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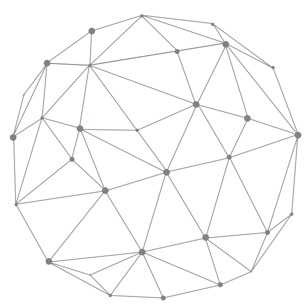

Mitsubishi Chemical Holdings Corporation
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www.mitsubishichem-hd.co.jp/english

KAITEKI REPORT 2018

Mitsubishi Chemical Holdings Corporation

Mitsubishi Chemical Holdings Corporation

KAITEKI REPORT 2018

Integrated Report

KAITEKI Value for Tomorrow

The sustainable well-being of people,
society and our planet Earth
— we call it KAITEKI.

Through our core values of Sustainability, Health and Comfort,
we create innovative solutions globally realizing KAITEKI.

Creating KAITEKI Value today
we ensure a bright future for tomorrow.
We are THE KAITEKI COMPANY.

Message

We will display our Group's total strengths to facilitate the sustainable well-being of people, society and our planet Earth, and we will aim to achieve further reforms and growth

Representative Corporate
Executive Officer, President and CEO Hitoshi Ochi

Today, many countries are facing a range of social issues, including climate change, water shortages, resource and energy issues, and soaring medical costs associated with the aging of the population. Meanwhile, in the domains of information and communication technology (ICT), artificial intelligence (AI), robotics, mobility, medical and healthcare, science and technologies are developing at an accelerating pace. They have the potential to bring about significant innovations.
In this environment, the Mitsubishi Chemical Holdings (MCHC) Group understands that it is our mission to bring together the innovation capabilities of our domestic and overseas group companies to continuously offer solutions to these social problems, and we are working to steadily execute our action plan in a bid to meet the targets set out in the *APTSIS 20* medium-term management plan, which runs from FY2016 to FY2020.
With the key message of "achieving further reforms and growth," KAITEKI REPORT 2018 presents our activities from diverse perspectives, including the results of business activities in accordance with *APTSIS 20* and our medium-and long-term vision, to make clear our firm determination to realize KAITEKI.
We hope that this report will help you better understand our Group's value creation and we thank you for your continued support and cooperation.

Numeric data for the MCHC Group

As of the end of March 2018

INPUT		OUTPUT	
Total assets	4,700.6 billion yen	Revenue	3,724.4 billion yen
Number of countries/ regions of Group sites	39	Core operating income	380.5 billion yen
Number of employees (consolidated)	69,230	ROE (Return on equity)	17.8 %
Amount of capital expenditures	225.2 billion yen	Achievement ratio of target for new product proportion (MOT Index)	109 %
R&D expenses	138.8 billion yen	Contribution to achieving healthy and hygienic lives through products and services (MOS Index)	Up 72.9 % (compared to the previous fiscal year)
Energy consumption	41.0 TWh	Contribution to reduction of GHG emissions through products (MOS Index)	77.6 million t-CO_2e

State of MCHC in 2017

Measures for achieving growth	Performance Products domain	Optical films	Determine the addition of a polyester film-processed product manufacturing facility in China (Investment amount: ¥1.5 billion; manufacturing to start in April 2019)
			Complete the addition of *OPL Film* production facilities at Ogaki factory (Annual production of 18 million m²; start of operation in December 2017)
		Carbon fibers	Capitalize on C.P.C. SRL, a company that manufactures and sells car parts made of carbon fiber and aluminum composite materials in Italy (acquire 44% of its stocks in October 2017)
		Food packaging films	Determine the addition of a new manufacturing facility of *DIAMIRON* in Thailand (Commercial manufacturing to start in April 2020)
		Performance polymers	Acquire Dutch Filaments B.V., a filament manufacturer for 3D printers in the Netherlands (March 2018)
		Separator and aqua chemicals	Form a business partnership with ICM, Inc. (U.S.) to market zeolite films for North America, as well as with Mitsui & Co., Ltd. for Europe and Asia
		Lithium-ion battery materials	Establish a company that runs an electrolyte business in China (50/50 joint ownership with Ube Industries, Ltd. with 159 million RMB in capital in January 2018)
	Industrial Materials domain	MMA (acrylic resins)	Complete the construction of an MMA monomer/PMMA plant in Saudi Arabia (April 2017; annual production of MMA monomer: 250 thousand tons; annual production of PMMA: 40 thousand tons)
		Industrial gases	Enhance the electronic material gas production capacity in China (Commercial manufacturing to start in January 2019)
	Health Care domain	Pharmaceuticals	Start sales of *Radicava*, a medicine for the treatment of amyotrophic lateral sclerosis (ALS) (August 2017)
			Acquire NeuroDerm Ltd. in Israel (October 2017; price of acquired stocks: approximately ¥124.1 billion)
		Regenerative medicine and other products	Start an exploratory clinical trial of Muse-cell products and determine establishment of cell processing center in Japan (Operation to start in January 2019)
Measures for implementing innovation	Performance Products domain	IT and electronics materials	Determine the termination of the fractured toner business (planned to stop production at the end of March 2019)
		Environment & living solutions	Transfer stocks of Nitto Kako Co., Ltd. (March 2018)
		ABS resins	Establish a new joint venture by integrating the ABS resin business (April 2018)
	Industrial Materials domain	Polyolefin	Determine the addition of a new polypropylene manufacturing facility at Goi plant as part of structural reform (Annual production: 150 thousand tons; commercial operation to start in October 2019)
	Health Care domain	Pharmaceuticals	Transfer the generic pharmaceutical business (October 2017)
Overall Management			Mitsubishi Chemical Corporation was established by integrating three chemical operating companies (April 2017)
			Reinforce the function as a holding company (promote the separation of execution and supervision) and deepen KPI-based portfolio management
			Strengthen Corporate Strategy Division and utilize ICT and AI (Establish four strategy offices and Emerging Technology and Business Development Office)
			Fully promote KAITEKI health and productivity management

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

Dow Jones Sustainability Indices	RobecoSAM Sustainability Award 2018 Bronze Class	CDP Water 2017 A LIST
MSCI Japan ESG Select Leaders Index *1	MSCI Japan Empowering Women Index*1	FTSE Blossom Japan Index
FTSE4Good Index	Morningstar Socially Responsible Investment Index*2	NIKKEI Smart Work Management Survey

*1. The inclusion of Mitsubishi Chemical Holdings Corporation in any MSCI Index, and the use of MSCI logos, trademarks, service marks or index names on this page do not constitute a sponsorship, endorsement or promotion of Mitsubishi Chemical Holdings Corporation by MSCI or any its affiliates. The MSCI Indexes are the exclusive property of MSCI. MSCI and the MSCI index names and logos are trademarks or service marks of MSCI or its affiliates.
*2. As of July 2018

Contents

Editorial Policy

The Mitsubishi Chemical Holdings (MCHC) Group publishes the KAITEKI Report, which summarizes financial and non-financial information of the past, present and projected future, as a value-creation story, based on what, among our progress and outlook of corporate activities aimed at the realization of KAITEKI*, 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.

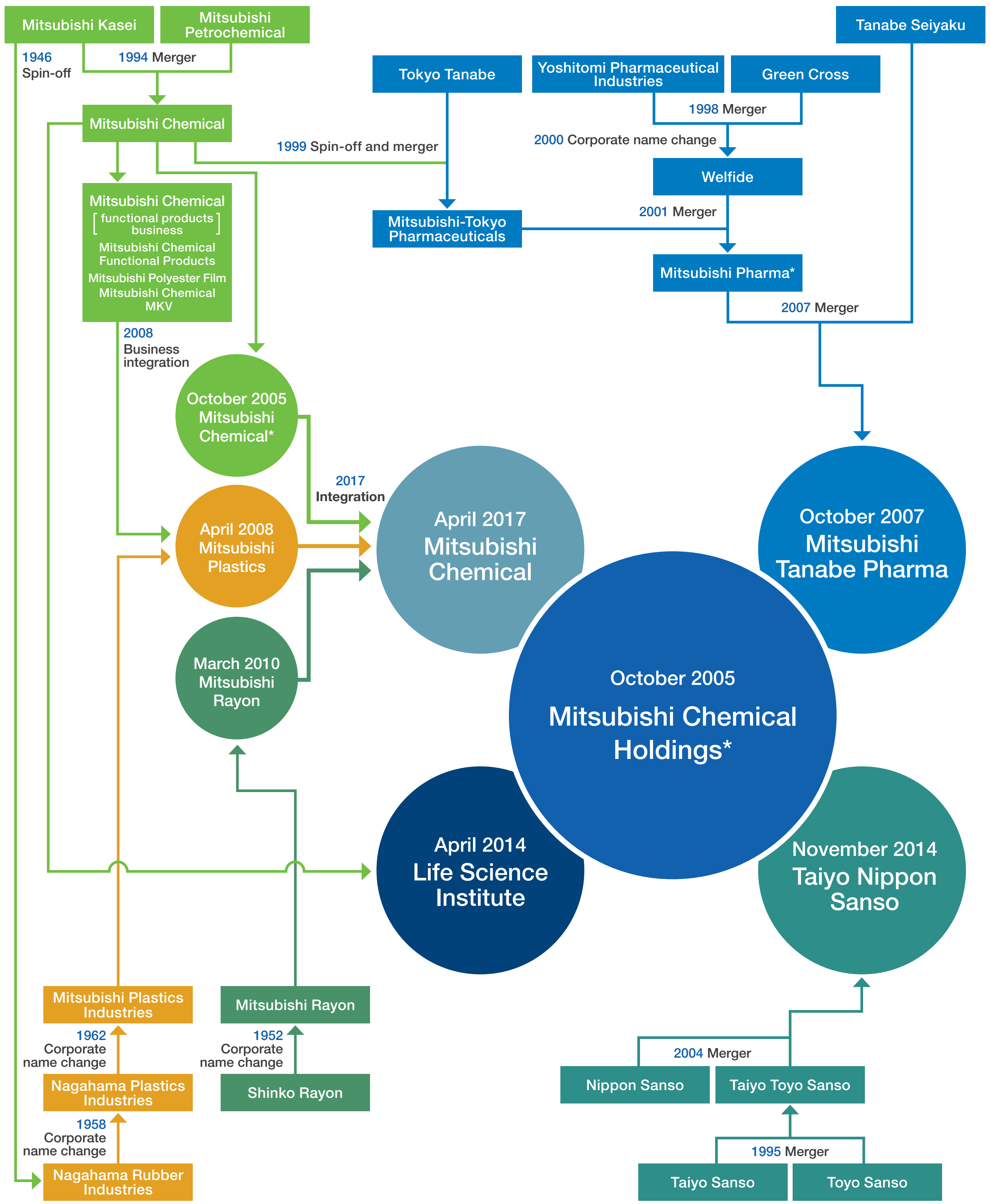
Reporting Period	FY2017 (April 2017 – March 2018), including some information from FY2018
Reporting Boundary	This report covers information relating to MCHC and the MCHC Group. For matters with a different reporting scope, we clearly specify the covered reporting scope.
Accounting Standards	MCHC has adopted International Financial Reporting Standards (IFRS), effective from the first quarter of FY2016, the financial year ended March 31, 2017. In this report, data in and after FY2016 are based on IFRS, while 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 "the sustainable well-being of people, society and our planet Earth". It is a concept of MCHC that proposes a way of realizing shared value for sustainable society and business.

History of the MCHC Group



* Mitsubishi Chemical and Mitsubishi Pharma established a joint holding company.

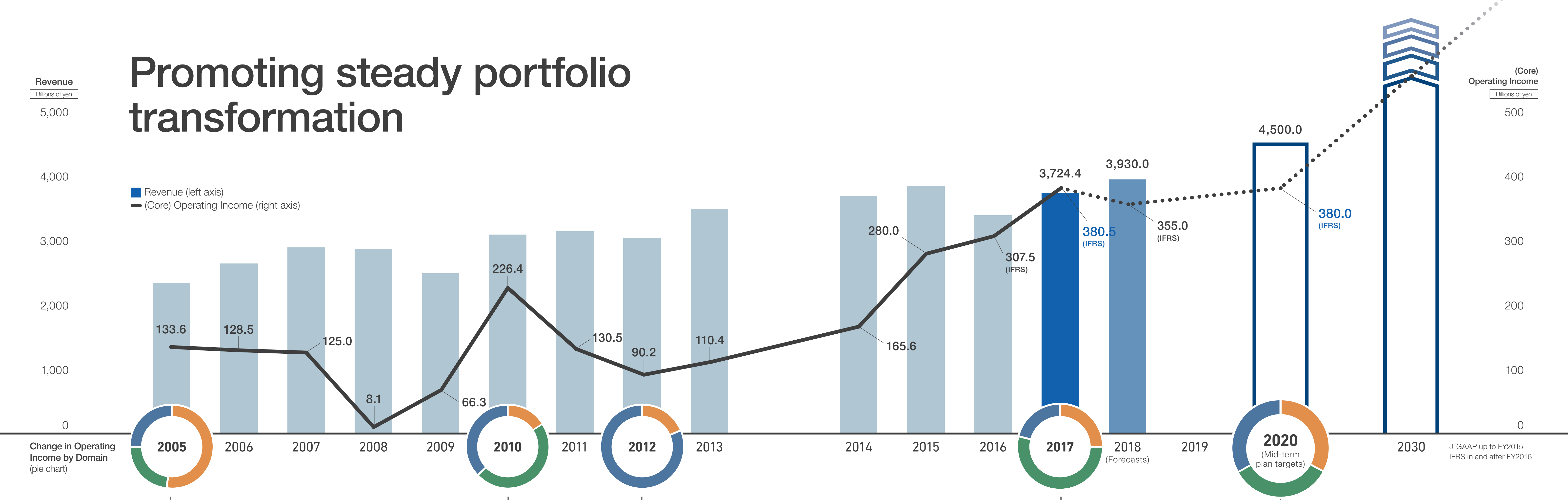
Transition of Portfolio Transformation

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

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

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

Promoting steady portfolio transformation



Year	Performance Products Domain	Industrial Materials Domain	Health Care Domain
2005	52%	23%	25%
2010	16%	47%	37%
2012	19%	0%	83%
2017	25%	54%	21%
2020	33%	34%	33%

* Other -2%

Establishment of MCHC 〉 Stable revenue due to healthy market conditions in Industrial Materials Domain and stronger Health Care Domain 〉 Accelerating portfolio transformation 〉 Industrial Materials Domain stabilized due to structural reforms and linking of Industrial Gases 〉 Sustainable growth, well-balanced across three business domains

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

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

Expanded the Performance Products domain
April 2008
Integrated MPI, MCC's functional products business, and three affiliate companies
May 2009 — Conversion of Quadrant AG (Switzerland) in the high-performance engineering plastic business into a consolidated subsidiary

Shifted to a high added-value business portfolio
March 2010
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
March 2013 — Conversion of Qualicaps Co., Ltd. in the business of manufacturing capsules and pharmaceutical equipment into a consolidated subsidiary

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

Stabilized profitability of the Industrial Materials domain from conversion of an industrial gas company into a consolidated subsidiary
November 2014
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

Accelerated growth of performance product groups through integrations
April 2017
Establishment of the new-Mitsubishi Chemical Corporation
Integration of the three chemical operating companies (MCC, MPI and MRC)

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)

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.

2 Vision for 2020

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

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1 Materiality Assessment

Identify material issues to realize KAITEKI

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▶ Overview of Business Segments P51 P55 P59
▶ Materiality Assessment P67
▶ Corporate Governance P77
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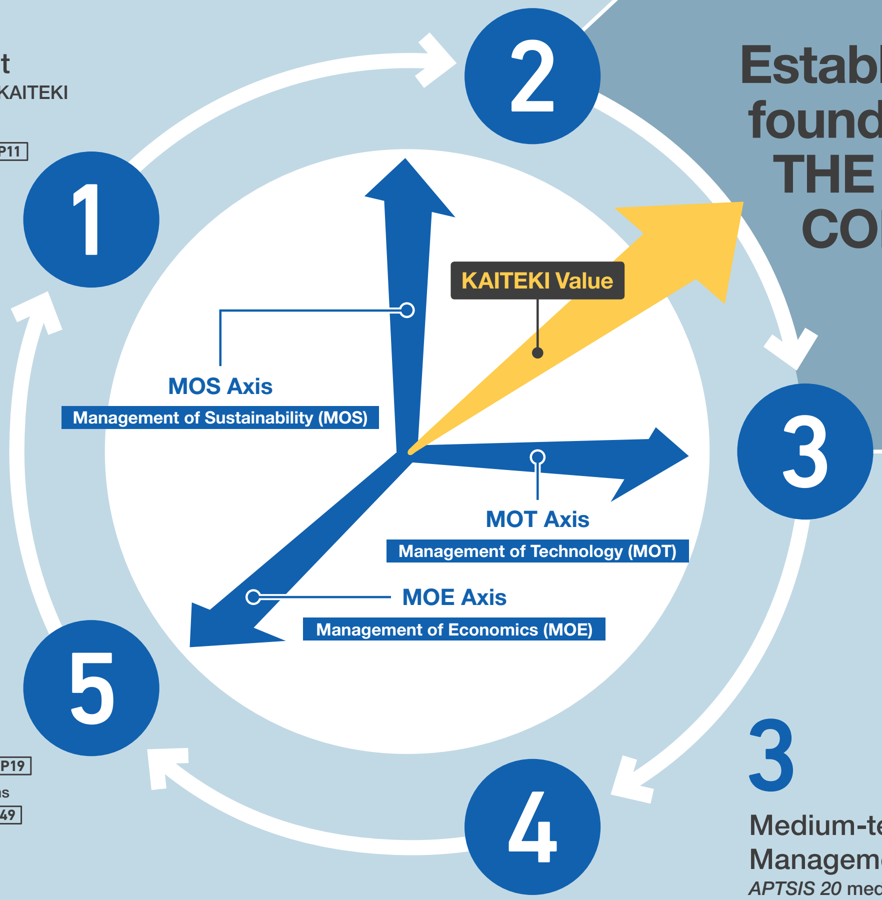

Establishing the foundations for THE KAITEKI COMPANY

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3 Medium-term Management Plan

APTSIS 20 medium-term management plan for FY2016 to FY2020

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

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4 Execute KAITEKI Management

Shared Values

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

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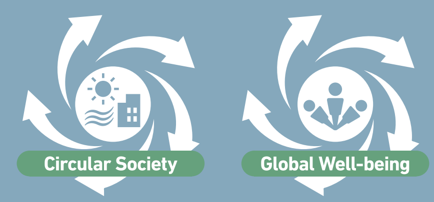
THE KAITEKI COMPANY to be a driving force to realize KAITEKI

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

Sustainable Development Goals

▶ Sustainability P68

Contribution to circular and sustainable society and global well-being



Leadership in creating a recycling, circulative-oriented optimal system aimed at sustainable use of diverse energy and resources, and a scheme to enable the sustainable well-being of people, society and our planet Earth.

2020

2030

Corporate Philosophy

Mission

We create innovative solutions globally based on our core values of Sustainability, Health and Comfort, striving for the well-being of people, society and our planet Earth.

Vision

Realizing KAITEKI

KAITEKI: The sustainable well-being of people, society and our planet Earth.

Value

Sustainability, Health, Comfort

The Six Focus Markets and Businesses *APTSIS 20*

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

Fundamental Materials

■ Petrochemicals ■ Carbon Products ■ MMA

The MCHC Group's Material Issues and Selection Process of "Focus Markets"

Mitsubishi Chemical Holdings Corporation (MCHC) began fully implementing KAITEKI Management from the previous medium-term management plan, *APTSIS 15* (FY2011 to FY2015). Setting Sustainability, Health, and Comfort as our core values, the Group considers the provision of solutions to the issues facing people, society and our planet Earth through its business activities to be its management priority.

Under the current medium-term management plan *APTSIS 20* covering the period of FY2016 to FY2020, MCHC identified priorities for KAITEKI Management through materiality assessment based on global macro-trends, including environmental and energy issues such as climate change and the depletion of resources, industrial and economic trends such as the acceleration of IT use and the rise of emerging economies, and medical and health issues (see page 67).

To address those issues considered to be the most important, MCHC selected "Focus Markets" as markets in which the MCHC Group would focus its efforts on providing solutions, with the aim of helping solve social issues through its business activities while at the same time achieving corporate growth. Moreover, through initiatives to address the material management issues of the MCHC Group, the Group will steadily develop the businesses to contribute to the 17 Sustainable Development Goals (SDGs) adopted at the United Nations in 2015.

Analysis of macro-trends → Extraction of risks and opportunities for the Group → Identification of material management issues of the MCHC Group → Selection of "Focus Markets"

Macro-trends		
Increasing climate change	Pollution and shortage of water resources	Advancing globalization and development of emerging economies
Expansion of regional economic zones	Digitization, modularization, ICT introduction in the industries	Increasing global population
Ageing population	Increasing medical costs	Progress of regenerative medicine and personalized medicine

Risks	Opportunities	Material Issues Related to Global Environment and Social Systems
Depletion of fossil resources and other natural resources such as rare metals	Transformation and diversification of resources and energy supply sources Practical application of renewable energy and accelerated technological development	Energy and resources
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	Expansion of products and businesses to adapt to and mitigate climate change	Climate change
Expanding water stress due to higher demand, climate change and other factors Increasing health risk due to shortages of hygienic water	Expansion of businesses such as water purification and recycling	Water
Increasing incidence rate for adult-onset diseases and rising mortality Increasing risk of health insurance system failure	Expansion of health information service market (shift from treatment to prevention)	Health and wellness
Growing forays into the medical and healthcare fields from other industries (intensification of competition)	Manifestation of unmet medical needs Advancing digitization of data on medical treatment and health information through ICT	Medical care
Worsening food issues due to population growth and increasing urban lifestyles	Increasing shift to factory-produced foods	Food and agriculture

Focus Markets | **Better contributions to the SDGs below**

Automobiles, Aircraft (Mobility)

Contribute to the efficient use of resources and energy and the mitigation of climate change by reducing the weight of automobiles and aircraft, promoting electric vehicles, and offering environmentally friendly products (switching to renewable raw materials and materials).

Healthcare

Contribute to people's lives and health by developing ethical pharmaceuticals and regenerative medicines to meet unmet medical needs and by offering health management-related services.

IT, Electronics, Displays

Contribute to a smart society and more comfortable lifestyles by providing high performance materials for liquid crystal displays and OLED and semiconductor materials, etc.

Environment, Energy

Contribute to energy conservation, the effective use of water resources, improvement of productivity in the agricultural, fishery, and livestock industries and adaptation to climate change by providing lithium-ion battery materials, water treatment-related products, plant factories and disaster prevention and mitigation products, etc.

Medical, Food, Bio Products

Contribute to solving medical issues and promoting health maintenance by providing high performance medical-related products, pharmaceutical materials and functional food ingredients, etc.

Packaging, Labels, Films

Contribute to the safe storage and distribution of food and the reduction of food loss, etc. by providing high gas barrier films for food and medical packaging that prolong shelf life and enable long-term storage.

13 CLIMATE ACTION
Take urgent action to combat climate change and its impacts

7 AFFORDABLE AND CLEAN ENERGY
Ensure access to affordable, reliable, sustainable and modern energy for all

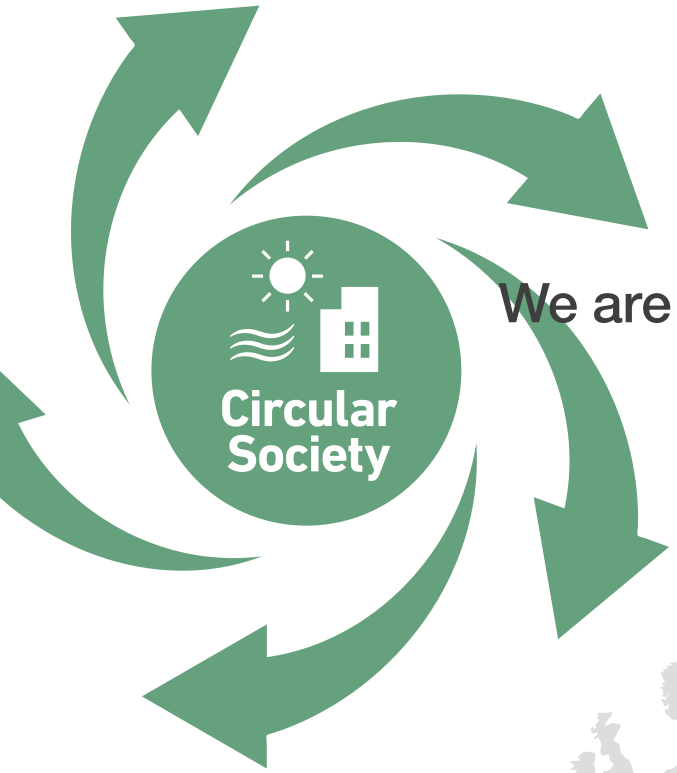
3 GOOD HEALTH AND WELL-BEING
Ensure healthy lives and promote well-being for all at all ages

12 RESPONSIBLE CONSUMPTION AND PRODUCTION
Ensure sustainable consumption and production patterns

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

17 PARTNERSHIPS FOR THE GOALS
Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

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.

Creation of technology that contributes to energy saving and CO_2 reduction

Bioethanol dehydration using zeolite membrane

The use of bioethanol made from biomass such as corn and sugarcane is penetrating the market as a fuel that leads to the reduction of CO_2 emissions in various countries, especially in the United States and Brazil. However, it is necessary to dehydrate it to above specified concentration so that it can be used as a fuel.

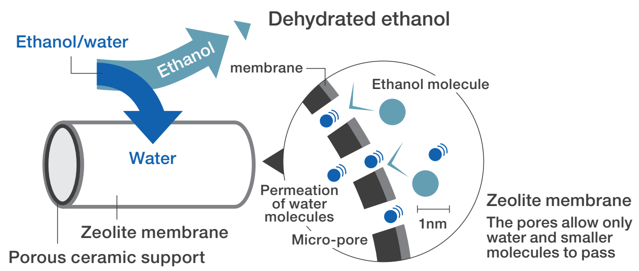
Zeolite has micro pores and we have technology to control the size and structure of these pores. The *ZEBREX* zeolite membrane developed by the MCHC Group has pores of a size that allows only water and smaller molecules to pass, so it is possible to perform dehydration efficiently by removing only the water contained in the bioethanol.

Using a zeolite membrane in the bioethanol dehydration process reduces the amount of energy consumption compared to conventional technology and contributes to the reduction of CO_2 emissions (see the bottom-right graph).

In the case of a bioethanol factory in Hungary that has decided to adopt zeolite membranes, the zeolite membrane plant is currently under construction and is scheduled to start operation in spring 2019. It is expected to be able to reduce CO_2 emissions by a maximum of 9,000 tons a year.

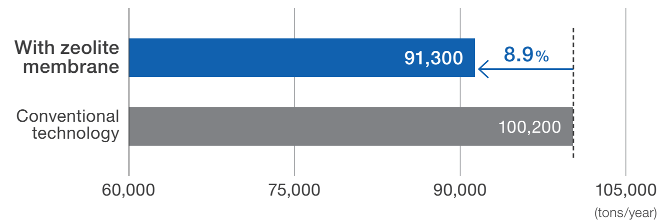
The bioethanol factory (Hungary) that has decided to adopt zeolite membranes

Example of Dehydration of Aqueous Ethanol Solution



Water and ethanol are separated by the zeolite membrane

Comparison of Annual CO_2 Emissions at Bioethanol Factory in Hungary (Estimates)



Prevention of global warming and creation of a circular society

Greenhouse gas recovery service

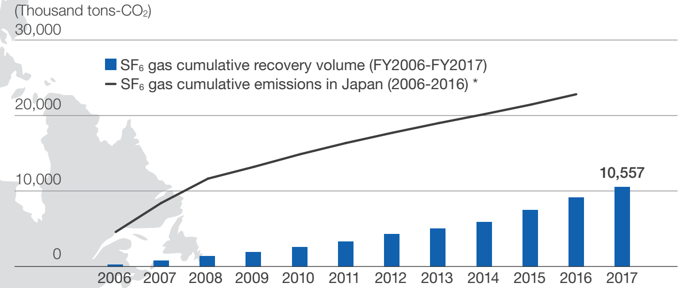
SF_6 gas recovery unit

SF_6 (sulfur hexafluoride), which is used in various applications as an insulation material for electric-related equipment, is produced in Japan at a rate of about 2,000 tons a year. However, SF_6 has a long life of 3,200 years in the atmosphere, and as its global warming potential is also 23,900 times that of CO_2, which is high, it has been designated as a greenhouse gas and is required not to be discharged into the atmosphere.

In response to this issue, the MCHC Group, as "The Gas Professionals," is endeavoring to promote zero emissions of SF_6 by developing an SF_6 gas recovery service that integrates the recovery, reuse, and treatment for rendering SF_6 harmless.

Based on our highly reliable recovery operations that make use of our self-developed technology, the cumulative amount of SF_6 gas recovered since 2006 has reached 441.7 tons (as of March 2018), which amounts to a CO_2 equivalent of 10,557 thousand tons-CO_2. We will continue to contribute to the prevention of global warming and the creation of a circular society.

Cumulative Recovery Volume of SF_6 Gas and Cumulative Emissions in Japan*

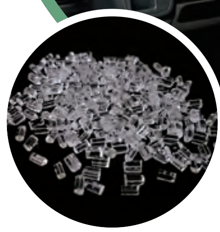


* Compiled from Ministry of Economy, Trade and Industry (METI)'s "Estimated Emission Volume of HFC, etc. in 1995-2016"

Creating a resource-saving and carbon recycling-based society

Plant-derived sustainable materials

Example of application: Car instrument panels



DURABIO

Example of application: Cosmetics containers

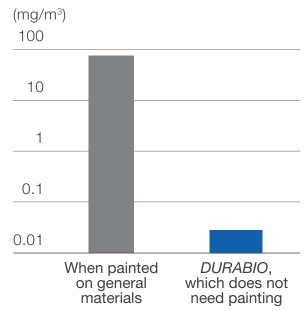
DURABIO, which the MCHC Group has developed, is an engineering plastic that uses isosorbide, a raw material derived from plants.

As it is derived from plants, unlike general petroleum-derived engineering plastics, it has advantages in that the CO_2 generated at the time of combustion is incorporated into plants again and the petroleum used is also reduced by about 60%.

In addition, it contributes to human-friendly car manufacturing in the following way: whereas resins that are generally used in interior components of vehicles are painted after they have been molded, *DURABIO* has good color properties, is not easily damaged and is resistant to change in color, which means that the painting process can be omitted. Consequently, the use of volatile organic compounds (VOCs) can be substantially reduced in the vehicle interior.

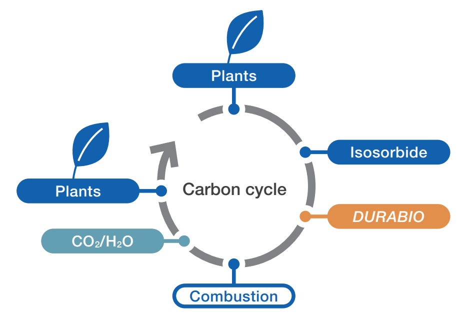
Owing to such beneficial features, besides being used in the interior and exterior components of vehicles, *DURABIO* is also becoming more widely adopted in applications that are familiar to us such as optical films used in displays, transparent construction materials that can also be used outdoors and cosmetics containers.

VOC Discharge Volume



* Measured by MCHC according to JASO (Japan Automobile Standards Organization) measurement method

Carbon Cycle of *DURABIO*



As a specific way to contribute to Global Well-being, the MCHC Group is involved in regenerative medicine

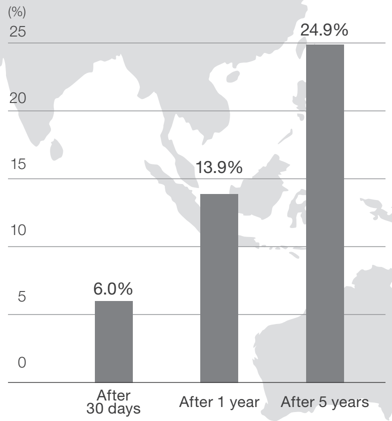
Regenerative medicine is one of innovative therapies that aims to restore tissue or organ functions lost due to damage or birth defects by replacement of lost cells. It is expected as a promising therapy for intractable diseases where therapeutic effects are insufficient in conventional therapy. Through this initiative the MCHC Group will contribute to an improvement in people's quality of life.

Clinical Application of Regenerative medicine in treatment of myocardial infarction

In January 2018, the MCHC Group has conducted exploratory clinical trials in patients with acute myocardial infarction by using Muse cell*1 product at Gifu University Hospital. Myocardial infarction is defined as myocardial necrosis in a clinical setting consistent with occlusion of coronary arteries (blood vessels supplying oxygen and nutrient to the myocardium). About 70,000 patients a year are hospitalized due to myocardial infarction. Moreover, heart disease is the second leading cause of death in Japan, about 20% of which is due to myocardial infarction. As approximately 25% of patients with myocardial infarction suffering from death or development of heart failure within five years in spite of conventional therapy, a novel therapeutic regimen is required.
Therefore, the use of a Muse cell product as a breakthrough treatment is expected to have the effect of restoring myocardium of patients with a history of myocardial infarction.

*1 Multilineage-differentiating Stress Enduring cell

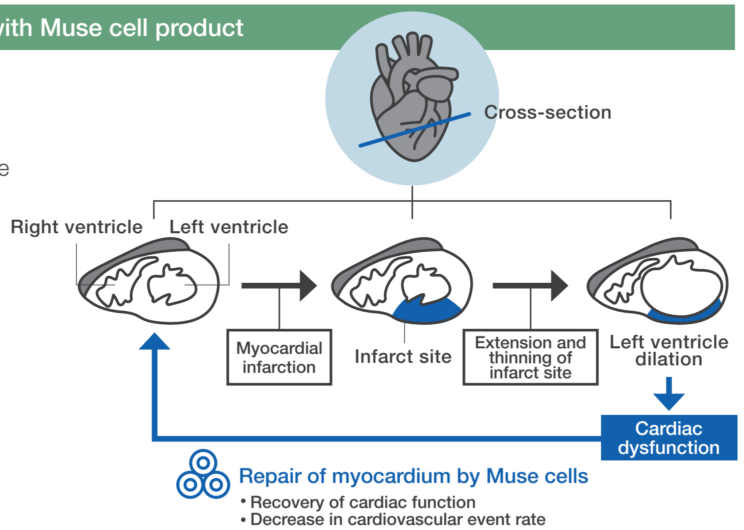
Incidence of Death or Heart Failure after Myocardial Infarction



* Extracted from CREDO-KYOTO AMI registry

Treatment with Muse cell product

After the onset of myocardial infarction, the conventional therapy can not repair the infarcted site in the heart, and the left ventricle dilates due to extension or thinning of that part, which may cause cardiac function to deteriorate. As a result, the incidence of cardiovascular events (cardiac death, myocardial infarction recurrence and heart failure) increases.
Muse cells accumulate at the site of infarction, differentiate into cardiomyocytes and vascular-lineage cells and repair the heart tissue itself. Muse cells restore cardiac function post myocardial infarction, which cannot be improved with conventional therapy, and as a result, it is likely that cardiovascular events after myocardial infarction will be reduced.



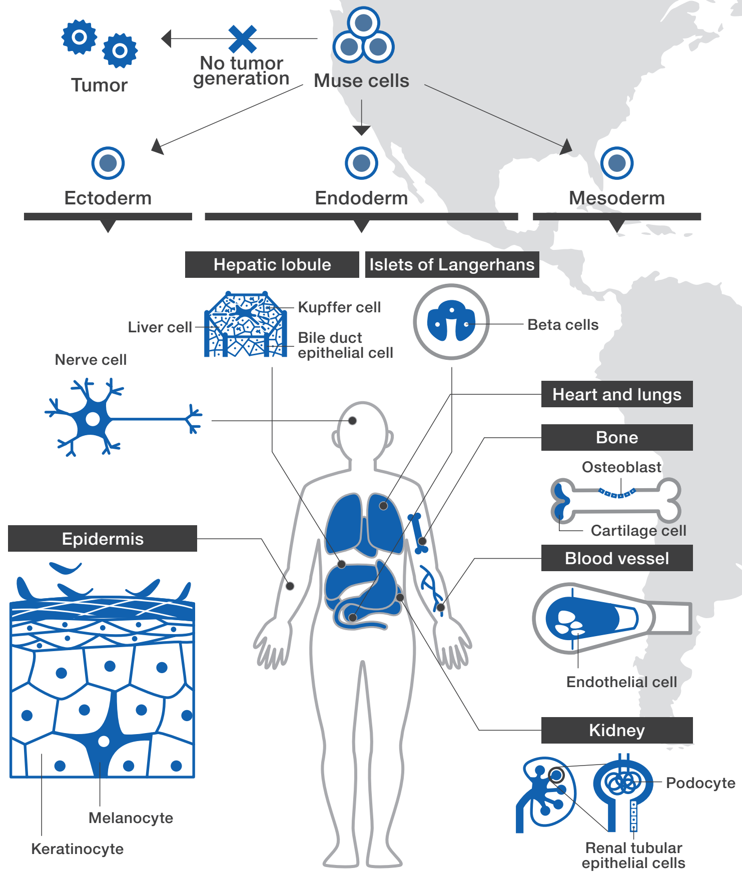
Contributing to Global Well-being with cutting-edge regenerative medicine

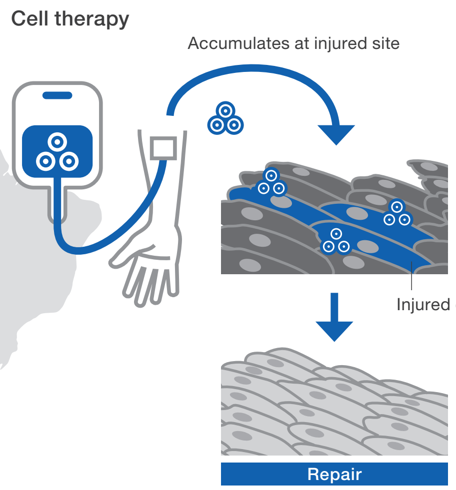
Developing regenerative medicine by using Muse cells, which are pluripotent stem cells

Muse cells are pluripotent stem cells that exist in the human body and were discovered by the team led by Professor Mari Dezawa of Tohoku University in 2010. These cells exist in mesenchymal tissues such as bone marrow of the body and can differentiate into various cells of the ectoderm (such as nerves and skin), mesoderm (muscles, etc.), and endoderm (internal organs, etc.). As they originally exist in the human body, they also have the advantage of being cells with few concerns about safety such as tumorigenicity. Because of these properties, it is likely that Muse cells can be used as regenerative medical products for various intractable diseases.

In addition to the previously mentioned properties, Muse cells have desirable characteristics as regeneration medicine. It has become clear that Muse cells, after intravenous administration to animals, accumulate at the disease site themselves and repair the tissue by spontaneously differentiating into lost cells. As Muse cells also have the property of avoidance of immunological rejection, allogenic transplantation is possible.
An outline of treatment using Muse cells is shown in the diagrams below. Muse cells administered intravenously migrate towards signals released by injured cells and accumulate, and then they differentiate into cells compatible with target tissues and repair them. The cell product is kept as a frozen formulation and used after being thawed when necessary.

Pluripotency of Muse Cells





We will continue the clinical trial of acute myocardial infarction with Muse cells and aim to obtain approval as a regenerative medical product by the end of FY2021.
As the effectiveness of Muse cells on diseases such as cerebral infarction and kidney disease has been reported in animal models in basic research, their use is expected to be expanded to various diseases.

Update on *APTSIS 20*

Medium-Term Management Plan

APTSIS 20 Basic Policy

(FY2016-FY2020)

Aiming to remain a high growth/high profit-model company through businesses in the Performance Products, Industrial Materials and Health Care domains

Growth	Efficiency	Strengthening Foundations

Promotion of integration and synergies in the MCHC Group

Accelerate overseas business development and advancing well-integrated management

Strengthen portfolio management with awareness of earnings

Realize a highly productive corporate structure through cost-cutting and other measures

Strengthen the financial position

Thorough safety and compliance measures

Numerical Targets

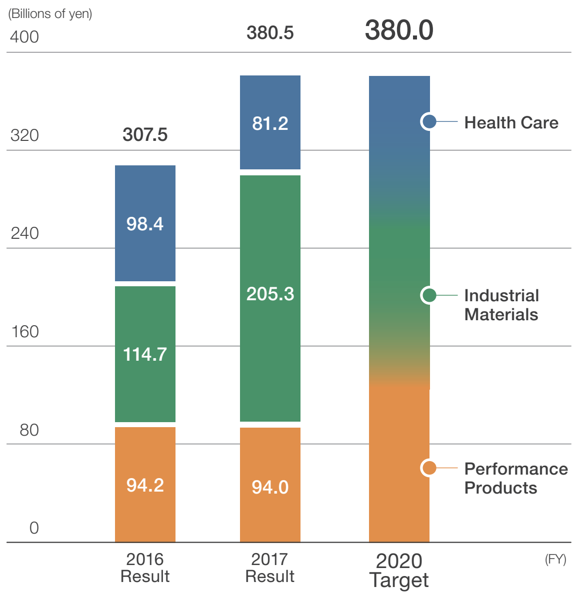
Attain ROE of more than 10% to improve capital efficiency

In FY2017 some numerical targets were achieved earlier than planned

	APTSIS 20 FY2020 Targets	FY2017 Results
Core operating income*	¥380.0 billion	¥380.5 billion
ROS (Core operating income)	8.0%	10.2%
Net income attributable to owners of the parent	¥180.0 billion	¥211.8 billion
ROE	12.0%	17.8%
Net D/E ratio	0.8	0.89

* 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.

Core Operating Income



Resource Allocation

Investment and loans and R&D investment increased from the initial plan

Investment and loans + Capital expenditure

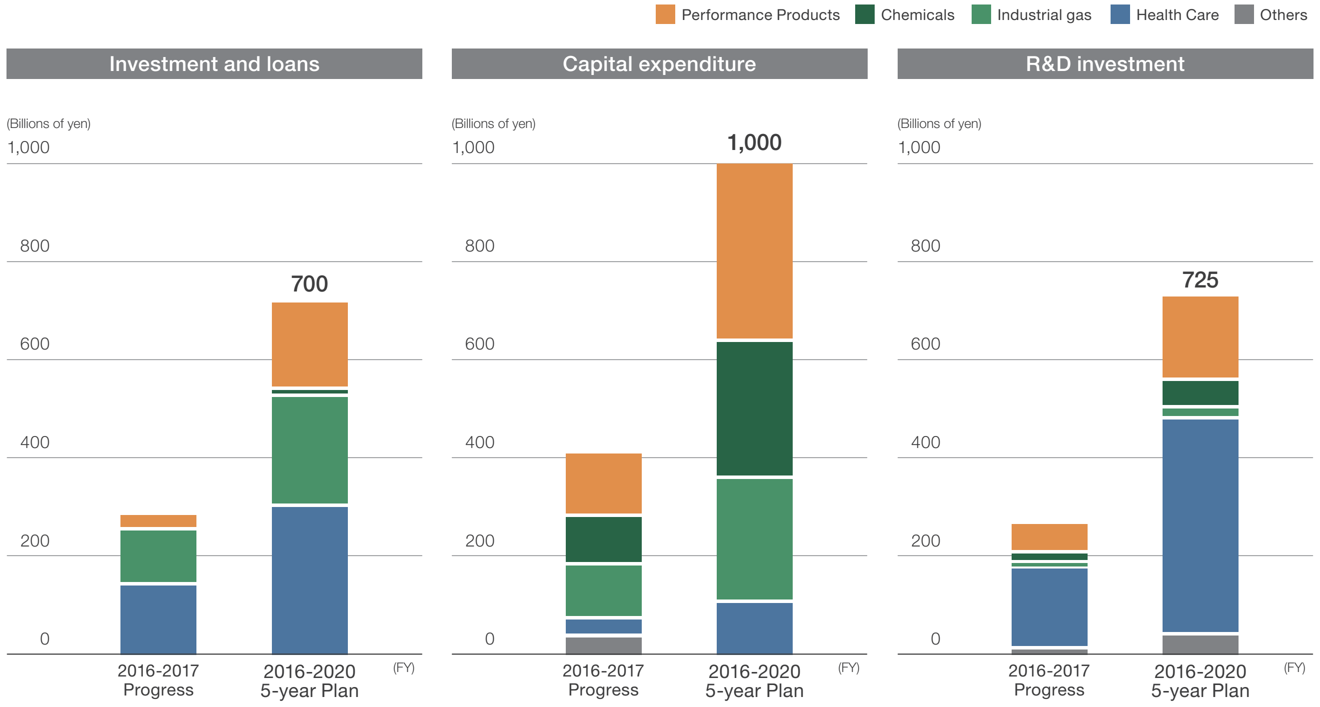
¥1.5 trillion ➔ ¥1.7 trillion

(Increase of ¥200.0 billion, consisting mainly of investment and loans for Performance Products)

R&D investment

¥700.0 billion ➔ ¥725.0 billion

(Increase of ¥25.0 billion, consisting mainly of investment in Performance Products and Health Care)



Key Measures

01 Reinforcement and expansion of profit base by strengthening portfolio management

Relevant Pages P28-P29

- Positioning each operating company and subsidiary based on the indices by business domain
- Optimizing the business portfolio and resource allocations with regular monitoring
- Selection and focus of growth businesses and priority allocation of resources
- Consideration and acceleration of reconstructing businesses equivalent to total sales revenue of ¥300 billion

02 Early realization of synergies from the integration of the three chemical operating companies

Relevant Pages P24-P25

- Established the new-Mitsubishi Chemical Corporation in April 2017 and consolidated operations into 10 business domains
- Selected focus markets aiming to achieve synergies of the integration of ¥50.0 billion by FY2020 (growth through collaboration: ¥35.0 billion + rationalizaition: ¥15.0 billion)

03 Early Commercialization of Seeds of Next-generation Businesses

Relevant Pages P30/P65

- Established Emerging Technology & Business Development Office to promote open innovation
- Create new value through the use of AI and IoT (digital transformation)

04 Acceleration of global expansion

Relevant Pages P25/P32

- Overseas net sales ratio - FY2017 result: 41.6%→FY2020 target: 50%
- MCC established regional headquarters (2017)

Long-Term Management with an Eye to 30 Years into the Future

Striving for the Well-Being of the Whole World

Hitoshi Ochi
Representative Corporate Executive Officer, President and CEO

Hitoshi Ochi, the president, here. Our FY2017 performance was an all-time high of 380.5 billion yen in core operating income (24% increase from the previous period), 17.8% in ROE, and increase in dividends from 20 yen in FY2016 to 32 yen. This is in part due to more favourable market conditions, but personally I am convinced that we would not have been able to accomplish the goal of 380 billion yen, which we put up for FY2020 in the medium-term management plan, so early if not for the closing down of underperforming businesses and M&A structural reforms that we have been undertaking since the founding of the Mitsubishi Chemical Holdings Corporation (MCHC) in 2005.

At the same time, in order to become a company that does not miss out on the accelerating development of technology and that can achieve sustainable growth despite slow global economic growth, we have plenty of challenges to overcome and so a record income should not make us complacent. Without slowing down, we will be doing our very best to achieve the income level of 430 billion yen in core operating income, which we have put up for March 2021.

Becoming a Stronger Holding Company by Increasing Corporate Value in the Mid-to-Long Term

It has been four years since I became president of MCHC, and this April, I stepped down from my concurrent post as president of Mitsubishi Chemical Corporation (MCC) to focus solely on my responsibilities at MCHC. I was well aware of my tasks as president of MCHC on the one hand, thinking about how to increase corporate value for the Group as a whole over the medium to long terms, and as the president of an operating company on the other, managing day-to-day business. Yet with MCC running smoothly now, I decided it was time to put that job aside and focus on strengthening the functions of MCHC as a holding company.

In fact, even though it has only been a few months, my time management has changed drastically. Previously, I had to spend time overseeing daily operations as the president of an operating company, but right now my time is spent on thinking about corporate strategy and measures for the medium to long terms. I feel like I am one step closer to the ideal in terms of increasing the corporate value of the Group as a whole.

What we are aiming for is a strong holding company. In general, I think the role of a holding company is limited to creating suitable business portfolios, IR, financial affairs, corporate governance, and so forth. When MCHC was founded in 2005, we were not able to work out a strong strategic policy as a holding company. Then, up until 2017, we implemented a variety of reforms to strengthen our profile as a holding company, such as selling and closing down businesses worth about 600 billion yen and bringing in businesses on a 1.45 trillion yen scale. Our businesses in the fields of chemistry, industrial gases, pharmaceuticals, and life science showed reasonable growth, and we saw an increase in core operating income from about 130 billion yen in FY2005 to about 380 billion yen in FY2017. In April 2017, we merged three chemical operating companies and founded MCC, laying the groundwork for the coming reforms. In this way, the company's business stage changed, and I think it was a time of many changes in the respective roles of the holding company and the operating companies, which happened against a background of accelerating digital technological and chemical technological development around the world.

