation required on initial application of IFRS is as follows. The reclassification column in the reconciliation table below presents items that do not affect retained earnings and comprehensive income. The differences in recognition and measurement column represents items that do affect retained earnings and comprehensive income.

Adjustment to profit or loss and comprehensive income for the year ended March 31, 2016

Millions of yen

Japanese GAAP line item	Japanese GAAP	Reclassification	Differences in recognition and measurement	IFRS	Note	IFRS line item
Net sales	¥ 3,823,098	¥(157,743)	¥(122,003)	¥ 3,543,352	1	Revenue
Cost of sales	(2,779,584)	160,324	90,957	(2,528,303)	1	Cost of sales
Gross profit	1,043,514	2,581	(31,046)	1,015,049		Gross profit
Selling, general and administrative expenses	(763,488)	821	43,583	(719,084)	2	Selling, general and administrative expenses
	—	18,750	(147)	18,603		Other operating income
	—	(57,712)	(2,093)	(59,805)	3	Other operating expenses
	—	10,105	3,878	13,983	4	Share of profit in investments accounted for using the equity method
Operating income	280,026	(25,455)	14,175	268,746		Operating profit
Non-operating income	34,066	(34,066)	—	—		
Non-operating expenses	(43,476)	43,476	—	—		
Extra ordinary income	38,278	(38,278)	—	—		
Extra ordinary loss	(110,646)	110,646	—	—		
	—	44,563	(35,644)	8,919	5	Finance income
	—	(28,153)	3,279	(24,874)	6	Finance costs
Profit before income taxes	198,248	72,733	(18,190)	252,791		Profit before tax
Income taxes	(92,648)	1,136	17,448	(74,064)	7	Income tax expense
	105,600	73,869	(742)	178,727		Profit from continuing operations
	—	(73,869)	—	(73,869)		Profit (loss) from discontinued operations
Profit	¥ 105,600	¥ —	¥ (742)	¥ 104,858		Net profit

Millions of yen

Japanese GAAP line item	Japanese GAAP	Reclassification	Differences in recognition and measurement	IFRS	Note	IFRS line item
Profit	¥105,600	¥ —	¥ (742)	¥104,858		Net Profit
Other comprehensive income (loss)					8	Other comprehensive income
Net unrealized holding gain (loss) on other securities	(29,729)	—	20,863	(8,866)		Net gain (loss) on revaluation of financial assets measured at fair value
Remeasurements of defined benefit plans	(26,328)	—	4,283	(22,045)		Remeasurements of defined benefit pensions plans
Foreign currency translation adjustments	(36,732)	—	1,031	(35,701)		Exchange differences on translation of foreign operations
Gain (loss) on deferred hedges	298	—	48	346		Net gain (loss) on derivatives designated as cash flow hedges
Other comprehensive income (loss) for affiliates accounted for using equity method	(5,414)	—	1,124	(4,290)		Share of other comprehensive income (loss) of investments accounted for using the equity method
Total comprehensive income	¥ 7,695	¥ —	¥26,607	¥ 34,302		Total comprehensive income

Notes on adjustment to net profit and comprehensive income

(1) Revenue and Cost of Sales
Under Japanese GAAP, exchange transactions between companies in the same industry were presented on a gross basis as revenue and cost of sales, but these transactions are presented on a net basis under IFRS when appropriate. Matheson Tri-Gas, Inc. changed its fiscal year-end of December 31, which had been used as the closing date under Japanese GAAP, to the Company's year end date of March 31. As a result, the period consolidated under Japanese GAAP is different to that consolidated under IFRS. Overall, revenue and cost of sales declined as a result of those adjustments.

(2) Selling, General and Administrative Expenses
Although the Group amortized goodwill over a certain period under Japanese GAAP, it is not amortized under IFRS and, as a result, selling, general and administrative expenses have decreased.

(3) Other Operating Expenses
Under Japanese GAAP, the Group recorded costs incurred in product and technology deployment agreements prior to seeking approval from the relevant authorities as part of research and development expenses. Under IFRS, however, expenses meeting certain requirements are recognized as intangible assets. In applying IFRS, other operating expenses increased, largely because the Company reduced the carrying amounts of such recognized intangible assets for which a decision to halt development was made and impairment losses were duly recognized.

(4) Share of Profit of Investments Accounted for Using the Equity Method
In adopting IFRS, profit of equity method investments increased following a review of the scope of application of equity method accounting, with SPDC Ltd. added as an associate.

(5) Finance Income
Under Japanese GAAP, the Group recognized gains or losses on the sale of equity financial assets in profit or loss. Under IFRS, however, for equity financial assets designated as measured at fair value through other comprehensive income, it recognizes changes in fair value as other comprehensive income, which reduced finance income.

(6) Finance Costs
Under Japanese GAAP, the Group recognized impairment losses on equity financial assets in profit or loss. Under IFRS, however, for equity financial assets designated as measured at fair value through other comprehensive income, it recognizes changes in fair value in other comprehensive income, which reduced finance costs.

(7) Income Tax Expense
The Group's income tax decreased owing to differences in recognition and measurements accompanying the adoption of IFRS, including for transfers of tax expenses to other comprehensive income associated with the sale of equity financial assets designated as measured at fair value through other comprehensive income.

