KUREHA CORPORATION
Business Report 2018

Year ended March 31, 2018

The Pursuit of Excellence

Building on Core Strengths

Kureha Corporation is a manufacturer of highly originative specialty chemicals and plastics that leverages proprietary technologies to develop products in the fields of advanced materials, agrochemicals, pharmaceuticals, and packaging materials. Since its establishment in 1944, Kureha has utilized its strengths in technology and innovation to provide a wide range of solutions suited to the market needs of each era.

Today, this corporate DNA drives Kureha to always pursue originality and excellence in harmony with the environment, and consistently create products that bring value to customers and society.

Corporate Philosophy

To be a company supporting an ever-changing society.
To be a company that changes society for the better.
We formulated our Corporate Identity to reflect our vision for Kureha.

- **We treasure people and the natural environment.**
- **We constantly evolve through innovation.**
- **We contribute to society by developing beneficial products.**

Contents

R&D Innovation:

The Source of Our Competitiveness

We pride ourselves on our expertise in polymer engineering and processing as well as organic synthesis and carbon materials development. These technologies provide the base for the development of our original innovative materials and products. We are constantly adding and fusing new ideas to these accumulated technologies, and in the spirit of "if it doesn't exist, let's create it," each day we pursue technology solutions that only Kureha can provide to meet unmet needs.

The Pursuit of Excellence

Originality and Quality to Answer Global Needs:

The Growth Potential in Global Markets

Kureha's overseas sales had reached 27% of total revenue in FY2017. Along with exports from Japan, we have production, processing and sales locations in the United States, Germany, the Netherlands, France, the U.K., China, Vietnam and Australia, enabling an effective response to needs in overseas markets. With continued growth expected in newly emerging countries and many other regions, we are taking active and strategic steps to expand sales of highly competitive products in line with the needs of overseas markets, whether for advanced materials, chemicals, or plastic products.

Maximizing Earnings & Diversifying Risks:

The Path to Sustainable Growth

Our innovative products and services are broadly based but highly specialized, supporting a wide range of industries, including electrical and electronic-appliances, automotive, agriculture, medicine and energy. We maximize earnings and diversify risk through broad-based business development in promising growth fields such as the environment, energy, health and lifestyle. We continuously optimize our portfolio to align with shifting market needs while securing our earnings path.

FY2017 Revenue by Segment

Advanced Materials

¥41,640 million

28.3%

Specialty Chemicals

¥26,176 million

17.8%

Specialty Plastics

¥45,397 million

30.8%

Construction and Other Operations

¥17,354 million

11.8%

(Construction)

¥16,760 million

11.4%

(Other Operations)

Consolidated Financial Highlights

Kureha Corporation and Consolidated Subsidiaries
Years ended March 31, 2018 (FY2017) and 2017 (FY2016)

Business Areas

Advanced Plastics
Carbon Fibers & Products
Battery Materials

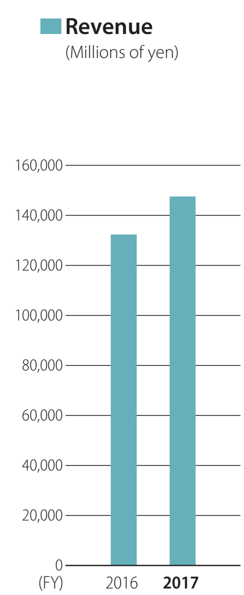
Agrochemicals
Pharmaceuticals
Industrial Chemicals

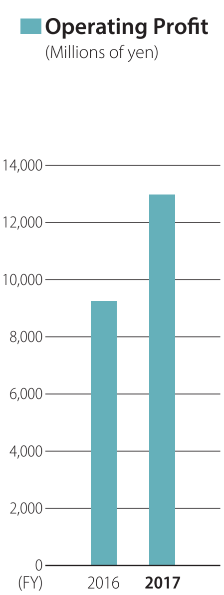
Household Products
Packaging Materials
Synthetic Fiber Products