Specifically, we had previously divided up responsibilities so that operating companies focused on their own strategies for the next 3–7 years while the MCHC consolidated those efforts and decided on the overall direction. We will change this to a properly implemented system where the MCHC decides on the direction of the Group as a whole with an eye to developments 10–15 years in the future, creating a basic strategic framework that becomes the basis of the operating companies' strategies for the next 3–7 years. It was for this reason that we founded the Emerging Technology and Business Development Office (ETBDO) in 2017, to operate like a think-tank and innovator for corporate strategy.

Message from the President

Realizing that we were at a stage where we must think seriously about the connections between our corporate activities and the SDGs*, we decided to really rethink KAITEKI.
We redefined KAITEKI, which is our goal, as "the sustainable well-being of people, society and our planet Earth."
It contains our wish to realize good health and well-being not only in our company or society, for all humanity and all over the world.

*Sustainable Development Goals

On to the Third Phase of KAITEKI Management

KAITEKI Management aims for sustainable growth and has now reached its third phase. The starting point of KAITEKI Management, its first phase, was Project 10/20 that started in 2006. As part of that project, we kept asking ourselves what role we can play in the world as a chemical company, thinking about where we should be in 10 years and what the world will be like in 20 years. We also identified seven businesses that contribute to sustainable development.
The second phase started around the time of the 2008 financial crisis. Back then, we thought that "CSR is about realizing sustainable development through the core businesses." The Japanese word "kaiteki" means "comfortable" in English, but we decided to stylize it as "KAITEKI" as a way to broaden our perception of the values shared by our company and society (CSV : Creating Shared Value). Moreover, we proposed that KAITEKI Management should be implemented along three axes (MOE: Management of Economics, MOT: Management of Technology, MOS: Management of Sustainability) to spread awareness about how the company is creating value.
And now we have reached the third phase. With the UN's announcement of the SDGs in 2015, the scope of issues requiring solutions by society was expanded from the climate, water, and food to areas including poverty, discrimination, education, and so forth. We had previously been performing materiality assessments to get an overview of stakeholders and company priorities in a matrix format, but realizing that we were at a stage where we must think seriously about the connections between our corporate activities and the SDGs, we decided to really rethink KAITEKI. We redefined KAITEKI, which is our goal, as "the sustainable well-being of people, society and our planet Earth." It contains our wish to realize good health and well-being not only in our company or society, for all humanity and all over the world.

Preparing for the Future

Our management is long-term oriented. Looking ahead 20–30 years, we founded the KAITEKI Institute, Inc. (TKI) in 2009 to think about what our theme is for the next generation (see page 64). We were faced with the task of how to utilize the long-term perspective of the TKI for our short-to-medium term business strategies, but as we were strengthening the strategic functions of the MCHC, for example by establishing the ETBDO, we could create a framework in which the TKI looks 20–30 years into future, the MCHC thinks about ways to innovate in the next 5–20 years, and the operating companies make plans for the next 3–7 years.
When it comes to the digital transformation (see page 66), we invited a CDO (Chief Digital Officer) from outside and started thinking broadly about what the MCHC Group needs. The team consists of inside and outside members, and will be working on how to apply digital shift from a diverse range of perspectives. We have 70–80 themes, but will start by developing and implementing about 10 trial projects. Through the sharing and implementation of digital innovation knowledge centering on younger employees, we are also bringing up new human resources.
Circular economy is another theme that is important to the MCHC Group. In recent years, we have seen the spread of ocean pollution from microplastics and other causes, a problem that is especially serious along the shores of developing countries that lack systems for collecting garbage. Recycling and reuse activities are not a new thing in the industry, but it is our responsibility as a material manufacturer as well as a growth opportunity to create mechanisms for a more substantial recycling society.

Promoting Organizational and Individual "Health Management"

An important policy that forms part of the KAITEKI Management is health management (see page 73). We are making major improvements to our ability to generate income by linking operational effectivization and increased productivity to health assistance and work-style reforms, as well as by enhancing our ability to innovate and compete in business.
We have been implementing employee awareness surveys in the last few years, which has taught us that promoting health and improving workplace communication can increase individual ability and satisfaction as well as vitalize the organization and boost creativity. Work-style reforms across the world tend to focus on overtime work. We monitor working times as well of course, but we also use original KPI, such as indicators for energy, health, and work style.
We are also investing in office environments and welfare facilities to train human resources and improve communication. Investments in human resources count as expenses in the accounts, but I am confident that developing human resources by energizing communication, improving health, and sharing experiences is something that definitely will bear fruit.

Safety and Compliance Are the Foundation of Everything in the Company

Safety and compliance are the foundation of everything in the company. Overlooking those aspects will threaten the company's very survival. In the area of safety, we will definitely not let past experiences go to waste, including the lessons from the 2007 accident at the MCC Kashima Plant. We are working to prevent accidents involving old equipment by making suitable maintenance investments and introducing new technologies.
In the area of compliance, we are constantly monitoring and adapting to the rapid changes taking place across the world, including personal information protection rules in Europe and environmental regulations in China. It is not enough for us to think and act by ourselves. We must work to understand the needs of the times and uphold a global standard. We also cannot stop at simply upholding it, but must engage with it creatively.

Committed to Increasing Corporate Value in the Mid-to-Long Term

The first time I became involved in IR activities was in 2008. I was in the Corporate Strategy Office and assisted the then President Yoshimitsu Kobayashi as he called on international investors. I received many questions about the low profitability of petrochemical and other industries as well as about the incomprehensibility of the "integrated" chemical industry. Nowadays, I get more substantial questions about how we can survive in this age and how we can generate growth organically under the current Medium-Term Management Plan. Investors appreciate the structural reforms that we have conducted as well as the stability and improvements we have achieved in terms of income, but I also feel that they are developing a keener interest in ESG and the SDGs. The dialogs we have with all our stakeholders will continue to be a priority, and it is our ambition to repay your trust by implementing measures for enhancement of medium- to long-term corporate value and facilitate corporate growth. I hope to have your continued support in this.

Dialogue between the President and An Investor

Hitoshi Ochi
Representative Corporate Executive Officer, President and CEO
Mitsubishi Chemical Holdings Corporation

Masanobu Itani
Senior Vice President and Portfolio Manager, Total Return Equities Asia Pacific
GIC Pte Ltd

Aiming for continuous portfolio transformation and the establishment of new business models to achieve sustainable growth

Responding to broadly diversifying marketing needs through rapid decision-making and the formulation/implementation of strategies.

1. Results of FY2017

Itani: You have achieved the goals for FY2020 ahead of schedule (see pages 17 and 19), granting that the core operating income of ¥380.5 billion for FY2017 was attributable to strong market conditions. In hindsight, what do you think the contributing factors were?

Ochi: Our understanding is that three main factors, namely business structure/organizational reforms, improved market conditions and changes in market needs worked in our favor in a synergistic fashion. The MCHC Group has been implementing portfolio transformation for many years to build foundations for growth. As a matter of fact, our management condition has changed since FY2015 (the final year of the previous medium-term management plan).

Concretely speaking, in the Industrial Materials domain, we increased profitability thanks to improved and stabilized global market conditions, as well as the separation of low-profit businesses that we have been undertaking. In particular, the MMA business, in which the MCHC Group has a 40% market share worldwide, had previously been operated by each of multiple Group companies. Today, we have established a system in which optimization is achieved in the implementation of marketing strategies and the operation of facilities as one business on a global scale. As a result, the MMA business increased its profitability significantly in FY2017 on the back of favorable market conditions as well. In addition, in the Performance Products domain, which includes films, high-performance engineering plastics and composites, among other products, we enhanced profitability by actively facilitating globalization and shifting to high value-added products to respond to market needs.

We feel that changes in market needs are working positively in terms of profitability. New social needs are being created because it is possible to store and analyze a large amount of information as a result of scientific and technological progress in a variety of areas. We are in an era in which markets for different products, rather than a market for a particular product, grow simultaneously.

We consider that this situation is a good opportunity for the Group, which, as a general chemical manufacturer, supplies materials to diverse markets including those related to mobility and electronics, creating a business environment in which we can leverage our strengths.

Itani: The petrochemical business, especially MMA, has seen strong growth in profit, and made a remarkable impact on the Group's profitability. That said, however, how do you deal with the risk of market deterioration going forward?

Ochi: In our previous petrochemical business, we attached importance to the capacity and efficiency of production at the upstream stage. What is important today, though, is how we should create value-added products at the downstream stage. The maintenance of the production capacity of materials such as ethylene, propylene and butadiene at the upstream stage depends on the competitiveness of products made from the respective materials at the downstream stage.

We had already consolidated naphtha cracking facilities during the period of the previous medium-term management plan. Accordingly, we do not expect profitability to fluctuate as significantly as it did before, even if market prices decline. We believe that MMA is well positioned to cope with market fluctuations because it has a 40% market share and we have a highly cost competitive proprietary production method called the New Ethylene Method used in the new plant in Saudi Arabia.

2. Measures to achieve targets in the current medium-term management plan (FY2020)

Itani: If you keep restructuring by shrinking capacities, upside potential cannot be fully captured if the market starts to pick up. However, it appears you have been able to enhance the earnings through a good mix of restructuring and growth investments. Given the excellent performance, you have increased the target of core operating income in the medium-term, which was ¥380 billion, by ¥50 billion to ¥430 billion. What measures are you going to take to achieve this target?

Ochi: For one thing, we expect that the existing businesses will achieve organic growth more strongly than they did previously thanks to the effects of the integration of the three chemical operating companies. Specifically, we believe that profitability will be enhanced through a faster decision-making process resulting from the consolidation of business units and the optimization of existing products/services. To facilitate

Dialogue between the President and An Investor

In addition to facilitating growth acceleration through M&As, we will make growth investments for the utilization of digital technologies and collaboration with start-ups, among other objectives, with an eye on the development of next-generation businesses and the improvement of the efficiency in core business such as manufacturing technologies, research and development, and human resource development.

orchestration between the companies affiliated with MCHC, we have established a system in which the Industrial Gas and Performance Products domains can be operated collaboratively to capture business opportunities in as many areas as possible for when the market for semiconductor businesses is vitalized in, for example, China, among other countries.
Meanwhile, with respect to the development of overseas businesses, we aim to cultivate markets on an area-by-area basis.
This involves the establishment of regional headquarters (RHQ) and the implementation of M&As as important measures. Our RHQ, or organizations in which marketing and human resources functions are integrated to address the needs of the respective markets such as Europe, the United States and Asia, are functioning effectively to make decisions and implement strategies rapidly and also apply such strategies to one another among markets. In addition, from the perspective of responses to diversifying market needs that I touched on at the beginning, it is becoming more important strategically to ensure that different businesses, for example, those for high-performance engineering plastics and carbon fibers, are connected to each other to address customer needs.
Moreover, we implement measures for streamlining operation and improving production efficiency to achieve cost savings of around ¥15 billion each year. We are aiming to hit the new target of ¥430 billion through these measures.
Itani: You expect to achieve your additional medium-term management target of ¥50 billion through the orchestration, growth and streamlining of the three chemical operating companies. What is the progress of these measures?
Ochi: Of ¥50 billion, approximately ¥20 billion is within reach in monetary terms. With regard to portfolio transformation, we have almost completed the process of classifying businesses into core or non-core businesses. ROIC targets have been established in each domain, and they are being monitored. In addition, the operating companies are in the process of reducing the number of affiliate companies by 25%, from the original 750 to 760.

3. Domains for which investments are made for growth and research and development

Itani: In terms of your investment plan for the period of the medium-term management plan, you have increased the upper limits for investments and loans and capital expenditures by ¥200 billion compared to the initial plan, to ¥1.7 trillion, while at the same time increasing research and development expenses by ¥25 billion from the initially planned ¥700 billion. How do you allocate growth investments going forward? For example, as shown in the term “orchestration” that you have been using so far, you are successfully developing new business domains by connecting different product lines appropriately. From this perspective, how do you make the most of M&As going forward?
Ochi: We aim to accelerate growth investments mainly in the Performance Products domain. When Mitsubishi Chemical Corporation was established in 2017, we integrated the business units into 10 through restructuring. Still, we think it is difficult to achieve growth solely with the existing businesses. Accordingly, we will adopt M&As actively to acquire new markets and technologies. In the Healthcare domain, M&As can be used as means of adding new functions from the perspective of developing the healthcare business as a whole, not to mention the pharmaceutical business in which we have been accumulating expertise.
Incidentally, the acquisition of the European business (acquisition price: 5.0 billion euro/ approx. ¥643.8 billion, stock transfer scheduled for November 2018) by the Industrial Gas business (Taiyo Nippon Sanso Corporation), which was announced on July 5, 2018, was a project that exceeded the initially expected limit. Even so, by acquiring a highly profitable business that enjoys a certain market share in Europe, an untapped market for our industrial gas business, we will move forward with the efforts to globalize our industrial gas business and increase profitability through the expansion of marketing functions, among other measures.
We also expect that synergies will be created through acquisitions in other businesses of MCHC besides the industrial gas business, such as initiatives for increasing sales of semiconductor-related products in the Performance Products domain by utilizing the sales channels of special gases and other resources.
Itani: In conjunction with the healthcare business, globally speaking, more chemical companies appear to be separating their pharmaceutical businesses. Considering these trends, I think you are taking a rather unique approach because you are developing a healthcare business centered around the pharmaceutical business.
Ochi: The MCHC Group’s pharmaceutical business will address unmet medical needs with a focus on the central nervous and autoimmune systems, which are, in a sense, special disease areas. These areas will continue to be important from a business perspective going forward.
Moreover, considering a range of health-related challenges including employees’ workstyles, in addition to those related to the aging population and social welfare, we should enhance services for the prevention of diseases and the maintenance of health as well as those associated with the treatment of any diseases that develop. In the long term, we hope to create a health system that connects pharmaceuticals,

medical fronts, individuals and the organizations in which they work.
Itani: So, based on this concept, you have positioned healthcare solutions as a next-generation business. We have heard that you recently commenced an exploratory clinical test for Muse cells that are used in regenerative medicine.
Ochi: Regenerative medicine is an area in which we will facilitate research and development going forward. At this point in time, we aim to launch Muse cells, on which the Life Science Institute is working, onto the market in 2021 (see pages 15 and 16).
In addition, with respect to the Performance Products domain, materials used in medical fronts fall under the category of future growth areas. We will promote medical materials such as capsules for pharmaceuticals, transfusion bags and high-performance engineering plastics for artificial joints, among other items.
Itani: On the other hand, you are working to achieve growth investment through measures such as the utilization of digital technologies and alliances with start-up companies. How do you leverage these approaches?
Ochi: This area is led by the newly established Emerging Technology and Business Development Office, which has two main missions: playing the role as an accelerator for the development of next-generation businesses and streamlining corporate platforms for production technologies, research and development and human resources development. The utilization of digital technologies is actually a step that will lead to health management. We will be able to secure the safety of workers on the factory floor, reduce routine work such as monthly analyses, and improve workers’ productivity. From the aspect of human resources development, we are considering the establishment of communication systems and knowledge-sharing systems. We consider these measures to be investments for the future, ensuring that the MCHC Group can establish new business models to sustain growth with society under the KAITEKI vision from a long-term perspective.

4. Shareholder returns

Itani: Lastly, I would like to ask you about shareholder returns. Could you tell us about the future outlook for shareholder returns, including the purpose of the acquisition of treasury stock of approximately ¥20 billion that you implemented in May and June 2018?
Ochi: In conjunction with returns to shareholders, our basic stance is to pay dividends stably while aiming for a consolidated payout ratio of 30% on a medium-term basis, factoring in an appropriate balance between investment for growth and efforts to improve the financial position.
We continued to achieve favorable financial results in FY2016 and 2017. However, we must calmly ascertain the extent to which profitability increased as a result of the actual growth of businesses because such results were partly due to the impacts from a temporary decline in tax expenses, as well as the market prices of certain products including MMA that remained at such high levels that we had not seen over the past years. Taking these factors comprehensively into account, we have decided to increase the dividend per share for FY2017 by ¥12, to ¥32. In addition, we carried out the acquisition of treasury stock amounting to ¥20 billion. Through measures such as these, we are striving to enhance shareholder returns.

Message from the CFO

Driving growth investments by continuously transforming portfolios and improving capital efficiency

Hidefumi Date
Managing Corporate Executive Officer and Chief Financial Officer

Progress of the Medium-Term Management Plan, *APTSIS 20* (results of FY2017 and forecasts of FY2018)

FY2017 results

In FY2017, sales continued to increase overall, especially in the Performance Products domain, while market prices remained strong in general for petrochemicals such as MMA in the Industrial Materials domain. In this largely favorable business environment, revenue increased by ¥348.3 billion year on year, to ¥3,724.4 billion, and core operating income rose by ¥73.0 billion year on year, to ¥380.5 billion, surpassing the previous record highs. ROS came to 10.2%. Net profit attributable to owners of the parent rose significantly by ¥55.5 billion year on year, to ¥211.8 billion, reflecting decreased tax expenses attributable mainly to the reversal of deferred tax liabilities resulting from the reduction of the U.S. federal corporate tax rate.

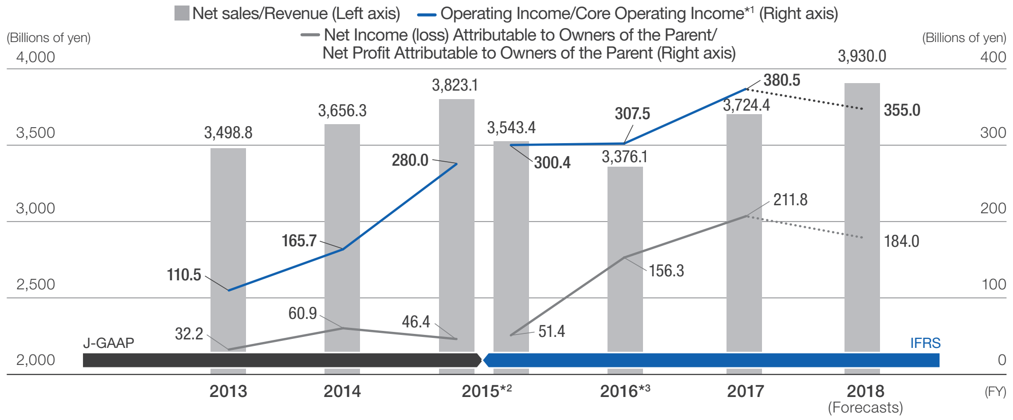
With respect to the key performance indicators of *APTSIS 20*, ROE stood at 17.8%, up 2.7% year on year, the net D/E ratio was 0.89 times, or improved 0.17 year on year, and the ratio of equity attributable to owners of the parent came to 27.4%, or up 2.9% year on year, all showing improvements compared to the previous year. On the cash flow side, despite capital expenditures amounting to ¥228.3 billion, which surpassed depreciation by ¥49.4 billion, and investments amounting to ¥150.2 billion, we secured free cash flow of ¥71.3 billion in real terms, thereby keeping net interest-bearing debt at almost the same level as the previous year.

FY2018 forecasts

As we announced at the beginning of this period, for FY2018, revenue, core operating income and net profit attributable to owners of the parent are expected to be ¥3,930.0 billion, or up ¥205.6 billion year on year, ¥355.0 billion, or down ¥25.5 billion year on year, and ¥184.0 billion, or down ¥27.8 billion year on year, respectively. Margins are expected to decline in the Industrial Materials and Performance Products domains due to rising prices of raw materials for some products, while the Health Care domain faces the impact of NHI drug price revisions and an increase in research and development expenses. Accordingly, we will continue to work on measures to expand sales and reduce costs. In addition, by controlling working capital, we will ensure that net cash provided by operating activities remains at the same level as FY2017.

In terms of key performance indicators for FY2018, our initial expectations are ROS of 9.0%, ROE of 13.5% and net D/E ratio of slightly less than 0.8 times, all surpassing the goals set out in the Medium-Term Management Plan.

Changes in Consolidated Performance



*1. To obtain a clear picture of ordinarily generated operating income/loss, "core operating income" is presented by excluding expenses associated with structural reforms and income/loss attributable to losses from extraordinary factors such as disasters. Core operating income is used as an indicator for external explanations and business management.
*2, 3. Figures pertaining to non-continuing businesses are excluded in IFRS-based FY2015 results and FY2016.

Progress of financial strategies in *APTSIS 20*

Moving into the accomplishment stage of a stable and robust financial base

In the *APTSIS 20* medium-term management plan for the period from FY2016 to FY2020, we have established ROE of 12%, core operating income of ¥380.0 billion and net profit attributable to owners of the parent of ¥180.0 billion as the main goals in FY2020. Even so, we are seeking to achieve ROE of at least 10% continuously in the fiscal years before FY2020 as well.

Not only by investing in and developing the Performance Products and Health Care domains, both of which contribute high growth and profitability, but also by demonstrating business synergies through the integration of three chemical operating companies and improving operational efficiency by means of workstyle reforms, we will raise profitability and meet the goals laid out in *APTSIS 20*, while at the same time taking into account the possibility of achieving the core operating income of ¥430.0 billion. We will use cash earned from operations to make investments for sustainable growth going forward, improve the financial base and pay appropriate and stable shareholder returns in a well-balanced fashion.

Under *APTSIS 20*, we are in a position to generate cash that is expected to exceed the initial plan by more than ¥200 billion as a result of improved performance and financial structure reforms such as the improvement of asset efficiency. Factoring in improved cash generating ability, we have decided to inject ¥200 billion in addition to the initially projected amount for capital expenditure and M&A-based growth investments, mainly with respect to performance products, and spend approximately ¥1,700 billion in five years. Furthermore, with regard to investments in research and development, we have decided to inject approximately ¥25 billion in addition to the initially expected amount, mainly into performance and health care products, and accelerate their growth. On the other hand, we have managed to meet the initially established goals of 30% for the ratio of equity attributable to owners of the parent and 0.8 times for the net D/E ratio, which are the specific goals for the improvement of financial position.

That being said, the acquisition of the European industrial gas business announced in July 2018 (share transfer is expected to take effect in November 2018) has turned out to be an investment that has exceeded the initially projected level. We are expecting that financial indicators will be affected temporarily due to this investment. That said, we will continue to achieve further growth and improve profitability while seeking to create a stable and robust financial base and work to achieve the goals as soon as possible.

Strengthening portfolio management

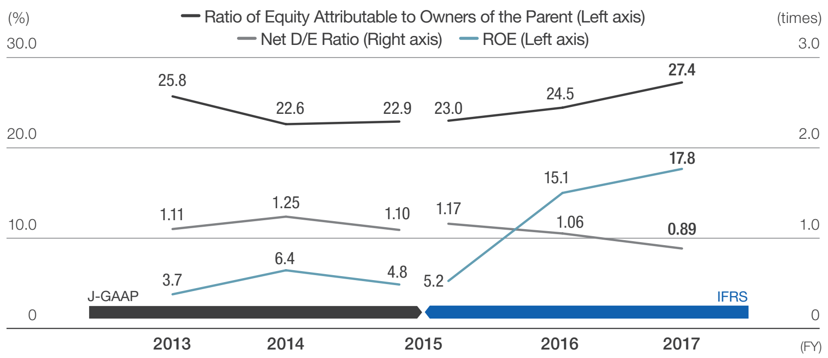
To implement the medium-term management plan effectively, we have clarified the business relationship between MCHC and the operating companies by defining the role of the former as management and the latter as execution, respectively, and have delegated a large amount of authority to the operating companies so that management is undertaken more rapidly.

MCHC is responsible for the preparation and management of business strategies and medium- to long-term plans, and based on them, it decides how resources should best be allocated. To allocate resources as appropriately as possible, we are seeking to strengthen portfolio management by reclassifying operating and affiliated companies into four types: next-generation businesses, growth businesses, cash-generating businesses and businesses to be restructured on the four-quadrant matrix, based on domain-specific indicators, with a focus on management indicators that match the respective business domains such as growth rate, ROS and ROIC. Any low-profit business, not to mention unprofitable business, is obviously subject to review if its ROIC falls below the weighted average capital cost (WACC). We conduct reviews constantly, taking into consideration not only numerical aspects but also our technological advantages and verify business model as well. So far, total revenue stands at approximately ¥300 billion for businesses to be restructured that are under review, factoring in a range of possibilities ranging from alliances with other companies to withdrawal.

We perform numerical checks and evaluations biannually with regard to the progress of action and investment plans under the medium-term management plan, as well as management indicators. Any unachieved targets will result in a review of the portfolio and resource allocation after holding discussions on the necessity of concrete measures including structural reforms.

As a result of these initiatives, the domain-specific ROIC for FY2017 stood at 8.5% for the Performance Products domain, 9.7% for

Changes in Consolidated Financial Indicators



Goal for the end of FY2020

Ratio of Equity Attributable to Owners of the Parent (as of the end of FY2020)

30% (end of FY2017: 27.4%)

* Shareholders' Equity Ratio by the Japanese accounting standard.

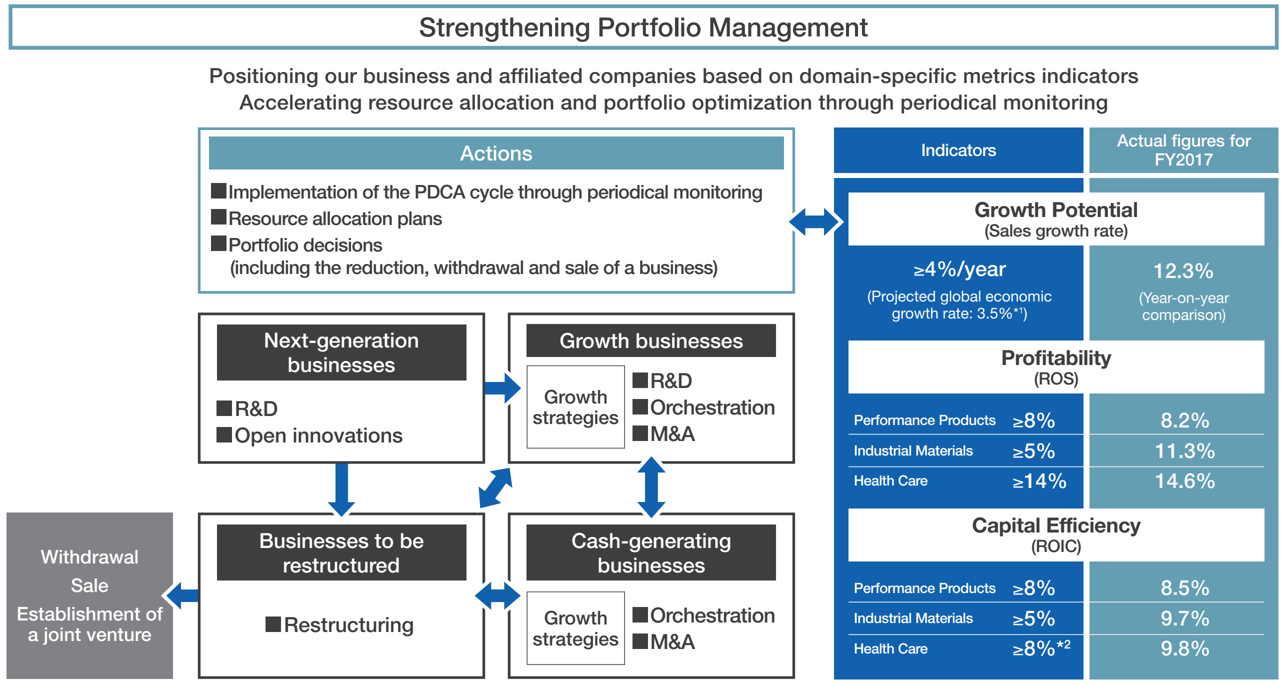
Net D/E Ratio (as of the end of FY2020)

0.8 Times (end of FY2017: 0.89 times) the Industrial Materials domain and 9.8% for the Health Care domain, exceeding the established capital efficiency indicators of 8%, 5% and 8% for the Performance Products domain, Industrial Materials domain and Health Care domain, respectively.

Improving capital efficiency not only in Japan but also on a global basis

We established a tri-polar system including Japan and the United States by introducing the Cash Management System (CMS) in Europe. The system contributed to the improvement of cash efficiency by ¥12.6 billion during the two-year period that ended in FY2017. Moving into FY2018, we have already launched the CMS for the U.S. dollar in Asia. By FY2020, we will establish a system in which multiple Asian currencies are centrally managed, and aim to improve efficiency through globally centralized management in the four regions including Asia and further strengthen the governance of the Group including overseas subsidiaries, utilizing the CMS.

In addition, we are working to reduce Cash Conversion Cycles (CCC) with the goal of a 10% reduction, or from approximately 99 days to approximately 89 days compared to FY2016, by the final year of the medium-term management plan. In FY2017, we were able to improve the cycle by 1.5% on a year-on-year comparison, excluding the impacts of periodic turn around and the increased costs of raw materials and products. We are also working to sell off assets with less necessity of holding by periodically examining the rationale for such holdings, and striving to further improve capital efficiency.



*1. Average annual growth forecast from 2016 to 2020 by IMF *2. Calculated by excluding cash and deposits

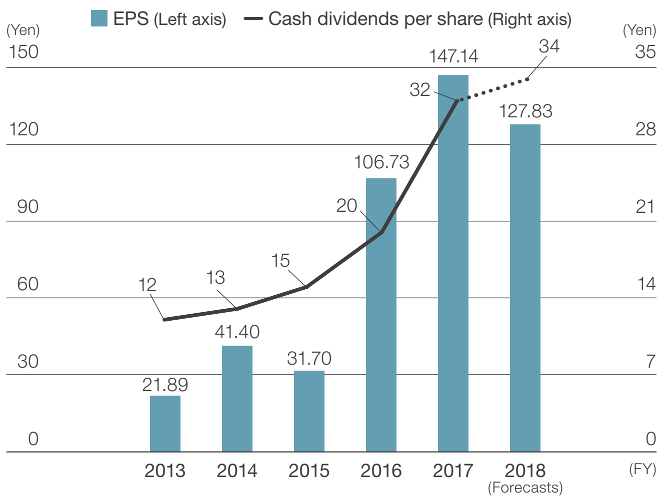
Basic policy on shareholder returns

We aim to improve shareholder value by enhancing corporate value. In conjunction with shareholder returns, we aim to achieve a consolidated dividend payout ratio of 30% as the medium-term level, while at the same time maintaining an appropriate balance between investments in growth businesses and efforts to strengthen the financial position. We also implement dividend payments in consideration of stability. With respect to dividends per share for FY2017, we paid an interim dividend of ¥15 and a year-end dividend of ¥17, or a full-year dividend of ¥32 (up ¥12 year on year). For FY2018, we plan to pay ¥17 for the interim and year-end dividends per share, respectively, which comes to ¥34 for the full year (up ¥2 year on year), although we expect a decrease in profit year on year.

As we announced on May 10, 2018, we acquired treasury stock amounting to ¥20 billion in total during the acquisition period that ended on June 1 to implement flexible capital policies in response to changes in the business environment. While we consider dividend payments to be the basic concept of shareholder returns, we implemented shareholder returns by taking advantage of the temporary decline in tax expenses in both FY2016 and FY2017.

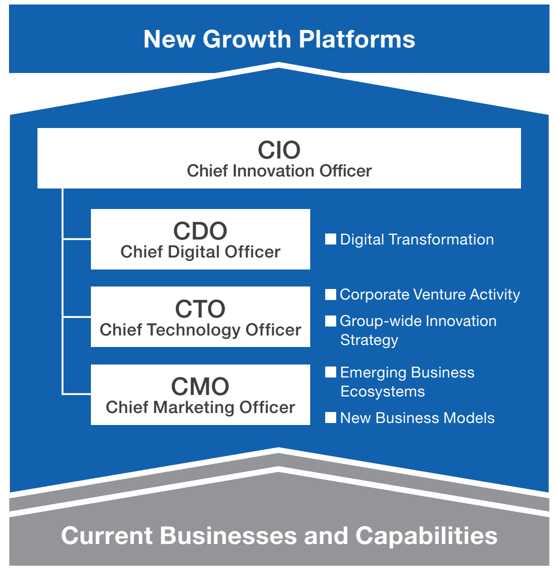
Shareholder Returns

■Aiming to improve shareholder value by enhancing corporate value
■A dividend policy in consideration of maintaining a balance between growth investments and efforts to improve the financial structure
·Aiming for a consolidated dividend payout ratio of 30% on a medium-term basis
·Implementation of stable dividend payments



Creating new innovation platforms with a global perspective to expand MCHC beyond the trajectory of our current businesses

Larry Meixner
Managing Corporate Executive Officer
Chief Innovation Officer



One year ago, the Emerging Technology and Business Development Office (ETBDO) was established to expand the innovation strength of MCHC Group. Recognizing that each Operating Company must focus on its own growth, we add value to the overall Group portfolio in three main ways. First, we develop new opportunities for expansion beyond the trajectory of our current businesses. Second, we introduce new platform capabilities that enhance growth across multiple business units. Third, we ensure MCHC Group maintains a global focus by promoting new technologies, business models, and methods from beyond Japan.

Our digital transformation strategy rests on two key elements. Initial efforts focus on improving operational excellence across MCHC Group, deploying advanced digital technologies to leverage the wealth of data resident in our Operating Companies. We are already generating positive results in diverse areas, including knowledge inheritance, prediction of process anomalies, and quality control. Building on these initial successes, we will develop new business models to transform our current businesses for the digital age.

To increase our exposure to the global flow of ideas, we launched a new Corporate Venture Capital fund and U.S. subsidiary, Diamond Edge Ventures, Inc. Our new U.S. office and experienced Silicon Valley-based team will drive collaboration with and investment in select startup companies. This will provide an essential element of business strategy to complement our existing R&D and M&A activities. We aim primarily to exploit disruptive innovation to create new growth pillars for MCHC Group, but the insights gained will also support the efforts of our Group Companies to expand their business. With the autonomy and agility to move “at startup speed”, we are creating a new platform capability for MCHC Group.

We are also taking a market-focused approach, probing new ecosystems that emerge from societal and technological shifts. All our efforts reflect strong collaborations with business planning, R&D, and operating teams throughout MCHC Group.

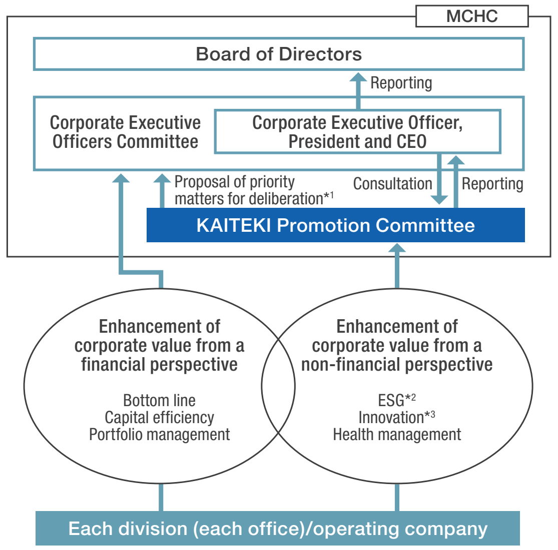
Beyond MCHC Group, I am honored to serve as the first-ever foreign Executive Committee Member of the Council on Competitiveness Nippon (COCN). I also direct MCHC’s participation as an early-stage partner of the World Economic Forum Center for the Fourth Industrial Revolution. Through such interactions, we continually broaden our horizons and drive innovation across MCHC Group.

Message from the CSO

With a focus on pursuit of sustainability, we will maximize KAITEKI value and aim for sustainable corporate growth

Yoshihiro Ikegawa
Managing Corporate Executive Officer
Chief Sustainability Officer

The MCHC Group's value creation approach 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.

Environmental and social issues have been widely recognized in recent years. With developments of such as the adoption of the UN Sustainable Development Goals (SDGs) and the entry into force of the Paris Agreement, the goal to solve global agendas together cohesively in the entire earth has come to be shared, and there has been growing demand for corporate stance and corporate activities to address these issues. Since 2007, the MCHC Group has adopted the concept of KAITEKI and defined its corporate value (KAITEKI value) as to continue to provide solutions for the issues of future society. Furthermore, the group aims to realize the sustainable well-being of people, society, and our planet Earth through its corporate activities. This forward-looking approach is consistent with the movement of the international communities as described above and we are committed to further developing Management of Sustainability (MOS) to maximize KAITEKI value.

The MCHC Group has established MOS Indices to steadily promote initiatives aimed at improving sustainability. For example, we have adopted goals such as the reduction of environmental impact, promotion of energy conservation, promotion of renewable energy use, and expansion of product lines contributing to reduction of GHG emissions as MOS Indices to address environmental issues, and we will continue to work on achieving these goals. Meanwhile, we will tackle issues related to the company and its organizational structure to earn greater trust from society. We will maintain stable production and stable supply by preventing accidents and injuries, and we will also strengthen engagement through communication, enabling us to work with our business partners to solve various issues (see pages 69 to 72).

In addition, the MCHC Group considers "people" to be both the driving force for sustainable growth of society and companies and one of its most important management resources, and we have launched KAITEKI Health and Productivity Management (see pages 73 and 74).

In FY2017, we were highly recognized for our efforts, including being selected as a member of the global Dow Jones Sustainability World Index and as one of the excellent companies in the Nikkei Smart Work Management Survey. I believe these evaluations reflect public understanding of the fact that our initiatives over the past 10 years and the fruits of our efforts are indispensable to a society which is facing a myriad of issues.

The MCHC Group recently reorganized its philosophy system including its mission to further strengthen the KAITEKI approach both in Japan and on a global level (see page 10). We also began examining formulating a medium-to long-term vision for 2050, with contribution to the sustainability for people, society and our planet Earth as the central theme. This medium- to long-term vision will clarify our 2030 sustainability targets and indices, and we plan to reflect these in our next medium-term management plan and subsequent medium-term management plans.

Moving forward, we will continue orchestrating with our stakeholders to accelerate the cycle for enhancing corporate value (see pages 9 and 10, The MCHC Group's Value Creation Approach) and make steady progress towards the realization of KAITEKI.

Mitsubishi Chemical Top Message

Aims of Establishment of Mitsubishi Chemical and Effects of Integration

Masayuki Waga
Representative Director,
President and CEO,
Mitsubishi Chemical Corporation

Priority initiatives to enhance corporate value

1	**Safe and stable operations** Mechanization of dangerous work and reduction of workload through the utilization of AI, IoT, robotics, etc.
2	**Enhanced profitability** Insistence of every single employee on profitability as source of corporate vitality
3	**Aiming for a truly global company** Promotion of two-way globalization to strengthen the MCC Group's unity
4	**Sales reforms** Centralization of sales information from across business departments and building multi-faceted relationships with customers encompassing all levels including management

Mitsubishi Chemical Corporation (MCC) was formed in April 2017 through the integration of the former Mitsubishi Chemical, Mitsubishi Plastics and Mitsubishi Rayon. The decision to integrate the companies was based on the judgment that, with new science and technology such as AI, IoT, robotics and regenerative medicine developing at a dizzying pace, and with society undergoing dramatic changes, it is necessary to build a framework to maximize the three companies' management resources and quickly adapt to these changes. I became the president in April 2018, as MCC entered its second year, and when I reflect on the newly formed MCC, I feel that, as a result of the integration of the three companies with their diverse human resources, technologies and business flows, the range of options we are now able to offer to customers is much broader. At the same time, the removal of corporate barriers has made it possible for different departments to share information about interconnected business partners and markets, while it has also been beneficial in terms of assessing the direction for research and development. Meanwhile, in its overseas operations, MCC established regional headquarters in the United States, Europe, China, and the Asia Pacific and focused on strengthening its overseas business base, including its marketing capabilities in each region.

I intend to make full use of the wide range of technologies, business partners, market information and other resources gained through the integration of the three companies and to ensure that MCC achieves sustainable growth as an integrated chemical company which provides materials to meet customers' diverse needs. It goes without saying that we will focus first and foremost on safe and stable operations, and it is also essential to strengthen our sales capabilities. Based on the notion that "customers have answers," we will deal strategically with our customers, building multi-faceted relationships encompassing all levels including management and sharing sales information across business departments.

As a company, it is only natural for us to endeavor to improve profitability and we have set ROS (ratio of core operating income to revenue) and ROIC (return on invested capital) as performance indicators. However, in my view, the important question is whether the world considers our products necessary and whether we deliver a level of craftsmanship only we can deliver. We will, therefore, judge continuity of businesses based not only on economic viability but also on its contribution to the world and technology. I believe that this approach is in keeping with the KAITEKI Management practiced by the MCHC Group to which MCC belongs and is also along the same lines as the SDGs and ESG activities companies are currently required to undertake. On top of this, true globalization is also a must. Many Japanese companies have aimed to become global companies in the past, but it seems to me that this has been nothing more than a one-way process whereby Japanese companies or Japanese people learn about foreign languages, cultures and business. In addition to this aspect of globalization, I would like to give the MCC Group employees who work overseas the opportunity to learn Japanese and experience life in Japan, thereby promoting two-way globalization and strengthening the MCC Group's unity.

The MCHC Group consists of operating companies that operate in diverse fields ranging from industrial gas to pharmaceuticals and life sciences. MCC will also actively focus on creating synergies through orchestration with these Group companies and contribute to enhancing the corporate value of the MCHC Group.

Management Structure

MCHC has chosen to be a company with a nominating committee, etc., as a means to enhance management transparency and openness, to strengthen supervisory functions, and to improve management agility through prompter decision-making. Accordingly, the Board of Directors and the three committees—the Nominating Committee, Audit Committee and Compensation Committee—primarily undertake management supervision while corporate executive officers make business decisions and are in charge of business execution.

The 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 the 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.

Corporate executive officers

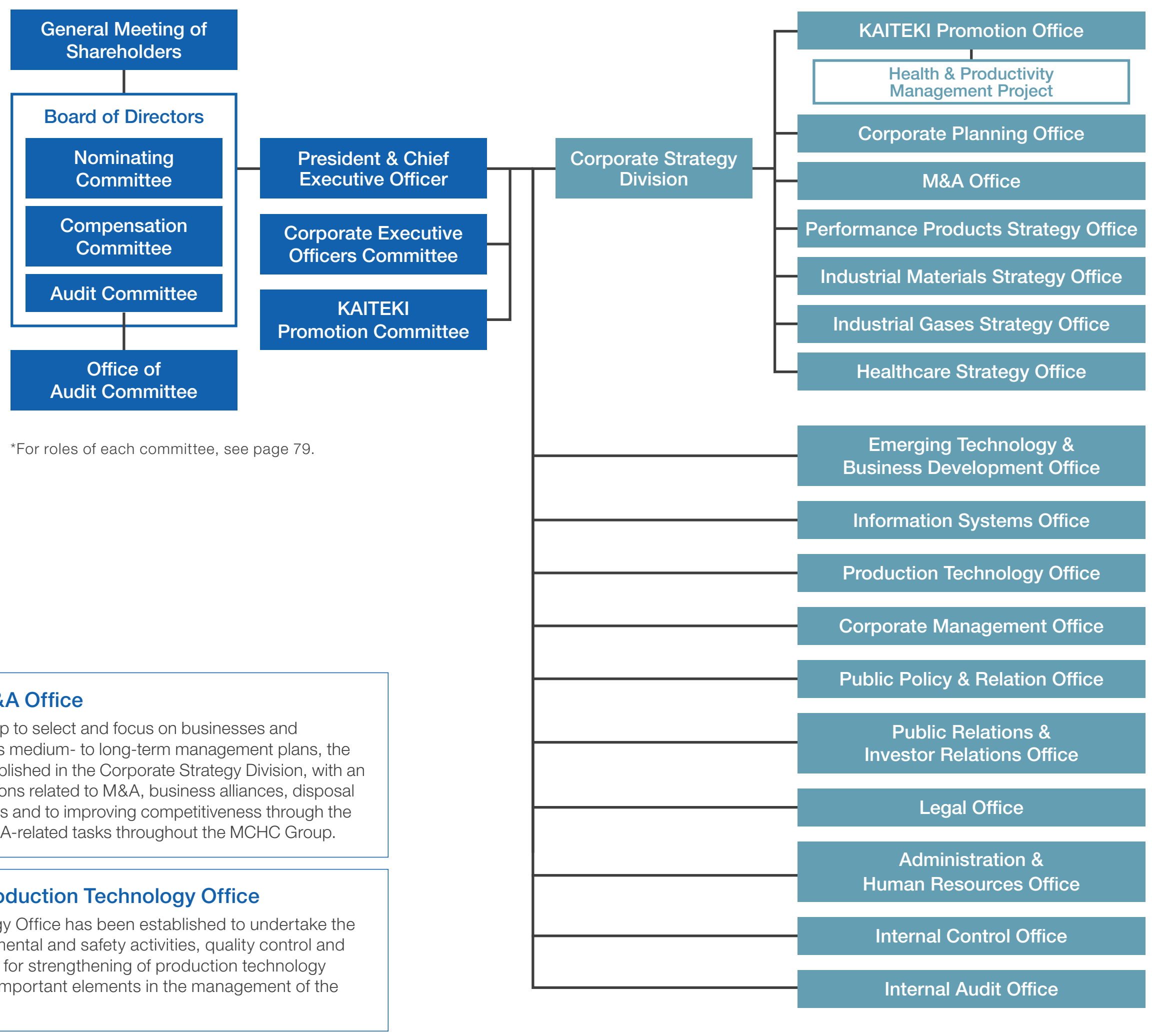
Corporate executive officers make decisions regarding business execution and take responsibility for business operations in accordance with the basic management policies determined by the Board of Directors. Important matters concerning the management of the MCHC Group are resolved at the Corporate Executive Officers Committee, a council-format body comprising 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 under which decisions are made in an appropriate and efficient manner.

Corporate Executive Officers Committee

The Corporate Executive Officers Committee consists of all corporate executive officers. In addition to deliberating and resolving important matters concerning the management of MCHC and the MCHC Group, the committee monitors MCHC Group's businesses in accordance with the basic management policies.

Related Articles → Corporate Governance (see pages 77 to 80)

Management and Execution Structure



*For roles of each committee, see page 79.

Establishment of M&A Office

To enable the MCHC Group to select and focus on businesses and accelerate growth under its medium- to long-term management plans, the M&A Office has been established in the Corporate Strategy Division, with an eye to bolstering the functions related to M&A, business alliances, disposal of business and other areas and to improving competitiveness through the provision of support to M&A-related tasks throughout the MCHC Group.

Establishment of Production Technology Office

The Production Technology Office has been established to undertake the role of promoting environmental and safety activities, quality control and formulating group policies for strengthening of production technology capabilities, as these are important elements in the management of the MCHC Group.

Message from the Chairperson

Working toward the realization of a sustainable society and the enhancement of corporate value

Yoshimitsu Kobayashi
Chairperson

1. Review of FY2017

For the last three years since 2015, when MCHC transitioned to a company with a nominating committee, etc., we have been taking steps to improve the effectiveness of the Board of Directors by defining its roles to be the formulation of basic management policies and supervision of all aspects of corporate management, while introducing independent and diverse viewpoints of Outside Directors. The Board of Directors met 10 times in FY2017, holding rigorous discussions on monitoring of progress in the medium-term management plan and investment in future growth, among other topics.

2. Seeking Further Improvement

The business environment surrounding the MCHC Group has been changing rapidly in recent years, reflecting increasing globalization and evolving innovative science and technology. This in turn has been aggravating environmental and social problems and compounding management issues. For the MCHC Group to achieve sustained growth in these circumstances, it is essential to make accurate management judgments about the future and put in place a system capable of adapting to changes in the management environment and risks. The Board of Directors will be required to support appropriate risk-taking by the management execution side and institute highly effective supervision.

In FY2017, the Board of Directors pursued initiatives such as requiring important issues that are reported to the Corporate Executive Officers Committee for deliberation to be reported to the Board of Directors, based on the theme of reducing information asymmetry between Directors and Outside Directors. In addition, we invited an attorney specializing in corporate governance to provide Board members with an opportunity to discuss the best form of the Company's Board of Directors and roles of Outside Directors. Moving forward, we will work to improve materials for Board meetings and explanation methods so as to better facilitate meaningful discussions among the diverse members of the Board. Moreover, we will encourage lively discussions on medium- to long-term strategies, group governance and other themes through the use of the Outside Director Liaison Committee.

3. Aiming for Realizing of KAITEKI

The MCHC Group has heralded the vision "Realizing of KAITEKI"; namely the contribution to the establishment of a sustainable society by resolving environmental and social problems. Placing the pursuit of economic and capital efficiency, pursuit of innovation, and improvement of sustainability at the core of the Group's management and believing that our corporate value is the total sum of the value generated through corporate activities in line with these three axes, we promote KAITEKI management to further improve our corporate value since April 2011.

Meanwhile, attention is increasingly focused on the elements of ESG (environment, social and governance), which is non-financial information, as factors for measuring corporate value, in addition to financial information. On the corporate side, there is a growing move toward incorporating SDGs (Sustainable Development Goals advocated by the United Nation) in their management strategies to use them as business opportunities.

What the MCHC Group has sought to deliver is in sync with what society is demanding, and in response, we will need to increase our power of information transmission to promote greater understanding of KAITEKI management. The Board of Directors will continue to hold proactive discussions with President Ochi and others on the management execution side, and will support KAITEKI management to further enhance corporate value.