(8) Other Comprehensive Income
・Financial assets measured at fair value through other comprehensive income
Under Japanese GAAP, the Group mainly measured unlisted shares at cost using the moving-average method. Under IFRS, however, such shares are measured at fair value, which increased other comprehensive income.
・Remeasurement of defined benefit plans
Under Japanese GAAP, the Group recognized interest expenses and expected returns on assets as profit or loss for postretirement benefits under the defined benefit plans. Under IFRS, however, the Group recognizes net interest expenses in profit or loss by multiplying net defined benefit assets (liabilities) by the discount rate, which increased other comprehensive income.
Under IFRS, the Group evaluates the fair value of plan assets on a quarterly basis, recognizing the resulting actuarial differences in other comprehensive income, which resulted in an increase in other comprehensive income.
・Foreign currency translation adjustments
Quadrant AG changed its fiscal year-end from December 31 under Japanese GAAP to the consolidated reporting date of March 31. The resulting difference between reporting periods used under Japanese GAAP and IFRS led to an increase in other comprehensive income.

(9) Reclassifications
Discontinued operations are presented separately under IFRS, and taxes on income from those operations are included in reclassifications. The impacts are described in Note 6 Discontinued Operations.

Financial Information

Reconciliation of equity as of IFRS transition date (April 1, 2015)

Millions of yen

Japanese GAAP line item	Japanese GAAP	Reclassifica-tion	Differences in recognition and measurement	IFRS	Note	IFRS line item
Assets:						Assets:
Current assets						Current assets
Cash and deposits	¥ 236,186	¥ 6,868	¥ 9,695	¥ 252,749	1	Cash and cash equivalents
Trade receivables	759,850	(4,698)	(817)	754,335		Trade receivables
Securities	127,805	(127,805)	—	—		
Inventories:						
Finished goods	374,684	(374,684)	—	—		
Work in process	40,000	(40,000)	—	—		
Raw materials and supplies	180,821	407,959	5,000	593,780	2	Inventories
	—	171,159	(70)	171,089		Other financial assets
Other	142,601	(86,702)	1,528	57,427	3	Other current assets
Allowance for doubtful accounts	(4,698)	4,698	—	—		
Subtotal	1,857,249	(43,205)	15,336	1,829,380		Subtotal
	—	8,676	76	8,752		Assets held for sale
Total current assets	1,857,249	(34,529)	15,412	1,838,132		Total current assets
Non-current assets:						Non-current assets:
Property, plant and equipment	1,498,146	(2,764)	(10,157)	1,485,225	4	Property, plant and equipment
Intangible assets						
Goodwill	243,797	—	1,878	245,675	3	Goodwill
Other	181,505	5,972	10,868	198,345	5	Intangible assets
Investments and other assets:						
Investment securities	355,743	(249,555)	23,081	129,269	6	Investments accounted for using the equity method
	—	321,708	18,168	339,876	7	Other financial assets
Other	188,066	(141,586)	413	46,893		Other non-current assets
	—	99,286	(13,703)	85,583	8	Deferred tax assets
Allowance for doubtful accounts	(1,468)	1,468	—	—		
Total non-current assets	2,465,789	34,529	30,548	2,530,866		Total non-current assets
Total assets	¥4,323,038	¥ —	¥45,960	¥4,368,998		Total assets

Japanese GAAP line item	Japanese GAAP	Reclassifica-tion	Differences in recognition and measurement	IFRS	Note	IFRS line item
						Liabilities and equity
Liabilities:						Liabilities
Current liabilities:						Current liabilities:
Trade payables	¥ 459,345	¥ (9,471)	¥ 2,982	¥ 452,856	2	Trade payables
Short-term debt	518,985	(518,985)	—	—		
Current portion of long-term debt	178,627	(178,627)	—	—		
Commercial paper	26,000	(26,000)	—	—		
Current portion of bonds	20,040	723,613	(941)	742,712		Bonds and borrowings
Accrued income taxes	36,224	(2,018)	(25)	34,181		Income tax payable
	—	229,504	7,279	236,783	9	Other financial liabilities
Provision for directors' bonuses	39,286	(39,286)	—	—		
Other provisions	9,830	230	(6,488)	3,572	10	Provisions
Other	277,610	(178,860)	27,906	126,656	11	Other current liabilities
Total current liabilities	1,565,947	100	30,713	1,596,760		Total current liabilities
Long-term liabilities:						Non-current liabilities:
Bonds	305,010	(305,010)	—	—		
Long-term debt	554,933	305,010	(727)	859,216		Bonds and borrowings
	—	22,317	7,242	29,559	12	Other financial liabilities
Net defined benefit liabilities	132,921	(6)	974	133,889		Retirement benefit liabilities
Provision for loss on litigation	6,467	(6,467)	—	—		
Other provisions	15,633	15,797	(10,058)	21,372	10	Provisions
Other	153,526	(128,353)	9,484	34,657	13	Other non-current liabilities
	—	96,612	(5,447)	91,165	8	Deferred tax liabilities
Total long-term liabilities	1,168,490	(100)	1,468	1,169,858		Total non-current liabilities
Total liabilities	2,734,437	—	32,181	2,766,618		Total liabilities
Net assets:						Equity
Common stock	50,000	—	—	50,000		Common stock
Additional paid-in capital	317,714	471	—	318,185		Additional paid-in capital
Treasury stock	(16,236)	—	—	(16,236)		Treasury stock
Retained earnings	523,149	—	59,645	582,794	14	Retained earnings
Accumulated other comprehensive income	106,366	—	(48,098)	58,268	15	Other components of equity
Warrants	471	(471)	—	—		
	981,464	—	11,547	993,011		Equity attributable to owners of the parent
Non-controlling interests in consolidated subsidiaries	607,137	—	2,232	609,369		Non-controlling interests
Total net assets	1,588,601	—	13,779	1,602,380		Total equity
Total liabilities and net assets	¥4,323,038	¥ —	¥45,960	¥4,368,998		Total liabilities and equity

Notes on Reconciliation of Equity

(1) Cash and Cash Equivalents

The Group reviewed the scope of application of the equity method in adopting IFRS.