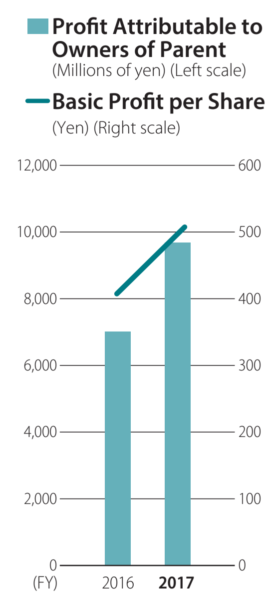
Engineering & Construction
Environment Management
Transport/Warehousing

	Millions of yen		Thousands of U.S. dollars
	FY2017	FY2016	**FY2017**
For the year:			
Revenue	**¥147,329**	¥132,294	**$1,386,760**
Operating profit	**12,973**	9,255	**122,116**
Profit attributable to owners of parent	**9,697**	7,001	**91,278**
Capital expenditure	**9,768**	10,304	**91,944**
Depreciation and amortization	**9,898**	10,191	**93,167**
Research and development expenses	**4,962**	4,734	**46,706**
Year-end:			
Total assets	**¥242,281**	¥234,907	**$2,280,510**
Total equity attributable to owners of parent	**150,193**	124,297	**1,413,722**
Interest-bearing debt	**48,089**	71,007	**452,652**
	Yen		U.S. dollars
Amounts per share:			
Basic profit per share	**¥ 507.48**	¥ 407.38	**$ 4.78**
Owners' equity per share	**7,271.67**	7,232.89	**68.45**
	Percent		
Ratios:			
Profit attributable to owners of parent to revenue	**6.6%**	5.3%	
Return on equity	**7.1**	5.8	
Return on assets	**5.3**	3.8	
Owner's equity ratio	**62.0**	52.9	

Notes: 1. For convenience only, U.S. dollar amounts have been translated from Japanese yen at the rate of ¥106.24 to US$1, the rate of exchange prevailing on the Tokyo Foreign Exchange Market on March 30, 2018.
2. For amounts per share, see Note 29 of the Notes to Consolidated Financial Statements.
3. Return on equity = Profit attributable to owners of parent/Shareholders' equity × 100
4. Return on assets = Profit before tax/Total assets × 100
5. Owner's equity ratio = Owner's equity/Total liabilities and equity







President's Message

Yutaka Kobayashi
President & Chief Executive Officer

Dear Shareholders,

In FY2017 (ended March 31, 2018), Kureha paved the way for future growth. One of the strategies in the current mid-term management plan is to enhance the competitiveness and earnings capacity of existing businesses, and we made significant progress in this regard, achieving an 11.4% year-on-year increase in revenue to 147.3 billion yen, and a 40.2% gain in operating profit to 13.0 billion yen.

We also posted a record high 9.7 billion in profit attributable to the owners of Kureha, demonstrating the untiring efforts of the employees of the Kureha Group and our commitment to sustained growth. Further, we expanded returns to shareholders, increasing our annual dividend by 15 yen to 125 yen per share, the highest in Kureha's history.

Performance Highlights for FY2017

- **Advanced Materials:** Kureha's polyvinylidene fluoride (PVDF) business, which provides our market-leading lithium-ion battery (LiB) binder material, continued to see high demand for use in electric vehicles, particularly in China and Korea. Earnings grew on the back of products meeting advanced market requirements.

  Polyphenylene sulfide (PPS), which is seen in the automotive industry as an excellent solution to reduce vehicle weight and incorporate more electronics benefitted from higher demand worldwide. Earnings expanded as Kureha increased its sales volume by operating production plants in Japan at full capacity, along with steady growth at our U.S. joint venture firm.

  Carbon products were boosted by firm demand in the semiconductor industry, and the positive outcome of several years of business restructuring, leading to the first operating profit in six years.