Directors

Directors

(As of June 26, 2018)

- ■ 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 (until Mar. 2018)
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
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)
Apr. 2018 Director of the Board, MCC (current)
Jun. 2018 Director of the Board, TNSC (current)

Director of the Board, Managing Corporate Executive Officer
Ken Fujiwara
●

Apr. 1984 Joined Mitsubishi Chemical Industries Limited
Apr. 2015 Executive Officer, MCHC
Apr. 2017 Executive Officer, MCC (until Mar. 2018)
Apr. 2018 Managing Corporate Executive Officer, MCHC (current)
Jun. 2018 Director of the Board, Managing Corporate Executive Officer, MCHC (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 of the Board, MCHC (current)
Apr. 2015 Professor, Graduate School of Innovation Studies (currently Graduate School of Management), 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 of the Board, 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 of the Board, 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 (until Mar. 2018)
Oct. 2013 Director, Center for Promotion of Educational Innovation Gender Equality Promotion Office, Shibaura Institute of Technology (until Mar. 2018)
Jun. 2015 Outside Director of the Board, MCHC (current)
Apr. 2018 Visiting Professor, Graduate School of Engineering Management, Shibaura Institute of Technology (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 of the Board, MCHC (current)
May 2017 Honorary Executive Advisor, IBM Japan, Ltd. (current)

Dialog between the Director and Outside Directors

Roles of the Audit Committee for realizing KAITEKI

For a company to grow sustainably and enhance its corporate value in the medium- to long-term, not only firm decision-making by the management, but the development of a supportive risk management system is required.
In this dialog, Chairperson of the Audit Committee Umeha listened extensively to Outside Directors Ito and Watanabe, who are also Audit Committee members, about the roles of the Audit Committee, risk management and compliance.

Director
(Chairperson of the Audit Committee)
Yoshihiro Umeha
×
Outside Director
(Audit Committee Member)
Taigi Ito

Is the concept of KAITEKI reflected and realized in the course of business execution? Confirming this is one of the goals of the audits by the Audit Committee.

Umeha I would like to start by focusing on the roles of audits by the Audit Committee for the MCHC Group, which has set the realizing KAITEKI as its vision. The concept of KAITEKI is the foundation of our business execution and I think we always need to consider it while taking measures to improve the quality of our audits.

Ito With respect to the audits by the Audit Committee, audits on business execution, excluding accounting audits, usually aim to verify compliance with laws, regulations and in-house rules as well as the appropriateness and efficiency of business execution. Recently, we are required to proactively meet the expectations of stakeholders from a broader perspective. Because the MCHC Group has set the realizing KAITEKI as its vision, we have also made it an audit goal to see whether business is executed in consideration of KAITEKI, in order to realize it at each operating site, in addition to the aforementioned audit goals. Therefore, we conduct audits by confirming that specific actions are taken to realize KAITEKI on the front lines, remaining aware of consistency with the vision. I think one of the roles of the Audit Committee is to point out our findings and encourage improvements as needed.

Umeha In the MCHC Group, there are approximately 80 Audit Committee members and corporate auditors (hereinafter collectively referred to as the "Audit Committee Members, Etc."). We provide newly appointed Audit Committee Members, Etc. with training every year so that each Audit Committee member and corporate auditor will have a correct understanding of the concept of KAITEKI, as well as their required roles under the Companies Act and the Financial Instruments and Exchange Act, and recognize that they are fulfilling an important function to support the realizing KAITEKI in the entire Group.

Ito The role of outside Audit Committee members is to maintain their independence and conduct fair and objective audits. It is important for them to understand the mechanism and contents of the Company's operations in detail, as well as its philosophy and visions to fulfill the role appropriately. Moreover, to respond to recent social trends requiring increasingly higher standards for audits year after year, it is very important to facilitate communication between the internal Audit Committee members and outside Audit Committee members regarding information about the business environment surrounding the Company.

Umeha I think that the internal Audit Committee members with seasoned knowledge of the Company's operations have an advantage in risk prevention. Misconduct is similar to issues at plants. For rational business operation, it is important to learn how to prevent an unexpected issue. Similarly in compliance cases, it is important to learn how to prevent misconduct, not to mention correcting misconduct if it has already occurred. Those who are familiar with the business contents have their own distinctive audit perspective. On the other hand, the independent point of view of the outside Audit Committee members is crucial to fulfill an appropriate audit (monitoring) function for the execution of business. You took on the role of an outside corporate auditor of Mitsubishi Chemical after engaging in accounting audits for many years as a certified public accountant. Based on such experience, how do you see the effectiveness of the Audit Committee?

Ito The outside Audit Committee members receive the required company information during their audits, including an overview of the Corporate Executive Officers Committee meetings and the reports on cooperation with the Accounting Auditor, in addition to monthly activity reports about standing internal Audit Committee members, the Internal Audit Office and the Internal Control Office. I feel that information inside the Group and the knowledge thereof are shared in a timely and appropriate manner. Thus, collaboration is strong on trilateral audits (audits by the Audit Committee, accounting audits and internal audits) and has resulted in a situation where the determination of the appropriateness and adequacy and identification of problems is facilitated. In addition, the outside Audit Committee members participate in audit planning and spend sufficient time discussing them. In that sense, I think we are able to conduct advanced and well-balanced audits as Audit Committee members.

We are required to attentively identify changing social attitudes toward compliance and accurately respond to them.

Director
(Chairperson of the Audit Committee)
Yoshihiro Umeha
×
Outside Director
(Audit Committee Member)
Kazuhiro Watanabe

Umeha Based on the recognition that appropriate corporate governance is essential for sustainable growth, MCHC has been working to strengthen its corporate governance to comply beyond the scope of laws and regulations. Please describe your opinion about what will be required in the future for MCHC to promote KAITEKI Management based on your experience as a prosecutor and lawyer.

Watanabe It is no exaggeration to say that the philosophy of KAITEKI Management is a pioneer of management—or it anticipates management—that is conscious of ESG, in which great importance has been attached in recent years. Compliance is an important foundation for KAITEKI Management. If an issue with compliance occurs, the philosophy of KAITEKI Management itself will be impaired. I think it is important to always keep this perspective in mind. As you pointed out, recently a growing emphasis has been placed on what is known as code (norms) in Japan and overseas. It is said that the scope of compliance has expanded to the realm of social norms and common sense, not to mention compliance with laws and regulations, which also includes a sincere response to stakeholders. As described, social attitudes toward compliance are changing over time. The longer a company's history, the more customs and practices it tends to have established in-house, and the more it may be inclined to think that all it has to do is to conform to these customs and practices. However, it is necessary to always consider the possibility that these customs and practices will lose their strength or deviate from society's awareness and norms over time. In the future, compliance must be attentive to these changes and accurately respond to them. I suppose what makes this possible is a sense of values and ethics of each employee, including management, although it is somewhat spiritual. Also, it is important for the employees to mutually share the sense of values and ethics as an organization.

Umeha You said that for the systems of an organization to improve, the awareness of each employee is important, right? I believe that to secure the effectiveness of corporate governance as a system, it is important that the development of rules and their monitoring will operate harmoniously, similar to two wheels on a cart. A current challenge for the MCHC Group is to develop a mechanism to efficiently and functionally monitor compliance at more than 700 Group companies. Because overseas Group companies in many countries do not yet have a corporate auditor system, we are trying to strengthen the checking system through internal audits and internal control, which are functions on the execution side. What do you think is necessary to efficiently practice management and supervision?

Watanabe I think that there are no wrong measures being taken for. First, you need to comprehensively prepare rules as well as management and supervisory systems as MCHC. With respect to their effectiveness, you should work to share awareness about issues and compliance with local areas and those on the front lines that are actually handling practical work through two-way dialogs, keeping communication in mind. The effectiveness and efficiency of management and supervision will only be achieved if both top-down and bottom-up communications are made. In terms of relationships with overseas bases and overseas Group companies, while it is important to solidly transmit the viewpoints of MCHC, I suppose that there are many cases in which more effective and efficient audits will be possible if you have secured persons with a detailed knowledge of the regional legal systems, institutions, culture and languages, and utilize them as audit personnel, given the differences and geographical distances. You must have these persons in local areas. It is also important to try to enhance the management and supervisory systems in local areas.

Umeha You mean we should build a system through which we are able to respond to the circumstances and situation of each region, while properly transmitting MCHC's policies, right? Finally, what expectations do you have for the MCHC Group?

Watanabe As I mentioned earlier, the MCHC Group has been working on ESG management, which other companies have also begun to address in recent years, as KAITEKI Management. I think this vision was edgy not only as an internal norm, but also as a commitment to stakeholders. I want the MCHC Group to evolve KAITEKI Management in the future by recognizing diverse problems from a global perspective, with officers and employees working together and considering an urgent response to them.

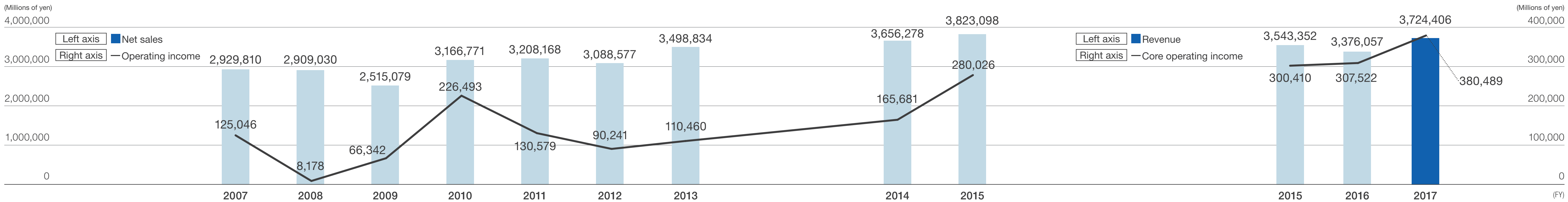
Financial Summary

J-GAAP (FY2007 – FY2015)

	2007	2008	2009	2010	2011	2012	2013	2014	2015
For the Year									Millions of yen
Net sales	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	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	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	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	170,051	139,011	119,025	117,806	116,145	132,221	133,339	165,057	176,508
Depreciation and amortization	102,172	119,230	129,574	148,697	145,695	129,549	131,571	151,253	180,374
R&D expenses	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	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	(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	70,871	179,526	94,437	(149,493)	(164,146)	(26,250)	(8,307)	(2,061)	(156,957)
At Year-end									
Total assets	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	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	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	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	119.51	(48.81)	9.32	58.72	24.06	12.61	21.89	41.40	31.70
Net assets	601.45	486.09	490.99	514.30	522.77	553.54	611.95	669.77	636.43
Cash dividends	16.00	12.00	8.00	10.00	10.00	12.00	12.00	13.00	15.00
Major Index									
Return on assets (ROA) (%)	8.5	(1.5)	1.4	5.1	3.9	2.6	3.4	4.2	4.7
Return on equity (ROE) (%)	21.3	(8.9)	1.9	11.6	4.6	2.3	3.7	6.4	4.8
Shareholders' equity ratio (%)	29.9	24.4	20.0	23.0	24.2	24.6	25.8	22.6	22.9
Other									
Number of employees	39,305	41,480	53,907	53,882	53,979	55,131	56,031	68,263	68,988

International Financial Reporting Standards (IFRS FY2015 – FY2017)

	2015	2016	2017	Increase or decrease (%)	2017
For the Year			Millions of yen		Thousands of U.S. dollars
Revenue	3,543,352	3,376,057	**3,724,406**	10.3%	**33,644,137**
Core operating income	300,410	307,522	**380,489**	23.7%	**3,437,118**
Profit before tax	252,791	258,343	**344,077**	33.2%	**3,108,193**
Net profit attributable to owners of the parent	51,358	156,259	**211,788**	35.5%	**1,913,171**
Comprehensive income	34,302	226,493	**297,476**	31.3%	**2,687,227**
Capital expenditures	213,134	206,482	**225,189**	9.1%	**2,034,228**
Depreciation and amortization	182,656	174,040	**178,895**	2.8%	**1,616,034**
R&D expenses	126,782	126,290	**138,833**	9.9%	**1,254,137**
Net cash provided by (used in) operating activities	299,612	396,643	**397,940**	—	**3,594,761**
Net cash provided by (used in) investing activities	(234,078)	(289,056)	**(335,933)**	—	**(3,034,625)**
Net cash provided by (used in) financing activities	(40,945)	1,411	**(150,592)**	—	**(1,360,361)**
At Year-end					
Total assets	4,223,774	4,463,547	**4,700,592**	5.3%	**42,462,439**
Property, plant and equipment	1,403,437	1,431,681	**1,433,509**	0.1%	**12,949,494**
Interest-bearing debt	1,579,575	1,693,742	**1,606,123**	(5.2%)	**14,508,790**
Equity attributable to owners of the parent	972,197	1,091,398	**1,285,750**	17.8%	**11,614,724**
Per Share			Yen		U.S. Dollars
Basic earnings	35.06	106.73	**147.14**	37.9%	**1.3**
Equity attributable to owners of the parent	663.71	758.30	**893.26**	17.8%	**8.1**
Cash Dividends	15.00	20.00	**32.00**	60.0%	**0.3**
Major Index					
Return on assets (ROA) (%)	5.9	5.9	**7.5**	27.1%	—
Return on equity (ROE) (%)	5.2	15.1	**17.8**	17.9%	—
Ratio of equity attributable to owners of the parent (%)	23.0	24.5	**27.4**	11.8%	—
Other					
Number of employees	68,988	69,291	**69,230**	(0.1%)	—



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 | 2016–2020 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. FY2017 refers to the year ended March 31, 2018.
2. U.S. dollar amounts are converted from yen at the rate of ¥110.7 = U.S. $1.00.
3. Return on assets (ROA) (%) is calculated by dividing profit before tax by the average of the beginning and ending balances of total assets.

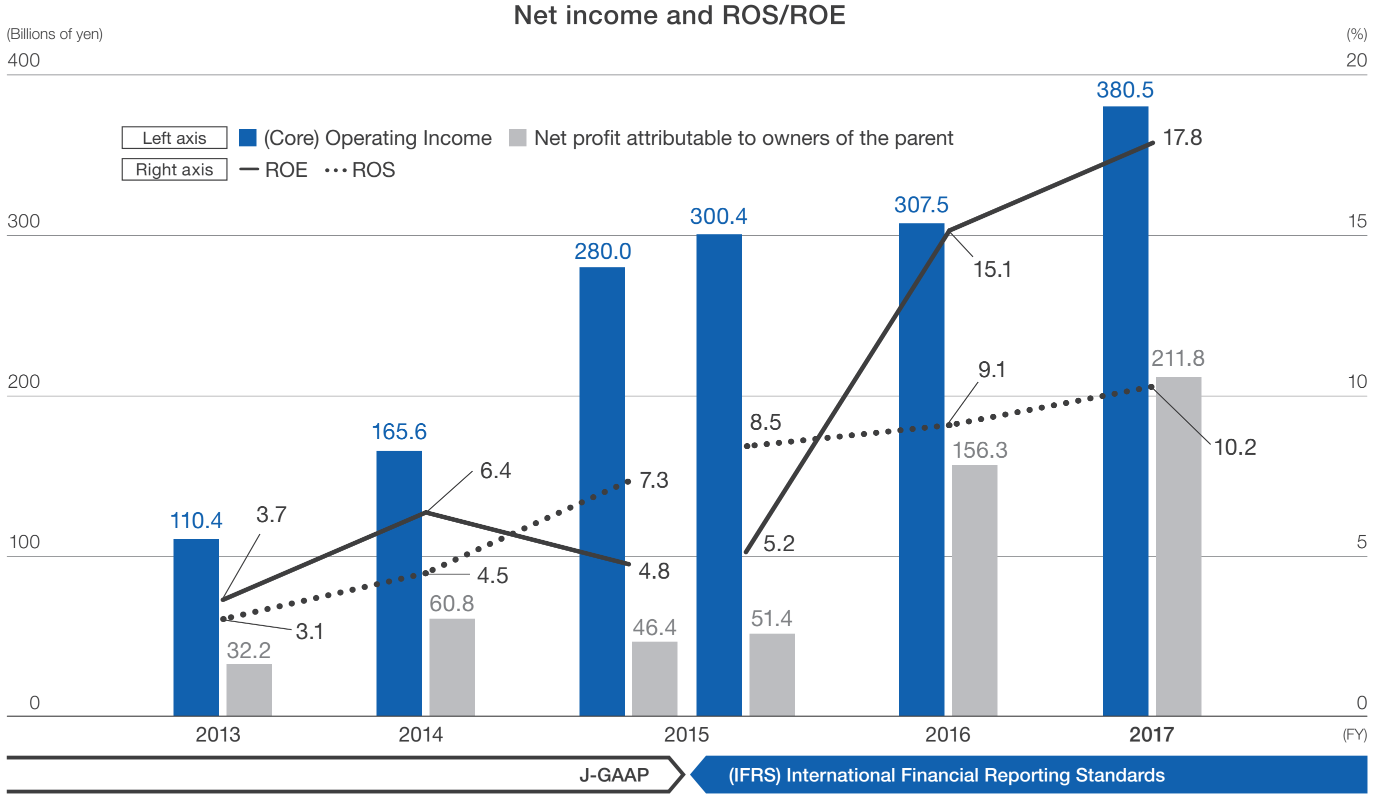
(Notes) 4. Return on equity (ROE) (%) is calculated by dividing net profit attributable to owners of the parent by the average of the beginning and ending balances of equity attributable to owners of the parent.
5. When non-recurring depreciation on non-current assets is recorded, the amount is included in depreciation and amortization.

Financial Highlights

Financial Index

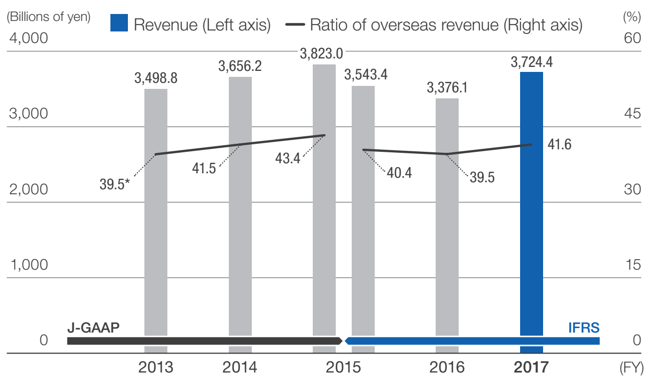
With the start of the medium-term management plan *APTSIS 20*, we have adopted the International Financial Reporting Standards (IFRS) beginning in FY2016.
Core operating income is calculated as operating income (loss) excluding certain gains and expenses attributable to non-recurring factors (gains and expenses 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.

Net income and ROS/ROE



As a result of the business portfolio reforms along with the previous medium-term management plan *APTSIS 15* for the period from FY2011 to FY2015, we posted record operating income in FY2015 based on the Japanese standards. Following the current medium-term management plan *APTSIS 20*, which started in FY2016, we have increased our income further thanks to the growing sales volume, mainly in the Performance Products domain. In FY2017, because of the generally strong market conditions in the Industrial Materials domain, both core operating income and net profit attributable to owners of the parent reached record high. We increased core operating income by ¥73.0 billion (+23.7% y/y) to ¥380.5 billion and improved ROS by 1.1% y/y to 10.2%. Net profit attributable to owners of the parent increased by ¥55.5 billion (+35.5% y/y) to ¥211.8 billion, partly due to decreased tax expenses associated with the reduced U.S. federal corporate income tax rate. ROE improved by 2.7% y/y to 17.8%.

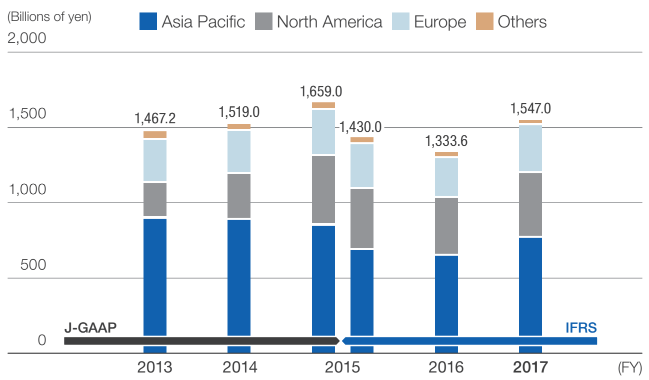
Revenue and ratio of overseas revenue



Revenue increased by ¥348.3 billion (+10.3% y/y) because sales prices rose due to higher raw material prices and because the trend of market conditions remained strong in the Industrial Materials domain, including MMA and other petrochemical products. The ratio of overseas revenue increased to 41.6% (+2.1% y/y).

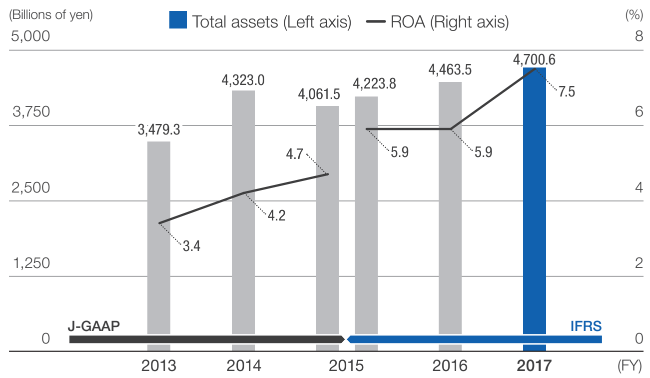
* The influence of ¥145.6 billion due to the unification of the accounting period is excluded.

Overseas revenue by region



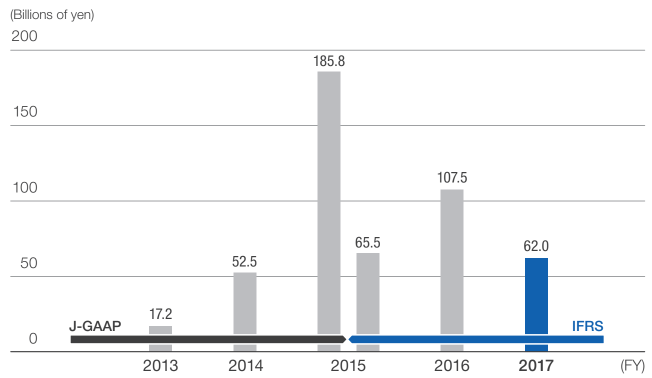
Overseas revenue increased from a year earlier due to the increased sales volume in the Performance Products domain, mainly in Europe and the U.S., as well as acquisitions in the industrial gases business and rising prices of MMA.

Total assets and ROA



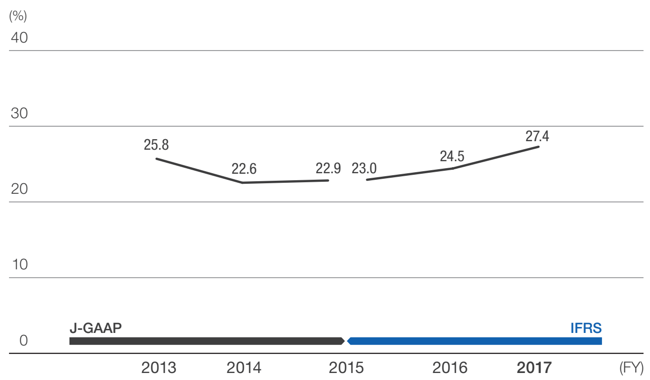
Total assets were ¥4,700.6 billion, rising ¥237.1 billion from a year earlier, primarily because of the increase in inventories and trade receivables. ROA improved by 1.6% y/y to 7.5% due to the increase in income.

Free cash flow



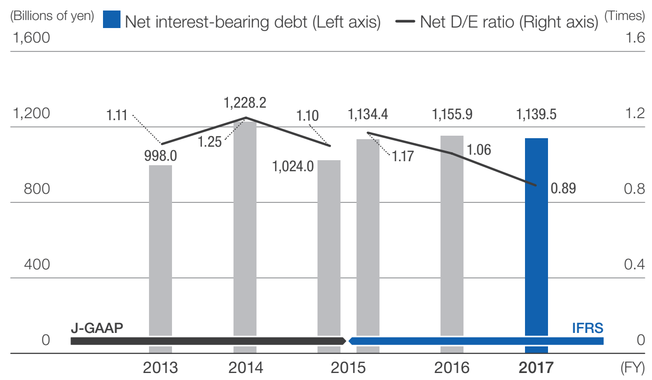
In cash flows from investing activities, outflows increased due to investments and loans associated with M&A, mainly in the Health Care domain. As a result, FCF decreased by ¥45.5 billion y/y to ¥62.0 billion.

Ratio of equity attributable to owners of the parent



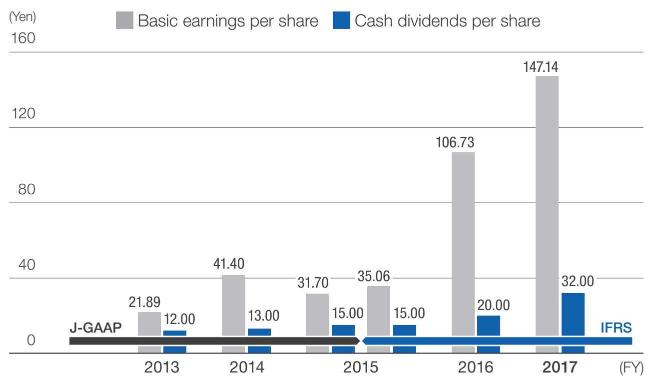
As a result of the increase in income, equity attributable to owners of the parent increased by ¥194.4 billion from the previous fiscal year, to ¥1,285.8 billion. Consequently, the ratio of equity attributable to owners of the parent was 27.4%, up 2.9% from the previous fiscal year. We will continuously aim to achieve 30%, the target set in the medium-term management plan *APTSIS 20*.

Net interest-bearing debt and net D/E ratio



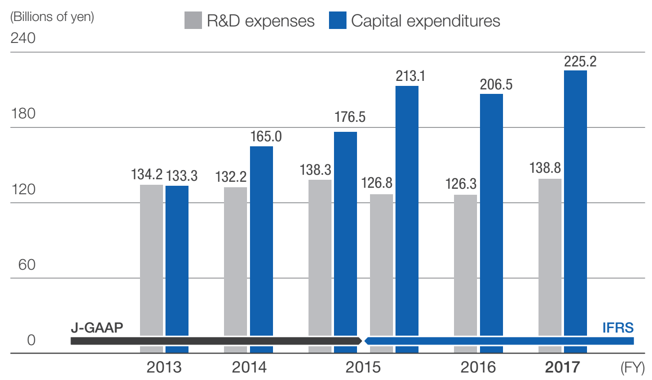
Net interest-bearing debt stood at ¥1,139.5 billion, down by ¥16.4 billion y/y. Partly because of the increase in equity attributable to owners of the parent due to the increase in income, the net D/E ratio was 0.89 times, improving by 0.17 y/y. We will continue our efforts to reinforce our financial position.

Basic earnings per share and cash dividends per share



Basic earnings per share was ¥147.14, primarily because of income growth. Cash dividends per share were ¥32 per year, up ¥12 y/y, based on a comprehensive evaluation of our financial situation, future business development and improving shareholder returns.

R&D expenses and capital expenditures

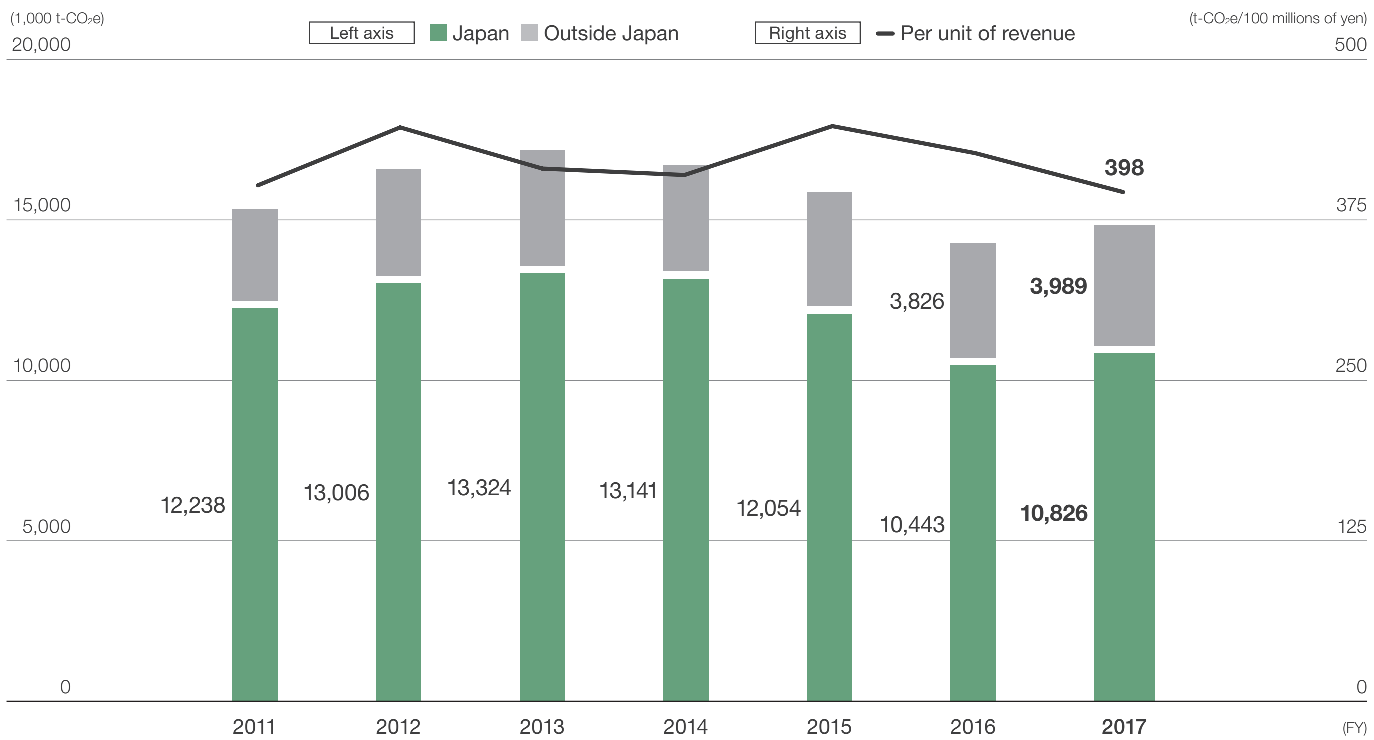


R&D expenses increased by ¥12.5 billion y/y to ¥138.8 billion, mainly focusing on the Health Care domain, and we continued to work on improving our current technologies and developing new technologies. Capital expenditures increased by ¥18.7 billion y/y to ¥225.2 billion, mainly reflecting the construction of manufacturing facilities in the industrial gases business.

Non-Financial Highlights

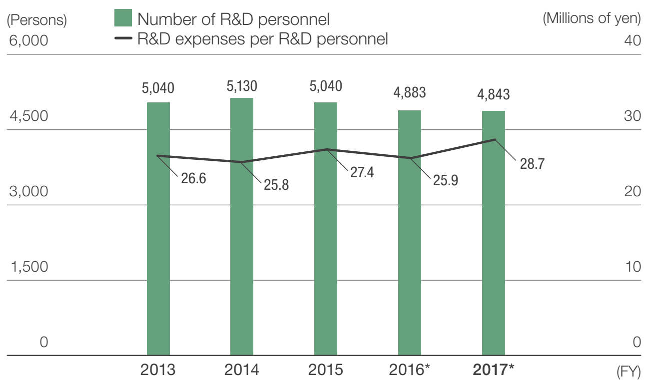
Non-Financial Index

GHG emissions



GHG emissions (Scope 1 + Scope 2) in FY2017 were 14,815 thousand t-CO_2e and the emissions per unit of revenue were 398 t-CO_2e/100 millions of yen. The absolute emissions increased by 4% from the previous fiscal year due to the Group's full operations worldwide under a solid recovery of the global economy, despite the implementation of GHG emission reduction measures including energy conservation efforts. Toward achieving the 2030 reduction targets set in alignment with the Paris Agreement, we have devised and promoted measures to reduce GHG emissions. Additionally, in FY2016, the calculation method was revised to respond to global standards (see page 75). We will continue to improve the completeness and reliability of the calculation method so all the Group companies can strive to achieve the medium-term reduction targets.

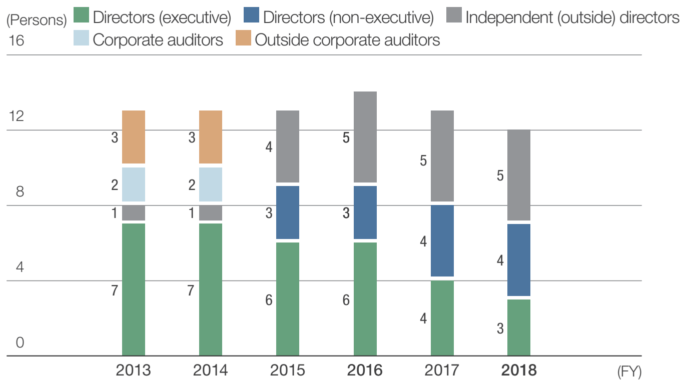
Number of R&D personnel and R&D expenses per R&D personnel



The number of R&D personnel in FY2017 was 4,843, a reduction of 40 from the previous fiscal year. R&D expenses per personnel were ¥28.7 million, an increase of ¥2.8 million.

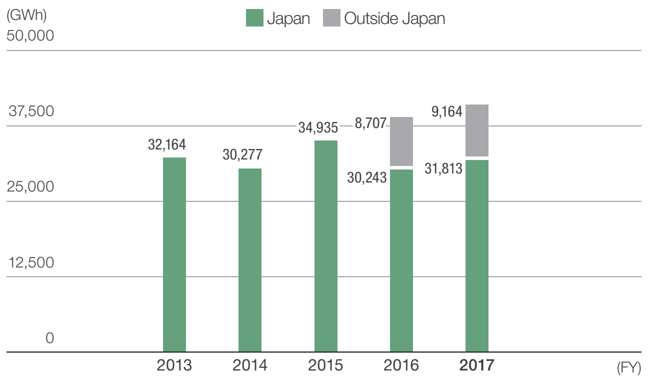
* IFRS basis

Number of directors and outside directors



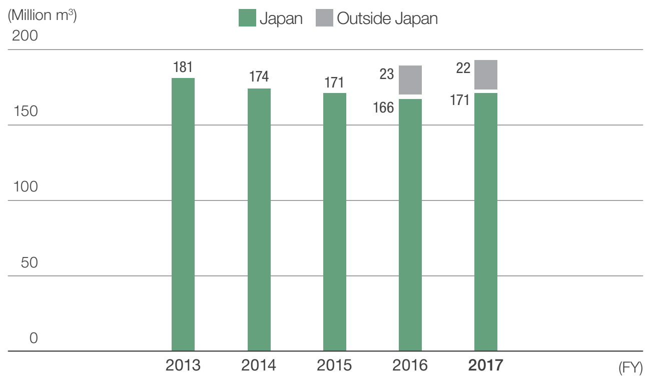
MCHC transitioned to a company with a nominating committee, etc. in June 2015.

Energy consumption



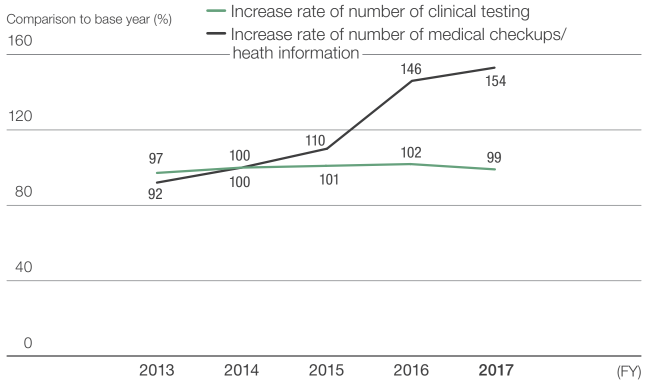
Since FY2016, we have tracked global energy consumption and have it assured by a third party. Accordingly, overseas data are described as additional values (Outside Japan) in FY2016 and 2017. In FY2017, energy consumption increased due to strong production. To further accelerate our efforts for the reduction in energy consumption, we will expand our activities for the effective use of energy, such as the stable operation of processes and energy conservation efforts.

Water withdrawal



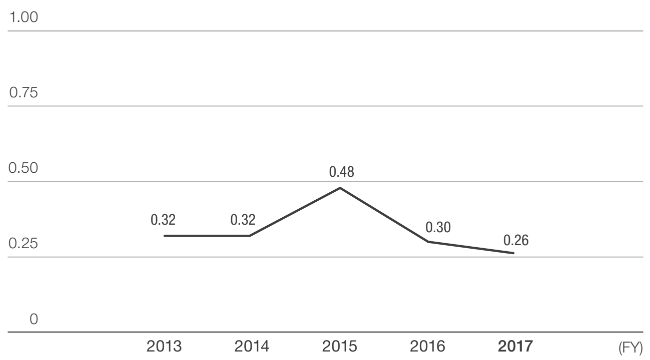
Since FY2016, we have tracked the global water withdrawal (excluding seawater) and have it assured by a third party. Accordingly, overseas data are described as additional values (Outside Japan) in FY2016 and 2017. In FY2017, we used 193 million m³ of water, an increase of 4 million m³ from the previous fiscal year due to strong production. We will make progress with efforts to effectively utilize water resources and reduce usage and continue to contribute to the improved sustainability of water resources.

Increase rate of number of clinical testing and medical checkups/health information



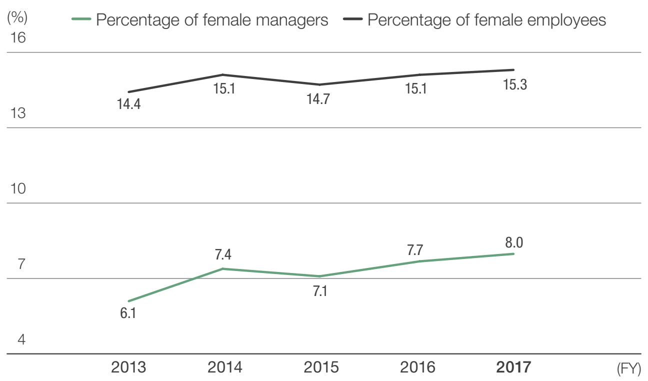
The number of clinical testing and health checkups or health information provided was 99% and 154% respectively for each MOS index compared with the benchmark year (FY2014). We will appropriately respond to the rising interest in health and trends, such as increased self-medication, and aim to achieve the FY2020 targets set as the MOS Indices.

Lost-time injuries frequency rate (LTIFR)



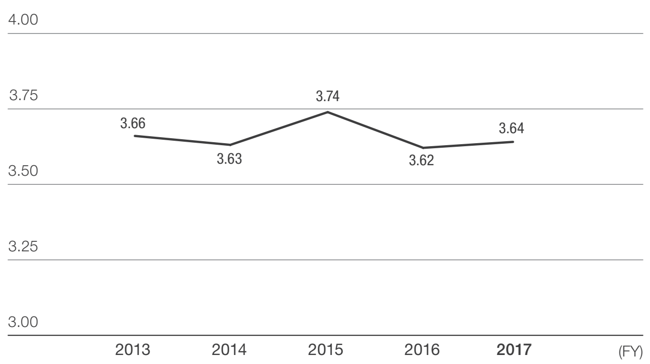
Lost-time injuries frequency rate (LTIFR) reached 0.26 points, improving by 0.04 points from the previous fiscal year. By thoroughly enforcing measures to ensure basic actions and operations for safety and risk assessments, we will strive to prevent occupational accidents.

Percentage of female employees/ Percentage of female managers



The percentages of female employees and female managers were 15.3%, an increase of 0.2%, and 8.0%, an increase of 0.3% respectively, compared to the previous fiscal year. We have continued to promote a range of measures aimed at female empowerment.

Employee satisfaction



Employee satisfaction was 3.64 points, a 0.02 point rise compared to the previous fiscal year. Since FY2011, employee satisfaction has remained at a largely favorable level. We will seek further improvement by actively promoting related measures including health and productivity management and workstyle reform.

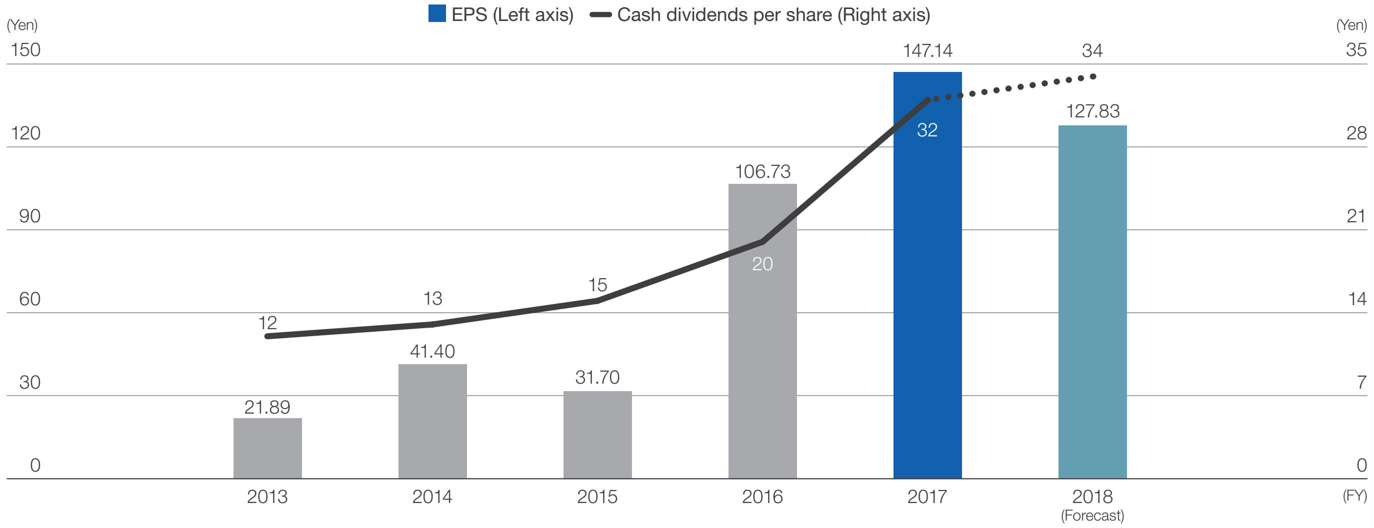
Shareholder Information

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

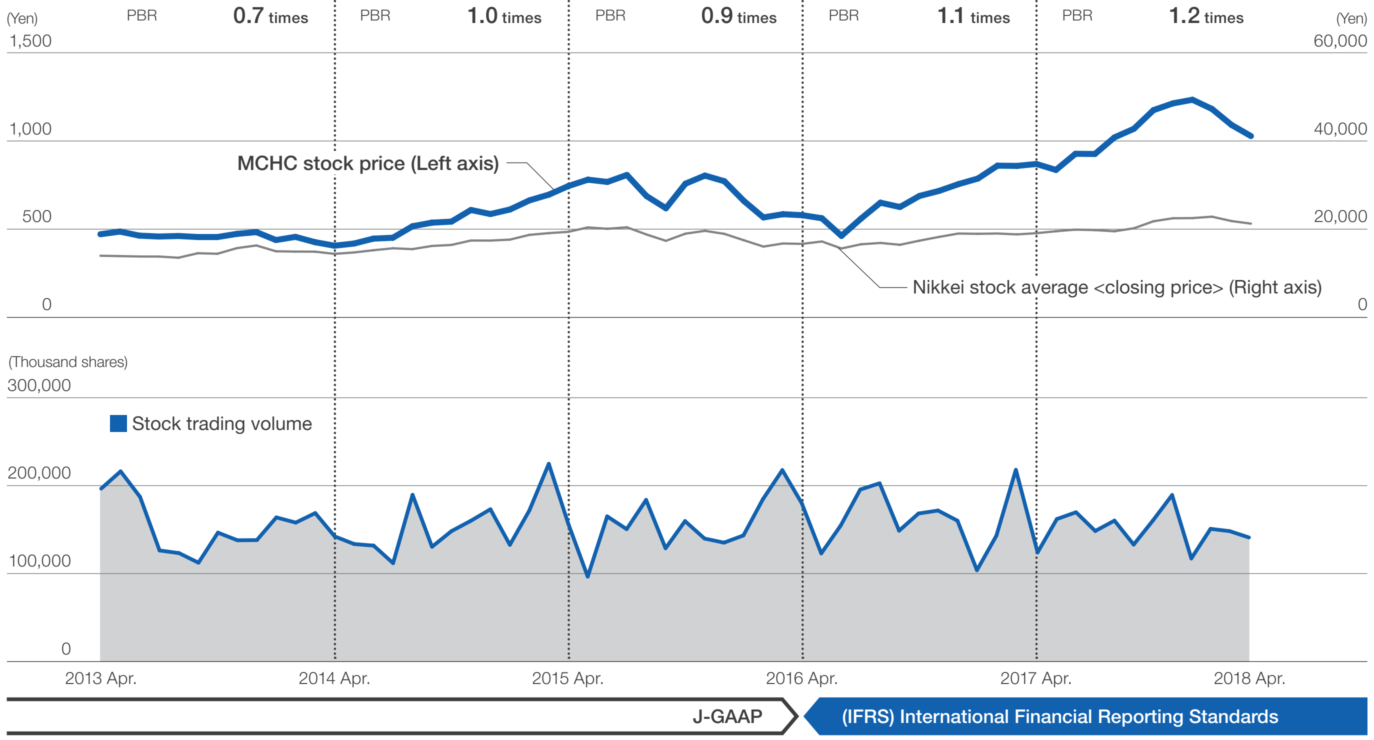
Targeting a medium-term consolidated payout ratio of 30%/Paying stable dividends

EPS/Cash dividends per share



Stock Price/Stock Trading Volume

	FY2013	FY2014	FY2015	FY2016	FY2017
Stock price	¥429	¥698.6	¥587.5	¥861.4	¥1,030.5
PER	19.5 times	16.8 times	18.5 times	8.1 times	7.0 times
PBR	0.7 times	1.0 times	0.9 times	1.1 times	1.2 times



* Stock price: As of March 31 PER: Share price as of March 31/Basic earnings per share (Net income (loss)-basic per share until FY2015) PBR: Share price as of March 31/Equity attributable to owners of the parent per share (Net assets per share until FY2015)

Stock Information (As of March 31, 2018)

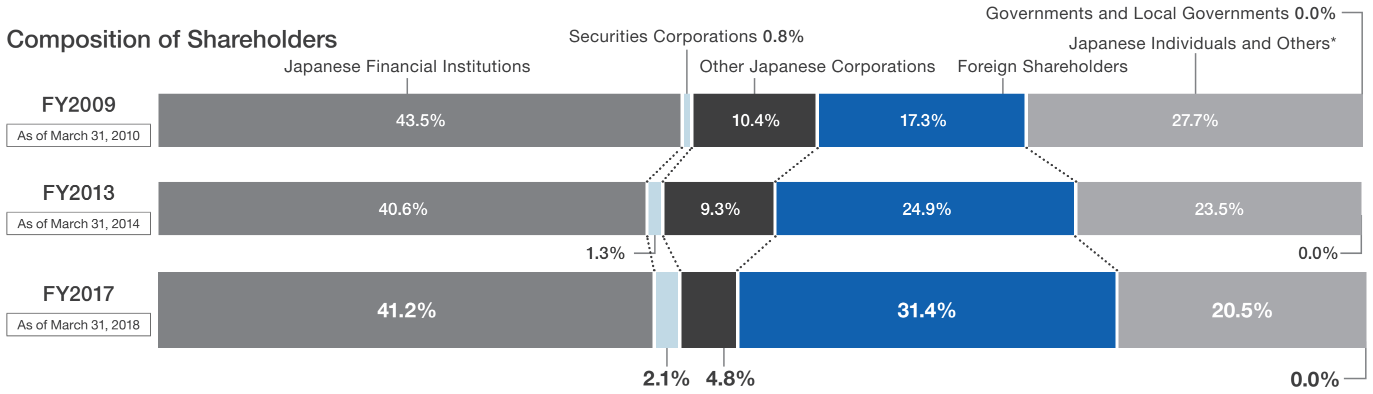
Stock listing	Tokyo Stock Exchange
Securities code	4188
Shares per unit	100
Authorized shares	6,000,000,000
Outstanding shares	1,506,288,107
Number of shareholders	175,537
General meeting of shareholders	Annually in June
Transfer agent	Mitsubishi UFJ Trust and Banking Corporation

Major Shareholders

Name	Number of Shares (Thousands)	Percentage (%)
The Master Trust Bank of Japan, Ltd. (Trust account)	96,148	6.7
Japan Trustee Service Bank, Ltd. (Trust account)	75,626	5.3
Meiji Yasuda Life Insurance Company	64,389	4.5
Nippon Life Insurance Company	42,509	3.0
Japan Trustee Service Bank, Ltd. (Trust account 4)	36,803	2.6
State Street Bank West Client-Treaty 505234	28,941	2.0
Japan Trustee Service Bank, Ltd. (Trust account 5)	26,808	1.9
Japan Trustee Service Bank, Ltd. (Trust account 7)	22,462	1.6
Tokio Marine & Nichido Fire Insurance Co., Ltd.	20,774	1.4
The Bank of Tokyo-Mitsubishi UFJ, Ltd.	20,553	1.4

(Notes) 1. In addition, MCHC holds 66,902 thousand shares of treasury stock, which are excluded in the calculation of the percentage above.
2. The Bank of Tokyo-Mitsubishi UFJ, Ltd. changed its company name to MUFG Bank Ltd. on April 1, 2018.