The Saudi Methacrylates Company, which was an equity method associate under Japanese GAAP, became a joint operation under IFRS. This resulted in an increase of cash and cash equivalents.

(2) Inventories and Trade Payables

Under Japanese GAAP, the Group recognized revenue on sales mainly at the time of dispatch. Under IFRS, however, it recognizes revenue on sales when the significant risks

Financial Information

and rewards associated with ownership of the goods are transferred, thus increasing inventories and trade payables.

(3) Other Current Assets and Goodwill
Matheson Tri-Gas, Inc. changed its fiscal year-end from December 31 under Japanese GAAP to the consolidated reporting date of March 31 to align with the Company's year-end in conformity with IFRS. Transactions between the two dates thus increased other current assets and goodwill.

(4) Property, Plant and Equipment
In adopting IFRS, the Group utilized the deemed cost exemption in IFRS for certain property, plant and equipment. The carrying amount of the assets to which such deemed cost was applied was ¥41,010 million, and the corresponding fair value was ¥21,316 million. As a result, property, plant and equipment decreased.

(5) Intangible Assets
Under Japanese GAAP, the Group recorded costs incurred in product and technology deployment agreements prior to seeking approval from the relevant authorities as part of research and development expenses. Under, IFRS, however, expenses meeting certain requirements are recorded as intangible assets, thus increasing intangible assets.

(6) Investments Accounted for Using Equity Method
In adopting IFRS, the Group's share of profit of investments accounted for using the equity method increased following a review of the scope of application of the equity method, adding SPDC Ltd. as an associate.

(7) Other Financial Assets (Non-Current Assets)
Under Japanese GAAP, the Group mainly measured unlisted shares at cost using the moving-average method. Under IFRS, however, the shares are measured at fair value, increasing other financial assets (non-current assets).

(8) Deferred Tax Assets and Deferred Tax Liabilities
Under Japanese GAAP, the Group offset deferred tax assets and liabilities in their respective current and fixed classifications. Under IFRS, however, it has classified all deferred tax assets and liabilities as non-current, increasing offsetting amounts and decreasing deferred tax assets and deferred tax liabilities.

(9) Other Financial Liabilities (Current Liabilities)
Under Japanese GAAP, the Group applied special accounting procedures for interest rate swaps that satisfied certain requirements. Under IFRS, however, it measures these instruments at fair value, which increased other financial liabilities (current liabilities).

(10) Provisions for Current and Non-Current Liabilities
Under Japanese GAAP, the Group made provisions for large periodic repairs by posting to a reserve for periodical repairs. Under IFRS, however, the reserve does not satisfy the provision recognition requirements and has been reversed, thus decreasing provisions.

(11) Other Current Liabilities
While Japanese GAAP did not recognize untaken paid leave, IFRS recognizes such entitlements as liabilities, thus increasing other current liabilities.

(12) Other Financial Liabilities (Non-Current Liabilities)
Under Japanese GAAP, the Group recognized expenses based on payments determined in operating lease agreements with free rents and other incentives. Under IFRS, however, it recognizes total lease payments, including incentives, on a straight-line basis throughout the lease periods, thus increasing other financial liabilities (non-current liabilities).

(13) Other Non-Current Liabilities
Under Japanese GAAP, the Group recognized lump-sum payments from technology licensing, joint sales and promotions as revenue at the time of receipt. Under IFRS, however, these items are booked as deferred revenue where contractual obligations are not fulfilled, and revenue is recognized throughout the periods in which the obligations are met, thus increasing other non-current liabilities.

(14) Retained Earnings
The impacts on retained earnings of reconciliations accompanying the adoption of IFRS are as follows. The amounts below are after adjustment for related tax effects and non-controlling interests.

Millions of yen

	As of April 1, 2015 (Transition date)
Reconciliation of cumulative exchange differences on translation of foreign operations (Note 15)	¥ 57,567
Review of scope of equity method application (Note 6)	23,079
Reconciliation of large periodical repair costs (Note 10)	10,273
Reconciliation of paid leave obligations (Note 11)	(16,181)
Deemed cost (Note 4)	(14,615)
Other	(478)
Total reconciliation for retained earnings	¥ 59,645

(15) Other Components of Equity
The Group chose the exemption provisions under IFRS 1 transferring all cumulative exchange differences on translation of foreign operations to retained earnings as of the transition date of April 1, 2015.