- **Specialty Plastics:** Kureha has continually improved *NEW Krewrap* plastic wrap on an annual basis since 2004 through careful consideration of consumers' needs, while at the same time making strategic price adjustments. This year, we achieved a record level of operating profit.

- **Specialty Chemicals:** In pharmaceuticals, amid a business environment marked by fierce competition from generics, in January 2018 Kureha launched a fast-dissolving tablet for *Kremezin*, a therapeutic agent for chronic kidney disease. This new tablet is aimed at making the medication gentler for the patient and improving drug adherence, and we are working with our marketing partner to expand sales.

  The agrochemicals business was boosted by a higher sales volume of *Ipconazole* fungicide, along with favorable exchange rates.

- As part of our Reform Project measures, Kureha implemented bold and sweeping measures to lower costs in all aspects of the Group's business operations, achieving cumulative cost reductions through FY2017 of 7.6 billion yen compared to FY2012 levels.

Putting the PGA Business on a Growth Track

The polyglycolic acid (PGA) business is a key component for the success of the FY2016-2018 management plan, and positioned as a core business that will drive Kureha's future growth. Currently, Kureha is the only company in the world producing this resin on an industrial scale. Its exceptional material strength and controllable degradability, which enable enhanced efficiency and lower costs, have made it a game-changing solution for hydraulic fracturing to extract shale gas and oil. We see a broad range of market opportunities in the oil and gas sector, and have expanded our product lineup through the development of new frac plug types that are degradable in lower temperatures and therefore applicable to a broad range of wells.

Product development to meet such customer needs meant full-fledged business establishment was delayed compared to the initial plan, and the PGA business recorded an operating loss in FY2017. However, we also made thorough preparations for future business growth. During FY2018 we will focus on market expansion in North America, and narrow the operating loss. We will accelerate business growth by steadily capturing market needs, and expect to achieve profitability in FY2019. Going forward, PGA for oil and gas exploration is expected to make a much stronger contribution to the Kureha Group's performance.

Investment for the Future

Alongside the expansion of the PGA business, Kureha is concentrating resources in the growth field of advanced materials.

In the fall of 2018, we will increase PVDF production capacity at the Iwaki Factory by 2,000 tonnes to 6,000 tonnes per year. Further, in anticipation of greater demand in the LiB market, we are considering doubling production capacity at our Chinese factory (currently producing 5,000 tonnes per year), and will finalize plans in the first half of 2019.

PPS is another growth business. To meet surging demand, we have already taken the decision to increase annual production at the Iwaki Factory from 10,700 tonnes to 15,700 tonnes, with the new facility scheduled to become operational in the spring of 2021. For this expansion, we will utilize a highly efficient manufacturing process that will enable Kureha to maintain its leading position in the PPS market.

As a company built on technology, we are keenly aware of how vitally important it is to maintain our current market presence while creating new businesses that will support future growth. In April 2016, Kureha launched the New Business Creation Project, an initiative to use our technological skills and specialization in the fields of the environment, energy and quality of life, and create new technologies and products that will lead to downstream business development through collaboration with third-party companies, universities, and other organizations. We currently have 11 projects underway, several of which have moved into the stage of advanced technology development.

Innovation in materials science is not something that can be accomplished in a short time frame. It may take time, but I believe that the synergies and new value offered by the wonderful technologies that arise from these efforts to reveal the unknown will bring benefits to the Kureha Group of the future, as well as society as a whole.

Changing Kureha's History in FY2018

FY2018 is the final year of Kureha's Challenge 2018, Kureha's current mid-term management plan. We are forecasting year-on-year increases in revenue to 150.0 billion yen (up 1.8%), operating profit to 14.0 billion yen (up 7.9%), and profit attributable to the owners of Kureha to 10.5 billion yen (up 8.3%). While the revenue forecast is 10.0 billion yen lower compared to the initial targets in the mid-term management plan, operating profit is on track to reach 14.0 billion yen.