Composition of Shareholders



* Shares held by the Company as treasury stock are included in "Japanese Individuals and Others."

FY2017 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.

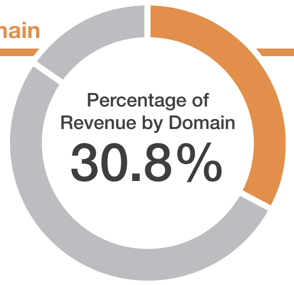
Activities		Description
1 General Meeting of Shareholders		Held on June 26, 2018, Attendance: 1,826 persons (for reference: 1,535 attended in 2017)
2 For domestic institutional investors and analysts	IR briefings	2 sessions, May: IR Day, Nov: Business briefing
	Top management's dialog with investors	Jun, Dec: Small meetings, Visits to 14 investors
	Conference call, following the financial results announcement	4 sessions (following the quarterly financial results announcement), Audio data available on the website
	Visit to operating sites	2 tours, Sep: Nagahama district, Mar: Toyohashi and Otake Plants
	Other IR activities	Individual meetings following the financial results announcement and small meetings on specific subjects
3 For individual investors	IR briefings	12 sessions for 2,026 attendees (including those in the online sessions and in briefings by the CEO and CFO)
4 For overseas investors	Overseas road show by the CEO, CFO and other executives	5 sessions in eight countries in North America, Europe and Asia
	Participation in conferences organized by securities firms	8 conferences (four in Japan and four overseas)

Overview of Business Domains | Summary

* Figures for FY2016 do not include discontinued operations.
* Figures for FY2013 to 2016 of reporting segments prior to the change are presented for reference purposes only. For details about the change in segments, see page 49.
* Revenue Growth Rate and ROA figures for FY2016 in the New Segments section are presented for reference purposes only.
* ROA = (Core) Operating Income / Total Assets (Annual Average)

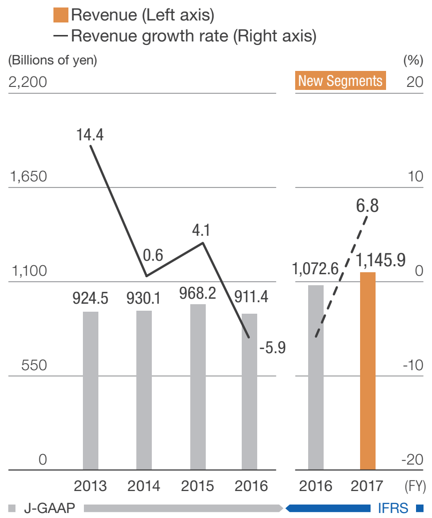
Revenue/Revenue Growth Rate | (Core) Operating Income/(Core) Operating Margin | Total Assets/ROA | Capital Expenditures/Depreciation and Amortization | R&D expenses/Ratio of R&D expenses to Revenue

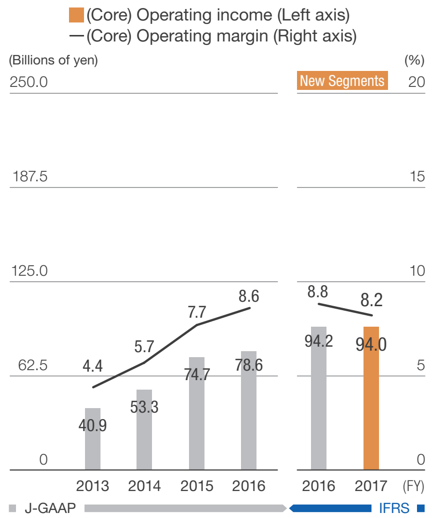
Performance Products Domain

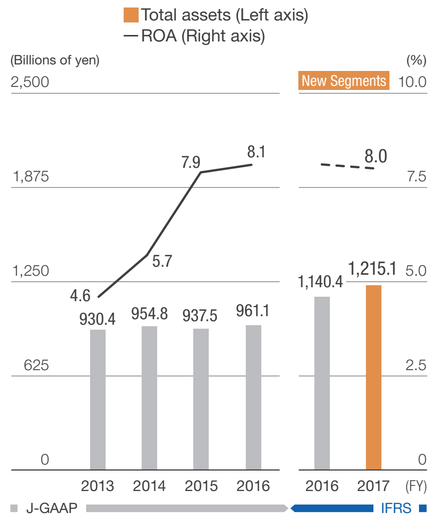


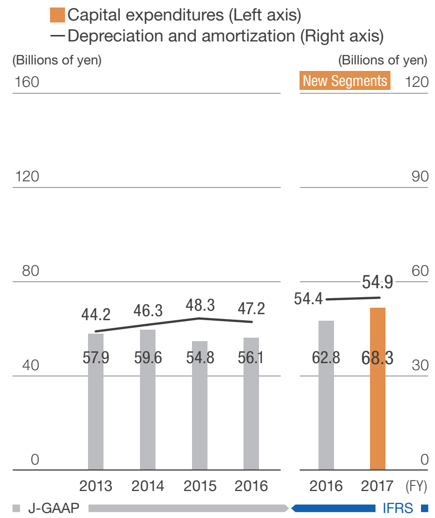
Revenue ¥1,145.9 billion

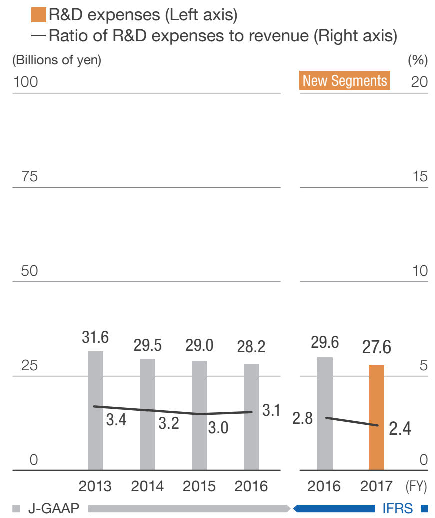
ROIC 8.5%



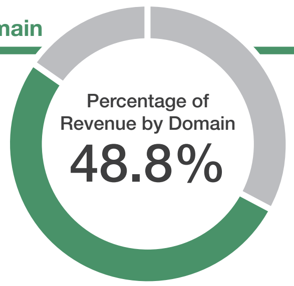






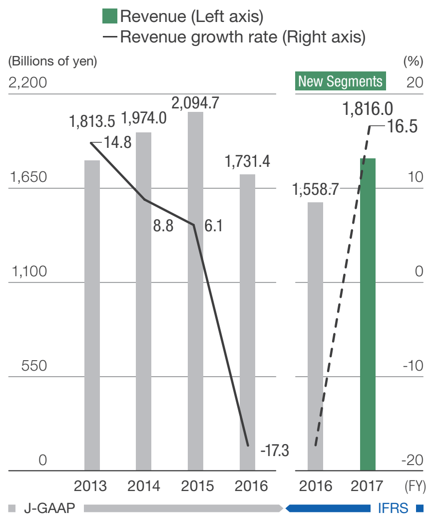


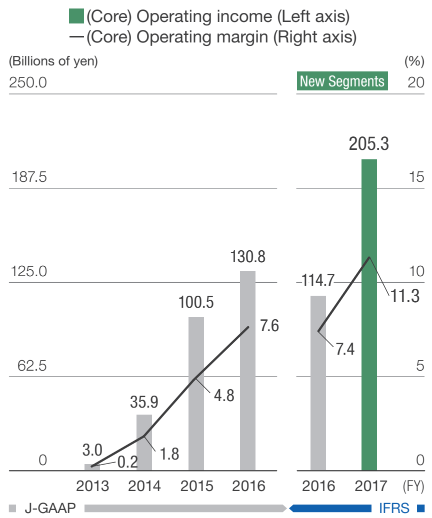
Industrial Materials Domain

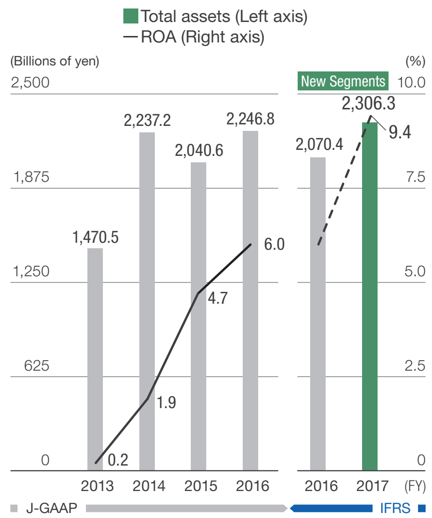


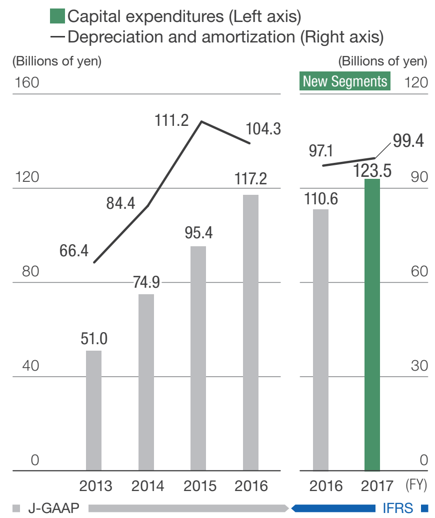
Revenue ¥1,816.0 billion

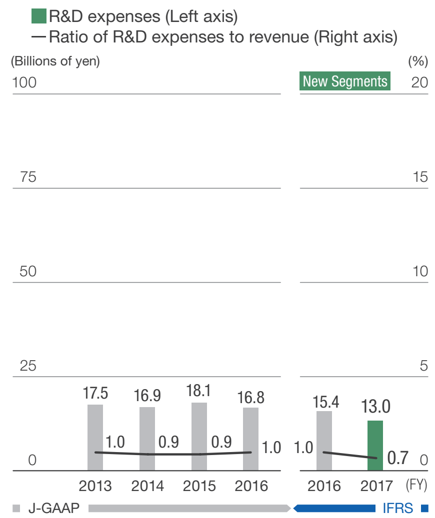
ROIC 9.7%



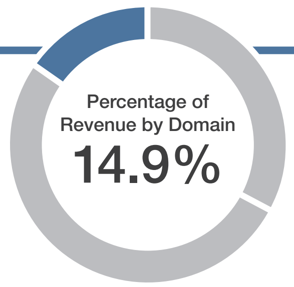






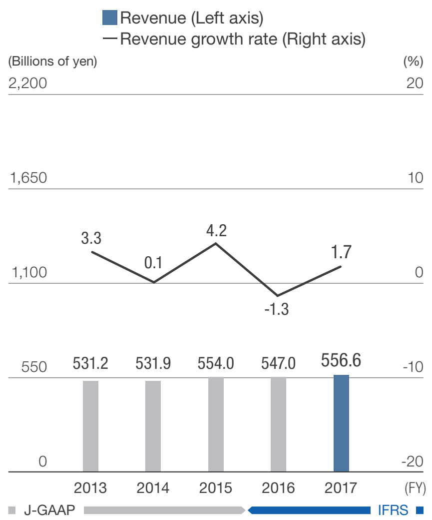


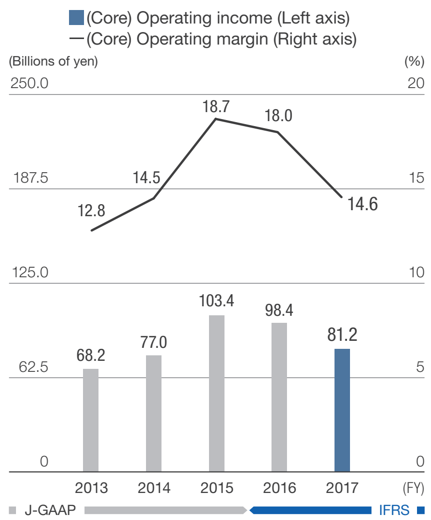
Health Care Domain

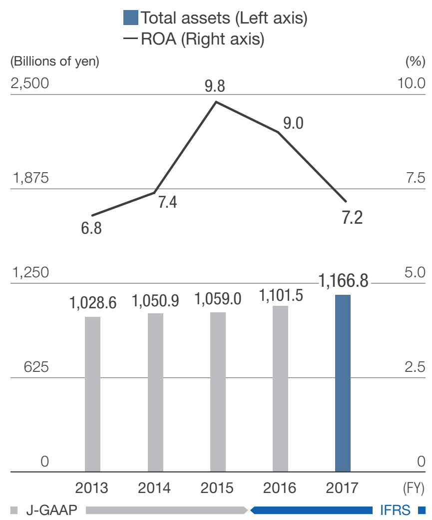


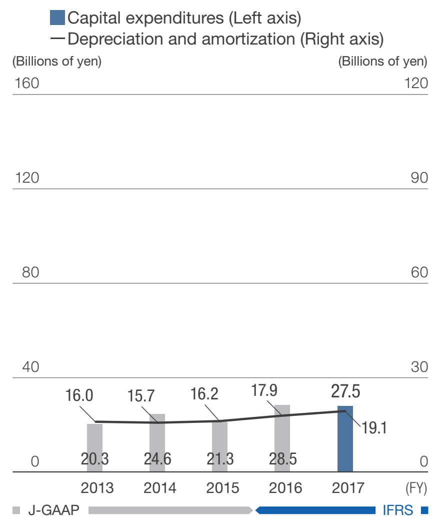
Revenue ¥556.6 billion

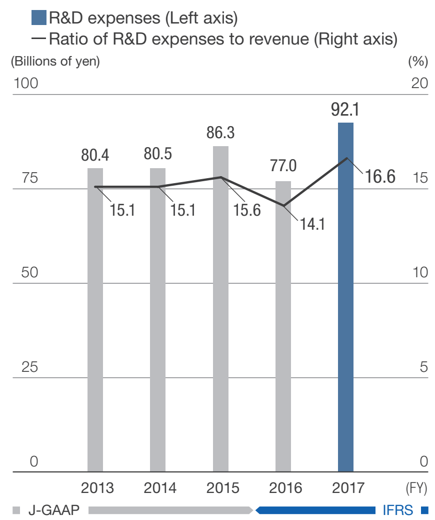
ROIC 9.8%









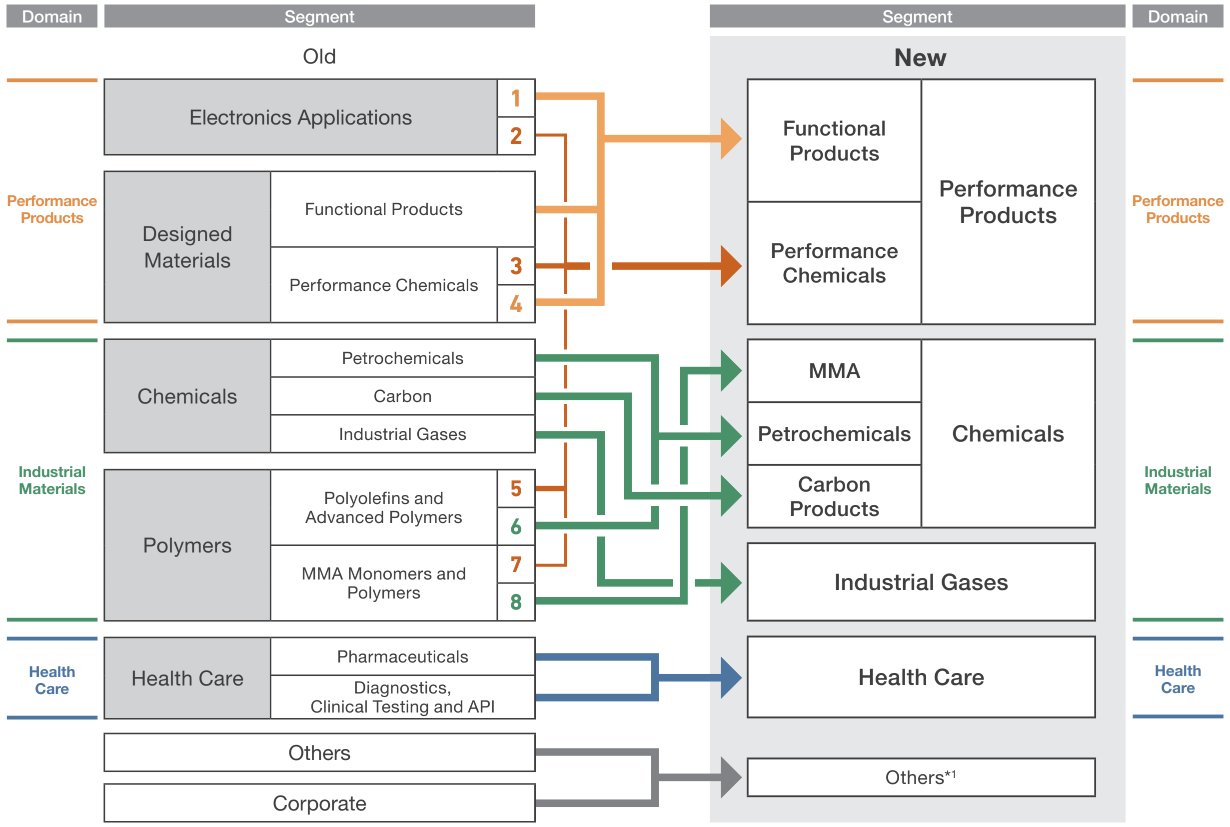


Overview of Business Domains | FY2017 Results by Segment

Change in reporting segments

MCHC integrated three consolidated subsidiaries into one company, and established the new MCC on April 1, 2017. This was executed in consideration of the need to establish an organizational structure that can take full advantage of each company's resources and strengths to address a rapidly changing business climate and drive the expansion of their business toward accomplishing the goals of *APTSIS 20*, which began in FY2016.
Taking this opportunity, MCHC, the holding company of the four operating companies — the new MCC, MTPC, LSII, and TNSC — stepped up its efforts to plan medium-term strategies for each of four business segments (performance products, chemicals, industrial gases, and health care) in which four operating companies are mainly engaged, enhance monitoring of *APTSIS 20*, and shift to a management system that accelerate growth strategies for these four business segments.
Based on the above factors, from FY2017, the current business segments were reviewed and reclassified into "Performance Products," "Chemicals," "Industrial gases," and "Health Care."

Old/New Segments Comparison Chart



1 Display materials, OPC drums and toners, recording media, etc.
2 LED materials, gallium nitride, etc.
3 Coating materials, battery materials, inorganic chemicals, food ingredients, etc.
4 PVOH*2 *OPL Film*, etc.
5 Phenol, polycarbonate, performance polymers, etc.
6 Polyolefins
7 ABS resins
8 MMA/PMMA

*1 Others include certain overseas sales companies reclassified from the former sub-segment of Functional Products.

New Segments

Domain	Segment	Segment Details		
			Major Businesses and Products	
Performance Products	Performance Products	Functional Products	Information, Electronics & Displays	Optical films, e.g. polyester films, and optical PVOH*2 films/Color resist/Precision cleaning
			High-performance films	Food packaging materials/Industrial-use films/Medical and sanitary films
			Environment & living solutions	Aqua solutions/Separation materials/Separator and aqua chemicals/Agricultural solutions/Infrastructure solutions
			Advanced moldings & composites	High-performance engineering plastics/Carbon fiber and composite materials/Alumina fibers/Functional moldings and composites/Fibers and textiles
		Performance Chemicals	Advanced polymers	Performance polymers/Phenol and polycarbonate/Polybutylene terephthalate/Sustainable polymers
			High-performance chemicals	Coating materials/Epoxy resins/Resin additives/Food ingredients
			New energy	Lithium-ion battery materials/LED materials/Scintillator
Industrial Materials	Chemicals	MMA	MMA	MMA and PMMA
		Petrochemicals	Petrochemicals	Basic petrochemicals and Basic chemical derivatives/Polyolefins
		Carbon Products	Carbon Products	Coke/Carbon materials/Carbon black/Synthetic rubber
	Industrial Gases	Industrial Gases	Industrial gases	Industrial Gases/Industrial Gas-related equipment and facilities
Health Care	Health Care	Health Care	Pharmaceuticals	Ethical Pharmaceuticals
			Life Science	Clinical testing/Diagnostic reagents and instruments/Capsules and pharmaceutical processing equipment/Active pharmaceutical ingredients and intermediates

*2 PVOH refers to polyvinyl alcohol.

* Other differences include impacts from inventory valuation gain/loss and differences of equity income, etc.

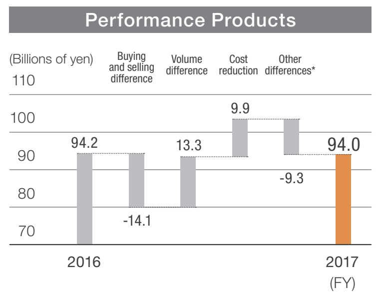
Performance Products Domain

Performance Products

Performance Products Segment

This segment posted a revenue hike and an income decline. Revenue rose ¥73.3 billion year on year to ¥1,145.9 billion, while core operating income declined ¥0.2 billion year on year to ¥94.0 billion.
In functional products, sales remained steady in films for displays in electronics and displays, in addition to advanced moldings and composites including high-performance engineering plastics, alumina fibers, and other products.
In performance chemicals, sales volumes increased, reflecting rising sales of battery materials for automobiles in the new energy business, continued firmness in market prices for phenol-polycarbonate chain in advanced polymers, and the resolution of issues related to scheduled plant maintenance and repairs completed during the previous period.
Core operating income remained unchanged, due primarily to a rise in raw material costs for some products, despite higher sales volumes as a whole.

Contributing factors to core operating income



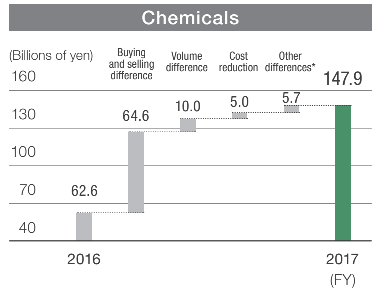
Industrial Materials Domain

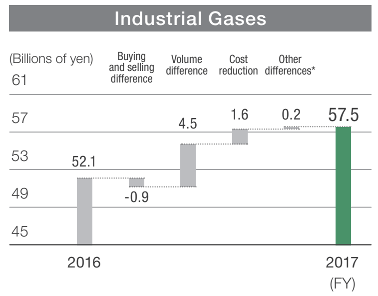
Industrial Materials

Chemicals Segment

This segment recorded a hike in both revenue and income. Revenue surged ¥193.2 billion year on year, to ¥1,177.3 billion, while core operating income rose ¥85.3 billion, to ¥147.9 billion.
In MMA, MMA monomer market prices rose in line with continuing firm demand.
In petrochemicals, sales volumes increased in the midst of continued firm supply-demand situation, reflecting higher sales prices brought on by higher raw material prices and a smaller impact from ethylene production facility scheduled maintenance and repairs, which were less than in the previous period.
In carbon, sale prices rose, accompanying a rise in coking coal prices.
Core operating income increased due primarily to a broadening in the price differential between raw materials and products in MMA and carbon products including coke and needle coke in the continued firm demand and the lower impact of the smaller scheduled maintenance and repairs at petrochemical production facilities.

Contributing factors to core operating income





Industrial Gases Segment

This segment recorded growth in revenue and income. Revenue stood at ¥638.7 billion, up ¥64.1 billion year on year, while core operating income was ¥57.5 billion, up ¥5.4 billion year on year.
In industrial gases, sales revenue and core operating income increased, reflecting continued firmness in the domestic and overseas electronics material gases and the inclusion of results of businesses acquired in the U.S. and Australia in the previous period.

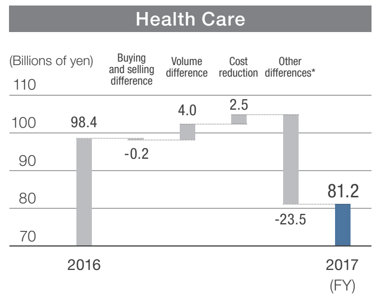
Health Care Domain

Health Care

Health Care Segment

This segment posted increased revenue and decreased income. Revenue totaled ¥556.6 billion, with an increase of ¥9.6 billion year on year, while core operating income was ¥81.2 billion, down ¥17.2 billion year on year.
Pharmaceuticals recorded higher sales revenue, due mainly to higher sales volumes of priority ethical pharmaceutical products including *Simponi*, a treatment for rheumatoid arthritis and significant sales growth of *Radicava*, a treatment for amyotrophic lateral sclerosis (ALS) in the U.S., despite a lower sales brought on by a generic drug business transfer and other factors.
Core operating income decreased due primarily to increased business development costs in the U.S., in addition to R&D expenses.

Contributing factors to core operating income



Overview of Business Segments | Performance Products Domain

Performance Products

Performance Products Domain

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

SWOT Analysis

Strengths	Weaknesses	Opportunities	Threats
Optical films			
Strong market position and ability to deliver solutions for various optical applications	Ability to adapt to short-term demand changes that fluctuated beyond expectation	Increase in sophisticated market needs (greater demand for high-performance and high-precision products)	Shrinkage of existing market due to destructive technological innovation
High-performance films			
Technologies to add functions including gas barrier, porous control and multiple layers	Business development with focus on the domestic market	Roll-out of high-performance products to overseas businesses	Medium-term decrease in domestic demand
High-performance engineering plastics			
Global network across business groups from materials to forming processing field	Widespread and direct impacts from social/economic/foreign exchange risks in different regions around the world	Expanded demand in industrial use (aircraft, semiconductors) and medical use	Shrinkage of existing market due to dissemination of new technologies such as 3D printer
Carbon fiber and composite materials			
Business development through vertically-integrated value chain which covers from carbon fibers to CFRP intermediate base material/composites	Exchange rate impacts due to the high ratio of overseas sales	Expanded demand in industrial use (automobiles, wind power generation, pressure vessels and others)	Intensified competition due to quality improvement of products of developing countries

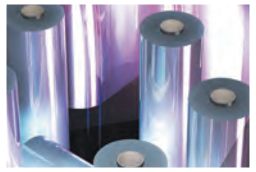
Focus Markets (Domains)	Automobiles, Aircraft (Mobility) Lightweight composites, Environment-friendly materials	Packaging, Labels, Films Food packaging films, Industrial films	IT, Electronics, Displays Flat panel display materials, Semiconductor-related materials	Environment, Energy Battery materials,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

Major Businesses and Products

Functional Products

FY2017 Revenue **¥782.1** billion | FY2017 Core Operating Income **¥58.0** billion

Information, electronics & display



Optical films/Optical PVOH film/Precision cleaning/Color resist

Optical films

We 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 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.

High-performance films

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

High-performance films

Through the optimal combination of technologies including polymer material design, forming processing, 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 for food, industrial, and healthcare, etc.

Environment & living solutions

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

Aqua solutions

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

Agricultural solutions

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

Advanced moldings & composites

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

High-performance engineering plastics

As a leading global manufacturer, we develop 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.

Performance Chemicals

FY2017 Revenue **¥363.8** billion | FY2017 Core Operating Income **¥36.0** billion

Advanced polymers

Performance polymers/Phenol and polycarbonate/Polybutylene terephthalate/Sustainable 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 medical care 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.

High-performance chemicals

Coating materials/Epoxy resins/Resin additives/Food ingredients/Inorganic 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.

New energy

Lithium-ion battery materials/Phosphors/Scintillators/GaN substrates

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.

Phosphors, Scintillators, and GaN Substrates

We are providing phosphors for fluorescent backlights and LED lighting and scintillators for security and medical diagnostic devices such as CT. We are also developing gallium nitride (GaN) substrates used in lasers and other high-performance devices.

Overview of Business Segments | Performance Products Domain

Performance Products

APTSIS 20

Policies

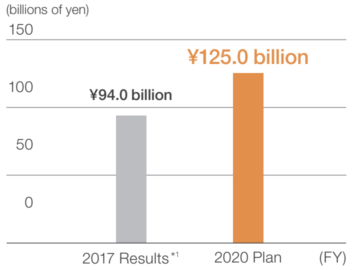
Accelerate growth through orchestration and integration, and supply high-performance products/solutions globally to growth markets

Key Strategies

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

Planned Figures (*APTSIS 20* Original planned figures)

Core Operating Income



Investment amount (Five-year plan, total) **¥390.0 billion***2

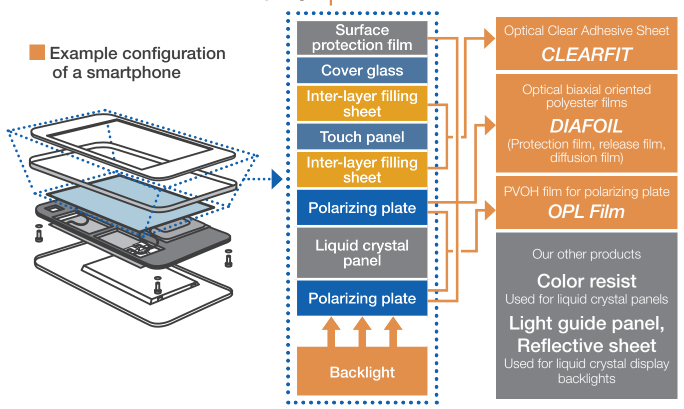
R&D investment (Five-year plan, total) **¥170.0 billion***2

*1 Since FY2017, changes have been made to some product segments.
*2 In November 2017, MCHC announced that it would increase investments and loans by 200 billion yen and R&D investments by 25 billion yen on a company-wide basis.

Growth Strategies of Information, Electronics & Display

By sharing optical-related material information used for display purposes, related information in the IT and electronic devices field, and customer information, we are strengthening market access and accelerating efforts to supply and develop products that satisfy customer needs while collaborating with other business domains. Specifically, we will add a facility in China, where integration in the display industry is in progress, to increase our production capacity of polyether film-processed products. In Japan, to correspond to liquid crystal displays which have been becoming larger year by year, we are working to increase production lines for wider *OPL Film* used in polarizing plate, a part of liquid crystal displays. In addition, we will expand our business by providing further solutions such as development of products for organic EL. For LCD materials, we will consider the addition of a new series of optical film for large-sized TVs and add a facility for high-performance coated polyester film in China. For organic EL panel materials, we will expand the sales of bank materials, strengthen the development of new products and commercialize them. In this way, we will pursue continued expansion.

Example configuration of a smartphone



Growth Strategies of High-performance Films

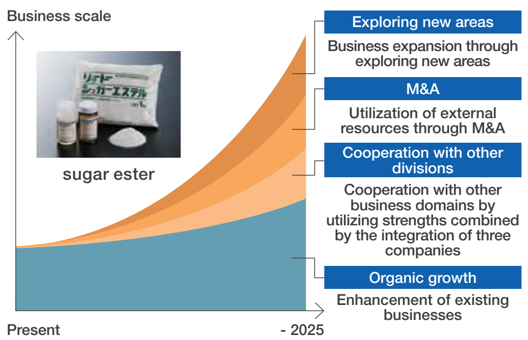
While strengthening our product development capabilities and proposal abilities by accelerating orchestration with other business domains and promoting the evolution of a seamless technology platform, we will accelerate the global expansion of high value-added products and realize our growth strategies by utilizing resources of overseas affiliates. In particular, we have started the construction of a local production facility in Thailand for a multilayer co-extruded film (*DIAMIRON*) that is widely used in food and medical packaging to expand business in the ASEAN market, which is expected to continue to experience significant growth. We will also globally expand the business of *DIAMIRON* and other barrier films through overseas M&A and enhance the technological development of next-generation products such as smart packaging to focus on social contributions, including solving the food-loss issue (longer shelf life).

Example of use of *DIAMIRON*

Growth Strategies of High-performance Chemicals

We pursue growth by organic growth, cooperation with other business domains, utilizing external resources through M&A, and expanding our business by exploring segments.
One specific example of the organic growth is the case for Emulsifier business, represented by Sugar Ester which we have the leading global market share. Sugar Ester will be expanded by applying technologies and schemes which have been established through our long experience in Japan, and especially by satisfying demand mainly in China/ASEAN where the market for processed food is expanding.
For cooperation with other business domains, combination with Carbon fiber composites materials shall be an example. Combining with matrix resins and other additives provided from our Domain, various functions such as high toughness, curing control, and adhesion to other materials, will be added. Thus, we persistently offer distinctive composite products to the growing markets.

Expansion through Organic Growth, Cooperation with Other Divisions, M&A, and Exploring New Areas



FOCUS

Growth Strategy

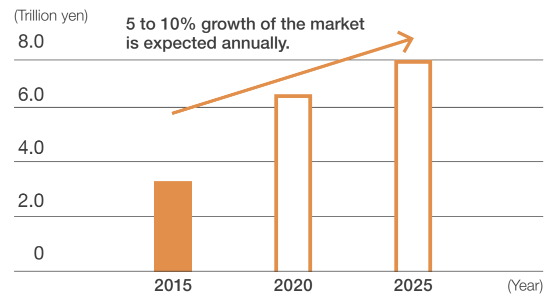
Flexibly adapt our products to diverse needs in medical care

As the aging population continues to grow in developed countries and the population increase will accelerate in developing countries, the global medical market is expected to continue to grow significantly. The MCHC Group focuses on the growing medical market and develops products that are flexibly adapted to diverse needs in medical care.
For example, in the high-performance engineering plastics business, ultra-high molecular weight polyethylene (*Chirulen*) has been employed globally by artificial joint manufacturers for many years, and biocompatible engineering plastics are widely used for medical devices and surgical tools as substitutes for metal parts because of their lightweight and radiolucent characteristics.
For MCHC overall, our target is to increase sales in the medical market from 55 billion yen in 2017 to 100 billion yen in 2020. We will combine our broad array of technology and experience, while continuing to pursue growth.

Biocompatible high-perfomance engineering plastic

Hip joint   Knee joint

Global market for orthopedic implants



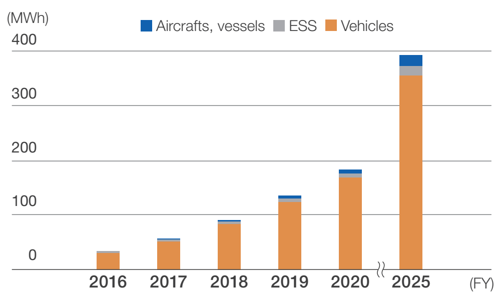
The above chart was prepared with reference to "Technology Roadmap for 2016-2025: Medical, Healthcare, Food and Agriculture industries" published in 2015 by Nikkei Business Publication, Inc.

Solutions for Environmental and Social Issues

Provide innovative products and solutions that contribute to the efficient use of energy in pursuit of a more KAITEKI society.

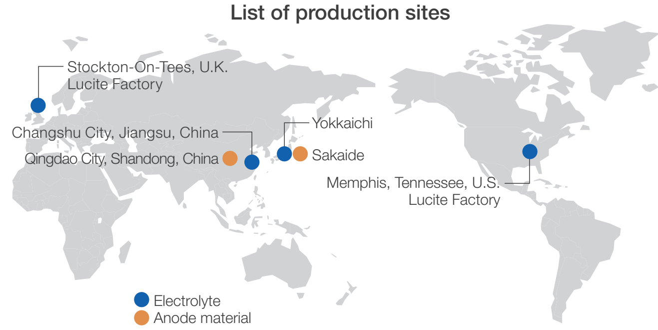
In recent years, with increasing awareness of resource constraints and environmental issues, the electric vehicle market is expanding. The MCHC Group is manufacturing and selling electrolytes and anode materials for lithium-ion batteries (LIB) equipped in electric vehicles. Our electrolytes and anode materials are widely used for LIBs for vehicles as high-performance products that can improve performance in a variety of ways, including product life, output, and charging property of LIBs.
We will continue to satisfy the performance requirements of customers with our high technologies while simultaneously strengthening our global supply system by increasing capacity at each site, aiming to realize a KAITEKI society.

Projection of demand in large size LIB



Reference data: IHS, Fuji Keizai, B3 and ID Tech

List of production sites



Overview of Business Segments | Industrial Materials Domain

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

	Strengths	Weaknesses	Opportunities	Threats
MMA	Possesses three major manufacturing methods. Holds a strong market position with the world's top market share	Fluctuating revenue due to overseas market conditions and raw material trends	Business network positioned to respond to global expansion of demand	Competition with other materials
Petrochemicals	Product chains ranging from crackers to derivatives and accumulation of own technologies	Susceptible to price fluctuation impacts of commodities such as crude oil	Knowledge business (technology license, catalysts) in overseas growth regions	U.S. shale-based products and Chinese coal-based products flowing into the Japanese market in greater quantities than expected
Carbon Products	Coking coal blending technologies and Coke quality management technologies	Fluctuating revenue due to volatile coking coal prices	Expanding production of crude steel and demands for coke in developing countries such as India	Integration of blast furnace along with the restructuring of steel companies
Industrial Gases	Holds a strong market position with the domestic top market share	Relatively expensive domestic cost structure (electricity rates)	Greater opportunity to invest in North America, Asia and Oceania. Expanding demand for electronics and medical uses	Oligopolization in overseas markets by major European and North American gas producers

Major Businesses and Products

MMA

FY2017 Revenue **¥385.9** billion

FY2017 Core Operating Income **¥109.6** billion

MMA, PMMA

MMA

We possess three main manufacturing methods* that use different raw materials and maintain a leading 40% global market share. We aim to realize the most advanced and sophisticated operations with an established global supply chain that takes advantage of raw material availability for each plant as well as cost competitiveness.

* 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.

Petrochemicals

FY2017 Revenue **¥538.0** billion

FY2017 Core Operating Income **¥25.9** billion

Basic petrochemicals, Basic chemical derivatives, Polyolefins

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.

Carbon Products

FY2017 Revenue **¥253.4** billion

FY2017 Core Operating Income **¥12.4** billion

Coke, Carbon material, Carbon black, Synthetic rubber

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.

Industrial Gases

FY2017 Revenue **¥638.7** billion

FY2017 Core Operating Income **¥57.5** billion

Industrial Gases, Industrial Gas-related equipment and facilities

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.

Overview of Business Segments | Industrial Materials Domain

Performance Products

APTSIS 20

Policies

Stabilization of earnings by strengthening of cost-competitiveness

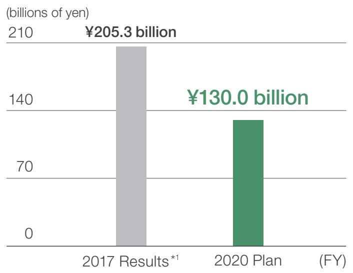
Acceleration of growth and strengthening of presence in the global market

Key Strategies

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

Planned Figures (*APTSIS 20* Original planned figures)

Core Operating Income



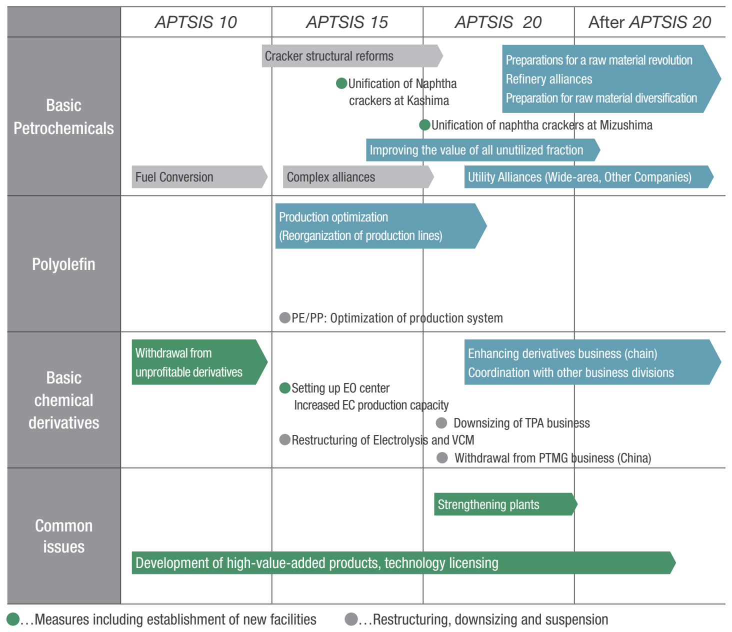
Investment amount (Five-year plan, total) **¥580.0** billion*2

R&D investment (Five-year plan, total) **¥80.0** billion*2

*1 Since FY2017, changes have been made to some product segments.
*2 In November 2017, MCHC announced that it would increase investments and loans by 200 billion yen and R&D investments by 25 billion yen on a company-wide basis.

Strategic Approach to Strengthening Competitiveness of Petrochemicals

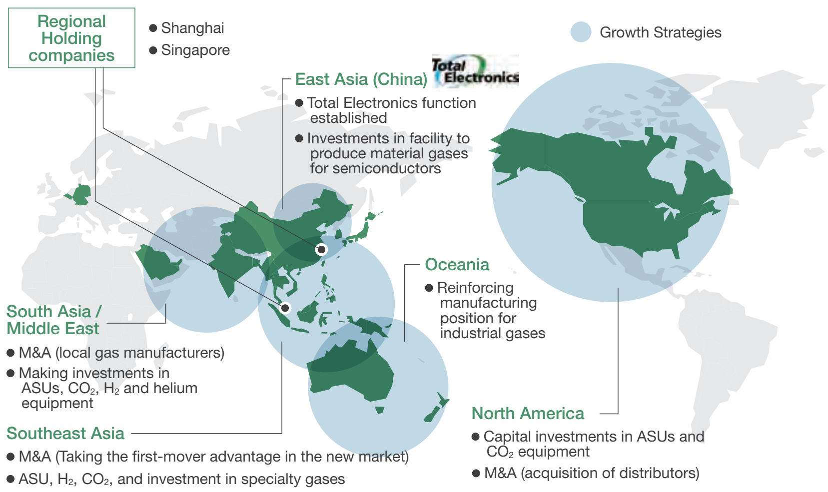
Up to 2016, we had specific aims for large-scale structural reforms, including the consolidation of ethylene cracker and withdrawal from unprofitable businesses. Looking ahead, we will continue to strengthen competitiveness by further reinforcing the foundations of production sites and optimizing production while seeking to maximize earnings.
As for the optimization of polyolefin production, in 2017, we stopped the system in the production facility using the slurry technique at Japan Polypropylene Corporation Goi Plant as part of the scrap-and-build plan. We have decided to construct a new system in the polypropylene production facility using the gas-phase process (our unique HORIZONE method), which can realize high-quality and high-efficiency production, at the same plant, aiming for start of operation in October 2019.
We will continue to maximize earnings through improved added value by targeting the unutilized fraction between cracker and derivatives, the development of high-performance polyethylene and high-performance polypropylene, and the expansion of technology licenses through the refinement of possessed technologies.



Growth Strategies of Industrial Gases

Taiyo Nippon Sanso Corporation (TNSC), which has a leading 40% share of the domestic market for industrial gases, will work to promote expansion by setting structural reform, innovation, globalization and M&A as the pillars of our growth strategy, aiming to improve global competitiveness and secure a firm footing in the industrial gas market where oligopolization by restructuring is taking place.
Domestically, by maximizing the power of the Group through the expansion of gas and gas-related businesses, including electronics material gases and the medical business, as well as the equipment business and strengthening of coordination among the sales divisions at Group companies, we will further reinforce our industry-leading position while continuously growing. Overseas, we will aggressively promote capital investment and M&A activities mainly in North America, Asia, and Oceania, where further growth is expected, while considering expansion into new business areas.

* In July 2018, MCHC announced the conclusion of the share purchase agreement to acquire a part of European businesses of U.S. company Praxair, Inc., for 5,000 million euro. The share transfer is planned for November 2018.



(Source: Materials from TNSC's Ortus Stage 2 medium-term management plan) *ASU: Air Separation Unit

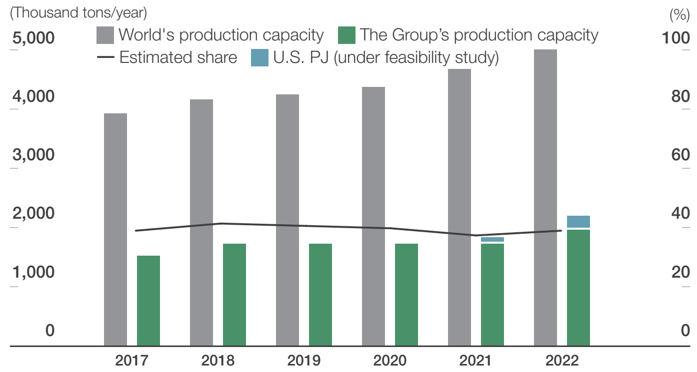
FOCUS

Growth Strategy

MMA - Establish a Strong Global Supply Network

With its global production sites and sales networks, Mitsubishi Chemical Corporation (MCC) has established a strong business model with high cost-competitiveness and a wide range of value chains, from MMA monomers to polymers and processed products, as well as from multi-purpose products to high-performance products, as the world's leading supplier of MMA, boasting approximately a 40% share of the global production capacity.
In April 2018, the plant with the world's largest production capacity of MMA monomers (250 thousand tons/year), which was established as a joint venture with Saudi Basic Industries Corporation in Saudi Arabia, has commenced commercial operations. This plant makes maximum use of the highly cost-competitive gas raw materials, utilities, and infrastructures in Saudi Arabia based on the new ethylene process (Alpha Technology), which is the Group's unique technology that produces MMA monomers from ethylene.
In the U.S., we are also performing investigations on business development regarding the construction of another MMA monomer production facility that has a production capability of 250 thousand tons based on the new ethylene process, using shale gas-based ethylene as a raw material.
To maintain our overwhelming competitive advantage as having the world's leading share of MMA business, we will continue to build optimal production systems for plants located all over the world.

MMA World Market Share Trend



MMA monomer plant with the world's top-class production capacity that has started operation (Saudi Arabia)

Solutions for Environmental and Social Issues

Needle Coke

Mitsubishi Chemical Corporation (MCC) has succeeded in the production of the world's first coal-based needle coke using coal tar, which is generated when coal is distilled (steamed and roasted) as a raw material. Demand for needle coke is rapidly increasing, mainly as a raw material for graphite electrodes in electric furnace steel and for anode materials for lithium-ion secondary batteries. Behind the rapid increase in demand is the rapid recovery of electric furnace operations due to the prohibition of illegally produced steel mill products in China and the global expansion of the electric vehicle market.
There are only two companies in the world (excluding China) that produce needle coke from coal. The electrodes that use our needle coke have superior characteristics, such as lower thermal expansion coefficients and electric resistibility, compared to conventional petroleum-based needle coke and extremely low power consumption of the electrodes themselves.
We are contributing to reducing the environmental impact by providing needle coke as a raw material for graphite electrodes in electric furnace steel, which generate lower CO_2 emissions than blast furnaces, and anode materials for lithium-ion secondary batteries, which are used for electric vehicles.

Overview of Business Segments | Health Care Domain

Health Care

Health Care Domain

Going beyond the treatment of disease, MCHC will develop the health care business for the realization of society in which all people live long, healthy lives

Major Businesses and Products

Health Care | FY2017 Revenue **¥556.6** billion | FY2017 Core Operating Income **¥81.2** billion

Pharmaceuticals

Remicade *Simponi* *Imusera*

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).

Tenelia *Canaglu* *Canalia*

Diabetes and kidney diseases area

In the diabetes and kidney diseases area, we aim to obtain evidence and expand sales channels for *Tenelia* Tablets and *Canaglu* Tablets, the Japan's first treatment for type 2 diabetes mellitus discovered by Mitsubishi Tanabe Pharma, and for *CANALIA* Combination Tablets*, a combination of *Tenelia* Tablets and *Canaglu* Tablets, and we plan to establish our presence in this area.

* Approved July 2017, launched in September 2017

Lexapro *Radicut*

Central nervous system diseases area

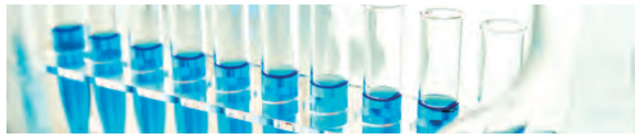
In the central nervous system diseases area, the antidepressant *Lexapro* was additionally approved for the treatment of social anxiety disorder in November 2015. Centering on its effect on anxiety, we will further promote this drug, reinforcing the sales base in this area for the launch of new drugs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

Influenza vaccine Tetrabik Varicella vaccine

Vaccines

MCHC and the Research Foundation for Microbial Diseases of Osaka University founded BIKEN Co., Ltd., a joint venture for the production of vaccines, which started operation in September 2017. We plan to double or triple production of varicella vaccine and to increase total vaccine production by 20-30% by 2019. We will also enhance the production platform for vaccines that are in greater demand and help further stabilize the supply of vaccines.