(16) Reclassifications
In addition to the above classifications, the Group made reclassifications in conformity with IFRS requirements, of which the principal ones are set out below:
・Under Japanese GAAP, the Group included short-term time deposits with deposit terms exceeding three months in "cash and deposits," but under IFRS they are included in "other financial assets" of current assets.
・Under Japanese GAAP, the Group included short-term investments with maturities of less than three months from the date of acquisition in "securities," but under IFRS they are included in "cash and cash equivalents."
・All of the current portion of deferred tax assets and liabilities has been reclassified as non-current.
・Assets that are very likely to be sold and readily available for sale are separately presented as "assets held for sale."
・Subscription rights to shares were listed separately under Japanese GAAP but are included in "additional paid-in capital" under IFRS.

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Reconciliation of Equity as of March 31, 2016

Millions of yen

Japanese GAAP line item	Japanese GAAP	Reclassifica-tion	Differences in recognition and measurement	IFRS	Note	IFRS line item
Assets:						Assets:
Current assets						Current assets
Cash and deposits	¥ 314,782	¥ (51,012)	¥ 3,378	¥ 267,148	1	Cash and cash equivalents
Trade receivables	703,996	(4,031)	69,129	769,094	2	Trade receivables
Securities	123,500	(123,500)	—	—		
Finished goods	331,398	(331,398)	—	—		
Work in process	39,506	(39,506)	—	—		
Raw materials and supplies	176,922	366,111	6,428	549,461	3	Inventories
	—	220,794	(6,309)	214,485	2	Other financial assets
Deferred income taxes	32,339	(32,339)	—	—		
Other	99,091	(46,364)	464	53,191		Other current assets
Allowance for doubtful accounts	(4,032)	4,032	—	—		
Subtotal	1,817,502	(37,213)	73,090	1,853,379		Subtotal
	—	3,338	—	3,338		Assets held for sale
Total current assets	1,817,502	(33,875)	73,090	1,856,717		Total current assets
Non-current assets:						Non-current assets:
Property, plant and equipment						
Buildings and structure, net	340,070	(340,070)	—	—		
Machinery, equipment and vehicles, net	584,748	(584,748)	—	—		
Land	304,888	(304,888)	—	—		
Construction in progress	88,551	(88,551)	—	—		
Other, net	72,470	(72,470)	—	—		
	—	1,395,372	8,065	1,403,437	4	Property, plant and equipment
Intangible assets						
Goodwill	248,164	—	19,686	267,850	5	Goodwill
Other	170,860	4,325	20,351	195,536	6	Intangible assets
Investments and other assets						
Investment securities	266,926	(161,703)	23,849	129,072	7	Investments accounted for using the equity method
Long-term loans receivable	5,084	(5,084)	—	—		
Net defined benefit assets	17,811	(17,811)	—	—		
	—	229,594	22,208	251,802	8	Other financial assets
	—	29,857	532	30,389		Other non-current assets
Deferred income taxes	62,211	32,339	(5,579)	88,971	9	Deferred tax assets
Other	83,678	(83,678)	—	—		
Allowance for doubtful accounts	(1,391)	1,391	—	—		
Total non-current assets	2,244,070	33,875	89,112	2,367,057		Total non-current assets
Total assets	¥4,061,572	¥ —	¥162,202	¥4,223,774		Total assets

Japanese GAAP line item	Japanese GAAP	Reclassifica-tion	Differences in recognition and measurement	IFRS	Note	IFRS line item
						Liabilities and equity
Liabilities:						Liabilities:
Current liabilities:						Current liabilities:
Trade payables	¥ 408,315	¥ (11,937)	¥ (2,313)	¥ 394,065	2	Trade payables
Short-term debt	394,688	(394,688)	—	—		
Current portion of long-term debt	138,471	(138,471)	—	—		
Commercial paper	30.000	(30,000)	—	—		
Current portion of bonds	40,010	563,159	103,536	706,705	2	Bonds and borrowings
Accrued income taxes	39,914	(3,498)	18	36,434		Income tax payable
	—	208,121	(22,181)	185,940	2	Other financial liabilities
Provision for directors' bonuses	42,516	(42,516)	—	—		
Reserve for prospective periodic repairs	6,683	(6,683)	—	—		
Reserve for prospective loss on removal of fixed assets	3,893	(3,893)	—	—		
	—	13,508	(9,905)	3,603	10	Provisions
Other	241,754	(152,943)	26,144	114,955	11	Other current liabilities
Total current liabilities	1,346,244	159	95,299	1,441,702		Total current liabilities
Long-term liabilities:						Non-current liabilities:
Bonds	325,000	(325,000)	—	—		
Long-term debt	537,583	325,001	10,286	872,870	1	Bonds and borrowings
	—	24,867	4,152	29,019	12	Other financial liabilities
Net defined benefit liabilities	143,713	—	466	144,179		Retirement benefit liabilities
Directors' retirement benefits	2,146	(2,146)	—	—		
Provision for loss on litigation	9,106	(9,106)	—	—		
Reserve for periodic repairs	1,571	(1,571)	—	—		
Reserve for loss on removal of fixed assets	982	(982)	—	—		
Reserve or costs associated with liquidation of subsidiaries and affiliates	415	(415)	—	—		
Provision for environmental measures	2,334	(2,334)	—	—		
	—	26,040	(2,424)	23,616	10	Provisions
Other	60,956	(34,712)	15,143	41,387	13	Other non-current liabilities
Deferred tax liabilities	76,994	199	(2,343)	74,850	9	Deferred tax liabilities
Total long-term liabilities	1,160,800	(159)	25,280	1,185,921		Total non-current liabilities
Total liabilities	2,507,044	—	120,579	2,627,623		Total liabilities
Net assets:						Equity
Common stock	50,000	—	—	50,000		Common stock
Additional paid-in capital	317,037	515	(8)	317,544		Additional paid-in capital
Treasury stock	(16,240)	—	—	(16,240)		Treasury stock
Retained earnings	549,430	—	61,479	610,909	14	Retained earnings
Accumulated other comprehensive income	32,025	—	(22,041)	9,984	15	Other components of equity
Warrants	515	(515)	—	—		
	932,767	—	39,430	972,197		Equity attributable to owners of the parent
Non-controlling interests in consolidated subsidiaries	621,761	—	2,193	623,954		Non-controlling interests
Total net assets	1,554,528	—	41,623	1,596,151		Total equity
Total liabilities and net assets	¥4,061,572	¥ —	¥162,202	¥4,223,774		Total liabilities and equity