We will continue to enhance quality and cost competitiveness, proceed determinedly with our strategy to put the PGA business on track, and make a concerted effort as a company to achieve our FY2018 operating profit target. In addition, we will cut loose the burdensome legacies that have consistently failed to meet their financial targets in management plans, and begin a new "history of reliable growth" for Kureha. This will enable Kureha to secure sustained growth into the future, and demonstrate our steadfast determination to provide value to customers, shareholders, and society.

Kureha will also continue to take action for reform and innovation, and pursue productivity gains by reducing costs, improving operational efficiency, enhancing employee motivation and further reinforcing our management foundation. All of our employees, myself included, are working resolutely with a sense of urgency toward our management goals and quantitative targets, driven by our watchwords Passion, Speed, and Commitment. The Kureha Group, through innovation in materials science, will seek solutions to the rapidly changing issues facing the world today, and continually generate new value for customers, shareholders, and society.

We thank you for your investment and your confidence in us, and look forward to your continued support.

Yutaka Kobayashi

Yutaka Kobayashi
President & Chief Executive Officer
June 2018

Progress in Kureha's Challenge 2018 Mid-term

During FY2017, Kureha steadily strengthened the competitiveness and earnings capacity of its existing businesses, in line with one of the key strategies in the management plan. In the Advanced Materials segment, demand for polyvinylidene fluoride (PVDF) as a binder material in lithium-ion batteries (LiB) is rising particularly sharply, mainly in the Chinese market. Kureha is steadily improving products to meet customer needs, and is gradually building a more solid business foundation. In carbon products, the fundamental business restructuring implemented over the last few years has restored profitability. In the Specialty Plastics segment, Kureha further enhanced earnings capacity in the household-use sector by establishing appropriate pricing, and increasing the proportion of high-margin products.

In the PGA business, which is positioned as future growth driver in the mid-term management plan, Kureha was unable to achieve the sales and earnings targets. Although we made progress establishing a sales structure in the mainstay U.S. market, developing the additional products and customer recognition needed for market expansion has required more time than anticipated.

PGA and other strategic growth businesses are key to our success in FY2018 as we aim to achieve the target of 14.0 billion yen in operating profit. We will pursue full-fledged expansion of the PGA business on the strength of our extended product lineup. In other existing businesses, we will further strengthen cost competitiveness and continue to pursue quality differentiation. At the same time, we will commence operation of expanded production facilities for PVDF, as well as expand production capacity for polyphenylene sulfide (PPS) with a scheduled start in 2021. In initiatives to create the new businesses that will support Kureha in the future, we will further pursue collaboration with companies, universities, and other organizations. Further, Kureha will continue to reduce costs through the Reform Project, enhancing productivity and strengthening the business base. We will do our utmost to achieve the targets of the FY2016-2018 Medium-term Management Plan, and thereby "lay the foundations for Kureha's future expansion" and continue toward our next stage of growth.

Management Plan (FY2016-2018)

▶ Quantitative Goals

	FY2016 Results	FY2017 Results	**FY2018 Initial Targets**	**FY2018 Revised Targets**
Revenue	¥132.3 billion	¥147.3 billion	**¥160.0 billion**	**¥150.0 billion**
Operating profit	9.3 billion	13.0 billion	**14.0 billion**	**14.0 billion**
Profit attributable to owners of parent	7.0 billion	9.7 billion	**9.0 billion**	**10.5 billion**
DE ratio	0.6	0.3	**0.5**	**0.3**
ROE	5.8%	7.1%	**6.0%**	**6.8%**

FY2018 Presumptions:

Initial Targets
- Currency exchange rates: ¥120/US$1, ¥130/€1, ¥18/CNY1
- Crude oil price: US$40/bbl

Revised Targets
- Currency exchange rates: ¥105/US$1, ¥130/€1, ¥16.5/CNY1
- Crude oil price: US$60/bbl

Strategic Direction:

As a company built on technology, Kureha will develop differentiated products in the field of specialty chemicals and become a high value-added enterprise that continually contributes to global society.