Life Science



Clinical testing/diagnostic reagents and instruments/capsule business/active pharmaceutical ingredients and intermediates

Drug discovery solutions

We offer clinical trial services that support the pharmaceutical development process and the manufacturing of active pharmaceutical ingredients and intermediates. We also provide high-quality, high-performance hard capsules such as HPMC capsules, the world's first HPMC capsules made of plant-derived materials, and pharmaceutical machinery using our knowhow of manufacturing technology.

Jibun Karada Club

Health and medical ICT

Through the provision of clinical testing services, the sale of diagnostic reagents and diagnostic instruments, and the provision of self-health check service, *Jibun Karada Club*, we offer solutions not only to "cure disease" but also to "prevent disease."

Muse cell

Next-generation healthcare

We are promoting next-generation medical business such as regenerative medicine. In January 2018, we began exploratory clinical trials of a Muse cell-based formulation for patients with acute myocardial infarction. The formulation uses Muse cells which were discovered by a team led by Professor Mari Dezawa of Tohoku University. For the commercialization of the Muse cell-based formulation, we plan to start operations the LSII Regenerative Medicine Center (tentative name), a cell processing facility, in January 2019 (see pages 15 and 16).

* The LSII Regenerative Medicine Center (tentative name), cell processing facility

SWOT Analysis

Strengths	Weaknesses	Opportunities	Threats
Pharmaceuticals			
■ Capabilities for drug discovery and IKUYAKU (drug fostering and evolution) in the pharmaceutical business ■ Presence in focus areas including autoimmune diseases	■ Global business expansion (in North America in particular) has been in progress	■ Diversification of medical needs ■ Expanding demand in the health care domain due to global aging	■ Declining success rate for new drug development and increasing R&D costs due to stricter drug approval process ■ Various measures to control medical expenditures by governments
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	■ Various products and services that meet customers' needs are insufficient	■ Upward trend in the use of big data through health and medical ICT ■ Government incentives to maintain health, to prevent serious disease cases and to restrain medical expenditure ■ Enhancing health awareness such as self-medication	■ Lack of economic incentives in the healthcare business

Overview of Business Segments | Health Care Domain

APTSIS 20

Policies

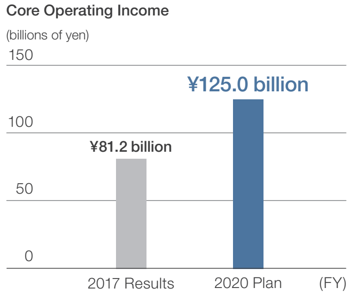
Worldwide growth in pharmaceutical business

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

Planned Figures (*APTSIS 20* Original planned figures)



Investment amount (Five-year plan, total) **¥560.0** billion*

R&D investment (Five-year plan, total) **¥440.0** billion*

* In November 2017, MCHC announced that it would increase investments and loans by 200 billion yen and R&D investments by 25 billion yen on a company-wide basis.

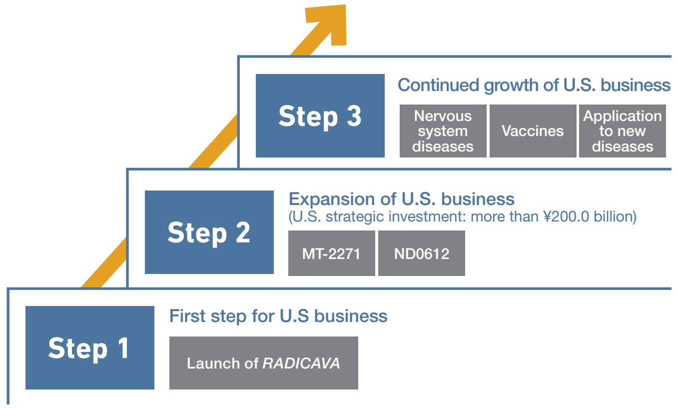
Growth Strategies in Pharmaceutical Business

As the health care company in the MCHC Group, Mitsubishi Tanabe Pharma has set the target revenue of ¥500.0 billion and core operating income of ¥100.0 billion for FY2020 under its medium-term management plan "Open Up the Future" and has also set out four strategic priorities for achieving the following objectives.

Four strategic priorities	FY2020 objectives	FY2017 results
Maximizing pipeline value	■ Late-stage drug candidate objective: 10 candidates ■ R&D investment: ¥400.0 billion (over medium-term management plan period)	▶ Progress of 5 products
Strengthening IKUYAKU (drug fostering and evolution) and marketing	■ Domestic revenue objective: ¥300.0 billion ■ New drug and priority product sales ratio: 75%	▶ ¥309.3 billion ▶ 63%
Accelerating U.S. business development	■ U.S. revenue objective: ¥80.0 billion ■ U.S. strategic investment: more than ¥200.0 billion (over medium-term management plan period)	▶ *Radicava* ¥12.3 billion (launched in August 2017) ▶ Acquisition of NeuroDerm (around ¥120.0 billion)
Reforming operational productivity	■ Cost reduction objective: ¥20.0 billion (compared to FY2015) ■ Number of employees in Japan: 5,000 employees	▶ ¥14.0 billion (compared to FY2015) ▶ 5,158 employees

Roadmap for accelerating U.S. business development

We launched *Radicava* for the treatment of amyotrophic lateral sclerosis (ALS) in August 2017 and made NeuroDerm Ltd. into a wholly owned subsidiary in October, thus acquiring product candidates such as ND0612 for Parkinson's Disease. In addition to such business development in the nervous system diseases area, we are in the process of developing MT-2271, a new seasonal influenza vaccine made using novel technology (see page 62) and aim to obtain approval during the period of the medium-term management plan.



Growth Strategies in Life Science Business

Drug discovery solutions

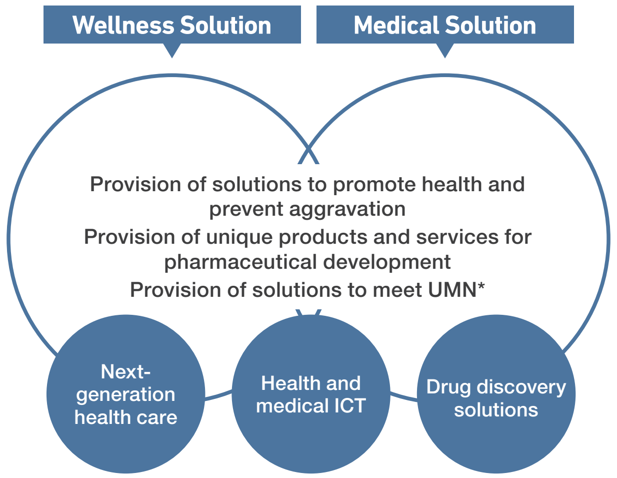
We will consolidate the pharmaceutical business (active pharmaceutical ingredients and intermediates, capsules, etc.) and the drug discovery support business (non-clinical trials, clinical trials) and we will also provide high added value one-stop solutions to pharmaceutical companies through alliances with other organizations.

Health and medical ICT

We will create a growing business by using ICT to organically link diverse products and services ranging from clinical testing to diagnostic reagents, diagnostic instruments, health check-ups and the *Jibun Karada Club* blood test kit.

Next-generation health care

We aim to address unmet medical needs by providing next-generation medical care including regenerative medicine to patients with diseases that are difficult to cure with currently available technologies. In FY2017, we began clinical trials of a Muse cell-based formulation for patients with acute myocardial infarction. We plan to start clinical trials for another indication during FY2018.



* Unmet Medical Needs

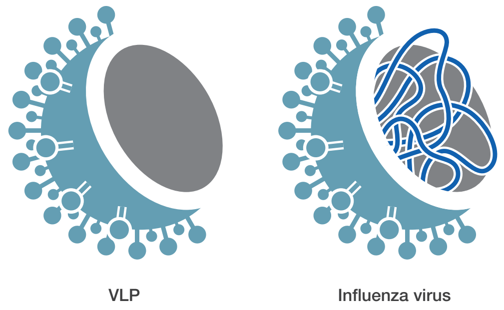
FOCUS — Growth Strategy

Step 2 (MT-2271) of U.S. business development: Virus-like Particle (VLP)-based vaccine

What is a VLP-based vaccine?

A VLP is similar to a wild-type virus and is expected to be highly immunogenic (effective). Medicago Inc., a subsidiary of Mitsubishi Tanabe Pharma based in Quebec, Canada, uses recombinant DNA techniques to produce vaccines and, therefore, all that is needed to start vaccine production is information on the genetic makeup of epidemic strain. Since Medicago also has a transient expression manufacturing platform, it can produce vaccines much more quickly than traditional egg-based influenza vaccine production.

Medicago is a biopharmaceutical company which is at the forefront of the research and development of new vaccines using infiltrated leaf tissue with virus-like particles (VLPs*). Medicago has proprietary technologies for the production, the efficient extraction and purification of those VLPs. In September 2017, Medicago began a phase III clinical study for seasonal influenza vaccine with its plant-derived VLP-based in seven countries including Canada, the U.S., Europe and Asia. The U.S. seasonable influenza vaccine market is worth around ¥240.0 billion and Medicago aims to obtain approval during FY2019.



Features and advantages of VLP-based vaccine production

Vaccines in 5-6 weeks	10M doses in one month
Clinical-grade influenza vaccines ready in 5-6 weeks after strain identification.	In 2012, Medicago demonstrated the ability to produce 10 million doses of a plant-based H1N1 influenza vaccine in one month.

Transient Plant-Based Expression System

1 Starting material	2 Infiltration	3 Incubation	4 Extraction	5 Purification
■ Gene(s) of interest ■ Plants	Getting the vector into the leaf tissue	Infiltrated plant cells producing & accumulating recombinant products	Releasing the recombinant products into solution	Getting highly pure product

Solutions for Environmental and Social Issues

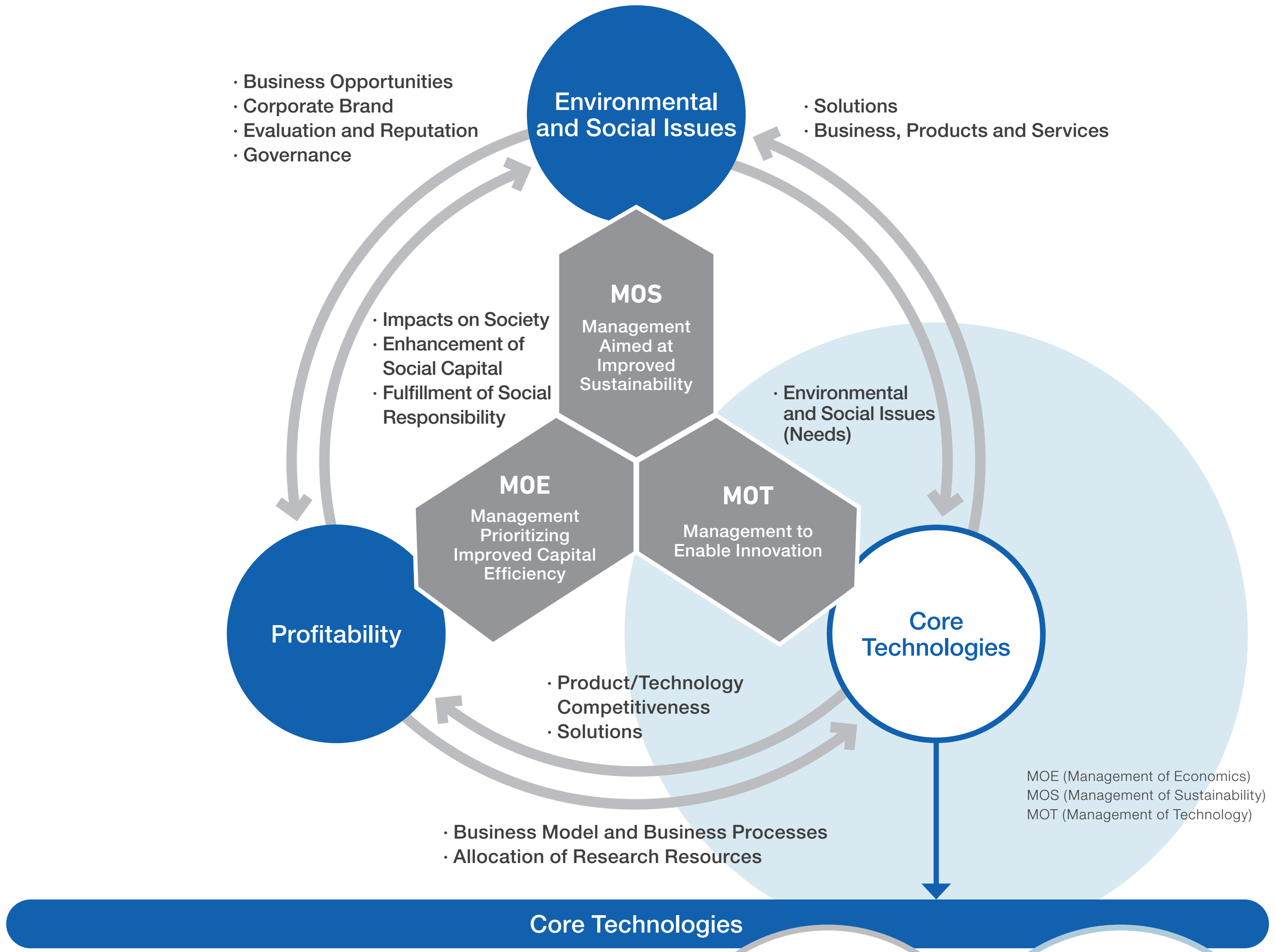
Technology supporting the 2020 Tokyo Olympic and Paralympic Games

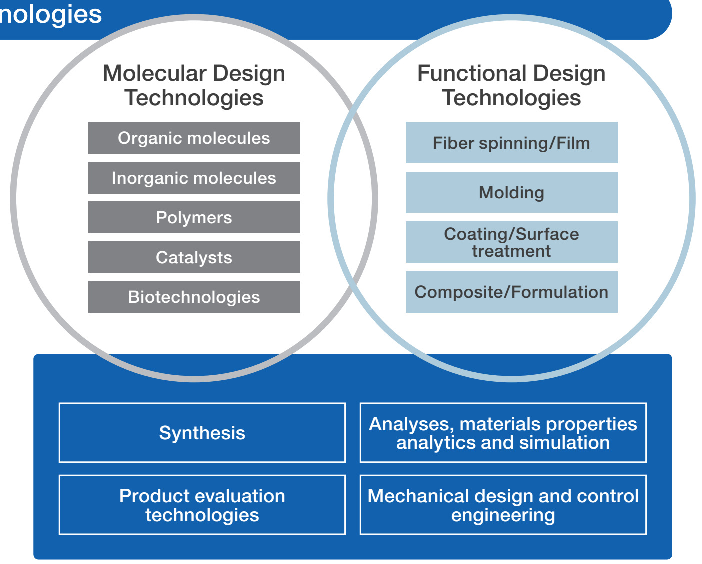
The drug discovery business of Life Science Institute, Inc. was certified as a doping test organization by the International Olympic Committee (IOC) in 1985 and since then it has conducted doping test. The Life Science Institute is the only laboratory in Japan certified by the World Anti-Doping Agency (WADA). At the 2020 Tokyo Olympic and Paralympic Games, we will apply advanced technologies to meet WADA requirements which have become even stricter since the detection of organized doping.

Innovation

Innovation

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





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

Research and Development Management

The MCHC Group embraces various approaches to strengthen our core technologies, 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 synergy among its core technologies and engages in R&D management that tracks the progress using Management of Technology (MOT) Indices. The twelve MOT Indices were selected to quantify the following: efficiency of research and development (R&D Index), technological superiority (Intellectual Property Index), and compatibility with social needs (Market Index). The indices were introduced on a trial basis in FY2013 and reviewed during the formulation of *APTSIS 20*. The new indices have been in use since FY2016. (The table on the right shows achievement percentage of representative indices in FY2017 against target values)

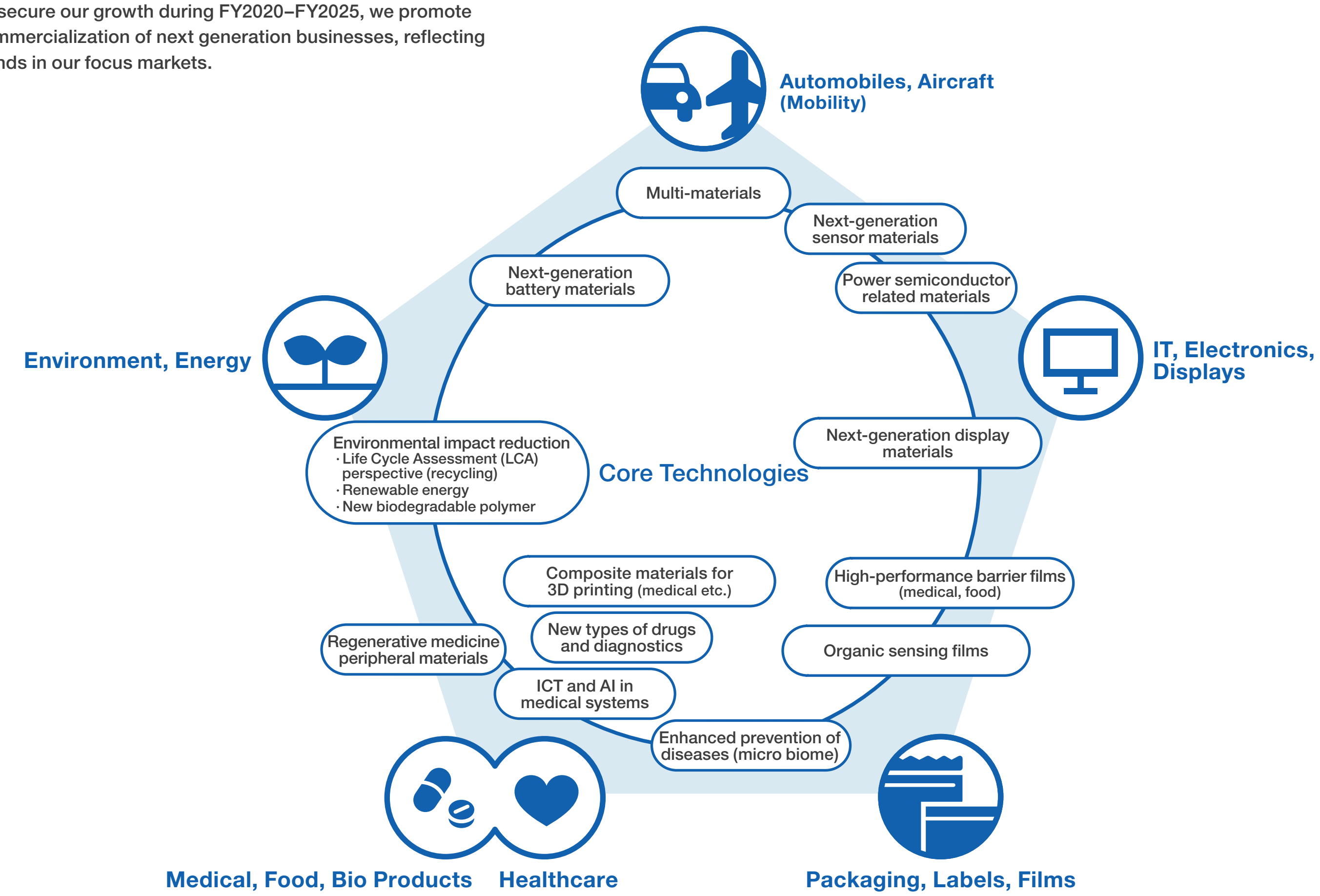
* Open Shared Business (OSB): OSB is MCHC's original framework in which MCHC works with organizations outside the Group to advance collaboration in both R&D and business while developing a distinctive value chain.
"OSB": MCHC registered trade mark No. 5585432

Example MOT Indices and Results in FY2017

MOT Index		Success Ratio
R&D Index	Elevated stage success ratio (development stage to launch stage)	137%
Intellectual Property Index	Overseas patent applications ratio (percentage of overseas applications out of total number of applications)	104%
Market Index	New product ratio (percentage of new products and services out of total revenue)	109%

Early Commercialization of Next-Generation Businesses

To secure our growth during FY2020–FY2025, we promote commercialization of next generation businesses, reflecting trends in our focus markets.



Message from the CDO

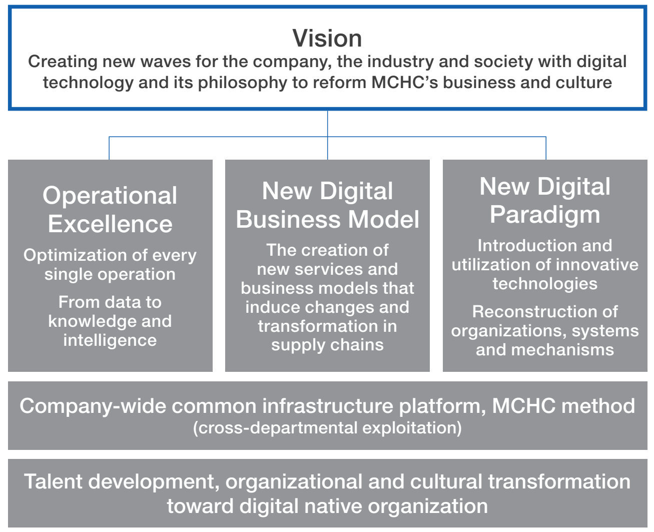
Creating new waves for the company, the industry and society with digital technology and its philosophy to transform MCHC's business and culture

Kazuo Iwano
Executive Officer
Chief Digital Officer

We live in an era of global change that is becoming increasingly complex at an accelerating pace, driven by Information Technology such as cloud computing, big data, Internet of Things (IoT), and artificial intelligence (AI).
We predict that this situation will have significant impact not only on consumer business but also on the heavy and large-scale chemicals and materials industries. In April 2017, the MCHC Group launched the new post of Chief Digital Officer (CDO) to which I was appointed. Working for many years in the IT industry, I have always been thinking about the essence of the technology and concept on which today's digital technology is based and its implications for business and society. In this way, I have tried to sharpen my sense. I feel fulfilled and strongly responsible when serving the MCHC Group to create products and services that support economic and social activities around the world and to help create new value by taking advantage of this sensitivity.
The MCHC Group has four assets which are very significant to the digital transformation. First, a huge volume of long-accumulated data. Second, actual real business fields. Third, the will for digital transformation of our leaders. Fourth, various businesses and associated professionals.
Considerable time has passed since we first heard about the era of big data and artificial intelligence. Until now, discussions and the utilization of these have been confined to the business to consumer (B2C) area. Around 2017, some started remaking, "data is creating a new economy" and "data is the new oil of this century; data mining to turn data to value by ourselves can really produce the greatest profit." The day has come when we, as holders of data and real fields, create value by ourselves. In addition, in the domains of Cyber Physical Systems (CPS) and IoT, the physical world and cyberspace will be fused and be full filled with opportunities to create value. In this respect, innovative changes will occur in the business to business (B2B) area with a higher regard and will have a massive impact on society and industries. It is time for us to be a leader in this challenging transformation.
In this rare opportunity, the MCHC Group with its valuable assets mentioned above must essentially incorporate innovations based on digital technologies and its philosophy and bring about business and cultural reforms. I believe that these activities will have a profound meaning and pioneering role in society.

Actions toward digital transformation

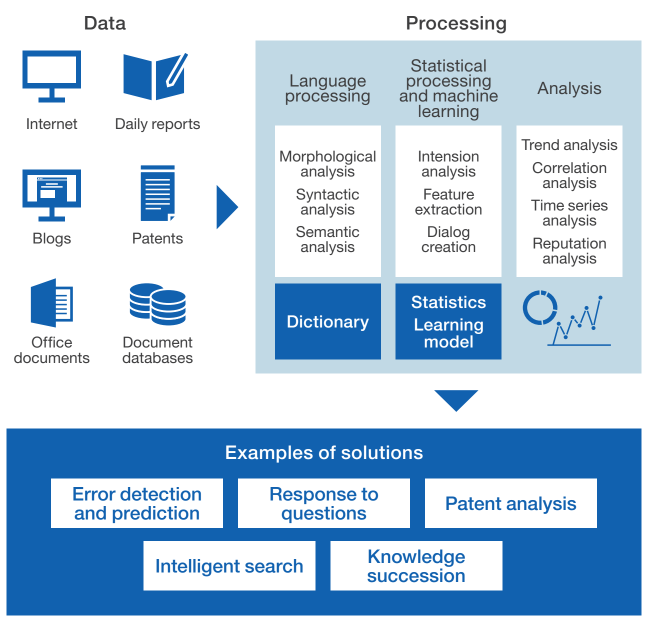
To realize the vision of digital transformation, we carry out activities base on five pillars as illustrated on the right. Specifically, the MCHC Group's operating companies, business divisions and plants are working together to carry out Digital Projects aimed at resolving business issues using digital technologies and its philosophy. In the FY2017, we engaged in dozens of projects focusing on Operational Excellence and produced the results mentioned below.



1 Inheritance of knowledge utilizing text mining

The value of information is long sustained in the MCHC Group. However, the information and data are either scattered or possessed by individuals and we were facing a risk of losing knowledge and expertise with the retirement of skilled employees. This was an issue in the situations such as responding to inquiries on products from customers, so we used text mining technology to turn documents, including textbooks on the products concerned and past responses, into a knowledge base that was visualized and searchable. As a result, we have improved the response quality and speed.

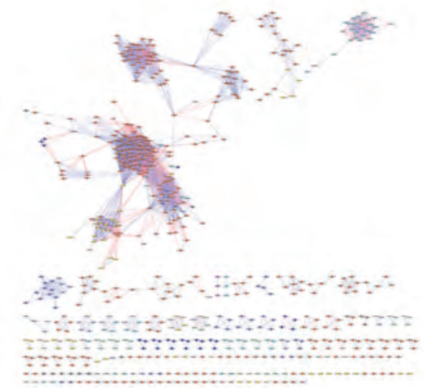
■ Scope of application for text mining



2 Detecting signs of errors in processes at plants

Defects in a large chemical plant have such a huge impact on business activities that they lead to losses of business opportunities. It has been difficult to detect through chemical engineering alone for a long time. Data from sensors installed in a plant are analyzed using statistical and machine learning methods to achieve the practical and predictive detection of abnormalities.

■ Sensor correlation diagram



We have established the methodology in the solution process acquired through a digital project as the MCHC method and we are broadly introducing it together with the common infrastructure platform to Group companies. We are also working to advance technologies by developing working-level engineers and other personnel through hands-on training, exchange and flexible introduction of outside knowledge.
As a company at the upstream part of the supply chain, we will work hard to establish a new business model in collaboration with our downstream partners.

Sustainability

Based on our unique approach, Management of Sustainability (MOS), the MCHC Group drives corporate activities including development technologies, provision of products and services and improvement of manufacturing technologies to contribute to sustainability for people, society and our planet Earth.

Materiality Assessment

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

Material 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 the sustainable well-being of our planet Earth.

Material 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 the sustainable well-being of society.

Material 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.

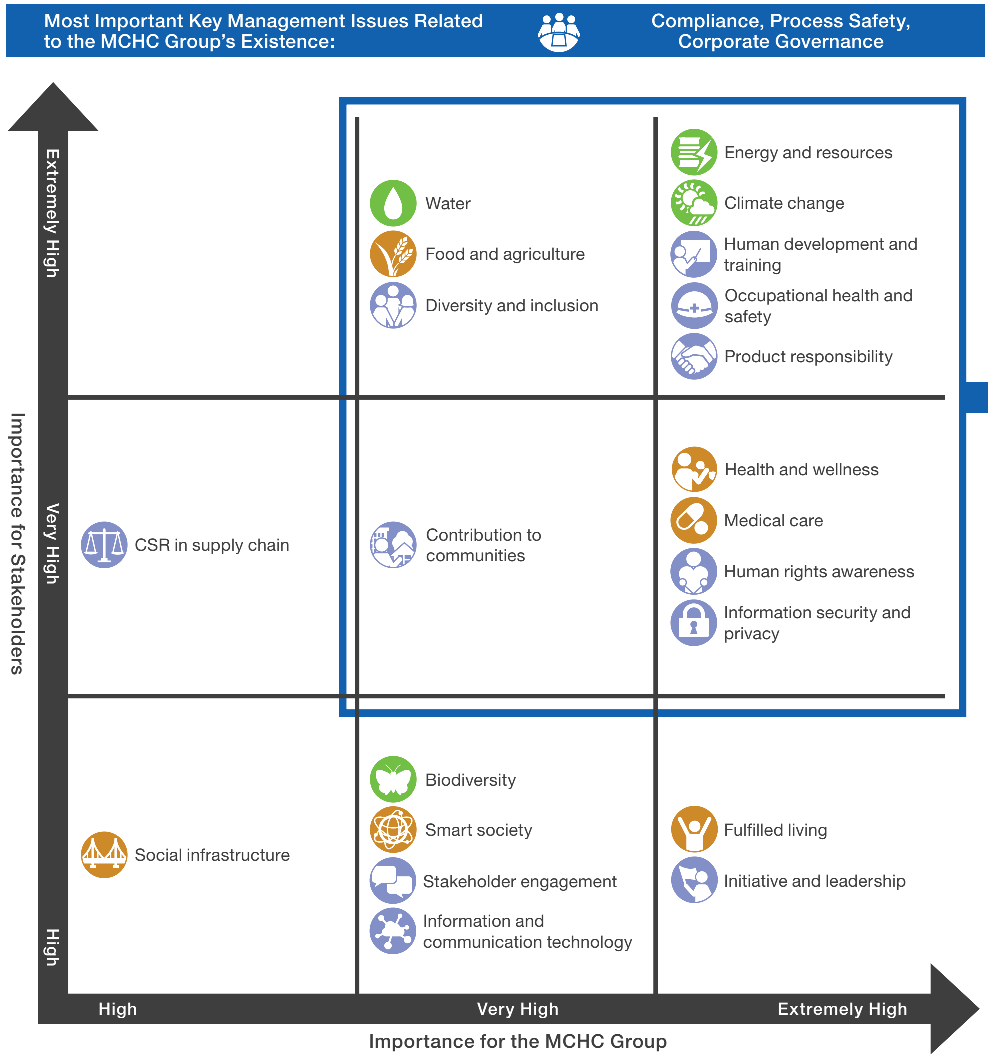
PROCESS 1 Set issues to be researched and analyzed
As a starting point, ordered corporate activities under *APTSIS 20* by analyzing macro trends. Reviewed material issues identified in the previous assessment and added new issues.

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 issues the MCHC Group needs to address
MCHC management identified material issues accounting for management strategies and policies and activities under *APTSIS 20* and prioritized them (three issues of highest priority related to the MCHC Group's existence and 21 material 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 (currently the Corporate Executive Officers Committee) and the Board of Directors.



Material Issues	Recognized Opportunities and Risks	MCHC Group Management	Related SDGs
Material 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, 12, 13
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.	
Material 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, 9
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.	
Material 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, 8, 9, 12, 17
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.	

Relevance between Processes: MOS and SDGs

We believe that initiatives taken by the MCHC Group to realize KAITEKI largely contribute to achieving the sustainable development goals (SDGs). We will promote and develop MOS with awareness of the relevance between the 17 SDGs and our material issues to contribute to achieving SDGs and solving the material issues.

The MCHC Group's sustainability promotion activities are presented in comparison with the five steps of SDG Compass, a guide for business actions on the SDGs.

Cited/edited from SDG Compass*
* Developed by GRI, the UN Global Compact and the World Business Council for Sustainable Development (WBCSD)

Sustainability

APTSIS 20 - Progress of the MOS Indices

Begun in FY2011, the MCHC Group's the MOS Indices are management benchmarks for visualizing the degree of contribution to "Sustainability for people, society and our planet 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 material issues, upgrading of indices related to products that contribute to KAITEKI, and expansion to monitored Group companies inside and outside Japan. In FY2017, the second year of the medium-term management plan, our activities resulted in an annual target achievement rate of 108%, earning 152 points. (See the graph on the lower right.)

Outline of S Indices

We have achieved good progress in S Indices on the whole. We made progress on reducing environmental impact amid stable operation and achieved the target for reducing the environmental impact on the atmosphere, water and soil environment (S-1-1 to S-1-3). We also achieved better results than the annual targets for promoting activities to conserve energy (S-2-1), promoting use of renewable energy (S-2-3), providing products and services that contribute to reducing GHG emissions (S-3-1), and providing products and services that help solve food problems (S-3-3). However, we did not meet the targets on reduction of resource volume in the conversion to resource-saving and reusable materials (S-2-2) and providing products and services that help solve water resource problems (S-3-2).

Related Articles	Promote activities to conserve energy (S-2-1) → FOCUS The MOS Indices: (see page 71)

Outline of H Indices

We made good progress and achieved targets in terms of providing pharmaceuticals (H-1-1), providing health management and health checkup information (H-2-2), and providing products for the health field (H-3-1). However, we did not achieve notable progress and failed to meet our annual targets in terms of providing clinical testing services (H-1-2) and products for the sanitation field (H-3-2).

Related Articles	Provide health management and health checkup information (H-2-2) → Non-financial indicators: (see page 44) Pharmaceuticals provision (H-1-1) → FOCUS The MOS Indices: (see page 71)

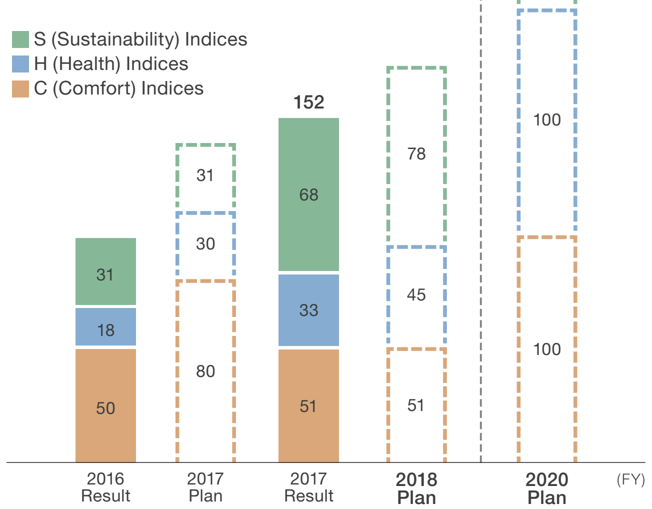
Outline of C Indices

In terms of preventing accidents and injuries (C-1-2), we surpassed our targets concerning the reduction rate of safety incidents, but fell far short of the reduction rate of environmental incidents and lost-time injuries frequency index. We achieved steady progress in terms of improving awareness of compliance (C-1-1) and promoting communication with business partners (C-2-1). However, we did not achieve notable progress and failed to meet our targets in terms of customer satisfaction index and improvement rate in the number of complaints (C-1-3). We largely achieved steady progress in the employee wellness index (C-2-3), in which we have adopted eight measurement items: the employee satisfaction, the proportion of long-time workers, the paid leave utilization rate, the rate of days of work absences due to illness and injury, the percentage of female employees advancing to assistant manager level and above, the percentage of female employees among those joining main career track positions, the percentage of non-Japanese presidents of key local subsidiaries and employees' awareness of orchestration within the Group. We will aim to improve the indices by linking them with KAITEKI Health and Productivity Management.

Related Articles	Prevent accidents and injuries: lost-time injuries frequency index (C-1-2) → Non-financial indicators: (see page 44) Improve awareness of compliance (C-1-1) → FOCUS The MOS Indices: (see page 71)

The MOS Indices Annual Trend Diagram

The MCHC Group introduced the MOS Indices as management benchmarks in FY2011. To coincide with the formulation of *APTSIS 20*, we undertook a revision of the MOS Indices and set updated targets. In FY2017, we achieved steady progress, earning 152 points. We will continue working towards achieving 300 points as a final year target.



APTSIS 20 MOS Indices Performance Evaluation List

MOS Indices				Assessment Criteria (Units)	FY2017 Plan	FY2017 Result	FY2020 Target	Annual Self-Assessment	Point allocation	Related materiality theme
Index that need to be achieved			Achieve zero occurrences of serious accidents and compliance violations							
S	Contribute to reducing environmental impact	S-1-1	Reduce burden on the atmospheric environment	Per-unit impact on the environment (LIME / ¥100 million)	646.2	554.0	548.7	★★★	10	
		S-1-2	Reduce burden on the water environment	Per-unit impact on the environment (LIME / ¥100 million)	6.9	6.1	6.1	★★★	8	
		S-1-3	Reduce burden on the soil environment	Per-unit impact on the environment (LIME / ¥100 million)	6.9	5.2	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)	36,430	51,699	66,000	★★★	13	
		S-2-2	Convert to resource-saving and reusable materials	Reduction of resource volume (equivalent tons of heavy oil)	2,984	2,194	12,000	★★	13	
				Growth rate in provision of resource recycling services (%)	19.8	30.1	28	★★★		
		S-2-3	Promote use of renewable energy	Volume of renewable energy generated and supplied (MW)	43.8	52.6	50.0	★★★	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)	0.65	0.78	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)	3.75	3.34	17	★★	10	
		S-3-3	Provide products and services that help solve food problems	Growth in sales of related products and services (%)	-0.9	7.1	30	★★★	10	
H	Contribute to medical treatment	H-1-1	Pharmaceuticals provision	Contribution index for pharmaceuticals provision (points)	8.82	10.87	15	★★★	15	
		H-1-2	Provide clinical testing services	Contribution index for providing clinical testing services (points)	3.18	2.20	15	★★	15	
	Contribute to the prevention and early detection of diseases	H-2-1	Provide vaccines	Vaccine provision index (points)	4.39	4.17	14	★★★	14	
		H-2-2	Provide health management and health checkup information	Increase frequency of health information provisions (compared to base year, %)	154	154	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)	4.21	7.84	14	★★★	14	
		H-3-2	Provide products for the sanitation field	Growth rate in sales of applicable products (%)	2.6	-2.4	60	★	14	
		H-3-3	Provide products for the medical field	Growth rate in sales of applicable products (%)	25.0	20.3	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	21.0	21	★★★	21	
		C-1-2	Prevent accidents and injuries	Reduction rate of safety incidents (%)	57.9	57.9	60	★★★	19	
				Reduction rate of environmental incidents (%)	100	-40	100	★		
				Improvement rate of lost-time injuries frequency index (%)	17.6	-11.1	50	★		
		C-1-3	Initiatives to provide products and services trusted by society	Customer satisfaction index (points)	47	-4	47	★	17	
				Improvement rate in the number of complaints (%)	60.0	34.5	50	★		
	Promote communication and work in concert with stakeholders	C-2-1	Promote communication with business partners	Communication improvement index (points)	28.8	43.2	83	★★★	7	
		C-2-2	Improve evaluation by stakeholders	External evaluation index (points)	11.0	8.6	11	★★	11	
		C-2-3	Build a dynamic and cooperative organization	Employee wellness index (points)	9.17	8.43	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 (%)	14.3	14.0	40	★★★	9	

Sustainability

FOCUS
The MOS Indices

S Indices **S-2-1**

Material Issues of MCHC
Energy and resources

Promote activities to conserve energy


Energy-efficient, super-large air separation unit

Approx. 90% of CO_2 emitted by the MCHC Group through its business activities is from energy. In response, the MCHC Group proactively promotes energy conservation activities, which lead to the prevention of global warming, and quantitatively evaluates the reduction effect.
Among the energy-saving activities, energy efficiency improvement in the manufacturing process is highly effective. We also work on the optimization of operating conditions, replacement of fuels and well-planned replacement of devices with energy-efficient ones.
For example, air separation units, which are used to produce oxygen, nitrogen and argon from the air, normally require a lot of energy for the air compression process. Replacement of those units with energy-efficient ones enables a significant reduction in energy consumption. In FY2017, this and a variety of other initiatives made progress, resulting in a 148% improvement in energy-saving effects from the previous fiscal year. The accumulated total amount of energy-saving effects in FY2016 and 2017 was 51,699 tons of heavy oil equivalent.

H Indices **H-1-1**

Material Issues of MCHC
Medical care

Pharmaceuticals provision

Radicava (product name in Japan: *Radicut*), treatment for ALS

The pharmaceuticals provision index consists of two items; the degree of contribution to treatment of disease and expansion of utility. The degree of contribution to treatment of disease is calculated based on the treatment satisfaction of diseases for which the products are administered and the number of patients to whom the products were actually administered. We monitor how much our products contribute to the medical care for hard-to-treat diseases. On the other hand, for the expansion of utility, we evaluate the level of expansion of indications for our products, increase the number of countries where they are marketed and other factors.
In FY2017, we released *Radicava* (product name in Japan: *Radicut*), the first new therapeutic agent in approx. 20 years in the U.S. for amyotrophic lateral sclerosis (ALS), a neurodegenerative disorder of unknown etiology. This product was administered to more than 2,500 ALS patients. Through this and other initiatives, we achieved steady progress, resulting in the contribution index for pharmaceuticals provision at 10.87 points, up 92.0% year on year. We will continue to contribute to medical treatment by providing more patients with treatment options through pharmaceuticals.

C Indices **C-1-1**

Material Issues of MCHC
Compliance, Process Safety, Corporate Governance

Improve awareness of compliance


Guidelines for the MCHC Group Charter of Corporate Behavior

The MCHC Group regards compliance as one of the most important managerial issues in its continued existence as a company that merits public trust. We take measures to impart a compliance culture in the Group, including the provision of training and awareness-raising activities inside and outside Japan.
In Japan, we outsource to an external agency surveys of compliance awareness among all employees within the MCHC Group. We use the responses from four of the survey items, which are highly relevant to awareness of compliance and workplace culture, to measure the MOS Indices.
In FY2017, annual targets were exceeded in all four items, demonstrating that our variety of initiatives steadily contribute to spreading and imparting compliance. We will continue to promote initiatives for raising the awareness of compliance, aiming to develop a corporate culture that is free from injustice and misconduct.

Case 01 Providing solutions that contribute to improving the water environment of Myanmar

Myanmar faces urgent need for improvement of access to water supply and sewage systems and other water-related technologies, including ones for water quality analysis. This is due to the low water-supply system coverage rate and aging waterworks facilities and also rising turbidity and salination of river water attributed to the prolonged rainy season and dry season, which are regarded as the effects of climate change.
The MCHC Group has established MW Aqua Solutions Co., Ltd. as a solution provider in Myanmar, which supplies safe drinking water by taking advantage of the advanced technologies of Wellthy Corporation that is engaged in the production of drinking water from groundwater. We will contribute to improving the water environment of Myanmar by operating a solution business that integrates water treatment engineering in conjunction with water quality analysis. In addition, we contribute to improving the water quality analysis technologies in the country. For example, we provide technical support to the governmental laboratory in the JICA Project for Capacity Development in Basic Water Environmental Management and Environment Impact Assessment System in Myanmar.


Training on water quality analysis at the Mandalay City Development Committee in Myanmar


River Water Desalination System

Case 02 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.
Mitsubishi Chemical Corporation (MCC), one of the operating companies, concluded an official partnership agreement with Japanese Para-Sports Association (JPSA) in April 2017. The company will support para-sports under this agreement.
MCC is also proactive in carrying out activities for promoting understanding of para-sports among its employees, having its employees support the operation of sports competitions hosted by JPSA as volunteers (such as working as receptionists and setting up venues), watch games and cheer for athletes, in addition to holding internal boccia competitions.
We will continue to support para-sports to help create a society that is physically and mentally healthy, where everyone enjoys the fun and pleasure of playing sports and the individuality of each person is respected, regardless of their age, gender, abilities and other attributes.


Internal boccia competition


2017 Japan Para Wheelchair Rugby Championship

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 are trying to promote initiatives that fully utilize people's skills and maximize the active participation of workers as KAITEKI Health and Productivity 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 the Workshop for the Management of Health on Company and Employee.

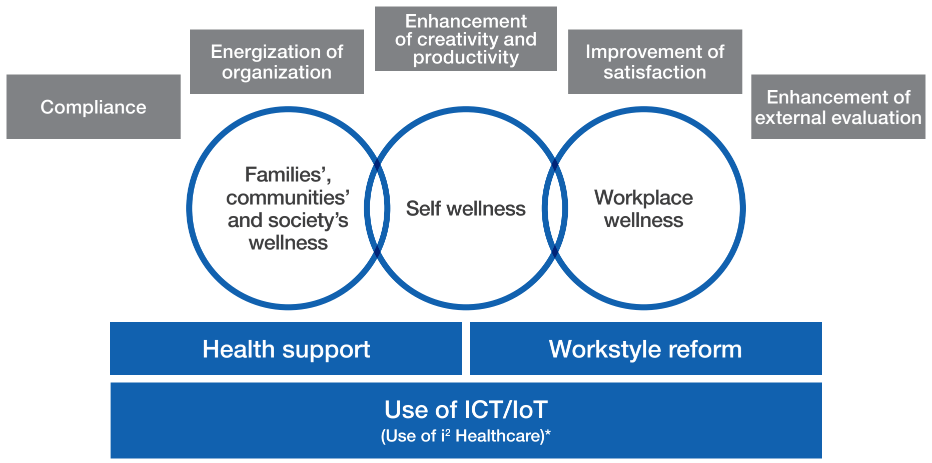
Message from the CHO

Since the declaration of Promotion of Health and Productivity Management in FY2016, MCHC has been carrying out a variety of activities from the view points both health support and workstyle reform as two sides on the same coin. The main focus of the previous workstyle reform was the reduction of overtime hours. Under KAITEKI Health and Productivity Management, we have changed the focus to employees' job satisfaction and sense of personal growth, shift in their awareness of workstyle, life satisfaction, improvements in health-related items and other factors as Key Performance Indicators (KPIs) and promote this reform using ICT and IoT. We lend wearable devices to employees to obtain data on their sleep quality and amount of activity. We have also created My Page, a terminal from which each employee can check the above data, as well as the results of their health checkup and their workstyle along with health support information. Group companies carry out these and many other distinctive activities, including study sessions held by industrial physicians and support for smoking cessation.
A workplace where diverse human resources work with energy and vitality is the foundation of the organization, which bustles with friendly competition, has an open atmosphere and builds high levels of trust. Through this virtuous circle, we will promote "workplace wellness" to become a company with high levels of creativity and productivity.

Director of the Board, Managing Corporate Executive Officer, Chief Compliance Officer, Chief Health Officer Ken Fujiwara

Approach to KAITEKI Health and Productivity Management

We aim to build a basis for high levels of creativity and productivity by fostering offices and workplaces where diverse human resources work with energy and vitality.



*See details on "Examples of Activities 02" on the right page.

KPIs and target values

**In promoting a wide range of activities and measures, we have selected three KPIs (Activeness index, workstyle index and health life index) and set target values to be achieved by FY2020, in order to share the direction and vision of achievement.
Based on these KPIs, we promote the PDCA of KAITEKI Health and Productivity Management.**

Descriptions	FY2020 targets
1. Activeness index	
Index for employees' job satisfaction, enthusiasm, trust and growth	+15 Increasing positive choices by 15% or more in the health survey*1
2. Workstyle index	
Index for levels of workstyle awareness, behavior and initiatives	+10 Increasing positive choices by at least 10% or more in the health survey
3. Health life index	
Index for health checkup items, lifestyle quality and level of life satisfaction	+10 Increasing employees who gain the number of applicable items among the 10 items indicating the health standard by 10 points (one item) or more

*1 The health survey is aimed at discovering initiatives taken by each employee for Health and Productivity Management, in addition to matters covered by our conventional employee awareness survey.

Examples of Activities

01 Safety Fitness Tests

The MCHC Group takes measures against work injuries focusing on human element. MCC takes two core measures against injuries in a fall. They are KAITEKI exercises aimed at sufficiently strengthening the body not to fall easily, and safety fitness tests for assessing employees' risk of falling. There are three safety fitness tests for assessing balance ability, risk of stumbling and weight bearing capacity (muscle strength). Bodily functions are assessed through these tests and the results are used to develop physical strength to prevent falls.

02 Utilization of ICT
Full-fledged utilization of i² Healthcare

MCHC has developed i² Healthcare, an ICT system that provides employees with support related to the health cycle. We have begun to fully implement this system within the Group. Many employees use wearable devices that allow them to monitor their physical condition, including their quality of sleep, amount of exercise and heart rate in real time. They make use of this system like enjoying a game.

Sustainability

☑ Indicators with this icon have been assured by KPMG AZSA Sustainability Co., Ltd. for FY2017.

Environmental Data

Scope of data aggregation: The data for FY2015 covers the three operating companies (MCC, MTPC, and LSII), TNSC and their domestic Group companies. The data for FY2016 and 2017 covers these four operating companies and their domestic and overseas Group companies. (Group companies are directly-owned consolidated subsidiaries.)

Energy consumption/ Greenhouse gasses (GHG) *1	FY2015	FY2016	FY2017
☑ Greenhouse gas emissions (Scope 1 + Scope 2) (1,000 t-CO_2e) *2	12,054*4	14,269	14,815
☑ Scope1	7,771	7,223	7,470
☑ Scope2	4,283*4	7,046	7,345
☑ Scope3*5	43,240	54,370	49,640
☑ Energy consumption (GWh) *3	34,935*4	38,950	40,977

*1 Energy used to produce electricity and steam sold externally and the resulting CO_2 emissions were excluded from figures for FY2015 and prior years (CO_2 emissions were excluded from Scope 2 emissions), but in conformity with the GHG protocol, they are not excluded starting in FY2016.