Financial Information

Notes on Reconciliation of Equity

(1) Cash and Cash Equivalents and Bonds and Borrowings (Non-Current Liabilities)
The Group reviewed the scope of application of the equity method in adopting IFRS.
The Saudi Methacrylates Company, which was an equity method associate under Japanese GAAP, became a joint operation under IFRS. This resulted in an increase of cash and cash equivalents and bonds and borrowings (non-current liabilities).

(2) Trade Receivables, Other Financial Assets (Current Assets), Operating Liabilities, Corporate Bonds and Borrowings (Current Liabilities), and Other Financial Liabilities (Current Liabilities)
Under Japanese GAAP, the Group derecognized all financial assets when transferring trade receivables used in securitized receivables transactions. Under IFRS, however, certain transfers do not meet the requirements for derecognition of financial assets for some trade receivables, so these assets are reported in both trade receivables and borrowings. Consequently, trade receivables and bonds and borrowings (current liabilities) increased, while other financial assets (current assets), trade payables and other financial liabilities (current liabilities) decreased.

(3) Inventories
Under Japanese GAAP, the Group recognized revenue on sales mainly at the time of dispatch. Under IFRS, however, it recognizes revenue on sales when the significant risks and rewards associated with ownership of the goods are transferred, which increased inventories.

(4) Property, Plant and Equipment
In adopting IFRS, the Group utilized the deemed cost exemption in IFRS for certain property, plant and equipment. The carrying amount of the assets to which such deemed cost was applied was ¥41,010 million and the corresponding fair value was ¥21,316 million.
While the Group reviewed the scope of application of the equity method in adopting IFRS, increasing property, plant and equipment by reclassifying The Saudi Methacrylates Company, which was an equity method associate under Japanese GAAP as a joint operation.

(5) Goodwill
The Group amortized goodwill over certain periods under Japanese GAAP, but under IFRS goodwill has increased because it is not amortized.

(6) Intangible Assets
Under Japanese GAAP, the Group recorded costs incurred in product and technology deployment agreements prior to seeking approval from the relevant authorities as part of research and development expenses. Under IFRS, however, expenses meeting certain requirements are recorded as intangible assets, thus increasing intangible assets.

(7) Investments Accounted for Using the Equity Method
In adopting IFRS, share of profit of investments accounted for under the equity method increased following a review of the scope of application of the equity method with SPDC Ltd. added as an associate.

(8) Other Financial Assets (Non-Current Assets)
Under Japanese GAAP, the Group mainly measured unlisted shares at cost using the moving-average method. Under IFRS, however, such shares are measured at fair value, which increased other financial assets (non-current assets).

(9) Deferred Tax Assets and Deferred Tax Liabilities
Under Japanese GAAP, the Group offset deferred tax assets and liabilities in their respective current and fixed classifications. Under IFRS, however, it has classified all deferred tax assets and liabilities as non-current, which increased the offsetting amounts and decreased deferred tax assets and deferred tax liabilities.

(10) Provisions for Current and Non-Current Liabilities
Under Japanese GAAP, the Group made provisions for large periodic repairs by posting to a reserve for periodical repairs. Under IFRS, however, the reserve would not satisfy the provision recognition requirements and has been reversed, thus decreasing provisions.

(11) Other Current Liabilities
While Japanese GAAP did not recognize untaken paid leave, IFRS recognizes such entitlements as liabilities, thus increasing other current liabilities.

(12) Other Financial Liabilities (Non-Current Liabilities)
Under Japanese GAAP, the Group applied special accounting procedures for interest rate swaps that satisfied certain requirements. Under IFRS, however, it measures these instruments at fair value, thus increasing other financial liabilities (non-current liabilities).

(13) Other Non-Current Liabilities
Under Japanese GAAP, the Group recognized lump-sum payments from technology licensing, joint sales and promotions as revenue at the time of receipt. Under IFRS, however, these items are booked as deferred revenue where contractual obligations are not fulfilled, and revenue is recognized throughout the periods in which the obligations are met, thus increasing other non-current liabilities.

(14) Retained Earnings
The impacts on retained earnings of reconciliations accompanying the adoption of IFRS are as follows. The amounts below are after adjustment for related tax effects and non-controlling interests.