Measures in Progress

01 Enhance Competitiveness & Enhance Earnings Capacity

Segment	Products	Progress in FY2016-2017	Challenges in FY2018
Advanced Materials	PPS	• Resolved to enhance annual production by 5,000 tons (operational in 2021)	• Study for additional production enhancement
	PVDF	• 2,000t enhancement project underway (operational in Fall 2018)	• Study for production enhancement in China, Promote quality differentiation
	Carbon Products	• Retuned to generating profit through streamlining and strategic reforms	• Continue to generate profit, Promote quality differentiation
Specialty Chemicals	Pharma/ Agro	• Launched fast-dissolving Kremezin tablets, Achieved steady growth for agrochemicals	• Expand sales of new Kremezin tablets, Develop new drugs and agrochemicals
Specialty Plastics	Home Products	• Advanced penetration strategy with higher prices and increased sale of 50m wrap	• Expand global markets, Improve profitability for Kichinto-san products
	Packaging	• Reformed EU sales/production framework, Launched new business expansion strategy	• Expand ML film sales by focusing on functional differentiation
	Synthetic Fiber	• Expanded PVDF processed product business	• Start full operation at new extrusion facility
Construction	Construction	• Expanded business for post-quake restoration demand	• Promote cost reduction programs
Other Operations	Environment	• Expanded industrial waste treatment business	• Improve competitiveness for industrial waste treatment

02 Expanding the PGA Business

Segment	Products	Progress in FY2016-2017	Challenges in FY2018
Advanced Materials	PGA	• Established Kureha Energy Solutions in US, Realigned sales/ marketing framework • Launched low-temp dissolving frac plugs • Developed super low-temp frac plugs	• Accelerate US business expansion with enhanced product lineup • Launch business in China market

03 Exploring New Business Themes

Progress in FY2016-2017

- Explored potential themes responding to market needs in collaboration with external parties

Challenges in FY2018

- Work on selected 11 themes with proper gate controls and accelerate their commercialization

04 Promote CSR Management

Progress in FY2016-2017

- Executed appropriate CSR management in line with Kureha corporate governance guidelines
- Improved CSR promotion system

Challenges in FY2018

- Maintain the effectiveness of governance
- Enhance safety and quality assurance systems

05 Strengthen the Management Foundation

Progress in FY2016-2017

- Established a process experiment lab and pilot plant to improve production technology
- Reduced ¥7.6bn in cost over 5 years (FY2013-2017) through group-wide reforms
- Launched productivity improvement projects for manufacturing and administrative departments
- Followed up on the Shine-Up Project to promote human resource development and improve our working environment

Challenges in FY2018

- Promote new production process developments
- Achieve effective and cumulative cost reductions of ¥8.8bn
- Improve productivity and enhance departmental functions under individual projects
- Execute measures devised through the follow-up

Launch of New *KREMEZIN*® Formulation

Mitsubishi Tanabe Pharma Corporation (MTPC) launched *KREMEZIN*® Tablets 500 mg, a drug for chronic renal failure developed by Kureha, on January 16, 2018. This new formulation improves the experience of the drug administration for patients, and is expected to increase adherence.*

KREMEZIN® is an orally administered spherical adsorbent with high-purity porous carbon for the treatment of chronic renal failure. By absorbing uremic toxins in the gastrointestinal tract of chronic renal failure patients, and excreting these toxins with the feces instead of letting them be absorbed into the body, *KREMEZIN*® improves symptoms of uremia at the predialysis stage, and delays the introduction of dialysis treatment.

The previous formulation of *KREMEZIN*® consisted of fine granules and capsules, but feedback from patients and doctors showed that with capsules the volume that needed to be administered in a single dose was large, and that the fine granules would diffuse in the mouth, giving an unpleasant feel to the patient. Kureha applied its proprietary drug formulation technologies and ideas to resolve these issues, and succeeded in commercializing a tablet that is easier to swallow. The new tablet formulation provides the same quantity, while disintegrating quickly with a small amount of water, and without dispersing inside the mouth.