*2 The emission factors specified in the Act on Promotion of Global Warming Countermeasures are used for the calculation of emissions in Japan. GHG emissions that are not subject to reporting under the Act are mostly calculated based on the mass balance of chemical reactions. Overseas Scope 1 emissions are calculated with the emission factors specified in the Act on Promotion of Global Warming Countermeasures or by the IPCC, and overseas Scope 2 emissions are calculated with power company-specific emission factors or country level emission factors for electricity published by the IEA.

*3 The unit higher heating values for fuels specified in the Act on the Rational Use of Energy or by the IPCC are used.

*4 The FY2015 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 FY2016 results and thereafter exclude GHG emissions and energy consumption of these companies.

*5 For the calculation method for Scope 3 GHG emissions, see page 3 of the non-financial data sheet on the MCHC website.

Environmental impact	FY2015	FY2016	FY2017
☑ NOx emissions (1,000 tons)	8.04	8.96	8.12
☑ SOx emissions (1,000 tons)	3.08	4.77	4.42
☑ COD emissions (1,000 tons) *6	1.74	2.00	2.08
☑ Total nitrogen emissions in water discharged (1,000 tons) *6	5.53	6.06	6.04
☑ Total phosphorous emissions (1,000 tons) *6	0.05	0.09	0.07

*6 Total COD emissions, total nitrogen emissions and total phosphorous emissions each show total volume of emissions discharged into rivers, lakes and oceans. Emissions into sewage systems are excluded.

Water use	FY2015	FY2016	FY2017
☑ water withdrawal (Million m^3) (excluding seawater)	171	189	193

Social Data

Constitution of employees (MCHC Group)	FY2015	FY2016	FY2017
Number of consolidated employees	68,988	69,291	69,230
Number of employees by district In Japan	44,858	44,034	43,406
Outside Japan	24,130	25,257	25,824

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

Scope of data aggregation: The figures show those employed by MCC, MTPC, TNSC and LSII (including those seconded to other companies but excluding those seconded from other companies).

Diversity / Work-Life Balance / Occupational Safety	FY2015	FY2016	FY2017
☑ Number of employees	22,508	21,736	21,770
☑ Number of employees by gender Male	19,194	18,459	18,440
☑ Female	3,314	3,277	3,330
☑ Percentage of females (%)	14.7	15.1	15.3
☑ Percentage of female managers (%) *7	7.1	7.7	8.0
☑ Paid leave utilization rate (%)	66.8	67.6	65.4
☑ Lost-time injuries frequency rate (LTIFR) *8,*9	0.48	0.30	0.26

*7 Percentage of female employees out of all employees at assistant manager level and above.

*8 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.

*9 The LTIFR is the number of lost-time injuries, illnesses 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 ☑ (the "Indicators") for the period from April 1, 2017 to March 31, 2018 included in its KAITEKI REPORT 2018 (the "Report") for the fiscal year ended March 31, 2018.

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 the 'International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information' and the 'ISAE 3410, Assurance Engagements on Greenhouse Gas Statements', issued by the International Auditing and Assurance Standards Board. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing the Company's responsible personnel to obtain an understanding of its policy for preparing the Report and reviewing the Company's reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical procedures on the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company's reporting criteria, and recalculating the Indicators.
- Visiting the Sakaide Plant of Mitsubishi Chemical Corporation and PT. Mitsubishi Chemical Indonesia selected on the basis of a risk analysis.
- Evaluating the overall presentation of the Indicators.

Conclusion

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

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.

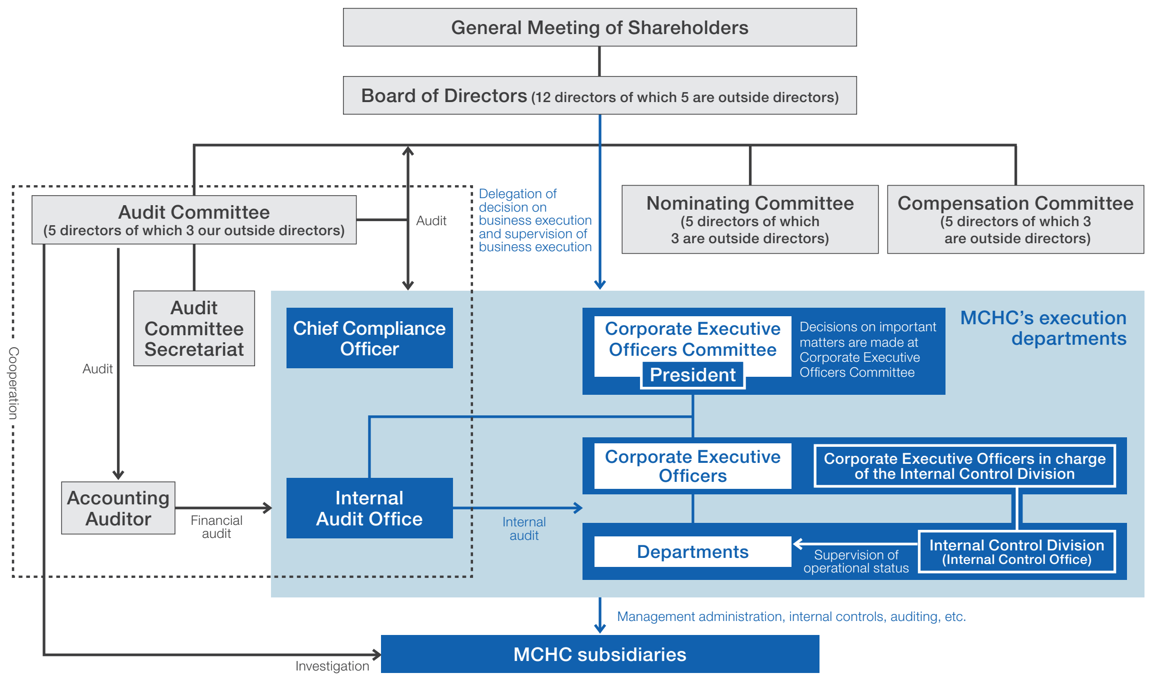
KPMG AZSA Sustainability Co., Ltd.
Tokyo, Japan
September 10, 2018

Corporate Governance

MCHC aims to contribute to the sustainable development of people, 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 26, 2018)

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.



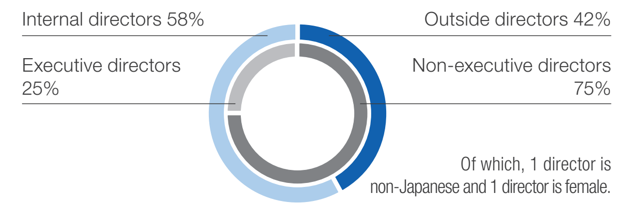
History of Strengthened Corporate Governance

Month/Year	Initiatives	Objective
June 2006	Introduced stock-based compensation (stock option) plans	To link director's remuneration to shareholder value
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 strategies, finance, compliance and corporate governance, and technology, but also five outside directors with experience in corporate management, expertise in social and economic issues, science and technology, as well as ICT, and accreditations as certified public accountants and attorneys. To strengthen supervisory functions of the Board of Directors, a majority of the directors are in non-executive roles.
MCHC's Articles of Incorporation restrict the number of directors to 20 or less. As of June 26, 2018, there were 12 directors, including five outside directors and three 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 26, 2018)



Outline of Evaluation Results on Effectiveness of Board of Directors for FY2017

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. The evaluation method and the outline of results on the effectiveness of the Board of Directors for FY2017 are as follows.

2. Analysis and evaluation method

In FY2017, MCHC commissioned a third-party external consultant to conduct a survey and analyze the results in order to ensure the objectivity and transparency of evaluation and comprehensively verify MCHC's overall corporate governance in accordance with the Corporate Governance Code (including the revised draft). Moreover, in light of the fact that three years had passed since the transition to a company with a nominating committee, etc., we also evaluated the effectiveness of not only the Board of Directors but also the Nominating Committee, the Compensation Committee and the Audit Committee. The specific process was as follows.

i) An anonymous survey consisting of a 5-scale evaluation with a total of 22 questions comprising mainly the following items was conducted among all directors including the Chairperson. In addition to the 5-scale evaluation, the format was designed to grasp the current situation and extract issues in terms of both a quantitative and qualitative evaluation through the creation of a column for comments on each question (March-April 2018)
- Composition of the Board of Directors
- Discussion at the Board of Directors
- Training to invigorate discussion
- Roles and evaluation of individual directors
- Composition and effectiveness of each committee
- Constructive dialog with shareholders

ii) MCHC's Board of Directors received a report on the results of the survey from the external consultant and discussed issues and measures to adopt based on the results in May 2018.

iii) In light of the above, the Chairperson evaluated the effectiveness of MCHC's Board of Directors and each committee and reported the results to the Board of Directors in June 2018.

3. Outline of evaluation results

(1) Summary

The evaluation concluded that MCHC's Board of Directors as well as the Nominating Committee, the Compensation Committee and the Audit Committee are being managed appropriately and that their effectiveness is being generally maintained, primarily through management supervisory functions. The results of the survey showed a high proportion of responses provided a positive evaluation on most questions about both outside directors and internal directors.
In particular, in response to the previous year's evaluation results, the provision of information to outside directors was improved by taking the measures listed in 4 below. Further, it was confirmed that constructive discussions were held at the Board of Directors, the internal control and risk management systems were appropriately supervised and opportunities for training to promote lively discussion at Board meetings, especially by outside directors, were appropriately provided.
In regard to each committee as well, it was confirmed that the management of each committee and feedback to the Board of Directors had been carried out appropriately and, in particular, that the Audit Committee had adequately supervised the business execution of corporate executive officers.

(2) Initiatives aimed at improvements

However, we will promote initiatives aimed at further improvements in the issues below that were recognized in the results of the survey and through discussion at the Board of Directors.

i) Board of Directors' documents and explanation methods
In light of the role (the formulation of basic management policy and the supervision of overall management) of the Board of Directors of MCHC, which is a pure holding company, MCHC will improve the following: (1) Board of Directors' documents: issues of discussion and risks identified in the process of decision making on business execution will also be included for evaluation and the checking function from a viewpoint that differs from business execution will be strengthened; (2) Prior explanation to outside directors: when resolving large-scale financing and investment projects, information without exaggeration or omission will be provided in advance and an environment will be developed that enables more appropriate support for decision making on business execution; and (3) Method of explaining agenda items: points at issue will be clarified to enable substantive discussion from diverse viewpoints.

ii) Supervision regarding responses to crises such as natural disasters and cyber security
The discussion outcomes and report details of the MCHC Risk Management Committee, which is chaired by the President and holds meetings once a year, are reported to the Board of Directors. The Committee enables the Board of Directors to directly supervise the status of responses to risks that include natural disasters and cyber security.

4. Measures to address the results of the previous evaluation

As the evaluation of effectiveness conducted in FY2016 identified the issues that i) the provision of information to outside directors should be enhanced and ii) the Board of Directors should be conducted more efficiently, we took the following measures in response.

For i), we made important matters discussed and reported at Corporate Executive Officers Committee subject to reporting to the Board of Directors and expanded the content of information provision utilizing the company's internal database. Further, by using the regular information exchange meetings with corporate executive officers, the departments responsible for managing business strategy in the four business domains provided explanation regarding each business strategy. In addition, we endeavored to enhance the provision of information through inspections of Group companies and operating sites in Japan and overseas.

For ii), in order to efficiently manage and supervise the status of business execution by the Board of Directors, we integrated the format of explanations in business execution reports provided by corporate executive officers and managed the progress of the medium-term management plan through new business monitoring methods.

MCHC will continue to enhance the efficiency of the Board of Directors in light of the latest evaluation results of the effectiveness of the Board of Directors and each committee and the various opinions presented by each director.

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.

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 basic 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

Directors and corporate executive officers have different remuneration schemes, which are decided by the Compensation Committee based on the following policies.

Remuneration for Directors — Basic Remuneration (Fixed)

- 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 the company with a 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

Remuneration for Corporate Executive Officers
- Basic Remuneration (Fixed)
- Performance-based Remuneration (Variable)

* 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 cash bonus and 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.
- The baseline cash amount/number of shares vary within a range of 0-200% according to the degree of performance achieved and the higher the person's title, the higher the ratio of performance-based remuneration to total remuneration.

Basic remuneration (fixed)	Performance-based remuneration (variable)	
Basic remuneration (70%)	Cash bonus (15%)	Stock-based remuneration (stock options) (15%)

* The case of the President

Performance-based (variable) remuneration is determined after discussion at the Compensation Committee based on the amount and number of shares calculated by means of the formula below.

Performance-based Remuneration (Variable) = Basic amount and number of shares by title × Coefficient linked to company performance evaluation*

* Company performance evaluation is determined after discussion at Corporate Executive Officers Committee based on the status of achievement of targets for each fiscal year.
Targets for each fiscal year are established based on Indices associated with the pursuit of economic and capital efficiencies (MOE), the pursuit of innovation (MOT) and the enhancement of sustainability (MOS).
-MOE Indices: Indices related to core operating income, ROE, ROIC and free cash flow
-MOT Indices: Indices related to efficiency of R&D, dominance of technology and consistency with social needs
-MOS Indices: Indices related to reduction of environmental impact, contribution to health and medical treatment, compliance and prevention of accidents and disasters

Total Amount of Remuneration for Officers (FY2017)

Category	Number of Persons	Amount of remuneration paid (millions of yen)		
		Basic remuneration	Performance-based remuneration	Total
Directors (internal)	6	250	10	260
Directors (outside)	5	69	-	69
Corporate Executive Officers	5	258	65	323
Total	16	577	75	652

(Notes)
1. The total amount of remuneration that MCHC and its subsidiaries paid is stated above.
2. Remuneration paid by MCHC comprises ¥284 million for 11 directors (including ¥69 million for five outside directors) and ¥277 million for five corporate executive officers.
3. MCHC pays directors who concurrently serve as corporate executive officers remuneration as corporate executive officers in line with the policy described above.
4. Performance-based remuneration for directors (internal) 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.
5. Performance-based remuneration for corporate executive officers is remuneration that MCHC paid in the form of stock options.

Activities of Outside Directors

Name	Activities	Attendance at Meetings of the Board of Directors and Committees (FY2017)		
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	10 / 10	100%
		Nominating Committee	6 / 6	100%
		Compensation Committee	6 / 6	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 / 10	100%
		Audit Committee	13 / 13	100%
		Compensation Committee	6 / 6	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 Audit Committee, he proposes audit plans, monitors audits in progress and their results, and expresses his opinions as required. As a member of the Compensation Committee, he expresses his opinion as necessary at meetings.	Board of Directors	10 / 10	100%
		Audit Committee	13 / 13	100%
		Compensation Committee	6 / 6	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	9 / 10	90%
		Nominating Committee	6 / 6	100%
		Audit Committee	13 / 13	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	10 / 10	100%
		Nominating Committee	6 / 6	100%

Message from an Outside Director

By accelerating the globalization of governance and strengthening our unique regional initiatives, we will pursue growth of the Group.

Takayuki Hashimoto, Outside Director

At the end of January 2018, I had an opportunity to visit MCHC Group companies in the United States. My visit had three objectives: to confirm whether defensive governance was functioning appropriately, to comprehend and provide advice on the progress status of offensive governance, and to alleviate the so-called asymmetry of information by gaining a good understanding of business operations by seeing local places of business with my own eyes and communicating with people. In regard to defensive governance, I was able to confirm that since Mitsubishi Chemical Holdings America, Inc. was established in 2010, it had undertaken governance and risk management of more than 40 MCHC Group companies in the U.S. Moreover, when Mitsubishi Chemical America, Inc. was established in April 2017, marketing, business development, brand strategy, human resources strategy, and product and solutions development of MCHC Group companies in the U.S. were integrated and globalization was accelerated. At present, the unification of business cards, collaborative exhibitions at exhibitions and joint approaches to specific industries are still in their infancy but I confirmed that they are steadily progressing. Subsequently, I visited six companies and I heard many people welcome the fact that the Group had gained an opportunity to display synergies. However, as we are lagging behind in regard to the initiatives of European and American companies that are actively engaged in globalization, I believe we need to adopt unique initiatives while increasing the speed of our globalization. This can only be achieved by transferring authority to local companies, carrying out decision-making in places that are close to markets and providing optimal solutions with global high added value. I think that our business in the innovative U.S. has great potential and if we further hone our sensitivity and responsiveness to the market and our intra-regional integration capability, it will make a big contribution. I am convinced that this experience will have a positive impact on the Japan side and lead the Group to its next stage of growth.

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 to major issues for contributing to the realization of KAITEKI, and the basic ideas on and initiatives for the realization of KAITEKI, with our business partners and others.

MCHC Group Charter of Corporate Behavior	07 Environment and Safety
01 Awareness and Responsibility	08 Fair Business Practices
02 Accountability and Transparency	09 Customer Satisfaction
03 Legal Compliance and Fairness, Equitability, and Integrity	10 Information Management
04 Valuing Stakeholders	11 Science and Technology
05 Respecting Human Rights	12 Community Involvement
06 Employment and Labor	13 Shared Standards

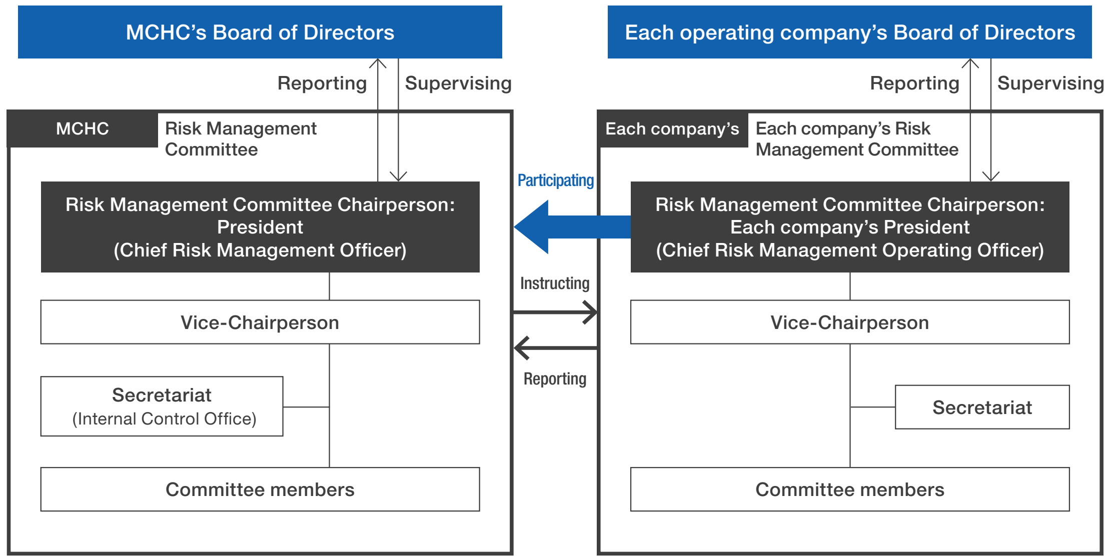
Risk Management

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

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 management of significant risks and risk management policy that affect the entire MCHC Group are deliberated and decided by MCHC's Risk Management Committee. The contents of those deliberations and decisions 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 their Group risk management system locally and overseeing the operations through the local Risk Management Committees.
Recognizing the importance of fostering risk control awareness among all executives, managers, and employees, everyone is expected to be involved in risk management from their respective standpoints.

■ Risk Management System Conceptual Diagram



Risk Management Process at Each Company

1 Identification of risks
All companies in the MCHC Group identify risks associated with business type, business characteristics, and other aspects of the internal environment as well as the country's political and social situation and other aspects of the external environment. Moreover, a unified system for each operating company has been established to understand and address the overall risks within the company.

2 Risk assessment and measures
Each operating company prioritizes identified risks in order of impact and frequency, and selects countermeasures, after which the relevant managing departments act to mitigate the risks or take some other measure. As they conduct the businesses and operations under their control, senior managers likewise identify what risks (major risks) may have a major impact on Group management. 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 each operating company's Chief Risk Management Officer.

4 Auditing
To ensure the proper administration of these risk management systems, the Internal Audit Office periodically conducts audits and reports its findings to the Chief Risk Management Officers.

Measures Against Major Risks

The MCHC Group has isolated the following categories of risks as warranting priority measures. Having identified these risks, we take measures to avoid their incidence and minimize the resulting damage in case of materialization.

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, work injuries, and large-scale natural disasters

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.
Learning lessons from past large-scale disasters, MCHC has made further improvements to its business continuity plan (BCP). In the event that it becomes impossible to continue operations at the MCHC head office (Tokyo), we have plans for transferring head office functions to a temporary backup site with the aim of minimizing damage and ensuring business continuity in disaster situations. We are also examining ways to maintain the procurement of raw materials and our responsibility of supplying products by procurement from multiple suppliers, as part of our BCP.

Information security

MCHC has developed the MCHC Group 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. Based on this policy, we established the Information Security Committee and charged it with reinforcing the maintenance and management of information security at our business sites inside and outside Japan. We regularly conduct educational and training sessions for all employees, including those overseas, on our policy to ensure employee awareness of and compliance with it. 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 minimize damages in case of an occurrence. We are also working to increase employee awareness about information security by drilling them with e-mails made to look like targeted e-mail attacks and arranging e-learning opportunities.

Overseas business development

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.
To prevent lapses in awareness of serious risks, including the above, we created a Global Risk Map collecting publicly available case studies of significant problems and legal violations in each country. This is distributed to Group companies overseas. In addition, we established a communication system for local companies, the head offices of operating companies, and MCHC to use in the event of political turmoil or other disruptions in the relevant country.

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 Group Chief Compliance Officer (CCO) is appointed by the MCHC Board of Directors. The Internal Control Office supports the CCO, acting as a secretariat dealing with compliance matters. To support Group activities, the secretariat compiles standard education tools, arranges training courses, and has established hotline systems for overseas Group companies. It also aims to ensure compliance in accordance with regional conditions through regional control companies established in the United States, Europe, and China. Each operating company has its own Compliance Promotion Committee as well as an Internal Control Promotion Department that serves as secretariat. They operate hotline systems and implement training courses and seminars, business audits and compliance awareness surveys based on the MCHC Group Compliance Promotion Rules.
In the event of a compliance violation, this must be reported to and discussed with the relevant company's Internal Control Promotion Department and the MCHC Internal Control Office, so that corrective actions and recurrence prevention measures can be taken.

Hotline Systems

Hotline systems are managed and operated with the MCHC, operating company Internal Control Promotion Departments, and external lawyers as contact points. In FY2017, 144 cases were reported via the hotline systems. We respond to the reported issues through our investigation teams headed by the managers of the Internal Control Promotion Departments. In case of any issue, corrective measures are taken promptly in line with the relevant regulations under the CCO's direction.

Measures and Results in FY2017

In FY2017, we commissioned an external agency to survey employee compliance awareness within the MCHC Group in Japan in order to continuously monitor the spread of compliance awareness. The results are shared with the operating companies as feedback and contributes to raising compliance awareness.
Likewise, awareness surveys, trainings, and the operation of hotlines are conducted overseas as well. We can recognize that our employees' compliance awareness has been growing by the year. Looking ahead, we will continue sharing information between Japan, the United States, Europe, China, and other parts of Asia. Through this network, we aim to further promote compliance as a Group.

FOCUS

Compliance Training

In the MCHC Group, we conduct compliance training for all company presidents as well as other business managers once a year, inviting external specialists. Compliance trainings for executives and employees are conducted in many other countries as well.

Training at head office

Training in Indonesia

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	**2018**
For the Year:				
Revenue	¥ —	¥3,543,352	¥3,376,057	**¥ 3,724,406**
Profit before tax	—	252,791	258,343	**344,077**
Net profit	—	104,858	216,515	**276,362**
Net profit attributable to owners of the parent	—	51,358	156,259	**211,788**
Total comprehensive income	—	34,302	226,493	**297,476**
Total comprehensive income attributable to owners of the parent	—	253	165,709	**233,619**
Net cash provided by operating activities	—	299,612	396,643	**397,940**
Net cash used in investing activities	—	(234,078)	(289,056)	**(335,933)**
Net cash provided by (used in) financing activities	—	(40,945)	1,411	**(150,592)**
Cash and cash equivalent at end of period	252,749	267,148	363,510	**277,624**
At Year-End:				
Equity attributable to owners of the parent	993,011	972,197	1,091,398	**1,285,750**
Total assets	4,368,998	4,223,774	4,463,547	**4,700,592**
			Yen	
Per Share:				
Equity attributable to owners of the parent	¥677.98	¥663.71	¥758.30	**¥893.26**
Net profit attributable to owners of the parent —Basic	—	35.06	106.73	**147.14**
Net profit attributable to owners of the parent —Diluted	—	35.03	105.95	**136.06**
Ratios:				
Ratio of equity attributable to owners of the parent (%)	22.7	23.0	24.5	**27.4**
Ratio of earnings attributable to owners of the parent (ROE) (%)	—	5.2	15.1	**17.8**
Price earnings ratio (Times)	—	16.8	8.1	**7.0**
Other:				
Number of employees (People)	68,263	68,988	69,291	**69,230**
(Temporary employees in parentheses) (People)	(6,101)	(6,967)	(6,878)	**(7,428)**

Notes: 1. The consolidated financial statements have been prepared in keeping with International Financial Reporting Standards ("IFRS") since the fiscal year, ended March 31, 2017.
2. Sales revenues do not include consumption taxes.
3. In the fiscal year ended March 31, 2017, the Company classified terephthalic acid operations in India and China as discontinued. The Company accordingly presents sales revenue and profit before tax for the fiscal years ended March 31, 2016, and 2017, as amounts for continuing operations after excluding discontinued operations.

Financial Information

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

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		**Core Operating Income (Loss)**	
		Millions of yen		Millions of yen
REPORTING SEGMENT	2017	**2018**	2017	**2018**
Performance Products	¥1,072,640	**¥ 1,145,932**	¥ 94,280	**¥ 93,995**
Chemicals	983,957	**1,177,352**	62,520	**147,868**
Industrial Gases	574,664	**638,675**	52,056	**57,467**
Health Care	547,032	**556,568**	98,389	**81,227**
Others	197,764	**205,879**	7,754	**7,119**
Subtotal	3,376,057	**3,724,406**	314,999	**387,676**
Elimination and corporate	—	**—**	(7,477)	**(7,187)**
Total	¥3,376,057	**¥3,724,406**	¥307,522	**¥380,489**

* Inter-segment revenue and transfers are not included.

	Assets		**Depreciation and Amortization**	
		Millions of yen		Millions of yen
REPORTING SEGMENT	2017	**2018**	2017	**2018**
Performance Products	¥1,135,373	**¥ 1,215,112**	¥ 54,399	**¥ 54,861**
Chemicals	1,031,751	**1,290,102**	54,573	**53,741**
Industrial Gases	1,009,085	**1,016,171**	42,490	**45,708**
Health Care	1,101,469	**1,166,776**	17,930	**19,049**
Others	940,930	**961,554**	2,918	**3,018**
Subtotal	5,218,608	**5,649,715**	172,310	**176,377**
Adjustments	(755,061)	**(949,123)**	1,564	**2,518**
Total	¥4,463,547	**¥4,700,592**	¥173,874	**¥ 178,895**

	Capital Expenditures		**R&D Expenditures**	
		Millions of yen		Millions of yen
REPORTING SEGMENT	2017	**2018**	2017	**2018**
Performance Products	¥ 62,757	**¥ 68,301**	¥ 29,573	**¥ 27,624**
Chemicals	68,500	**61,910**	12,139	**9,989**
Industrial Gases	42,069	**61,549**	3,323	**2,989**
Health Care	28,507	**27,505**	76,969	**92,140**
Others	4,266	**3,535**	51	**310**
Subtotal	206,099	**222,800**	122,055	**133,052**
Adjustments	383	**2,389**	4,235	**5,781**
Total	¥206,482	**¥225,189**	¥126,290	**¥138,833**

	Employees	
		Number
REPORTING SEGMENT	2017	**2018**
Performance Products	23,793	**23,601**
Chemicals	9,063	**8,510**
Industrial Gases	15,860	**16,746**
Health Care	12,116	**11,894**
Others	7,634	**7,586**
Subtotal	68,466	**68,337**
Corporate	825	**893**
Total	69,291	**69,230**

Financial Information

Net Sales

GEOGRAPHIC SEGMENT	2017	2018
		Millions of yen
Japan	¥ 2,408,535	**¥2,589,590**
Overseas	967,522	**1,134,816**
Total	¥ 3,376,057	**¥3,724,406**

Core Operating Income (Loss)

GEOGRAPHIC SEGMENT	2017	2018
		Millions of yen
Japan	¥ 211,456	**¥223,165**
Overseas	96,066	**157,324**
Total	¥ 307,522	**¥380,489**

OVERSEAS SALES	2017	2018
		Millions of yen
Overseas sales	¥1,333,679	**¥1,547,060**
Overseas sales as a percentage of consolidated net sales	39.5%	**41.5%**

Management's Discussion and Analysis

Results of Operations

Revenue and Core Operating Income

In the fiscal year ended March 31, 2018, the MCHC Group's overall results were strong, supported by rising sales mainly in the Performance Products domain and a generally favorable trend in the market condition of methyl methacrylate (MMA) and other petrochemical products in the Industrial Materials domain.

In this environment, consolidated sales revenue for FY2017 was ¥3,724.4 billion, increasing ¥348.3 billion from the previous fiscal year. Consolidated core operating income for FY2017 was ¥380.5 billion, increasing ¥73 billion year on year. The ratio of core operating income to revenue was 10.2%, surpassing the year-ago level of 9.1%.

Results by Segment

Starting in the first quarter of the fiscal year ended March 31, 2018, the Company reorganized the reporting segments.

Performance Products Segment (Functional Products and Performance Chemicals)

Segment revenue was up ¥73.3 billion year on year, to ¥1,145.9 billion. Core operating income fell ¥0.2 billion, to ¥94.0 billion.

In the Functional Products subsegment, sales of advanced moldings & composites, including high-performance engineering plastics and alumina fibers, and sales of high-performance films for displays categorized under Electronics & Display remained generally firm.

In the Performance Chemicals subsegment, sales volumes increased, reflecting the growing sales volume of automotive batteries, a new energy-related product, and the high-performance polymer market, in particular that for the phenol and polycarbonate chain business, which was boosted further by the absence of the impact of the periodic repairs conducted in the previous fiscal year.

The core operating income of this segment was on a par with the level a year ago due to rising raw material costs for certain products, despite a general rise in sales volumes.

Chemicals Segment (MMA, Petrochemicals and Carbon products)

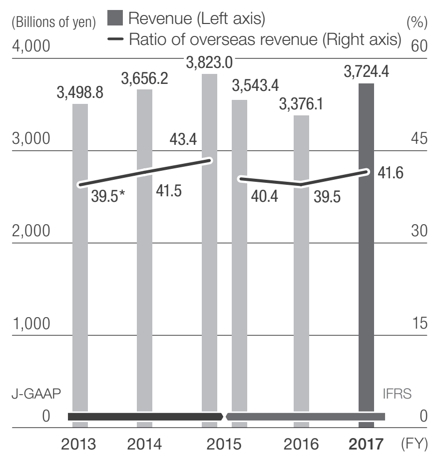
Segment revenue was up ¥193.2 billion year on year, to ¥1,177.3 billion. Core operating income rose ¥85.3 billion, to ¥147.9 billion. In the MMA subsegment, MMA monomer prices rose, supported by steady demand.

In the Petrochemicals subsegment, sales volumes increased attributable to the continuously strong supply and demand environment, sales price rises associated with higher raw material prices, and the reduced impact of periodic repairs of ethylene facilities.

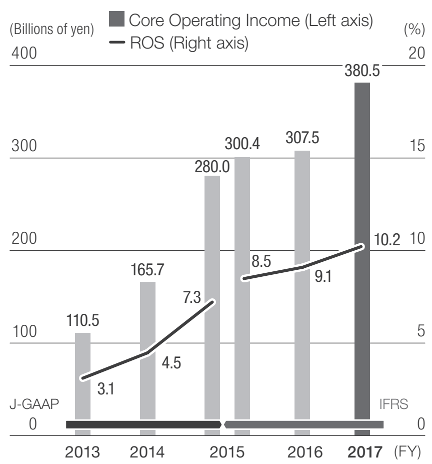
In the Carbon products subsegment, sales prices climbed due to a rise in process raw coal prices.

The core operating income of this segment increased, supported by strong demand for MMA, and coke, needle coke and other carbon products, which in turn widened the price spread between raw materials and products. Other factors for the increase included the reduced impact of periodic repairs of the petrochemical product facilities.

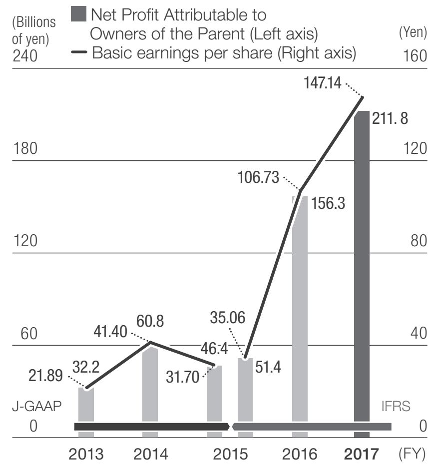
Revenue and Ratio of Overseas Revenue



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

Industrial Gas Segment (Industrial Gases)

Segment revenue was up ¥64.1 billion year on year, to ¥638.7 billion. Core operating income rose ¥5.4 billion, to ¥57.5 billion.

Both revenue and core operating income increased in the Industrial Gas segment, reflecting the strong performance of electronics-related gases in the domestic and overseas markets, as well as the full-year contribution from the results of the businesses acquired in the U.S. and Australia in the previous fiscal year.

Health Care Segment (Pharmaceuticals and Life Science)

Segment revenue was up ¥9.6 billion year on year, to ¥556.6 billion. Core operating income fell ¥17.2 billion, to ¥81.2 billion.

Revenue increased in Pharmaceuticals, mainly attributable to growth in key products, including *Simponi*, a treatment for rheumatoid arthritis, and a sharp increase in sales of *Radicava*, a treatment for amyotrophic lateral sclerosis (ALS) in the U.S., despite the negative impact mainly from the transfer of the generic businesses. Core operating income decreased, mainly due to increases in R&D expenses in Pharmaceuticals and business development expenses in the U.S.

Others (Excluding Adjustments)

Revenue of the Others segment was up ¥8.1 billion year on year, to ¥205.9 billion. Core operating income fell ¥0.7 billion, to ¥7.1 billion.

Non-recurring Items and Operating Income

In the fiscal year ended March 31, 2018, non-recurring items recorded a loss of ¥24.8 billion, representing a decrease in loss of ¥14.1 billion compared to the previous fiscal year. The loss was mainly due to an impairment loss of ¥9.7 billion and a loss on sales and retirement of property, plant and equipment of ¥5.6 billion.

As a result of the above factors, operating income for the fiscal year ended March 31, 2018 increased ¥87.1 billion year on year, to ¥355.7 billion.

Financial Income / Costs and Profit Before Tax

Financial income in the fiscal year ended March 31, 2018 increased ¥1.2 billion year on year, to ¥8.4 billion. The increase was primarily attributable to increases in interest and dividend income.

Financial costs in the year rose ¥2.6 billion year on year, to ¥20.0 billion. This was mainly due to an increase in exchange loss.

As a result of the above factors, profit before tax in the year under review climbed ¥85.8 billion from a year ago, to ¥344.1 billion.

Income Tax Expense and Net Profit

Income tax in the fiscal year ended March 31, 2018 increased ¥23.3 billion compared to a year ago, to ¥67.7 billion, despite a reduction in U.S. federal income tax rates. The effective rate after applying tax-effect accounting was 19.7%, whose difference from the statutory rate was 11.1 points.

As a result of the above factors, net profit grew ¥59.9 billion compared to a year ago, to ¥276.4 billion, and net profit attributable to owners of the parent increased ¥55.5 billion year on year, to ¥211.8 billion.

R&D Expenses

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 4,843 R&D employees and, in fiscal 2017, R&D expenses totaled ¥138.8 billion, up ¥12.5 billion from fiscal 2016.

Liquidity and Sources of Funds

Financial Policies

Under the medium-term management plan *APTSIS 20*, the MCHC Group has set out the 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." It has also set basic management indicators comprising 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. We seek to improve corporate value while maintaining an appropriate balance between investing in growth businesses, enhancing shareholder returns and strengthening our financial position.

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. Going forward, management will pursue Group-wide improvements in capital efficiency by consolidating Group fund procurement and management functions.

Financial Position

As at March 31, 2018, total assets were ¥4,700.6 billion, up ¥237.1 billion compared to a year ago. This increase was attributable primarily to an increase in inventories and a rise in trade receivables associated with the closing day falling on a holiday.

At year-end, total liabilities were ¥2,781.1 billion, up ¥15.8 billion from a year earlier. This was mainly due to an increase in trade receivables associated with the closing day falling on a holiday, which more than offset a decline in interest-bearing debt.

Total equity was ¥1,919.5 billion, rising ¥221.3 billion from a year earlier. This was mainly attributable to an increase in retained earnings as a result of the recording of net profit attributable to owners of the parent of ¥211.8 billion.

As a result of the above factors, ratio of equity attributable to owners of the parent at the end of fiscal 2017 increased 2.9 points from a year earlier, to 27.4%.

The balance of main account items at March 31, 2018 and details of increases and decreases are as follows.

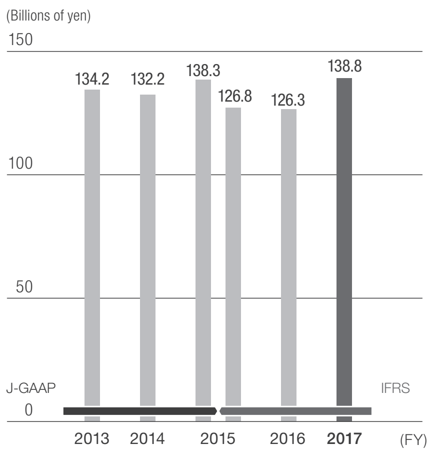
Trade Receivables

Trade receivables increased ¥78.6 billion compared to the end of the previous fiscal year, to ¥854.8 billion. The increase was mainly attributable to the closing day falling on a holiday.

Inventories

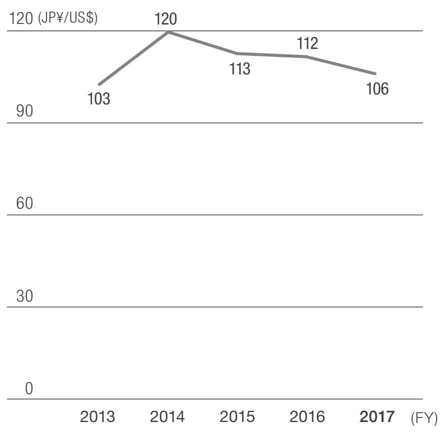
Inventories rose ¥69.6 billion from a year earlier, to ¥607.7 billion. The increase was mainly due to higher raw material prices.

R&D Expenses

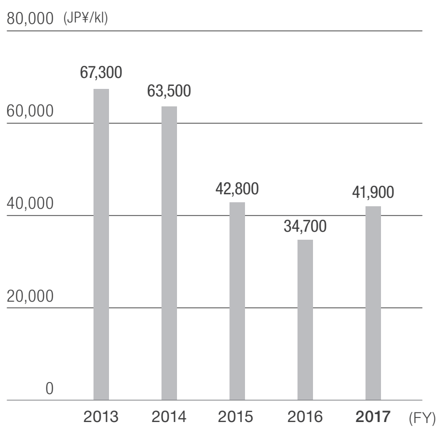


Reference

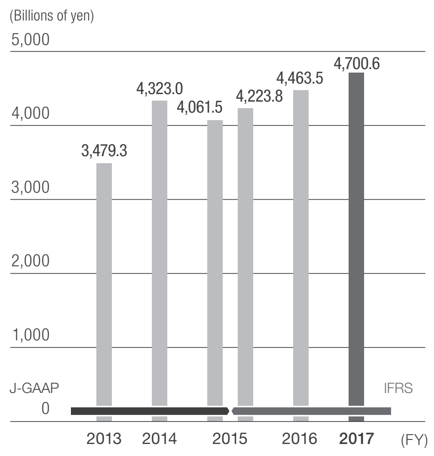
Foreign Exchange (Exchange rate at each fiscal year-end)



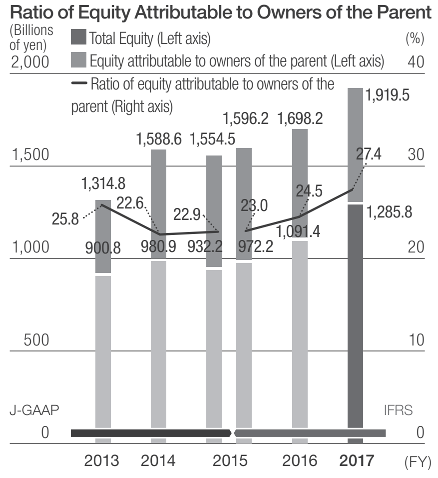
Domestic Naphtha Average Price of Each Fiscal Year



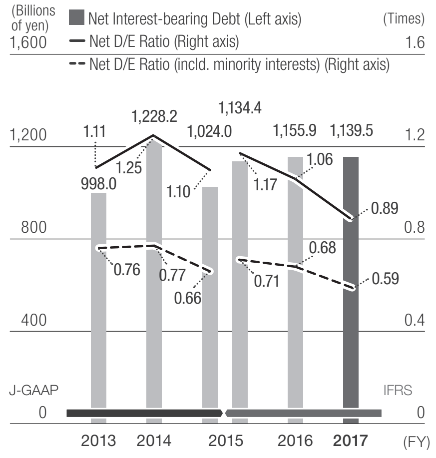
Total Assets



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

Property, Plant and Equipment and Intangible assets

Property, plant and equipment and intangible assets increased ¥129.8 billion from a year earlier, to ¥1,788.7 billion. The increase was mainly attributable to the acquisition of NeuroDerm Ltd. by Mitsubishi Tanabe Pharma Corporation, a consolidated subsidiary of the Company.

Interest-bearing Debt

At March 31, 2018, interest-bearing debt was ¥1,606.1 billion, down ¥87.6 billion from the end of the previous fiscal year.

Trade Payables

Trade payables rose ¥50.7 billion from the previous fiscal year-end, to ¥488.6 billion, primarily due to increases thereof associated with the closing day falling on a holiday.

Retained Earnings

Retained earnings increased ¥195.6 billion from the end of the previous fiscal year, to ¥956.9 billion. The increase was mainly due to the posting of profit attributable to owners of the parent.

Cash Flows

Net Cash Provided by (used in) Operating Activities

Net cash provided by operating activities in the fiscal year ended March 31, 2018 amounted to ¥397.9 billion, up ¥1.3 billion year on year. The increase was mainly attributable to the posting of profit before tax and Depreciation and Amortization, which more than offset the payment of income tax and an increase in working capital associated with increases in trade receivables and inventories.

Net Cash Provided by (used in) Investing Activities

In the year under review, net cash used in investing activities amounted to ¥335.9 billion, up ¥46.8 billion year on year. This resulted from capital investment expenditure and the acquisition of subsidiaries, which more than offset proceeds from sales and the redemption of securities in the management of cash on hand.

Net Cash Provided by (used in) Financing Activities

Net cash used in financing activities in the year under review came to ¥150.6 billion, up ¥152.0 billion year on year. The increase was mainly due to the payment of dividends and a decrease in borrowings and other interest-bearing debts.

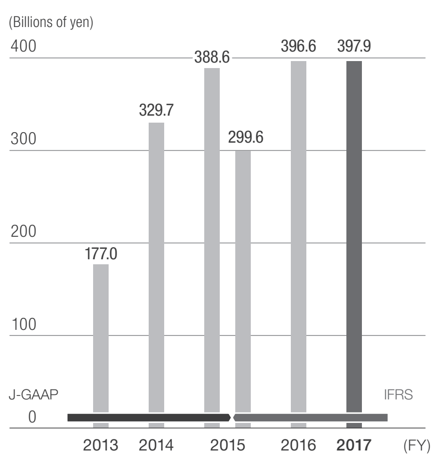
As a result of these factors, free cash flow comprising cash flows from operating and investing activities, was inflow of ¥62.0 billion, down ¥45.5 billion. Cash and cash equivalents at the end of FY2017 were ¥277.6 billion, a decrease of ¥85.9 billion.

Capital Expenditures

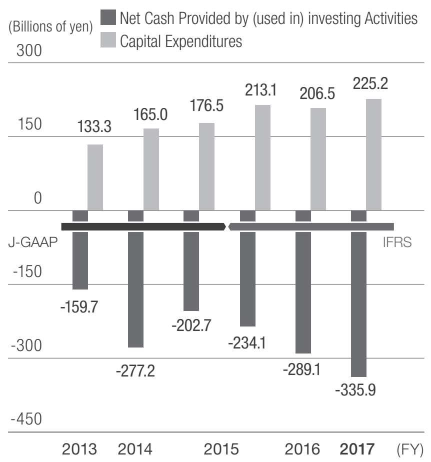
Capital expenditures for the fiscal year ended March 31, 2018 were ¥225.2 billion, an increase of ¥18.7 billion from a year earlier. These expenditures were largely applied to the construction of new facilities or the expansion and renewal of existing facilities, and rationalization investments in other facilities.

New additions of facilities in the fiscal year ended March 31, 2018 included polyvinyl alcohol film production facilities at The Nippon Synthetic Chemical Industry Co., Ltd. and polyester film production facilities at Mitsubishi Polyester Film Inc. (U.S.) in the Performance Products segment. In the Chemicals segment, MMA monomer and PMMA production facilities were established in The Saudi Methacrylates Company. In the Industrial Gas segment, air separation units were newly established at Taiyo Nippon Sanso Corporation and Matheson Tri-Gas, Inc. In the Health Care segment, additions were made to capsule production facilities at Qualicaps Co., Ltd.

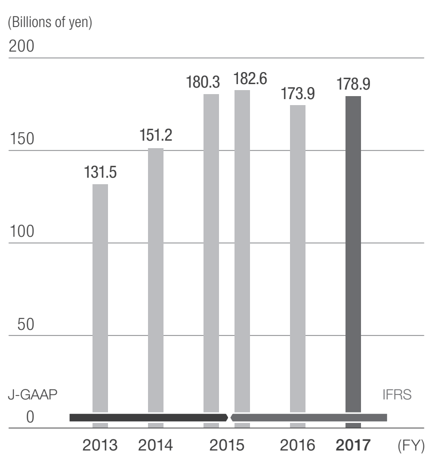
Net Cash Provided by (used in) Operating Activities



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, 2018. 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 (Performance Products segment)

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) Industrial Materials Domain (Chemicals segment and Industrial Gases segment)

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.

(c) Health Care Domain (Health Care segment)

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.