Millions of yen

	As of March 31, 2016
Reconciliation of cumulative exchange differences on translation of foreign operations (Note 15)	¥ 57,567
Review of scope of equity method application (Note 7)	23,462
Goodwill not amortized (Note 5)	20,115
Reconciliation of paid leave obligations (Note 11)	(16,119)
Deemed cost (Note 4)	(14,615)
Transfer to retained earnings from other components of equity resulting from remeasurements of defined benefit retirement plans	(11,799)
Other	2,868
Total reconciliation for retained earnings	¥ 61,479

(15) Other Components of Equity
The Group chose to utilize the exemption provision under IFRS 1 transferring all cumulative exchange differences on translation of foreign operations to retained earnings as of the transition date of April 1, 2015.

(16) Reclassifications
In addition to the above classifications, the Group made reclassifications in conformity with IFRS requirements, of which the principal ones are set out below:
・Under Japanese GAAP, the Group included short-term time deposits with deposit terms exceeding three months in “cash and deposits”, but under IFRS they are included in “other financial assets” of current assets.
・Under Japanese GAAP, the Group included short-term investments with maturities of less than three months from the date of acquisition in “securities,” but under IFRS they are included in “cash and cash equivalents.”
・All of the current portion of deferred tax assets and liabilities has been reclassified as non-current.
・Non-current assets that are very likely to be sold and readily available for sale are separately presented as “assets held for sale.”
・Subscription rights to shares were listed separately under Japanese GAAP but are included in “capital surplus” under IFRS.

Note on Reconciliation of Cash Flows for the Year Ended March 31, 2016
The principal differences between Consolidated Statement of Cash Flows under Japanese GAAP and IFRS relate to receivables transferred without satisfying derecognition requirements for financial assets and changes in the reporting periods of consolidated subsidiaries.

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Independent Auditor's Report

The Board of Directors
Mitsubishi Chemical Holdings Corporation

We have audited the accompanying consolidated financial statements of Mitsubishi Chemical Holdings Corporation and its consolidated subsidiaries, which comprise the consolidated statement of financial position as at March 31, 2017, and the consolidated statement of income, comprehensive income, changes in equity, and cash flows for the year then ended and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards, and for designing and operating such internal control as management determines is necessary to enable the preparation and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. The purpose of an audit of the consolidated financial statements is not to express an opinion on the effectiveness of the entity's internal control, but in making these risk assessments the auditor considers internal controls relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Mitsubishi Chemical Holdings Corporation and its consolidated subsidiaries as at March 31, 2017, and their consolidated financial performance and cash flows for the year then ended in conformity with International Financial Reporting Standards.

Ernst & Young ShinNihon LLC

June 27, 2017
Tokyo, Japan

Corporate Data

Mitsubishi Chemical Holdings Corporation (As of March 31, 2017)

Address of the head office	1-1 Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8251
Establishment	October 3, 2005
Paid-in capital	¥50.0 billion
Revenue (consolidated)	¥3,376.1 billion (fiscal 2016)
Number of employees (consolidated)	69,291

Organizational Structure

Holding company

Formulation of Group strategies, optimal allocation of management resources, supervision of business management and others

MCHC*

Function-sharing companies

Investigation into future societal issues and research for proving solutions to those issues
- 100% The KAITEKI Institute

Overseas administrative representatives in North America, Europe and China
- 100% Mitsubishi Chemical Holdings America
- 100% Mitsubishi Chemical Holdings (Beijing)
- 100% Mitsubishi Chemical Holdings Europe

Common functions for accounting and financial affairs
- 100% Mitsubishi Chemical Holdings Corporate Staff

Operating companies

Business operations in the three domains of Performance Products, Industrial Materials and Health Care

	MCC	MPI	MRC	MTPC*	LSII	TNSC*
Ownership	100%	100%	100%	56.4%	100%	50.6%
Paid-in capital	¥50.0 billion	¥21.503 billion	¥53.229 billion	¥50.0 billion	¥3.0 billion	¥37.344 billion
Revenue (consolidated)	¥1,440.6 billion	¥446.6 billion	¥503.7 billion	¥424.0 billion	¥133.8 billion	¥581.6 billion
Business lines	Performance products, industrial materials, and others	Plastic products and others	Chemical products, resins, fibers, carbon fiber and composite materials, water treatment systems and services, and others	Pharmaceuticals and others	Healthcare and medical ICT, drug development solutions, and next-generation healthcare	Industrial gases, related equipment and facilities, and others
Business domain	Performance Products, Industrial Materials	Performance Products	Performance Products, Industrial Materials	Health Care	Health Care	Industrial Materials
	Group companies	Group companies	Group companies	Group companies	Group companies	Group companies

* Listed company

MCC

On April 1, 2017, MCC, MPI and MRC were integrated as the new-MCC.

Paid-in capital	Revenue (consolidated)	Business lines	Business domain
¥53.229 billion	¥2,390.9 billion (FY 2016, an aggregation of figures according to three chemical operating companies)	Performance products, industrial materials, and others	Performance Products, Industrial Materials

Group companies

MCHC R&D Synergy Center, Inc., responsible for consolidating and advancing common platform technologies in R&D, integrated to new-MCC on April 1, 2017.