(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 weighted 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, 2017	**Year ended March 31, 2018**
Continuing operations:		
Revenue (Note 4)	¥ 3,376,057	**¥ 3,724,406**
Cost of sales	(2,366,658)	**(2,604,344)**
Gross profit	1,009,399	**1,120,062**
Selling, general and administrative expenses	(714,715)	**(764,317)**
Other operating income (Note 9)	10,695	**19,679**
Other operating expenses (Note 9)	(53,722)	**(46,350)**
Share of profit of investments accounted for using the equity method (Note 4)	16,964	**26,637**
Operating income (Note 4)	268,621	**355,711**
Financial income (Note 10)	7,155	**8,404**
Financial costs (Note 10)	(17,433)	**(20,038)**
Profit before tax	258,343	**344,077**
Income tax expense (Note 11)	(44,414)	**(67,715)**
Profit from continuing operations	213,929	**276,362**
Discontinued operations:		
Profit from discontinued operations (Note 6)	2,586	**—**
Net profit	¥ 216,515	**¥ 276,362**
Net profit attributable to:		
Owners of the parent	¥ 156,259	**¥ 211,788**
Non-controlling interests	60,256	**64,574**
Net profit	¥ 216,515	**¥ 276,362**
Earnings per share:		
Basic (Note 12):		**(Yen)**
Continuing operations	¥ 104.97	**¥ 147.14**
Discontinued operations	1.76	**—**
Basic earnings per share attributable to owners of the parent	¥ 106.73	**¥ 147.14**
Diluted (Note 12):		**(Yen)**
Continuing operations	¥ 104.20	**¥ 136.06**
Discontinued operations	1.75	**—**
Diluted earnings per share attributable to owners of the parent	¥ 105.95	**¥ 136.06**

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, 2017	**Year ended March 31, 2018**
Net profit	¥216,515	**¥276,362**
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)	14,391	**9,682**
Remeasurements of defined benefit pensions plans (Note 25)	17,324	**22,170**
Share of other comprehensive income (loss) of investments accounted for using the equity method (Note 25)	(207)	**—**
Total items that will not be reclassified to profit or loss	31,508	**31,852**
Items that may be subsequently reclassified to profit or loss		
Exchange differences on translation of foreign operations (Note 25)	(20,405)	**(13,598)**
Net gain (loss) on derivatives designated as cash flow hedges (Note 25)	840	**2,278**
Share of other comprehensive income (loss) of investments accounted for using the equity method (Note 25)	(1,965)	**582**
Total items that may be subsequently reclassified to profit or loss	(21,530)	**(10,738)**
Total other comprehensive income (net of tax)	9,978	**21,114**
Total comprehensive income	¥226,493	**¥297,476**
Total comprehensive income attributable to:		
Owners of the parent	¥165,709	**¥233,619**
Non-controlling interests	60,784	**63,857**

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

Consolidated Statement of Financial Position

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries

Millions of yen

		March 31, 2017	March 31, 2018
Assets	**Current assets:**		
	Cash and cash equivalents (Note 21)	¥ 363,510	**¥ 277,624**
	Trade receivables (Note 20)	776,191	**854,804**
	Inventories (Note 19)	538,131	**607,671**
	Other financial assets (Note 17)	215,446	**247,365**
	Other current assets (Note 18)	58,184	**62,050**
	Subtotal	1,951,462	**2,049,514**
	Assets held for sale (Note 22)	16,916	**2,139**
	Total current assets	1,968,378	**2,051,653**
	Non-current assets:		
	Property, plant and equipment (Note 14)	1,431,681	**1,433,509**
	Goodwill (Note 13)	312,950	**323,378**
	Intangible assets (Note 13)	227,169	**355,151**
	Investments accounted for using the equity method (Note 16)	136,734	**175,905**
	Other financial assets (Note 17)	252,921	**244,489**
	Other non-current assets (Note 18)	39,079	**36,145**
	Deferred tax assets (Note 11)	94,635	**80,362**
	Total non-current assets	2,495,169	**2,648,939**
	Total assets (Note 4)	¥4,463,547	**¥4,700,592**

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

Millions of yen

		March 31, 2017	March 31, 2018
Liabilities and Equity			
Liabilities	**Current liabilities:**		
	Trade payables (Note 34)	¥ 437,914	**¥ 488,592**
	Bonds and borrowings (Note 29)	577,737	**580,854**
	Income tax payable	21,287	**41,293**
	Other financial liabilities (Note 31)	184,909	**201,208**
	Provisions (Note 28)	6,057	**7,463**
	Other current liabilities (Note 33)	116,691	**126,285**
	Subtotal	1,344,595	**1,445,695**
	Liabilities directly associated with assets held for sale (Note 22)	5,307	**364**
	Total current liabilities	1,349,902	**1,446,059**
	Non-current liabilities:		
	Bonds and borrowings (Note 29)	1,116,005	**1,025,268**
	Other financial liabilities (Note 31)	27,489	**29,174**
	Retirement benefit liabilities (Note 27)	128,338	**110,639**
	Provisions (Note 28)	25,018	**30,712**
	Other non-current liabilities (Note 33)	38,439	**38,014**
	Deferred tax liabilities (Note 11)	80,159	**101,236**
	Total non-current liabilities	1,415,448	**1,335,043**
	Total liabilities	2,765,350	**2,781,102**
Equity	Common stock: (Note 23)	50,000	**50,000**
	Additional paid-in capital (Note 23)	321,703	**321,111**
	Treasury stock (Note 23)	(43,587)	**(43,569)**
	Retained earnings (Note 23)	761,364	**956,946**
	Other components of equity (Note 23)	1,918	**1,262**
	Equity attributable to owners of the parent	1,091,398	**1,285,750**
	Non-controlling interests	606,799	**633,740**
	Total equity	1,698,197	**1,919,490**
	Total liabilities and equity	¥4,463,547	**¥4,700,592**

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

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, 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.

Millions of yen

	Common stock	Additional paid-in capital	Treasury stock	Retained earnings
Balance at April 1, 2017	**¥50,000**	**¥ 321,703**	**¥ (43,587)**	**¥761,364**
Net profit	—	—	—	**211,788**
Other comprehensive income (Note 25)	—	—	—	—
Total comprehensive income	—	—	—	**211,788**
Purchase of treasury stock (Note 23)	—	—	**(62)**	—
Disposal of treasury stock (Note 23)	—	**(77)**	**80**	—
Cash dividends (Note 24)	—	—	—	**(38,861)**
Share-based payment transactions (Note 26)	—	**144**	—	—
Share-based payment transactions of consolidated subsidiaries (Note 26)	—	—	—	—
Changes in interests in subsidiaries	—	**(659)**	—	—
Changes in scope of consolidation	—	—	—	**1,242**
Transfer from other components of equity to retained earnings	—	—	—	**21,413**
Transfer from other components of equity to non-financial assets, etc.	—	—	—	—
Total transactions with owners	—	**(592)**	**18**	**(16,206)**
Balance at March 31, 2018	**¥50,000**	**¥321,111**	**¥(43,569)**	**¥956,946**

	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, 2017	**¥46,831**	**¥ —**	**¥(43,886)**	**¥(1,027)**	**¥1,918**	**¥1,091,398**	**¥606,799**	**¥1,698,197**
Net profit	—	—	—	—	—	**211,788**	**64,574**	**276,362**
Other comprehensive income (Note 25)	**6,918**	**19,208**	**(6,569)**	**2,274**	**21,831**	**21,831**	**(717)**	**21,114**
Total comprehensive income	**6,918**	**19,208**	**(6,569)**	**2,274**	**21,831**	**233,619**	**63,857**	**297,476**
Purchase of treasury stock (Note 23)	—	—	—	—	—	**(62)**	—	**(62)**
Disposal of treasury stock (Note 23)	—	—	—	—	—	**3**	—	**3**
Cash dividends (Note 24)	—	—	—	—	—	**(38,861)**	**(40,946)**	**(79,807)**
Share-based payment transactions (Note 26)	—	—	—	—	—	**144**	—	**144**
Share-based payment transactions of consolidated subsidiaries (Note 26)	—	—	—	—	—	—	**41**	**41**
Changes in interests in subsidiaries	—	—	—	—	—	**(659)**	**3,882**	**3,223**
Changes in scope of consolidation	—	—	—	—	—	**1,242**	**107**	**1,349**
Transfer from other components of equity to retained earnings	**(2,205)**	**(19,208)**	—	—	**(21,413)**	—	—	—
Transfer from other components of equity to non-financial assets, etc.	—	—	—	**(1,074)**	**(1,074)**	**(1,074)**	—	**(1,074)**
Total transactions with owners	**(2,205)**	**(19,208)**	—	**(1,074)**	**(22,487)**	**(39,267)**	**(36,916)**	**(76,183)**
Balance at March 31, 2018	**¥51,544**	**¥ —**	**¥(50,455)**	**¥173**	**¥ 1,262**	**¥1,285,750**	**¥633,740**	**¥1,919,490**

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

Consolidated Statement of Cash Flows

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries

Millions of yen

	Year ended March 31, 2017	**Year ended March 31, 2018**
Cash flows from operating activities:		
Profit before tax	¥258,343	**¥344,077**
Profit before taxes from discontinued operations	2,300	**—**
Depreciation and amortization	174,040	**178,895**
Share of profit of investments accounted for using the equity method	(16,964)	**(26,637)**
Interest and dividend income	(6,593)	**(7,669)**
Interest expense	16,060	**15,652**
Impairment loss	16,861	**12,062**
Loss on sales and retirement of property, plant and equipment	7,457	**10,414**
Environmental measures costs	6,781	**3,672**
Provision for loss on litigation	—	**1,170**
Loss on sales of shares of subsidiaries and associates	1,007	**26**
Gain on sales of non-current assets	(1,205)	**(4,183)**
Gain on sales of shares of subsidiaries and associates	(2,347)	**(3,747)**
(Increase) decrease in trade receivables	(11,264)	**(80,607)**
(Increase) decrease in inventories	(9,224)	**(70,882)**
Increase (decrease) in trade payables	43,992	**51,755**
Increase (decrease) in net defined benefit assets and liabilities	761	**8,876**
Other, net	(3,727)	**18,158**
Subtotal	476,278	**451,032**
Interest received	2,809	**2,699**
Dividends received	13,666	**16,941**
Interest paid	(15,741)	**(15,041)**
Income taxes (paid) received, net	(80,369)	**(57,691)**
Net cash provided by operating activities	396,643	**397,940**
Cash flows from investing activities:		
Purchase of property, plant and equipment	(197,100)	**(199,871)**
Proceeds from sales of property, plant and equipment	8,905	**10,268**
Purchase of intangible assets	(8,684)	**(28,390)**
Purchase of other financial assets	(314,982)	**(401,573)**
Proceeds from sales/redemption of other financial assets	207,280	**441,464**
Purchase of investments in subsidiaries	(26,276)	**(122,977)**
Proceeds from sales of investments in subsidiaries	10,748	**12,701**
Net (increase) decrease in time deposits	117,294	**(55,835)**
Payments for transfer of business	(77,774)	**(343)**
Other, net	(8,467)	**8,623**
Net cash used in investing activities	(289,056)	**(335,933)**
Cash flows from financing activities:		
Net increase (decrease) in short-term borrowings	(129,692)	**25,243**
Net increase (decrease) in commercial papers	10,000	**(16,000)**
Proceeds from long-term borrowings	217,446	**80,638**
Repayment of long-term borrowings	(143,867)	**(148,016)**
Proceeds from issuance of bonds	220,408	**29,828**
Redemption of bonds	(40,010)	**(40,000)**
Net (increase) decrease in treasury stock	(30,035)	**(60)**
Dividends paid	(23,437)	**(38,861)**
Dividends paid to non-controlling interests	(28,453)	**(40,946)**
Proceeds from stock issuance to non-controlling interests	2,812	**5,473**
Payment for acquisition of subsidiaries' interests from non-controlling interests	(48,837)	**(3,732)**
Other, net	(4,924)	**(4,159)**
Net cash used in financing activities	1,411	**(150,592)**
Effect of exchange rate changes on cash and cash equivalents	(13,144)	**847**
Net increase (decrease) in cash and cash equivalents	95,854	**(87,738)**
Cash and cash equivalents at beginning of period	267,148	**363,510**
Net increase (decrease) in cash and cash equivalents resulting from transfer to assets held for sale	(247)	**(6)**
Net increase (decrease) in cash and cash equivalents resulting from change in scope of consolidation	728	**1,640**
Net increase in cash and cash equivalents resulting from merger and acquisition	27	**218**
Cash and cash equivalents at end of period (Note 21)	¥363,510	**¥277,624**

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

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, 2018 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, Industrial Materials, and Health Care. 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.

2. Approval of Consolidated Financial Statements

The Group's consolidated financial statements were approved on June 26, 2018, by Hitoshi Ochi, Representative Corporate Executive Officer, President and Chief Executive Officer, and Hidefumi Date, Managing Corporate Executive Officer 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. Actual results may differ from these estimates.

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 35, Financial Instruments)
- Contingent Liabilities (Note 39, Contingent Liabilities)

6. Newly Applied Standards and Interpretations

Main standards and interpretations newly applied by the Group from the year ended March 31, 2018, are as follows.

Standard and Interpretation	Overview of Introduction or Revision
IAS 7 Statement of Cash Flows	Revision to disclosures relating to changes in liabilities arising from financing activities

Through the above adoption, Note 30 Changes in Liabilities is presented.

7. Early Application of New Standard

The Group applied IFRS 9 "Financial Instruments" in its entirety.

8. New Standards and Interpretations Not Yet Applied

Standards and interpretations that have not been applied by the Group as of March 31, 2018 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 Company estimates that the impact on the consolidated financial statements of adopting IFRS 15 is immaterial. In adopting this standard, the Company employed a retroactive adjustment as a transitional measure to recognize the cumulative effect retrospectively to the adoption date. The Company is assessing the impact of adopting IFRS 16, and has yet to reach a conclusion.

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 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 manufactures methyl methacrylate monomer, acrylic resin, and other offerings.

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. 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 acquisition 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 acquisition 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. Variable lease is 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 Company and some subsidiaries employ equity-settled share-based compensation plans.

Under such plans, services received are measured at fair value as of the date capital financial instruments are granted. If granted capital financial instruments are immediately determined, all services received on the grant date is recognized as expenses, that amount being recognized as an increase in equity. If granted capital financial instruments are determined after a certain period of time, they are recognized as expenses over the vesting period from the date granted, that amount being recognized as an increase in equity.

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 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 carrying amount 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.

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.

On April 1, 2017, the Company merged subsidiaries Mitsubishi Chemical, Mitsubishi Plastics, and Mitsubishi Rayon into Mitsubishi Chemical Corporation. The move was part of efforts to optimally employ operational resources to adapt swiftly to changes in the business climate and fulfill the objectives of APTSIS 20, a five-year medium-term management plan launched in April 2016.

In keeping with these changes, MCHC shifted to a management structure to accelerate growth strategies by formulating medium-term strategies for each business domain and stepping up medium-term management plan monitoring. That structure encompasses four business segments (Performance Products, Chemicals, Industrial Gases, and Health Care) that are focuses for the four operating companies, which are Mitsubishi Chemical, Mitsubishi Tanabe Pharma, Life Science Institute, and Taiyo Nippon Sanso.

We accordingly reviewed our reporting segments in the first quarter of the year under review and switched from the five segments of Electronics Applications, Designed Materials, Health Care, Chemicals, and Polymers, to four segments, which are Performance Products, Chemicals, Industrial Gases, and Health Care.

We have prepared segment information for the previous fiscal year based on the new segmentation.

The businesses in each reporting segment are as follows:

Business Domains	Business Segments	Segment Details		
			Businesses	
Performance Products	Performance Products	Functional Products	Information, Electronics & Displays	Optical Films, Information, Electronics & Displays, and Acetyl
			High Performance Films	Packaging and Industrial Films
			Environment and Living Solutions	Aqua and Separator Solutions, Infrastructure Solutions, and Agricultural Materials
			Advanced Moldings and Composites	High-Performance Engineering Plastics, Fibers and Textiles, Carbon Fiber and Composite Materials, Functional Moldings and Composites, Alumina Fibers Light and Metal Products
		Performance chemicals	Advanced Polymers	Performance and Engineering Polymers and Sustainable Resources
			High Performance Chemicals	Performance Chemicals and Materials and Food Ingredients
			New energy	Lithium Ion Battery Materials and Energy Transduction Device Materials
Industrial Materials	Chemicals	MMA	MMA	MMA
		Petrochemicals	Petrochemicals	Basic Petrochemicals, Polyolefins, and Basic Chemical Derivatives
		Carbon Products	Carbon Products	Carbon Products
	Industrial Gases	Industrial gases	Industrial Gases	Industrial Gases
Health Care	Health Care	Health Care	Ethical Pharmaceuticals	Ethical Pharmaceuticals
			Life Science	Life Science

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.

2. Revenues and Operating Results for the Group's Reporting Segments

The Group evaluates results based on segment profits.

Year ended March 31, 2017

Millions of yen

	REPORTING SEGMENT					Others (Note 1)	Subtotal	Adjustments (Note 2)	Consolidated
	Performance Products	Chemicals	Industrial Gases	Health Care	Total				
Revenue									
External revenue	¥1,072,640	¥ 983,957	¥ 574,664	¥ 547,032	¥3,178,293	¥197,764	¥3,376,057	¥ —	¥3,376,057
Inter-segment revenue	64,948	78,161	6,922	2,345	152,376	122,357	274,733	(274,733)	—
Total	¥1,137,588	¥1,062,118	¥ 581,586	¥ 549,377	¥3,330,669	¥320,121	¥3,650,790	¥(274,733)	¥3,376,057
Segment profit (loss) Core operating income (Note 3)	¥ 94,280	¥ 62,520	¥ 52,056	¥ 98,389	¥ 307,245	¥ 7,754	¥ 314,999	¥ (7,477)	¥ 307,522
Segment assets	1,140,413	1,061,351	1,009,085	1,101,469	4,312,318	940,930	5,253,248	(789,701)	4,463,547
Other items									
Depreciation and amortization	54,399	54,573	42,490	17,930	169,392	2,918	172,310	1,564	173,874
Share of profit of investments accounted for using the equity method	8,248	6,150	4,341	24	18,763	144	18,907	—	18,907
Investments accounted for using the equity method	48,257	64,792	22,843	244	136,136	598	136,734	—	136,734
Capital expenditures	62,757	68,500	42,069	28,507	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 ¥(7,477) million includes corporate costs of ¥(7,314) million not allocated to reporting segments and inter-segment eliminations of ¥(163) million. Corporate costs include expenditures on basin testing, research, and other activities not allocated to reporting segments.
   The segment assets adjustment of ¥(789,701) million includes corporate assets of ¥158,556 million not allocated to reporting segments and inter-segment eliminations of ¥(948,257) 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.
4. In the year ended March 31, 2017, the Company classified purified terephthalic acid businesses in India and China as discontinued operations. Segment information for the year ended March 31, 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.

Year ended March 31, 2018

Millions of yen

	REPORTING SEGMENT					Others (Note 1)	Subtotal	Adjustments (Note 2)	Consolidated
	Performance Products	Chemicals	Industrial Gases	Health Care	Total				
Revenue									
External revenue	**¥1,145,932**	**¥1,177,352**	**¥638,675**	**¥ 556,568**	**¥3,518,527**	**¥205,879**	**¥3,724,406**	**¥ —**	**¥3,724,406**
Inter-segment revenue	**65,280**	**83,720**	**7,543**	**2,214**	**158,757**	**129,947**	**288,704**	**(288,704)**	**—**
Total	**¥1,211,212**	**¥1,261,072**	**¥646,218**	**¥ 558,782**	**¥3,677,284**	**¥335,826**	**¥4,013,110**	**¥(288,704)**	**¥3,724,406**
Segment profit (loss) Core operating income (Note 3)	**¥ 93,995**	**¥ 147,868**	**¥ 57,467**	**¥ 81,227**	**¥ 380,557**	**¥ 7,119**	**¥ 387,676**	**¥ (7,187)**	**¥ 380,489**
Segment assets	**1,215,112**	**1,290,102**	**1,016,171**	**1,166,776**	**4,688,161**	**961,554**	**5,649,715**	**(949,123)**	**4,700,592**
Other items									
Depreciation and amortization	**54,861**	**53,741**	**45,708**	**19,049**	**173,359**	**3,018**	**176,377**	**2,518**	**178,895**
Share of profit of investments accounted for using the equity method	**10,865**	**12,946**	**3,488**	**4**	**27,303**	**(15)**	**27,288**	**—**	**27,288**
Investments accounted for using the equity method	**61,459**	**69,327**	**28,033**	**16,595**	**175,414**	**491**	**175,905**	**—**	**175,905**
Capital expenditures	**68,301**	**61,910**	**61,549**	**27,505**	**219,265**	**3,535**	**222,800**	**2,389**	**225,189**

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 ¥(7,187) million includes corporate costs of ¥(7,618) million not allocated to reporting segments and inter-segment eliminations of ¥431 million. Corporate costs include expenditures on basin testing, research, and other activities not allocated to reporting segments.
   The segment assets adjustment of ¥(949,123) million includes corporate assets of ¥104,279 million not allocated to reporting segments and inter-segment eliminations of ¥(1,053,402) 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, 2017	**Year ended March 31, 2018**
Segment operating results	¥307,522	**¥380,489**
Gain on sales of shares of subsidiaries and associates	—	**3,683**
Gain on sales of non-current assets	862	**3,628**
Impairment loss	(15,024)	**(9,662)**
Loss on sales and retirement of non-current assets	(2,865)	**(5,556)**
Prior service cost	(775)	**(4,996)**
Cost related to integration of subsidiaries	(1,005)	**(3,774)**
Early retirement program expenses	(2,501)	**(2,408)**
Provision for loss on a litigation	—	**(1,170)**
Environmental measures costs	(6,781)	**(1,001)**
Share of loss of investments accounted for using the equity method	(1,943)	**(651)**
Loss on sales of shares of subsidiaries and associates	(1,006)	**(26)**
Loss during business interruption largely stemming from earthquakes in Japan	(2,252)	**—**
Other	(5,611)	**(2,845)**
Operating profit	268,621	**355,711**
Financial income	7,155	**8,404**
Financial costs	(17,433)	**(20,038)**
Profit before tax	¥258,343	**¥344,077**

3. Geographic Information

The breakdown of external revenue and non-current assets is as follows:

External revenue

Millions of yen

	Year ended March 31, 2017	**Year ended March 31, 2018**
Japan	¥2,042,378	**¥2,177,346**
U.S.A.	348,361	**406,730**
PRC	246,464	**289,083**
Other	738,854	**851,247**
Total	¥3,376,057	**¥3,724,406**

Note: Revenue are based on the locations of customers.

Non-current assets

Millions of yen

	As of March 31, 2017	**As of March 31, 2018**
Japan	¥1,203,583	**¥1,215,479**
U.S.A.	366,745	**357,269**
Other	410,653	**548,059**
Total	¥1,980,981	**¥2,120,807**

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.

Note 5

Business Combinations

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**

(3) Goodwill, assets acquired and liabilities assumed at fair value

Millions of yen

	Acquisition date (September 8, 2016)
Current assets:	
Inventories	**¥ 406**
Other	**369**
Non-current assets:	
Property, plant and equipment (Note 1)	**28,911**
Intangible assets (Note 1)	**24,502**
Acquired assets	**54,188**
Current liabilities	**43**
Non-current liabilities	**3,744**
Liabilities assumed	**3,787**
Net assets acquired and liabilities assumed	**50,401**
Goodwill (Note 2)	**27,001**

The acquisition cost is allocated to acquired assets and liabilities assumed on the acquisition date based on fair value. In the second quarter, the Company revised provisional amounts in line with the completion of the payment consideration allocation. The affect of this change is insignificant.

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 for the year ended March 31, 2017 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 for the year ended March 31, 2017 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 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	10,229
Intangible assets	4,577
Other	125
Acquired assets	17,660
Current liabilities	1,189
Non-current liabilities	8,536
Liabilities assumed	9,725
Net assets acquired and liabilities assumed	7,935
Goodwill (Note)	13,643

The acquisition cost is allocated to acquired assets and liabilities assumed on the acquisition date based on fair value. In the third quarter, the Company revised provisional amounts in line with the completion of the payment consideration allocation. The affect of this change is insignificant.

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 for the year ended March 31, 2017 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.

Year ended March 31, 2018

1. Acquisition of NeuroDerm Ltd. by Mitsubishi Tanabe Pharma Corporation

On October 18, 2017, consolidated subsidiary Mitsubishi Tanabe Pharma Corporation (MTPC) acquired all of the outstanding shares (including shares underlying stock options) of NeuroDerm Ltd. The latter thereby became a wholly owned subsidiary of MTPC.

(1) Overview of business combination

1. Name and business description of acquired company

Name: NeuroDerm Ltd.

Business description: Research and development of central nervous system drugs to treat Parkinson's Disease and other illnesses

2. Main reason for business combination

NeuroDerm is a clinical-stage pharmaceutical company that develops novel formulation technology and drug-device combinations for Parkinson's disease. It is pushing ahead with development, centered on ND0612, which is expected to launch in fiscal 2019.

Given the importance of controlling blood levels of levodopa in the treatment of Parkinson's disease, ND0612 is expected to be used to treat advanced stage Parkinson's disease, and will be used in patients for whom oral levodopa is no longer effective in the control of motor complications. NeuroDerm is the first to develop liquid levodopa and carbidopa in the world. ND0612 can be continuously subcutaneously administered over a 24-hour period through a convenient small belt-worn pump.

Under its Medium-Term Management Plan 16–20: Open Up the Future, MTPC aims, through direct sales, to rapidly build a foundation for sustained growth in the United States, the world's largest pharmaceutical market. As a first step in that direction, MTPC launched Radicava, an amyotrophic lateral sclerosis treatment, in the U.S. market in August 2017. Additionally, the acquisition of ND0612 through this transaction is intended to enable MTPC to achieve its U.S. sales target of 80 billion yen by fiscal 2020, which is part of its Medium-Term Management Plan. MTPC will expand its product pipeline in the central nervous system disease area and advance its goal of providing patients with innovative drugs to address unmet medical needs.

3. Acquisition date

October 18, 2017

4. Method for gaining control of acquired company

Acquisition of shares for cash

5. Percentage of voting rights acquired

100%

(2) Fair value of consideration transferred

	Millions of yen
	Acquisition date (October 18, 2017)
Cash	¥124,410
Cost of the acquisition	¥124,410

(3) Goodwill, assets acquired and liabilities assumed at fair value

	Millions of yen
	Acquisition date (October 18, 2017)
Current assets:	
Cash and cash equivalents	¥ 4,686
Other financial assets	8,705
Other non-financial assets	303
Non-current assets:	
Intangible assets (Note1)	136,178
Other	217
Acquired assets	150,089
Current liabilities	3,697
Non-current liabilities:	
Deferred tax liabilities	32,692
Liabilities assumed	36,389
Net assets acquired and liabilities assumed	113,700
Goodwill (Note2)	10,710

The acquisition cost is allocated to acquired assets and liabilities assumed on the acquisition date based on fair value. The initial provisional amount was revised in the fourth quarter. The revised details are as follows.

Following additional analysis of the fair value of NeuroDerm, intangible assets increased ¥136,178 million, while deferred tax liabilities rose ¥32,692 million. As a result, goodwill decreased by ¥103,486 million.

As the cost allocation has yet to be completed, the amounts above are provisional fair values based on 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. Intangible assets

This is technology-related intangible assets of ¥136,178 million.

2. Goodwill mainly comprises anticipated synergies and excess earnings capabilities arising from acquisition that do not match specific recognition criteria. Goodwill is not deductible for tax purposes.

(4) Acquisition-related costs

These costs were ¥1,051 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, 2017 is immaterial.

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 (former 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, 2017	**Year ended March 31, 2018**
Profit or Loss from Discontinued Operations:		
Revenue	¥ 66,794	¥ —
Cost of sales	(63,062)	—
Gross profit (loss)	3,732	—
Selling, general and administrative expenses	(2,588)	—
Other operating income (Note)	2,872	—
Other operating expenses	(436)	—
Operating profit	3,580	—
Financial income	58	—
Financial costs	(1,338)	—
Profit (loss) before tax	2,300	—
Income tax expense	286	—
Profit (loss) from discontinued operations	¥ 2,586	¥ —
Net profit (loss) attributable to:		
Owners of the parent	¥ 2,586	¥ —
Non-controlling interests	¥ —	¥ —
Earnings (loss) per share:		(Yen)
Basic	¥ 1.76	¥ —
Diluted	¥ 1.75	¥ —

Note: 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.

Cash flows from discontinued operations are as follows:

Millions of yen

	Year ended March 31, 2017	**Year ended March 31, 2018**
Cash flows from operating activities	¥ (709)	¥ —
Cash flows from investing activities	3,327	—
Cash flows from financing activities	(60,829)	—
Total	¥ (58,211)	¥ —

Note 7

Employee Benefit Expenses

The breakdown of employee benefit expenses is as follows:

Millions of yen

	Year ended March 31, 2017	**Year ended March 31, 2018**
Wages and salaries	¥ 538,417	**¥ 563,269**
Retirement benefit costs	29,464	**37,196**
Total	¥ 567,881	**¥ 600,465**

Note 8

Research and Development Expenses

Research and development expenses recognized in the years ended March 31, 2017 and 2018 were ¥126,290 million and ¥138,833 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, 2017	**Year ended March 31, 2018**
Gain on sales of non-current assets	¥ 1,205	**¥ 4,183**
Gain on sales of shares of subsidiaries and associates	—	**3,747**
Rent income	2,583	**2,639**
Insurance income	1,901	**569**
Other	5,006	**8,541**
Total	¥ 10,695	**¥ 19,679**

The breakdown of other operating expenses is as follows:

Millions of yen

	Year ended March 31, 2017	**Year ended March 31, 2018**
Impairment loss	¥ 16,822	**¥ 12,062**
Loss on sales and retirement of property, plant and equipment	7,451	**10,414**
Cost related to integration of subsidiaries	991	**3,712**
Environmental measures costs	6,781	**3,672**
Early retirement program expenses	2,349	**2,408**
Provision for loss on litigation	—	**1,170**
Loss on sales of shares of subsidiaries and associates	1,007	**26**
Loss during business interruption largely stemming from earthquakes in Japan	2,252	**—**
Other	16,069	**12,886**
Total	¥ 53,722	**¥ 46,350**

Financial Information

Note 10

Financial Income and Financial Costs

The breakdown of financial income is as follows:

Millions of yen

	Year ended March 31, 2017	**Year ended March 31, 2018**
Financial income		
Interest income		
Financial assets measured at amortized cost	¥2,527	**¥3,365**
Financial assets at fair value through profit or loss	63	**25**
Dividend income		
Financial assets measured at fair value through other comprehensive income	3,948	**4,279**
Other	617	**735**
Total	¥7,155	**¥8,404**

The breakdown of financial costs is as follows:

Millions of yen

	Year ended March 31, 2017	**Year ended March 31, 2018**
Financial costs		
Interest expenses		
Financial liabilities measured at amortized cost	¥15,605	**¥15,652**
Foreign exchange losses	502	**2,960**
Other	1,326	**1,426**
Total	¥17,433	**¥20,038**

Note 11

Income Taxes

1. Deferred Tax Assets and Liabilities

As of March 31, 2017 and 2018, significant components of deferred tax assets and liabilities are as follows:

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
Inventory	5,397	(957)	—	(20)	4,420
Employees' paid leave	7,436	(609)	—	(13)	6,814
Other	64,316	(9,615)	568	440	55,709
Total	¥ 194,410	¥12,531	¥ (6,207)	¥(536)	¥ 200,198
Deferred tax liabilities:					
Valuation of assets	(48,469)	1,925	—	347	(46,197)
Property, plant and equipment	¥ (62,085)	¥ (3,424)	¥ —	¥ 102	¥ (65,407)
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

Year ended March 31, 2018

Millions of yen

	April 1, 2017	Amounts recognized in profit or loss	Amounts recognized in other comprehensive income	Other (Note)	March 31, 2018
Deferred tax assets:					
Tax loss carryforwards	**¥ 64,364**	**¥(6,396)**	**¥ —**	**¥ (545)**	**¥ 57,423**
Net defined benefit liabilities	**38,137**	**1,808**	**(8,876)**	**61**	**31,130**
Property, plant and equipment	**17,161**	**(1,655)**	**—**	**(29)**	**15,477**
Employees' bonuses	**13,593**	**1,574**	**—**	**(29)**	**15,138**
Inventory	**4,420**	**2,589**	**—**	**(3)**	**7,006**
Employees' paid leave	**6,814**	**(48)**	**—**	**121**	**6,887**
Other	**55,709**	**(3,488)**	**(969)**	**(271)**	**50,981**
Total	**¥ 200,198**	**¥(5,616)**	**¥ (9,845)**	**¥ (695)**	**¥ 184,042**
Deferred tax liabilities:					
Valuation of assets	**(46,197)**	**1,916**	**—**	**(37,409)**	**(81,690)**
Property, plant and equipment	**¥ (65,407)**	**¥15,617**	**¥ —**	**¥ (280)**	**¥ (50,070)**
Securities and other investments	**(33,149)**	**(1)**	**(4,231)**	**1,681**	**(35,700)**
Other	**(40,969)**	**(4,849)**	**(451)**	**(8,813)**	**(37,456)**
Total	**¥(185,722)**	**¥12,683**	**¥ (4,682)**	**¥(27,195)**	**¥(204,916)**
Net deferred tax assets	**¥ 14,476**	**¥ 7,067**	**¥(14,527)**	**¥(27,890)**	**¥ (20,874)**

Note: Other includes exchange differences on translation of foreign operations and changes owing to business combinations, etc.

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 March 31, 2017 and March 31, 2018 were ¥151,835 million and ¥125,508 million, respectively. The unrecognized deferred tax assets were ¥42,068 million and ¥34,273 million, respectively.

Tax loss carryforwards not recognized as deferred tax assets as of March 31, 2017 and March 31, 2018 amounted to ¥444,675 million (¥174,094 million for carryforwards exceeding five years) and ¥447,864 million (¥199,760 million for carryforwards exceeding five years). The unrecognized deferred tax assets were ¥71,595 million and ¥61,412 million, respectively.

As of March 31, 2017 and March 31, 2018, total temporary differences related to undistributed earnings of subsidiaries for which deferred tax liabilities were not recognized were ¥908,573 million and ¥1,055,342 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, 2017	**Year ended March 31, 2018**
Income taxes	¥55,467	**¥74,782**
Deferred income taxes	(11,053)	**(7,067)**
Total	¥44,414	**¥67,715**

The President of the United States signed the Tax Cuts and Jobs Act into law on December 22, 2017, thereby lowering the federal corporate tax rate after January 1, 2018.Therefore, deferred tax assets and liabilities subsequent to the third quarter of the year ended March

Financial Information

31, 2018, are calculated based on the effective revised tax rate corresponding to the consolidated fiscal year in which temporary differences are expected to be resolved.

Consequently, income taxes for the year ended March 31, 2018 decreased by ¥12,494 million.

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 30.8% for the years ended March 31, 2017 and 2018. 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, 2017 and 2018, was as follows:

	Year ended March 31, 2017	**Year ended March 31, 2018**
Statutory tax rate	30.8%	**30.8%**
Impact of lower U.S. federal corporate tax rate	—	**(3.6)**
Difference of statutory tax rate in overseas subsidiaries	(1.9)	**(3.3)**
Share of profit of investments accounted for using the equity method	(2.0)	**(2.4)**
Tax credits for research and development costs	(2.1)	**(2.2)**
Unrecognized deferred tax assets	(7.5)	**(1.6)**
Permanent differences	0.5	**0.6**
Foreign taxes	0.3	**0.5**
Other	(0.9)	**0.9**
Effective tax rate	17.2%	**19.7%**

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, 2017	**Year ended March 31, 2018**
Profit used to calculate basic earnings per share attributable to owners of the parent		
Profit from continuing operations attributable to owners of the parent	¥153,673	**¥211,788**
Profit (loss) from discontinued operations attributable to owners of the parent	2,586	**—**
Profit attributable to owners of the parent	¥156,259	**¥211,788**
Average number of ordinary shares during period (thousands of shares)	1,464,004	**1,439,338**
Basic earnings per share		**(Yen)**
Continuing operations	¥104.97	**¥147.14**
Discontinued operations	1.76	**—**
Basic earnings per share	¥106.73	**¥147.14**

2. Diluted Earnings per Share

Millions of yen

	Year ended March 31, 2017	**Year ended March 31, 2018**
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	¥153,673	**¥211,788**
Adjustment	1	**283**
Profit from continuing operations used to calculate diluted earnings per share	153,674	**212,071**
Profit (loss) from discontinued operations used to calculate diluted earnings per share	2,586	**—**
Profit used to calculate diluted earnings per share attributable to owners of the parent	¥156,260	**¥212,071**
Average number of diluted common shares during period (thousands of shares)		
Average number of ordinary shares during period	1,464,004	**1,439,338**
Impact of potentially dilutive ordinary shares		
Convertible bond-type bonds with subscription rights to shares	9,866	**118,388**
Subscription rights to shares	964	**955**
Average number of diluted ordinary shares during period	1,474,834	**1,558,681**
Diluted earnings per share		**(Yen)**
Continuing operations	¥104.20	**¥136.06**
Discontinued operations	1.75	**—**
Diluted earnings per share	¥105.95	**¥136.06**

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, 2017

Acquisition cost

Millions of yen

	Goodwill	Intangible assets				Total
		Technology-related intangible assets	Customer-related intangible assets	Software	Other	
Balance as of April 1, 2016	¥267,850	¥131,742	¥83,132	¥65,525	¥48,047	¥328,446
Acquisitions	—	8,005	—	2,359	1,221	11,585
Acquisitions through business combinations	44,599	2,535	31,586	296	892	35,309
Transfers	—	(39)	—	7,882	(168)	7,675
Exchange differences on translation of foreign operations	501	(3,787)	919	(5,979)	2,308	(6,539)
Balance 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				Total
		Technology-related intangible assets	Customer-related intangible assets	Software	Other	
Balance 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)
Balance as of March 31, 2017	¥—	¥46,199	¥26,554	¥49,868	¥26,686	149,307

Carrying amount

Millions of yen

	Goodwill	Intangible assets				Total
		Technology-related intangible assets	Customer-related intangible assets	Software	Other	
Balance as of April 1, 2016	¥267,850	¥92,121	¥62,961	¥18,363	¥22,091	¥195,536
Balance as of March 31, 2017	¥312,950	¥92,257	¥89,083	¥20,215	¥25,614	¥227,169

Year ended March 31, 2018

Acquisition cost

Millions of yen

	Goodwill	Intangible assets				Total
		Technology-related intangible assets	Customer-related intangible assets	Software	Other	
Balance as of April 1, 2017	**¥312,950**	**¥138,456**	**¥115,637**	**¥70,083**	**¥52,300**	**¥376,476**
Acquisitions	**—**	**17,792**	**—**	**7,013**	**5,996**	**30,801**
Acquisitions through business combinations	**12,484**	**136,266**	**—**	**507**	**15**	**136,788**
Transfers	**—**	**103**	**—**	**28**	**6,293**	**6,424**
Exchange differences on translation of foreign operations	**(2,056)**	**(9,819)**	**(2,795)**	**(1,217)**	**(1,468)**	**(15,299)**
Balance as of March 31, 2018	**¥323,378**	**¥282,798**	**¥112,842**	**¥76,414**	**¥63,136**	**¥535,190**

Accumulated amortization, accumulated impairment losses

Millions of yen

	Goodwill	Intangible assets				Total
		Technology-related intangible assets	Customer-related intangible assets	Software	Other	
Balance as of April 1, 2017	**¥—**	**¥46,199**	**¥26,554**	**¥49,868**	**¥26,686**	**¥149,307**
Amortization	**—**	**6,973**	**7,081**	**7,512**	**2,622**	**24,188**
Impairment losses	**—**	**3,364**	**—**	**218**	**18**	**3,600**
Exchange differences on translation of foreign operations	**—**	**(1,087)**	**(414)**	**(584)**	**5,029**	**2,944**
Balance as of March 31, 2018	**¥—**	**¥55,449**	**¥33,221**	**¥57,014**	**¥34,355**	**¥180,039**

Carrying amount

Millions of yen

	Goodwill	Intangible assets				Total
		Technology-related intangible assets	Customer-related intangible assets	Software	Other	
Balance as of April 1, 2017	**¥312,950**	**¥92,257**	**¥89,083**	**¥20,215**	**¥25,614**	**¥227,169**
Balance as of March 31, 2018	**¥323,378**	**¥227,349**	**¥79,621**	**¥19,400**	**¥28,781**	**¥355,151**

There were no material internally generated assets in the years ended March 31, 2017 and 2018.

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 with indefinite useful lives were ¥48,285 million and ¥183,790 million as of March 31, 2017 and March 31, 2018, respectively. The main items were in-process research and development expenses recognized when Mitsubishi Tanabe Pharma Corporation acquired Medicago Inc. in 2013 and NeuroDerm Ltd. in 2017 (both in the Health Care segment), and which were 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 in use, the period in which they could deliver economic benefits is unforeseeable, so the assets are classified as intangible assets with indefinite useful lives.

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. (now Mitsubishi Chemical Corporation), in March 2010. The carrying amounts of these intangible assets were ¥23,835 million as of March 31, 2017 and ¥20, 891 million as of March 31, 2018. The remaining amortization periods were 7 to 11 years.

The carrying amounts of technology-related intangible assets of Medicago Inc., which Mitsubishi Tanabe Pharma Corporation acquired in September 2013, were ¥26,410 million as of March 31, 2017 and ¥25,885 million as of March 31, 2018. Impairment tests are conducted every year, as these items are classified as intangible assets with indefinite useful lives.

For customer-related intangible assets of Taiyo Nippon Sanso Co., Ltd., which the Company acquired in November 2014, the carrying amounts were ¥32,395 million as of March 31, 2017, and ¥30,291 million as of March 31, 2018. The remaining amortization periods were 10 to 15 years.

The carrying amounts of technology-related intangible assets of NeuroDerm Ltd. which Mitsubishi Tanabe Pharma Corporation acquired in October 2017, was ¥ 128,338 million as of March 31, 2018. This item is classified as intangible assets with indefinite useful lives.

3. Impairment Losses

The Company conducts impairment tests at certain times of the year for intangible assets with indefinite useful lives, 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 6.1% to 10.5%.

The Group has recognized impairment losses of ¥277 million during the year ended March 31, 2017 and ¥3,600 million during the year ended March 31, 2018, 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, 2017

Acquisition cost

Millions of yen

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
Balance as of April 1, 2016	¥1,068,618	¥2,966,286	¥304,767	¥291,683	¥126,078	¥4,757,432
Acquisitions	29,585	118,354	18,172	1,392	29,966	197,469
Acquisitions through business combinations	5,600	53,185	11,419	2,360	1,242	73,806
Business divestitures	(4,445)	(28,152)	(1,818)	—	(1,538)	(35,953)
Sale or disposal	(9,783)	(50,662)	(12,168)	(3,519)	(629)	(76,761)
Transfers	(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)
Balance 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
Balance as of April 1, 2016	¥728,580	¥2,378,183	¥236,911	¥5,257	¥5,064	¥3,353,995
Acquisitions through business combinations	2,803	21,929	4,282	—	—	29,014
Business divestitures	(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)
Transfers	(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)
Balance 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
Balance as of April 1, 2016	¥340,038	¥588,103	¥67,856	¥286,426	¥121,014	¥1,403,437
Balance as of March 31, 2017	¥335,874	¥605,435	¥72,755	¥281,674	¥135,943	¥1,431,681

Year ended March 31, 2018

Acquisition cost

Millions of yen

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
Balance as of April 1, 2017	**¥1,075,780**	**¥2,908,122**	**¥314,342**	**¥286,915**	**¥141,216**	**¥4,726,375**
Acquisitions	**28,141**	**122,020**	**21,145**	**1,764**	**38,172**	**211,242**
Acquisitions through business combinations	**2,222**	**1,887**	**4,752**	**944**	**66**	**9,871**
Business divestitures	**(26)**	**(190)**	**(396)**	**—**	**(1)**	**(613)**
Sale or disposal	**(21,870)**	**(69,601)**	**(13,907)**	**(8,424)**	**(670)**	**(114,472)**
Transfers	**(1,603)**	**(2,407)**	**(263)**	**(7)**	**(13,894)**	**(18,174)**
Exchange differences on translation of foreign operations	**(141)**	**(9,670)**	**(8,405)**	**2,515**	**(15,461)**	**(31,162)**
Balance as of March 31, 2018	**¥1,082,503**	**¥2,950,161**	**¥317,268**	**¥283,707**	**¥149,428**	**¥4,783,067**

Accumulated depreciation, accumulated impairment losses

Millions of yen

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
Balance as of April 1, 2017	**¥739,906**	**¥2,302,687**	**¥241,587**	**¥5,241**	**¥5,273**	**¥3,294,694**
Acquisitions through business combinations	**1,025**	**679**	**3,894**	**—**	**—**	**5,598**
Business divestitures	**(23)**	**(79)**	**(333)**	**—**	**—**	**(435)**
Depreciation	**24,746**	**112,686**	**17,275**	**—**	**—**	**154,707**
Impairment losses	**2,347**	**4,271**	**80**	**1,546**	**218**	**8,462**
Sale or disposal	**(19,767)**	**(63,920)**	**(13,113)**	**(1,650)**	**—**	**(98,450)**
Transfers	**(1,897)**	**(1,524)**	**23**	**—**	**—**	**(3,398)**
Exchange differences on translation of foreign operations	**(368)**	**(4,244)**	**(6,013)**	**2,754**	**(3,749)**	**(11,620)**
Balance as of March 31, 2018	**¥745,969**	**¥2,350,556**	**¥243,400**	**¥7,891**	**¥1,742**	**¥3,349,558**

Carrying amount

Millions of yen

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
Balance as of April 1, 2017	**¥335,874**	**¥605,435**	**¥72,755**	**¥281,674**	**¥135,943**	**¥1,431,681**
Balance as of March 31, 2018	**¥336,534**	**¥599,605**	**¥73,868**	**¥275,816**	**¥147,686**	**¥1,433,509**

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.

Financial Information

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 March 31, 2017	**As of March 31, 2018**
Buildings and structures	¥1,621	**¥1,583**
Machinery and vehicles	3,673	**4,101**
Tools, furniture and fixtures	2,013	**3,309**
Total	¥7,307	**¥8,993**

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 tests idle assets individually to recognize impairment losses.

Impairment losses recognized in the years ended March 31, 2017 and 2018 are as follows. Impairment losses are included in Other operating expenses in the Consolidated Statement of Income.

Millions of yen

	Year ended March 31, 2017	**Year ended March 31, 2018**
Property, plant and equipment		
Buildings and structures	¥ 6,012	**¥ 2,347**
Machinery and vehicles	7,333	**4,271**
Tools, furniture and fixtures	318	**80**
Land	2,346	**1,546**
Construction in progress	536	**218**
Total of property, plant and equipment	¥16,545	**¥ 8,462**
Intangible assets	277	**3,600**
Total impairment losses	¥16,822	**¥12,062**

The main assets for which impairment losses were recognized are as follows:

Year ended March 31, 2017

Use	Location	Category	Reporting segment	Impairment loss
Polytetramethylene ether glycol production facilities	MCC Advanced Polymers Ningbo Co., Ltd. (now Ningbo Union King Polyester Material Limited) (Zhejiang Province, China)	Machinery and equipment, etc.	Chemicals	¥3,121 million
High-performance film production facilities	Nagahama and Asai plants of Mitsubishi Plastics, Inc. (now Mitsubishi Chemical Corporation) (Nagahama, Shiga prefecture)	Machinery and equipment Buildings, Others	Performance Products	¥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. (now Ningbo Union King Polyester Material Limited), where it is located. Management therefore decided to halt operations at MCC Advanced Polymers Ningbo and sell its stake in that company, reducing the carrying amount 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. (now Mitsubishi Chemical Corporation), is restructuring operations because it expects that sales of some high-performance films will decline substantially amid sluggish sales volumes. The carrying amount of facilities that were unlikely to be of use was reduced to zero value.

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, 2017	**March 31, 2018**
Performance Products	High performance engineering plastics	¥ 20,649	**¥ 21,371**
	Other	26,685	**28,069**
	Total	¥ 47,334	**¥ 49,440**
Chemicals	MMA	¥ 36,813	**¥ 36,813**
	Other	2,900	**2,863**
	Total	¥ 39,713	**¥ 39,649**
Industrial Gases	Industrial gases	¥144,276	**¥142,902**
Health Care	Ethical pharmaceuticals	¥ 47,934	**¥ 57,919**
	Pharmaceutical formulation materials	33,502	**33,295**
	Other	191	**173**
	Total	¥ 81,627	**¥ 91,387**
Total		¥312,950	**¥323,378**

The recoverable amount of goodwill in cash-generating units and groups of cash generating units is measured by the value in use.

The value in use is based on a management-approved five-year plan reflecting past experience and external source of 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 measuring recoverable value are as follows:

Reporting segment	Cash-Generating Unit (Groups of Cash-Generating Units)	March 31, 2017	**March 31, 2018**
Performance Products	High performance engineering plastics	7.7%	**7.5%**
Chemicals	MMA	5.4%	**6.3%**
Industrial Gases	Industrial gases	5.4%	**6.3%**
Health Care	Ethical pharmaceuticals Pharmaceutical formulation materials	6.2%	**6.1%**

The recoverable amount of goodwill allocated to pharmaceutical formulations could equal the carrying amount if the discount rate increases by 0.8%.

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:

	As of March 31, 2017	**As of March 31, 2018**
		Millions of yen
Carrying amounts of investments in joint ventures	¥65,380	**¥89,109**

Equity in earnings of joint ventures accounted for using the equity method for current comprehensive income is as follows:

	Year ended March 31, 2017	**Year ended March 31, 2018**
		Millions of yen
Share of profit using equity method	¥ 9,003	**¥17,390**
Share of other comprehensive income using equity method	(595)	**507**
Share of total shareholders' equity in total comprehensive income	¥ 8,408	**¥17,897**

Carrying amounts of individually insignificant investments in associates accounted for using the equity method are as follows:

	As of March 31, 2017	**As of March 31, 2018**
		Millions of yen
Carrying amounts of investments in associates	¥71,354	**¥86,796**

Equity in earnings of associates accounted for using the equity method for current comprehensive income is as follows:

	Year ended March 31, 2017	**Year ended March 31, 2018**
		Millions of yen
Share of profit using equity method	¥7,961	**¥9,247**
Share of other comprehensive income using equity method	(1,577)	**75**
Share of total shareholders' equity in total comprehensive income	¥6,384	**¥9,322**

Note 17

Other Financial Assets

The breakdown of other financial assets is as follows:

	As of March 31, 2017	**As of March 31, 2017**
		Millions of yen
Stocks and investments	¥200,835	**¥200,347**
Certificate of deposits	168,500	**98,000**
Time deposits	3,852	**65,563**
Accounts receivable	31,736	**41,235**
Bonds	7,150	**31,710**
Structured bonds	1,014	**—**
Other	56,740	**57,047**
Allowance for doubtful accounts	(1,460)	**(2,048)**
Total	¥468,367	**¥491,854**
Current assets	¥215,446	**¥247,365**
Non-current assets	252,921	**244,489**
Total	¥468,367	**¥491,854**

Stocks and investments are classified mainly equity financial assets measured at fair value through other comprehensive income. Certificate of deposits, accounts receivable, time deposits and bonds are classified financial assets mainly measured at amortized cost. Structured bonds are classified 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 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, Inc.	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 of March 31, 2018

Company name	Millions of yen
TOHO HOLDINGS CO., LTD.	**¥8,955**
SUZUKEN CO., LTD.	**6,804**
JFE Holdings Corporation	**5,515**
Alfresa Holdings Corporation	**5,271**
Mitsubishi UFJ Financial Group, Inc.	**4,997**
Tosoh Corporation	**4,649**
MEDIPAL HOLDINGS CORPORATION	**4,634**
ONO PHARMACEUTICAL CO.,LTD.	**3,617**
Azbil Corporation	**3,469**
KOATSU GAS KOGYO CO., LTD.	**2,957**

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.

Financial Information

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, 2017	Year ended March 31, 2018
Fair value	¥11,475	**¥17,801**
Cumulative gains or losses	1,275	**5,254**

Dividend income from equity financial assets measured at fair value through other comprehensive income is as follows:

Millions of yen	Year ended March 31, 2017	Year ended March 31, 2018
Derecognized financial assets	¥ 343	**¥ 110**
Financial assets held at year-end	3,605	**4,169**

Note 18

Other Assets

The breakdown of other assets is as follows:

Millions of yen	As of March 31, 2017	As of March 31, 2018
Net defined benefit assets	¥29,898	**¥27,376**
Accrued income tax	20,068	**24,821**
Prepaid expenses	25,596	**23,564**
Advance payment	7,694	**7,207**
Other	14,007	**15,227**
Total	¥97,263	**¥98,195**
Current assets	58,184	**62,050**
Non-current assets	39,079	**36,145**
Total	¥97,263	**¥98,195**

Note 19

Inventory

The breakdown of inventory is as follows:

Millions of yen	As of March 31, 2017	As of March 31, 2018
Finished goods	¥295,903	**¥354,129**
Raw materials and supplies	169,291	**176,985**
Work in process	72,937	**76,557**
Total	¥538,131	**¥607,671**

Inventories measured at net realizable value as of March 31, 2017 and March 31, 2018 were ¥79,989 million and ¥78,463 million, respectively.

In the years ended March 31, 2017 and 2018, write-downs of inventories recognized as expenses were ¥8,281 million and ¥6,687 million, respectively.

Note 20

Trade Receivables

The breakdown of trade receivables is as follows:

Millions of yen	As of March 31, 2017	As of March 31, 2018
Accounts receivable	¥780,542	**¥859,496**
Allowance for doubtful accounts	(4,351)	**(4,665)**
Total	¥776,191	**¥854,804**

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 March 31, 2017	As of March 31, 2018
Cash and deposits	¥236,523	**¥205,934**
Short-term investments	126,987	**71,690**
Total	¥363,510	**¥277,624**

Note 22

Assets Held for Sale

The breakdowns of assets held for sale and directly related liabilities are as follows:

Millions of yen	As of March 31, 2017	As of March 31, 2018
Assets held for sale:		
Trade receivables	¥ 6,535	**¥ 353**
Inventories	4,879	**390**
Property, plant and equipment	2,443	**693**
Other financial assets	2,256	**407**
Other	803	**296**
Total	¥16,916	**¥2,139**
Liabilities related directly to assets held for sale:		
Trade payables	¥ 2,160	**¥ 292**
Bonds and borrowings	1,676	**—**
Other	1,471	**72**
Total	¥ 5,307	**¥ 364**

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. (now Nipro ES Pharma 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-type 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. This absorption-type split and share transfer was completed in the fiscal year ended March 31, 2018.

Since fair value exceeded carrying amount, in the fiscal year ended March 31, 2017, the relevant assets and liabilities were measured at carrying amount. In the fiscal year ended March 31, 2018, Gain on sales of shares of subsidiaries and associates amounting to ¥3,564 million was presented within Other operating income.

As of March 31, 2017 and 2018, the amount of other components of equity relating to assets held for sale was ¥238 million and ¥(264) 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, 2017	**Year ended March 31, 2018**
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.

Changes in the number of shares of treasury stock during the year are as follows:

Thousands of shares

	Year ended March 31, 2017	**Year ended March 31, 2018**
At the beginning of the term	41,485	**67,025**
Increase (note 1)	33,418	**57**
Decrease (note 2)	(7,878)	**(180)**
At the end of the term	67,025	**66,902**

Note: 1. 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. The increase in the number of shares of treasury stock stemmed from share purchases constituting less than one unit.

Note: 2. 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. The decrease in the number of shares of treasury stock was from the sale of 1 thousand shares constituting less than one unit and a payout of 179 thousand shares from the exercise of stock options.

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 amount 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, 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

Year ended March 31, 2018

Date of approval	Resolution approved by	Type of shares	Amount (Millions of yen)	Amount per share (Yen)	Entitlement date	Effective date
May 17, 2017	Board of Directors	Common stock	¥17,271	¥12	March 31, 2017	June 6, 2017
November 2, 2017	Board of Directors	Common stock	¥21,590	¥15	September 30, 2017	December 4, 2017

Dividends with a record date in the year ended March 31, 2018, with an effective date in the following fiscal year are as follows:

Year ended March 31, 2018

Date of approval	Resolution approved by	Type of shares	Amount (Millions of yen)	Paid from	Amount per share (Yen)	Entitlement date	Effective date
May 16, 2018	Board of Directors	Common stock	¥24,470	Retained earnings	¥17	March 31, 2018	June 5, 2018

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, 2017	**Year ended March 31, 2018**
Financial assets measured at fair value through other comprehensive income:		
Amounts arising during term	¥ 17,360	**¥ 13,929**
Tax effects	(2,969)	**(4,247)**
Net amount	¥ 14,391	**¥ 9,682**
Remeasurements of defined benefit pension plans:		
Amounts arising during term	¥ 24,739	**¥ 31,452**
Tax effects	(7,415)	**(9,282)**
Net amount	¥ 17,324	**¥ 22,170**
Exchange differences on translation of foreign operations:		
Amounts arising during term	¥ (8,463)	**¥(13,713)**
Reclassification adjustments	(12,198)	**166**
Tax effects	256	**(51)**
Net amount	¥ (20,405)	**¥(13,598)**
Effective portion of net change in fair value of cash flow hedges:		
Amounts arising during term	¥ (1,893)	**¥ 1,157**
Reclassification adjustments	3,035	**2,068**
Tax effects	(302)	**(947)**
Net amount	¥ 840	**¥ 2,278**
Share of other comprehensive income (loss) of investments accounted for using equity method:		
Amounts arising during term	¥ (2,172)	**¥ 596**
Reclassification adjustments	—	**(14)**
Net amount	¥ (2,172)	**¥ 582**
Total other comprehensive income	¥ 9,978	**¥ 21,114**

Note 26

Stock-based Remuneration

1. Stock Option System

(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, 2017	**Year ended March 31, 2018**
Outstanding at the beginning of the term	915,650	**937,100**
Granted	155,400	**162,750**
Exercised	(133,950)	**(178,550)**
Forfeited	—	**—**
Expired	—	**—**
Outstanding at the end of the term	937,100	**921,300**
Exercisable stock options outstanding at the end of the term	216,100	**91,550**

The exercise price for all stock options is ¥1 per share.

The weighted average share prices for exercised stock options were ¥620.0 and ¥1,016.7 in the years ended March 31, 2017 and 2018, respectively.

The weighted average remaining contractual years of stock options outstanding at year-end were 11.4 years and 13.2 years as of March 31, 2017 and 2018, 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 ¥455 and ¥887, 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, 2017	**Year ended March 31, 2018**
Share price	¥523.7	**¥974.2**
Share price volatility (note 1)	33.744%	**32.917%**
Expected term (note 2)	4.81 years	**4.52years**
Expected dividends (note 3)	¥15 per share	**¥20 per share**
Risk-free interest rate (note 4)	(0.318)%	**(0.070)%**

Notes: 1. Calculated based on the daily share price over the past 4.81 years and 4.52 years for the fiscal years ended March 31, 2017 and 2018, 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 ¥ 71 million and ¥144 million, respectively, in the years ended March 31, 2017 and 2018, 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.

2. Business Performance-linked Stock-based Remuneration Plan at Mitsubishi Tanabe Pharma Corporation

(1) Details of Stock-based Remuneration

Mitsubishi Tanabe Pharma Corporation (MTPC), a consolidated subsidiary of the Company, has introduced a stock-based remuneration plan (hereinafter, "the plan") from the fiscal year ended March 31, 2018, utilizing a trust. The plan clarifies the linkage between remuneration of MTPC's board directors and executive officers (excluding non-residents of Japan and outside board directors; hereinafter "MTPC directors and executive officers") and the MTPC group's business performance. The objectives of introducing this plan are to provide incentives to MTPC directors and executive officers to strive for sustained growth of the MTPC group and enhance medium- to long-term corporate value, as well as raise management team morale. These objectives will be achieved by sharing with shareholders not only the benefits of rises in MTPC's share price but also the risk of share price decline.

MTPC has adopted a Board Incentive Plan (BIP) trust as the structure for the plan.

Under the plan, MTPC shares are acquired through the trust using money contributed by MTPC as the source of funds. In accordance with "Rules relating to grant of shares" established by MTPC, from the date of commencement of the plan, points (1 point = 1 share) are granted to MTPC directors and executive officers each year on the final day of the fiscal year during the period in which the plan applies. Vesting conditions include the requirement that the recipient is a current office holder as an MTPC director or executive officer, and points are granted according to office held and the degree of achievement of performance targets. In principle, when MTPC directors and executive officers retire from office, by carrying out the prescribed beneficiary vesting procedures, they are able to receive shares of the Company, with the number of shares corresponding to the number of points granted.

The plan is accounted for as equity-settled share-based compensation.

(2) Number of points granted during the period and weighted average fair value of points

The number of points granted during the period and weighted average fair value of points are as follows. The fair value on the day points were granted uses the share price on that day since the share price on the day of grant is a close approximation of fair value.

	Year ended March 31, 2017	**Year ended March 31, 2018**
Number of points granted during the period	—	15,259
Weighted average fair value of points (yen)	—	2,582

(3) Stock-Based Compensation Remuneration

Stock option-related expenses were ¥41 million in the year ended March 31, 2018. These expenses were presented within Selling, general and administrative expenses in the Consolidated Statement of Income

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, 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 March 31, 2017	**As of March 31, 2018**
Present value of the defined benefit obligation	¥630,280	**¥ 613,261**
Fair value of the plan assets	(531,840)	**(529,998)**
Net defined benefit liabilities	¥ 98,440	**¥ 83,263**
Retirement benefit liabilities	¥128,338	**¥ 110,639**
Retirement benefit assets	(29,898)	**(27,376)**
Net defined benefit liabilities	¥ 98,440	**¥ 83,263**

For defined benefit plans, amounts recognized as expenses in the Consolidated Statement of Income are as follows:

Millions of yen

	Year ended March 31, 2017	**Year ended March 31, 2018**
Current service cost	¥20,102	**¥ 18,974**
Prior service cost	891	**5,482**
Interest expense	4,782	**4,952**
Interest income	(6,830)	**(4,254)**
Total	¥18,945	**¥ 25,154**

Changes in the present value of the defined benefit obligation are as follows:

Millions of yen

	Year ended March 31, 2017	**Year ended March 31, 2018**
Outstanding at the beginning of the term	¥651,053	**¥630,280**
Current service cost	20,102	**18,974**
Interest expense	4,782	**4,952**
Remeasurements:		
Actuarial gains and losses arising from changes in demographic assumptions	(945)	**(1,396)**
Actuarial gains and losses arising from changes in financial assumptions	2,193	**(2,257)**
Other	(71)	**(605)**
Benefits paid	(39,894)	**(41,913)**
Prior service cost	891	**5,482**
Exchange differences on translation of foreign operations	(7,831)	**(256)**
Outstanding at the end of the term	¥630,280	**¥613,261**

Changes in the fair value of plan assets are as follows:

Millions of yen

	Year ended March 31, 2017	**Year ended March 31, 2018**
Outstanding at the beginning of the term	¥525,215	**¥531,840**
Interest income	6,830	**4,254**
Remeasurements:		
Return on plan assets	25,916	**27,194**
Contributions by the employer	14,784	**10,380**
Benefits paid	(31,932)	**(38,272)**
Exchange differences on translation of foreign operations	(8,973)	**(5,398)**
Outstanding at the end of the term	¥531,840	**¥529,998**

The principal actuarial assumptions used to calculate present values of defined benefit obligations are as follows:

	As of March 31, 2017	**As of March 31, 2018**
Discount rate	0.56%	**0.64%**

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, 2017 and 2018 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, 2017	**As of March 31, 2018**
Increase by 0.5%	¥(35,873)	**¥(32,970)**
Decrease by 0.5%	31,639	**25,902**

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 March 31, 2017

	Fair value with quoted prices in active markets	Fair value without quoted prices in active markets	Total
			Millions of yen
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

As of March 31, 2018

	Fair value with quoted prices in active markets	Fair value without quoted prices in active markets	Total
			Millions of yen
Cash and cash equivalents	**¥ 25,424**	**¥ —**	**¥ 25,424**
Equity instruments			
Domestic equities	**42,568**	**—**	**42,568**
Foreign equities	**31,401**	**—**	**31,401**
Other	**—**	**76,579**	**76,579**
Debt instruments			
Domestic bonds	**9,043**	**—**	**9,043**
Foreign bonds	**39,077**	**—**	**39,077**
Other	**—**	**167,690**	**167,690**
General accounts of life insurance companies	**—**	**97,564**	**97,564**
Other	**—**	**40,652**	**40,652**
Total	**¥147,513**	**¥382,485**	**¥529,998**

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, 2019 are ¥13,110 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 March 31, 2017 and March 31, 2018 were12.7 years and 13.1years, respectively.

2. Defined Contribution and Public Plans

Amounts recognized as expenses under defined contribution and public plans are as follows:

	Year ended March 31, 2017	**Year ended March 31, 2018**
		Millions of yen
Defined contribution plan cost	¥ 5,874	**¥ 6,662**
Public plan cost	18,643	**20,075**

Note 28

Provisions

The breakdowns and schedule of provisions are as follows:

Year ended March 31, 2017

	Asset retirement obligations	Provision for litigation	Provision for environmental measures	Other	Total
					Millions of yen
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

Year ended March 31, 2018

	Asset retirement obligations	Provision for litigation	Provision for environmental measures	Other	Total
					Millions of yen
As of April 1, 2017	¥15,584	¥7,961	¥2,425	¥5,105	¥31,075
Arising during the year	1,412	1,401	3,399	7,166	13,378
Interest cost associated with passage of time	201	12	—	—	213
Utilized	(97)	(775)	(2,309)	(911)	(4,092)
Unused amounts reversed	(205)	(28)	(45)	(1,778)	(2,056)
Exchange differences on translation of foreign operations	(24)	—	(4)	(159)	(187)
Other	(168)	—	—	12	(156)
As of March 31, 2018	¥16,703	¥8,571	¥3,466	¥9,435	¥38,175
Current liabilities	¥137	¥ —	¥1,207	¥6,119	¥ 7,463
Non-current liabilities	16,566	8,571	2,259	3,316	30,712
Total	¥16,703	¥8,571	¥3,466	¥9,435	¥38,175

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:

	As of March 31, 2017	**As of March 31, 2018**
		Millions of yen
Short-term borrowings	¥ 294,547	**¥ 349,641**
Current portion of long-term borrowings	141,024	**116,025**
Commercial paper	40,000	**24,000**
Current portion of bonds	40,000	**65,000**
Loans due to the transfer of trade receivables	55,150	**22,410**
Loans due to the transfer of trade receivables of subsidiaries	7,016	**3,778**
Bonds	355,000	**320,000**
Convertible bond-type bonds with subscription rights to shares	147,652	**148,027**
Long-term borrowings	613,353	**557,241**
Total	¥1,693,742	**¥1,606,122**
Current liabilities	¥577,737	**¥580,854**
Non-current liabilities	1,116,005	**1,025,268**
Total	¥1,693,742	**¥1,606,122**

Bonds and borrowings are classified as financial liabilities measured at amortized cost.

The average interest rates for short- and long-term borrowings as of March 31, 2017 were 0.881% and 1.182%, respectively.

The average interest rates for short- and long-term borrowings as of March 31, 2018 were 1.001% and 1.493%, respectively.

Repayment terms for long-term borrowings are from 2018 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.

The breakdown of bonds is as follows:

Millions of yen

Note	Name of bond	Term	Interest rate	As of March 31, 2017	**As of March 31, 2018**
1	2nd unsecured bond	2011-2021	1.204%	¥ 10,000	**¥ 10,000**
1	3rd unsecured bond	2012-2017	0.366%	15,000	**—**
1	4th unsecured bond	2012-2019	0.556%	10,000	**10,000**
1	5th unsecured bond	2012-2017	0.439%	15,000	**—**
1	6th unsecured bond	2012-2019	0.665%	10,000	**10,000**
1	7th unsecured bond	2013-2018	0.615%	20,000	**20,000**
1	8th unsecured bond	2013-2020	0.948%	10,000	**10,000**
1	9th unsecured bond	2013-2023	1.226%	10,000	**10,000**
1	10th unsecured bond	2013-2018	0.319%	10,000	**10,000**
1	11th unsecured bond	2013-2020	0.604%	15,000	**15,000**
1	12th unsecured bond	2013-2023	0.918%	15,000	**15,000**
1	13th unsecured bond	2014-2019	0.319%	25,000	**25,000**
1	14th unsecured bond	2014-2021	0.482%	15,000	**15,000**
1	15th unsecured bond	2014-2024	0.800%	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	**10,000**
1	22nd unsecured bond	2016-2026	0.320%	10,000	**10,000**
1	23rd unsecured bond	2016-2036	0.850%	20,000	**20,000**
1	24th unsecured bond	2018-2028	0.370%	—	**15,000**
1	25th unsecured bond	2018-2038	0.890%	—	**15,000**
2	37th unsecured bond	2008-2018	2.030%	20,000	**20,000**
2	38th unsecured bond	2009-2019	2.020%	10,000	**10,000**
3	6th unsecured bond	2009-2019	1.940%	5,000	**5,000**
4	10th unsecured bond	2012-2017	0.437%	10,000	**—**
4	11th unsecured bond	2014-2019	0.319%	15,000	**15,000**
4	12th unsecured bond	2014-2021	0.558%	10,000	**10,000**
4	13th unsecured bond	2016-2021	0.140%	15,000	**15,000**
4	14th unsecured bond	2016-2026	0.390%	15,000	**15,000**
	Subtotal			¥395,000	**¥385,000**
1	Zero coupon convertible bond-type bonds with subscription rights to shares due 2022	2017-2022	0.196%	74,269	**74,415**
1	Zero coupon convertible bond-type bonds with subscription rights to shares due 2024	2017-2024	0.312%	73,383	**73,612**
	Subtotal			147,652	**148,027**
	Total			¥542,652	**¥533,027**

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 28, 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. (now Mitsubishi Chemical Corporation), a domestic consolidated subsidiary. As of March 28, 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 March 31, 2017	**As of March 31, 2018**
Buildings and structures	¥ 7,483	**¥ 6,595**
Machinery and vehicles	9,836	**9,892**
Land	7,824	**7,699**
Other	1,542	**1,402**
Total	¥26,685	**¥25,588**

Collateralized obligations

Millions of yen

	As of March 31, 2017	**As of March 31, 2018**
Trade payables	¥ 435	**¥ 1,732**
Short-term borrowings	3,219	**51**
Current portion of long-term borrowings	408	**1,857**
Long-term borrowings	7,836	**5,778**
Other	46	**104**
Total	¥11,944	**¥ 9,522**

Note 30

Changes in Liabilities Relating to Financing Activities

Changes in liabilities relating to financing activities are as follows:

April 1, 2017, to March 31, 2018

Millions of yen

	Short-term borrowings	Commercial paper	Long-term borrowings (Note)	Bonds (Note)
As of April 1, 2017	356,713	40,000	754,377	542,652
Cash flows	25,243	(16,000)	(67,378)	(10,172)
Increase (decrease) due to transfer to liabilities related directly to assets held for sale	(199)	—	(983)	—
Changes from acquisition or loss of control over subsidiaries or other businesses	(1,480)	—	5	—
Impact of foreign exchange rate fluctuations, etc.	(4,448)	—	(12,755)	547
As of March 31, 2018	375,829	24,000	673,266	533,027

Note: Including amounts due or scheduled for redemption within one year.

Note 31

Other Financial Liabilities

The breakdown of other financial liabilities is as follows:

Millions of yen

	As of March 31, 2017	**As of March 31, 2018**
Account payable-other	¥ 96,061	**¥ 115,030**
Accrued expenses	63,480	**64,161**
Lease obligations	16,930	**17,334**
Deposits	10,981	**8,169**
Other	24,946	**25,688**
Total	¥212,398	**¥230,382**
Current liabilities	¥184,909	**¥201,208**
Non-current liabilities	27,489	**29,174**
Total	¥212,398	**¥230,382**

Other financial liabilities are mainly classified as financial liabilities measured at amortized cost.

Note 32

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 March 31, 2017			**As of March 31, 2018**		
	Total future minimum lease payments	Future finance costs	Present value	Total future minimum lease payments	Future finance costs	Present value
Due within one year	¥ 4,146	¥ (277)	¥ 3,869	**¥ 3,741**	**¥ (205)**	**¥ 3,536**
Due after one year and not later than five years	9,222	(623)	8,599	**8,782**	**(621)**	**8,161**
Later than five years	4,696	(234)	4,462	**5,795**	**(158)**	**5,637**
Total	¥18,064	¥(1,134)	¥16,930	**¥18,318**	**¥ (984)**	**¥17,334**

2. Operating Lease (Lessee)

Future minimum lease payments under noncancellable operating lease contracts are as follows:

Millions of yen

	As of March 31, 2017	**As of March 31, 2018**
Due within one year	¥12,339	**¥11,795**
Due after one year and not later than five years	19,320	**18,788**
Later than five years	7,610	**8,526**
Total	¥39,269	**¥39,109**

In the years ended March 31, 2017 and 2018, lease fees recognized as expenses were ¥19,873 million and ¥18,318 million, respectively.

Note 33

Other Liabilities

The breakdown of other liabilities is as follows:

Millions of yen

	As of March 31, 2017	**As of March 31, 2018**
Employees' bonuses	¥ 42,233	**¥ 48,778**
Employees' paid leave related obligations	30,079	**31,753**
Advances received	15,582	**12,806**
Accrued consumption taxes	10,003	**15,163**
Deferred income from out-licensing agreements	4,944	**4,464**
Social insurance premiums received	6,053	**4,918**
Other	46,236	**46,417**
Total	¥155,130	**¥164,299**
Current liabilities	¥116,691	**¥126,285**
Non-current liabilities	38,439	**38,014**
Total	¥155,130	**¥164,299**

Note 34

Trade Payables

Trade payables are as follows:

Millions of yen

	As of March 31, 2017	**As of March 31, 2018**
Accounts payable	¥437,914	**¥488,592**

Trade payables are classified as financial liabilities measured at amortized cost.

Note 35

Financial Instruments

1. Capital Management

Under the APTSIS 20 medium-term management plan (fiscal 2016 to 2020), 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 or year ended March 31, 2017	**As of or year ended March 31, 2018**
Return on Equity (ROE) (Note 1)	15.1%	**17.8%**
Net D/E ratio (Note 2)	1.06	**0.89**

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*1 / equity attributable to owners of the parent (end of fiscal years)
   *1Net interest-bearing debt = Interest-bearing debt - (cash and cash equivalents + cash reserves*2)
   *2 Cash reserves comprise certificates of deposits, securities, and other instruments other than cash equivalents that the Group holds to manage surplus funds.

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, 2017	**Year ended March 31, 2018**
Outstanding at the beginning of the term	¥5,400	**¥5,811**
Addition	1,859	**2,277**
Decrease (intended use)	(811)	**(434)**
Decrease (reversal)	(752)	**(818)**
Other	115	**(123)**
Outstanding at the end of the term	¥5,811	**¥6,713**

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 39 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 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	—	—	—	—	—

As of March 31, 2018

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	**¥488,592**	**¥488,592**	**¥488,592**	**¥ —**	**¥ —**	**¥ —**	**¥ —**	**¥ —**
Short-term borrowings	**375,829**	**375,829**	**375,829**	**—**	**—**	**—**	**—**	**—**
Commercial paper	**24,000**	**24,000**	**24,000**	**—**	**—**	**—**	**—**	**—**
Bonds	**533,027**	**535,000**	**65,000**	**60,000**	**55,000**	**125,000**	**20,000**	**210,000**
Long-term borrowings	**673,266**	**673,523**	**116,542**	**174,551**	**108,564**	**68,883**	**54,454**	**150,529**
Accounts payable-other	**115,030**	**115,030**	**115,030**	**—**	**—**	**—**	**—**	**—**
Accrued expenses	**64,161**	**64,161**	**64,161**	**—**	**—**	**—**	**—**	**—**
Other	**50,830**	**51,557**	**23,139**	**4,951**	**3,222**	**2,314**	**1,269**	**16,662**
Derivative liabilities:								
Foreign exchange forward contracts	**¥ 105**	**¥ 105**	**¥ 105**	**¥ —**	**¥ —**	**¥ —**	**¥ —**	**¥ —**
Currency swaps	**24**	**24**	**4**	**4**	**4**	**4**	**2**	**6**
Interest rate swaps	**232**	**238**	**153**	**72**	**7**	**—**	**—**	**6**

For financial guarantee agreements, maximum amounts based on performance requests are the outstanding guaranteed liabilities described in Note 39 Contingent Liabilities.

The total commitment line and borrowing balance is as follows:

Millions of yen

	As of March 31, 2017	**As of March 31, 2018**
Total commitment line	¥121,697	**¥131,162**
Borrowing balance	7,292	**7,437**
Unused balance	¥114,405	**¥123,725**

We are also diversifying funding, notably by obtaining uncommitment-based overdraft facilities with several financial institutions and by securing frameworks to issue commercial paper or register corporate bond issues.

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.

Financial Information

Millions of yen

	Year ended March 31, 2017	**Year ended March 31, 2017**
U.S. dollar (1% appreciation of yen)	¥(380)	**¥(100)**
Euro (1% appreciation of yen)	(77)	**(30)**

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.

Millions of yen

	Year ended March 31, 2017	**Year ended March 31, 2018**
Profit before tax	¥(2,010)	**¥(1,607)**

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, 2017 and 2018.

(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 March 31, 2017

Millions of yen

	Level 1	Level 2	Level 3	Total
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

As of March 31, 2018

Millions of yen

	Level 1	Level 2	Level 3	Total
Assets				
Stocks and investments	**¥127,192**	**¥ —**	**¥73,155**	**¥200,347**
Stocks and investments held for sale	**317**	**—**	**89**	**406**
Derivatives	**—**	**1,618**	**—**	**1,618**
Total	**¥127,509**	**¥1,618**	**¥73,244**	**¥202,371**
Liabilities				
Derivatives	**¥ —**	**¥ 361**	**¥ —**	**¥ 361**
Total	**¥ —**	**¥ 361**	**¥ —**	**¥ 361**

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 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, 2017	**Year ended March 31, 2018**
Balance at beginning of period	¥77,791	**¥81,875**
Other comprehensive income (Note)	4,171	**(1,346)**
Purchases	3,901	**1,345**
Sales or redemptions	(2,221)	**(4,379)**
Other	(1,767)	**(4,251)**
Balance at end of period	¥81,875	**¥73,244**

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 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

As of March 31, 2018

Millions of yen

	Carrying amounts	Fair value Level 1	Level 2	Level 3	Total
Assets:					
Debt securities	**¥ 31,710**	**¥ —**	**¥ 702**	**¥30,960**	**¥ 31,662**
Total	**¥ 31,710**	**¥ —**	**¥ 702**	**¥30,960**	**¥ 31,662**
Liabilities:					
Long-term borrowings	**¥ 673,266**	**¥ —**	**¥ 672,380**	**¥ —**	**¥ 672,380**
Bonds	**533,027**	**—**	**539,649**	**—**	**539,649**
Total	**¥1,206,293**	**¥ —**	**¥1,212,029**	**¥ —**	**¥1,212,029**

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, 2017 and 2018, Trade receivables included ¥38,288 million and ¥19,337 million, respectively, of trade receivables that were transferred without satisfying financial asset derecognition requirements. Bonds and borrowings included ¥55,150 million and ¥22,410 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, 2017 and 2018, expenses arising from transfers of trade receivables that were derecognized in their entirety were ¥121 million and ¥156 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:

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	—	—	—	—	—

As of March 31, 2018

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	**¥11,888**	**¥11,849**	**¥ 39**	**¥ —**	**¥ —**	**¥ —**	**¥ —**
Interest rate risk:							
Interest rate swaps	**81,166**	**18,509**	**58,352**	**2,272**	**272**	**272**	**1,489**
Interest rate currency swaps	**14,000**	**14,000**	**—**	**—**	**—**	**—**	**—**
Other	**221**	**221**	**—**	**—**	**—**	**—**	**—**

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 March 31, 2017	As of March 31, 2018
Cash flow hedges		
Foreign exchange risk:		
Foreign exchange forward contracts		
U.S. dollars	¥101.02-116.71	**¥103.36-112.13**
Euros	¥112.94-127.35	**¥130.41-132.96**
Interest rate risk		
Interest rate swaps		
Pay fixed rate, receive floating rate	0.34%-3.19%	**0.23%-2.30%**
Interest rate currency swaps		
Pay fixed rate, receive floating rate	0.59%	**0.59%**

Amounts for derivatives designated as hedges are as follows:

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)

As of March 31, 2018

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	**¥ 11,888**	**¥ 146**	**¥ 99**	Other financial assets / Other financial liabilities	**¥ 894**
Interest rate risk:					
Interest rate swaps	**81,166**	**248**	**232**	Other financial assets / Other financial liabilities	**805**
Interest rate currency swaps	**14,000**	**1,180**	**—**	Other financial assets	**(761)**
Other	**221**	**15**	**—**	Other financial assets	**22**

Amounts for items designated as hedges are as follows:

Millions of yen

	As of March 31, 2017: Change in fair value of hedged item used as the basis for recognizing hedge ineffectiveness	As of March 31, 2017: Cash flow hedge reserve	As of March 31, 2018: Change in fair value of hedged item used as the basis for recognizing hedge ineffectiveness	As of March 31, 2018: Cash flow hedge reserve
Cash flow hedges				
Foreign exchange risk:				
Planned to purchase	¥ (538)	¥(542)	**¥ 597**	**¥ 55**
Foreign-currency-denominated liabilities and interest	1	—	**—**	**—**
Interest rate risk:				
Interest on borrowings	1,329	(508)	**595**	**87**
Other	5	23	**8**	**31**

The breakdown of cash flow hedges is as follows:

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)	—	—	—	—

Year ended March 31, 2018

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	**¥ 594**	**¥—**	**¥—**	**¥611**	Financial cost
Currency options	**1,033**	**—**	**—**	**—**	
Interest rate risk:					
Interest rate swaps	**557**	**—**	**—**	**433**	Financial cost
Interest rate currency swaps	**65**	**—**	**—**	**475**	Financial cost
Other	**29**	**—**	**—**	**—**	—

(2) Derivative transactions to which hedge accounting is not applied

Amounts relating to items not designated as hedges are as follows:

	As of March 31, 2017			**As of March 31, 2018**		
	Contract amount	Over one year	Fair value	Contract amount	Over one year	Fair value
Foreign exchange forward contracts	¥ 4,122	¥ —	¥(46)	**¥ 5,075**	**¥ —**	**¥ (6)**
Currency swaps	864	727	133	**795**	**623**	**5**
Currency options	7,702	—	—	**—**	**—**	**—**
Total	¥12,688	¥727	¥ 87	**¥ 5,870**	**¥623**	**¥ (1)**

Note 36

Subsidiaries

Subsidiaries with significant non-controlling interests are as follows:

Name of subsidiary	Location	Percentage of non-controlling interest: As of March 31, 2017	**As of March 31, 2018**
Mitsubishi Tanabe Pharma Corporation	Japan, other	43.6%	**43.6%**
TAIYO NIPPON SANSO CORPORATION	Japan, other	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, 2017		**Year ended March 31, 2018**	
	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION
Net profit attributable to non-controlling interests	¥28,729	¥17,359	**¥21,335**	**¥24,793**
Dividends paid to non-controlling interests	11,823	4,539	**16,277**	**5,285**

Cumulative non-controlling interests of relevant subsidiaries are as follows:

Millions of yen

	As of March 31, 2017		**As of March 31, 2018**	
	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION
Cumulative non-controlling interests amounts	¥351,618	¥190,167	**¥362,174**	**¥ 208,239**

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 March 31, 2017		**As of March 31, 2018**	
	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION
Current assets	¥683,759	¥ 268,132	**¥ 585,525**	**¥ 278,302**
Non-current assets	271,673	746,320	**432,849**	**742,942**
Total	¥955,432	¥1,014,452	**¥1,018,374**	**¥1,021,244**
Current liabilities	88,407	213,602	**97,370**	**221,087**
Non-current liabilities	25,894	345,558	**56,575**	**308,878**
Total	¥114,301	¥ 559,160	**¥ 153,945**	**¥ 529,965**
Equity	841,131	455,292	**864,429**	**491,279**
Total	¥955,432	¥1,014,452	**¥1,018,374**	**¥1,021,244**

Financial Information

Summary Consolidated Statements of Income and Consolidated Statements of Comprehensive Income

Millions of yen

	Year ended March 31, 2017		Year ended 31, 2018	
	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION
Revenue	¥423,977	¥581,586	**¥433,855**	**¥646,218**
Net profit	68,922	34,520	**53,992**	**49,062**
Total comprehensive income	69,309	44,782	**56,620**	**44,908**

Summary Consolidated Statements of Cash Flows

Millions of yen

	Year ended March 31, 2017		Year ended March 31, 2018	
	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSO CORPORATION
Cash flows from operating activities	¥59,785	¥ 74,596	**¥66,943**	**¥ 83,199**
Cash flows from investing activities	(10,566)	(147,083)	**(19,178)**	**(52,088)**
Cash flows from financing activities	(24,408)	80,777	**(32,501)**	**(39,859)**
Effect of exchange rate changes on cash and cash equivalents	(507)	(5,404)	**(1,457)**	**1,841**
Net increase (decrease) in cash and cash equivalents	¥24,304	¥ 2,886	**¥13,807**	**¥(6,907)**

Note 37

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, 2017		Year ended March 31, 2018	
	Joint venture	Associates	Joint venture	Associates
Sales of goods and services	¥61,722	¥20,509	**¥63,690**	**¥27,081**
Purchases of goods and services	17,531	36,041	**22,978**	**41,068**

Receivables and obligations to major related parties as a result of the above transactions are as follows:

Millions of yen

	As of March 31, 2017		As of March 31, 2018	
	Joint venture	Associates	Joint venture	Associates
Receivables				
Accounts receivable	¥15,415	¥5,219	**¥12,054**	**¥8,734**
Other	1,505	583	**2,501**	**507**
Total	¥16,920	¥5,802	**¥14,555**	**¥9,241**
Obligations				
Accounts payable	¥ 3,320	¥2,310	**¥ 4,265**	**¥4,073**
Other	265	656	**7**	**102**
Total	¥ 3,585	¥2,966	**¥ 4,272**	**¥4,175**

Compensation for key Group executives is as follows:

Millions of yen

	Year ended March 31, 2017	Year ended March 31, 2018
Remuneration and bonuses	¥2,728	**¥2,149**
Stock-based compensation	35	**87**
Total	¥2,763	**¥2,236**

Note 38

Commitments

Commitments relating to acquisitions of property, plant and equipment and intangible assets are as follows:

Millions of yen

	As of March 31, 2017	As of March 31, 2018
Acquisitions of property, plant and equipment and intangible assets	¥195,088	**¥143,540**

Note 39

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, 2017	As of March 31, 2018
Joint ventures	¥11,945	**¥9,400**
Associates	560	**421**
General business partners	1,622	**641**
Other	1,549	**1,445**
Total	¥15,676	**¥11,907**

Note 40

Subsequent event

Acquisition of treasury stock

The Company has resolved at the meeting of the Board of Directors held on May 10, 2018 to acquire treasury stock in accordance with the provisions of Article 459, Paragraph 1 of Japan's Companies Act and Article 40 of MCHC Articles of Incorporation.

1. Details of Board of Directors Resolution of May 10, 2018

(1) Reason for Acquisition of Treasury Stock

To implement flexible capital management policies in response to changes in the business environment.

(2) Type of stock and total number of shares to be acquired

Up to 20,000 thousand shares of common stock

(3) Total acquisition price for shares

Up to ¥20,000 million

Financial Information

(4) Acquisition period
May 11 through June 15, 2018
(5) Method of Acquisition
(i) Purchase through Off-auction own shares repurchase trading system (ToSTNeT-3)
The Company will entrust the purchase of its treasury stock at the closing price on May 10, 2018, through the off-auction own shares repurchase trading system of the Tokyo Stock Exchange (ToSTNeT-3) at 8:45 a.m. on May 11, 2018.
(ii) Market purchase after the purchase through ToSTNeT-3
The Company will continue to acquire treasury stock through market purchase on the basis of discretionary trading pertaining to acquisition of treasury stock up to the total number of shares or total acquisition price obtained by subtracting the total number of shares and total acquisition price acquired through the off-auction own shares repurchase trading system of the Tokyo Stock Exchange (ToSTNeT-3) from the total number of shares to be acquired and total acquisition price, in case the total number of shares and total acquisition price through the aforementioned ToSTNeT-3 system did not reach the acquisition limit of either the total number of shares to be acquired or the total acquisition price resolved by the Board of Directors on May 10, 2018.

2. Results of Acquisition
(1)Total number of shares acquired
19,549 thousand shares
(2)Total acquisition price
¥20,000 million
(3)Acquisition period
May 11 through June 1, 2018

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, 2018, 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, 2018, and their consolidated financial performance and cash flows for the year then ended in conformity with International Financial Reporting Standards.

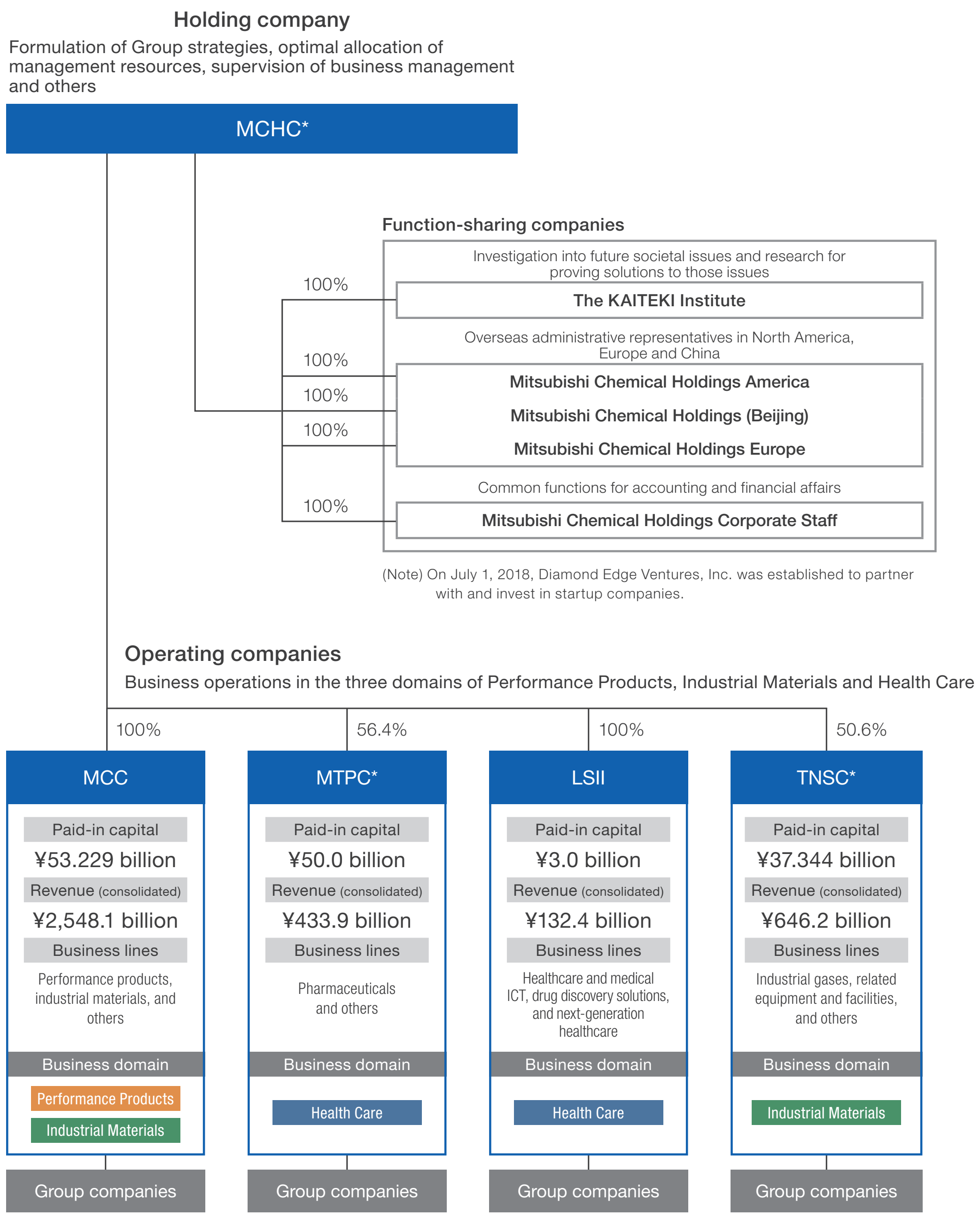
Ernst & Young ShinNihon LLC
June 26, 2018
Tokyo, Japan

Corporate Data

Mitsubishi Chemical Holdings Corporation (As of March 31, 2018)

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)	¥3,724.4 billion (FY2017)
Number of employees (consolidated)	69,230

Organizational Structure



* Listed company

Main Subsidiaries and Affiliates

(As of March 31, 2018)

Direct Investees

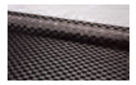
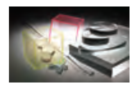
Company Name	Principal Businesses	Paid-in capital	Equity Participation (%)
Mitsubishi Chemical Corporation	Manufacture and marketing of chemical products	¥53.2 billion	100.0
Mitsubishi Tanabe Pharma Corporation	Manufacture and marketing of pharmaceuticals	¥50.0 billion	56.4
Life Science Institute, Inc.	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	Paid-in capital	Equity Participation (%)
Performance Products Domain	Performance Products Segment			
	The Nippon Synthetic Chemical Industry Co., Ltd.	Manufacture and marketing of polymer processing products	¥18.0 billion	100.0
	Mitsubishi Chemical Infratec Co., Ltd.	Manufacture and marketing of house and building materials and infrastructure materials	¥0.4 billion	100.0
	Mitsubishi-Chemical Foods Corporation	Manufacture and marketing of food and pharmaceutical ingredients	¥0.5 billion	100.0
	Mitsubishi Chemical Media Co., Ltd.	Marketing of recording media and computer peripheral equipment	¥4.1 billion	100.0
	MC Ionic Solutions US, Inc.	Manufacture and marketing of electrolytes for lithium-ion batteries	U.S.$100	100.0
	Quadrant AG	Management of subsidiaries that engage in the engineering plastic business	CHF28 million	100.0
	Mitsubishi Chemical Performance Polymers, Inc.	Manufacture and marketing of thermoplastic compounds and functional polyolefins	U.S.$100	100.0
	Mitsubishi Polyester Film Inc.	Manufacture and marketing of polyester film	U.S.$100	100.0
Industrial Materials Domain	Chemicals Segment			
	Kansai Coke and Chemicals Co., Ltd.	Manufacture and marketing of coke	¥6.0 billion	51.0
	Japan Polyethylene Corporation	Manufacture and marketing of polyethylene	¥7.5 billion	58.0
	Japan Polypropylene Corporation	Manufacture and marketing of polypropylene	¥11.8 billion	65.0
	Mitsubishi Chemical Lucite Group Limited	Management of subsidiaries that engage in the MMA business	£246 million	100.0
	Industrial Gases Segment			
	THERMOS K.K.	Manufacture and marketing of stainless steel vacuum flasks, thermal cookers, and other houseware	¥0.3 billion	100.0
	JFE Sanso Center Corporation	Manufacture and sale of industrial gases	¥0.09 billion	60.0
	NIPPON EKITAN Corporation	Manufacture and marketing of industrial gases	¥0.6 billion	84.1
	Matheson Tri-Gas, Inc.	Manufacture and marketing of industrial gases	U.S.$50	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 discovery solutions	¥3.0 billion	100.0
	Qualicaps Co., Ltd.	Manufacture and marketing of capsules for pharmaceuticals, health and nutrition foods, and pharmaceutical equipment	¥2.9 billion	100.0
	Mitsubishi Tanabe Pharma Factory Ltd.	Manufacture and marketing of pharmaceuticals	¥1.1 billion	100.0
Others	Mitsubishi Chemical Engineering Corporation	Engineering and construction services	¥1.4 billion	100.0
	Mitsubishi Chemical Logistics Corporation	Logistics and warehouse services	¥1.5 billion	100.0

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  Biodegradable polymer, *BioPBS*	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	
		Inorganic chemicals	Automobiles, electronics, Industrial-use chemicals
		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  Hydroponic system for leafy vegetables, *Napperland*  FRP[4] and SUS[5] panel water tank, *HISHITANK*	Aqua solutions	Environment, infrastructure, household goods, medical care, foods
		Ion-exchange resins	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	 Ethylene production facility  Petrochemical derivatives  PE[6] 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 processing 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 Polyethylene

Global Network

(As of March 31, 2018)

Number of Subsidiaries and Affiliates (Japan):	318
Number of Subsidiaries and Affiliates (Outside Japan):	390

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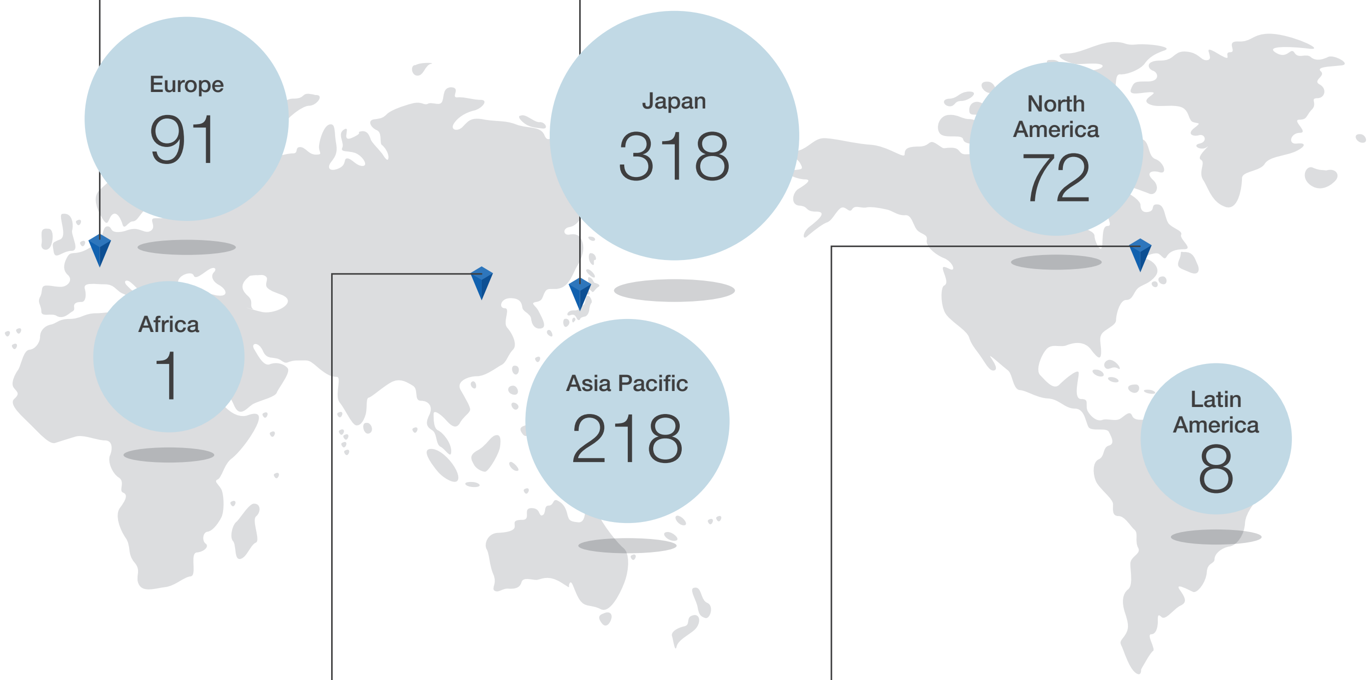

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