Main Subsidiaries and Affiliates

(As of March 31, 2017)

Direct Investees

Company Name	Principal Businesses	Capital	Equity Participation (%)
Mitsubishi Chemical Corporation	Manufacture and marketing of chemical products	¥50.0 billion	100.0
Mitsubishi Tanabe Pharma Corporation	Manufacture and marketing of pharmaceuticals	¥50.0 billion	56.4
Mitsubishi Plastics, Inc.	Manufacture and marketing of polymer processing products	¥21.5 billion	100.0
Mitsubishi Rayon Co., Ltd.	Manufacture and marketing of chemical products	¥53.2 billion	100.0
Life Science Institute, Inc.	Management of the healthcare solutions business	¥3.0 billion	100.0
Taiyo Nippon Sanso Corporation	Manufacture and marketing of industrial gases	¥37.3 billion	50.6

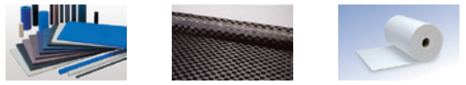
Indirect Investees

	Company Name	Principal Businesses	Capital	Equity Participation (%)
Performance Products Domain	Electronics Applications Segment			
	Mitsubishi Kagaku Media Co., Ltd.	Marketing of recording media and computer peripheral equipment	¥4.0 billion	100.0
	Designed Materials Segment			
	The Nippon Synthetic Chemical Industry Co., Ltd.	Manufacture and marketing of polymer processing products	¥17.9 billion	100.0
	Quadrant AG	Management of subsidiaries that engage in the engineering plastic business	CHF27 million	100.0
Industrial Materials Domain	Chemicals Segment			
	Kansai Coke and Chemicals Co., Ltd.	Manufacture and marketing of coke	¥6.0 billion	51.0
	Matheson Tri-Gas, Inc.	Manufacture and marketing of industrial gases	U.S.$50	100.0
	Polymers Segment			
	Japan Polypropylene Corporation	Manufacture and marketing of polypropylene	¥11.7 billion	65.0
	Japan Polyethylene Corporation	Manufacture and marketing of polyethylene	¥7.5 billion	58.0
	Mitsubishi Rayon Lucite Group Limited	Management of subsidiaries that engage in the MMA business	£246 million	100.0
Health Care Domain	Health Care Segment			
	API Corporation	Manufacture and marketing of active pharmaceutical ingredients and intermediates	¥4.0 billion	100.0
	LSI Medience Corporation	Clinical testing, manufacture and marketing of diagnostic reagents and instruments and drug development support	¥3.0 billion	100.0
	Qualicaps Co., Ltd.	Manufacture and marketing of capsules for pharmaceuticals and health food and pharmaceutical equipment	¥2.8 billion	100.0
Others	Mitsubishi Chemical Logistics Corporation	Logistics and warehouse services	¥1.5 billion	100.0
	Mitsubishi Chemical Engineering Corporation	Engineering and construction services	¥1.4 billion	100.0

(Notes) 1. On April 1, 2017, MCC, MPI and MRC, were integrated as new-Mitsubishi Chemical Corporation.
2. On April 1, 2017, Mitsubishi Kagaku Media Co., Ltd. and Mitsubishi Rayon Lucite Group Ltd. changed their corporate names to Mitsubishi Chemical Media Co., Ltd. and Mitsubishi Chemical Lucite Group Ltd., respectively.

Main Businesses

● MCC Group ● MTPC Group ● LSII Group ● TNSC Group

Business Unit	Main Businesses, Products and Services		Main Uses
Advanced Polymers	 Thermoplastic elastomer, *TEFABLOC* / Polycarbonate / Bio-based engineering plastic, *DURABIO*	●Performance polymers	Automobiles, industrial materials, electronics, household goods, foods, medical care
		●Phenol and polycarbonate	Industrial-use chemicals, automobiles, electronics
		●PBT*1	Automobiles, electronics, household goods, industrial materials
		●Sustainable polymers	
High-Performance Chemicals	 Acrylic resins / Epoxy resin, *jER* / Sugar ester	●Coating materials	Industrial materials, automobiles, electronics, household goods, industrial-use chemicals, aircraft
		●Epoxy resins	
		●Resin additives	
		●Food ingredients	Foods (beverages, confectionary, nutrition products, etc.)
Information, Electronics and Display	 Optical clear adhesive sheet, *CLEARFIT* / Optical PVOH*2 film, *OPL Film* / Color resist	●Optical films (Polyester film, etc.)	Electronics
		●Optical PVOH*2 film	
		●Color resist	
		●Precision cleaning	Electronics, environment
High-Performance Films	 Food packaging film, *DIAMIRON* / Acrylic film, *ACRYPLEN* / Moisture-proof PVC*3 sheet for tablet and capsule packaging, *VINYFOIL*	●Food packaging materials	Foods and household goods
		●Industrial-use films	Industrial materials
		●Medical and sanitary films	Medical care
Environment and Living Solutions	 Water treatment components, equipment and facilities / Fully artificial light-type plant growing system, *Plant Plant* / FRP*4 and SUS*5 panel water tank, *HISHITANK*	●Aqua solutions	Environment, infrastructure, household goods, medical care, foods
		●Separation materials	Environment, energy, industrial-use chemicals, electronics, medical care, foods
		●Separator and aqua chemicals	Environment, electronics, medical care, foods
		●Agricultural solutions	Agriculture
		●Infrastructure solutions	Environment, infrastructure, industrial materials
Advanced Moldings and Composites	 Engineering plastics / Carbon fiber and composite materials / Alumina fibers	●High-performance engineering plastics	Automobiles, electronics, industrial materials, medical care
		●Carbon fiber and composite materials	Automobiles, aircraft, industrial materials, sporting goods
		●Alumina fibers	Automobiles, industrial materials
		●Functional moldings and composites	Industrial materials
		●Fibers and textiles	Household goods, industrial materials
New Energy	 Lithium-ion battery materials / Phosphors / Scintillator	●Lithium-ion battery materials	Automobiles, electronics, energy
		●LED materials	Electronics, automobiles
		●Scintillator	Medical care, electronics
Petrochemicals	 EG*6 production facility / Petrochemical derivatives / PE*7 gasoline tank	●Basic petrochemicals and basic chemical derivatives	Industrial-use chemicals
		●Polyolefins	Automobiles, electronics, household goods, industrial materials, medical care
Carbon	 Coke / Carbon materials / Carbon black	●Coke	Industrial materials
		●Carbon materials	
		●Carbon black	Industrial materials, automobiles, household goods
		●Synthetic rubber	
MMA	 MMA monomers / Acrylic molding material, *ACRYPET* / Acrylic sheet products	●MMA and PMMA	Automobiles, electronics, industrial materials, household goods
Industrial Gases	 Separate gases (oxygen, nitrogen, argon) / Electronics material gases / Air separation units	●Industrial gases	Industrial materials, industrial-use chemicals, electronics, automobiles, foods, medical care
		●Industrial gas-related equipment and facilities	
Ethical Pharmaceuticals	 Treatment agent for autoimmune diseases / Therapeutic agent for amyotrophic lateral sclerosis, *Radicut* / Vaccine	●Ethical pharmaceuticals	Medical care, health
Life Science	 Compact immunoanalyzer, *PATHFAST* / Capsules / Self-health check service	●Clinical testing	Medical care, health
		●Diagnostic reagents and instruments	
		●Capsules and pharmaceutical equipment	
		●Active pharmaceutical ingredients and intermediates	
		●Self-health check service	Health

*1 Polybutylene terephthalate *2 Polyvinyl alcohol *3 Polyvinyl chloride *4 Fiber reinforced plastic *5 Stainless steel *6 Ethylene glycol *7 Polyethylene

Global Network

(As of March 31, 2017)

Number of Subsidiaries and Affiliates (Japan):	333	Number of Subsidiaries and Affiliates (Outside Japan):	398
Number of personnel in Japan:	approx. 45,000	Number of personnel overseas:	approx. 24,000

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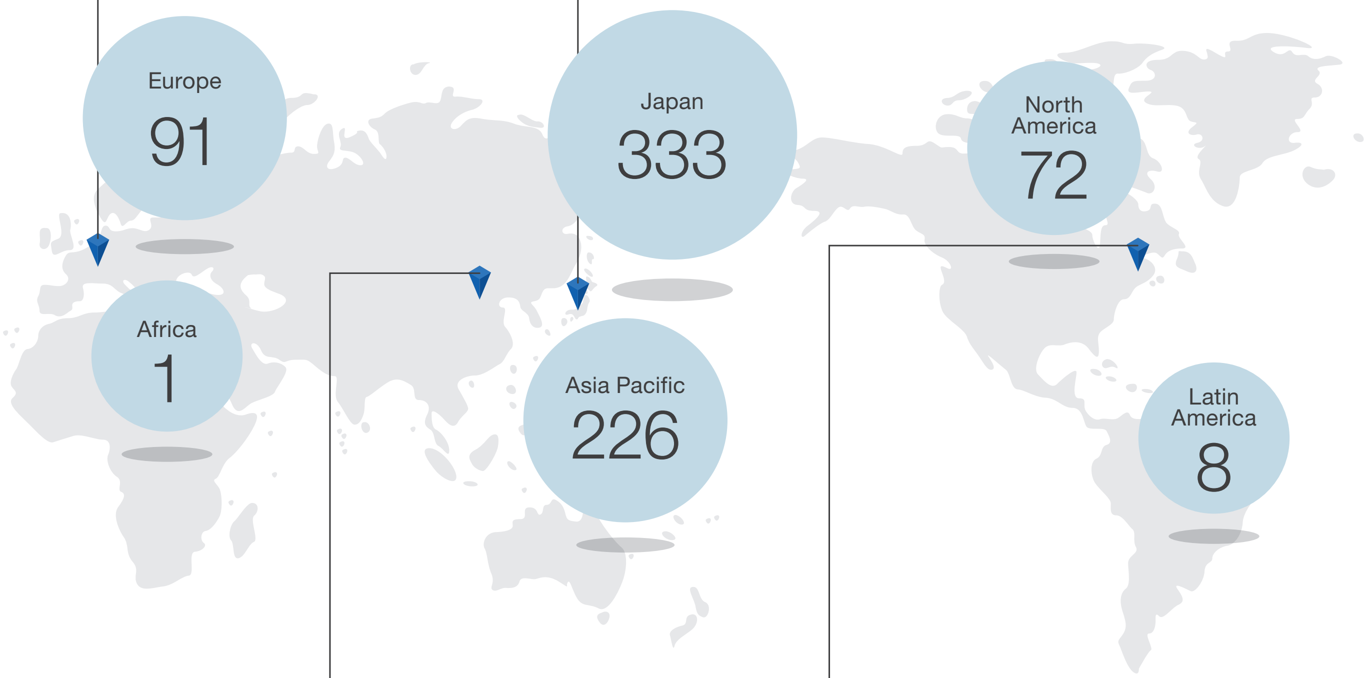

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