KREMEZIN® Tablets 500mg is manufactured by Kureha, while MTPC handles sales and provides information to medical institutions.

*Adherence: The extent to which a patient follows medication and medical advice as prescribed.

KREMEZIN® Tablets 500mg

Expansion of PVDF and PPS Facilities at the Iwaki Factory

Demand for Kureha's advanced plastics is rising, mainly in the automotive industry. Kureha is making effective investments to strengthen its supply structure and further enhance its market leadership in this growing business area.

Polyvinylidene fluoride (PVDF) is used as a binder in lithium-ion secondary batteries (LiBs), the power source for electric, hybrid, and plug-in vehicles. Kureha's PVDF was the first material ever to be used as a binder for LiB cathodes and, as the industry pioneer, we have maintained a high global market share. In addition, with vehicles continuing to be made lighter and incorporating more electronics, polyphenylene sulfide (PPS) is being more widely used as a replacement for metal in various components owing to its excellent heat resistance, strength, and workability.

Kureha produces these plastics to support the automotive industry both in Japan and overseas, and is actively working to develop this business globally. To meet further demand growth, we are expanding production capacity at our Iwaki Factory in Japan, as follows.

PVDF

Increase	2,000 tonnes/year
Investment	4.7 billion yen
Operation start	Fall 2018

PPS

Increase	5,000 tonnes/year
Investment	10.0 billion yen
Operation start	Feb. 2021

PVDF plant at Iwaki Factory

PPS plant at Iwaki Factory

Start of Measures to Digitize Business Activities

The digital revolution, called the "Fourth Industrial Revolution," is advancing rapidly around the world. In the chemicals industry too, advanced technologies such as AI and IoT are expected to play an important role in enhancing companies' market competitiveness and capacity to innovative.

Kureha launched the Digital Transformation Project in 2017 as a means of enhancing its enterprise value by actively incorporating digital technologies in its business activities. This project has already identified and launched studies into several specific themes aimed at digitizing operations and structures in such areas as R&D, production, sales, and administration.

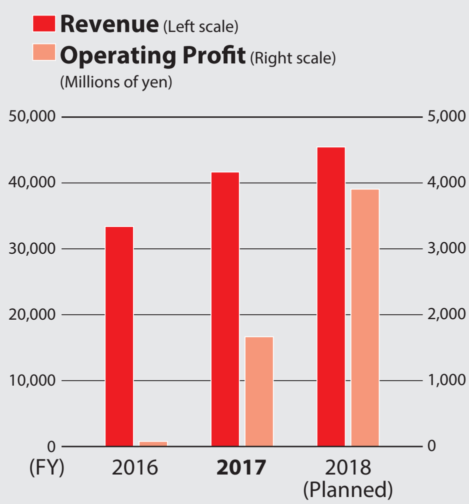
Examples of ideas under consideration include AI-supported designs for agrochemicals, and systemization of instrumentation maintenance and management. For agrochemical development, we plan to create a database of previous compound prototypes and their evaluation results, and have the system screen for molecular structures that might suit a particular purpose. Further, automating the general compound evaluation by using an AI that has learned the effect measurement standards for diseases will speed up R&D.

In addition, to prevent unforeseen equipment failures at production sites and ensure stable production, we will collect and analyze digital data from instrumentation devices. Such data will enable us to predict system deterioration and failure, and improve the timing of equipment maintenance.

Kureha is also considering introducing robotic process automation (RPA) throughout the company. RPA is expected to enhance productivity, including by automating routine computer tasks, shortening work hours, shifting resources to high value-added work, and improving operational quality.

Kureha will continue to regularly examine and introduce effective digitization measures to strengthen R&D capacity, improve productivity, ensure safety, and enhance corporate value.

Advanced Materials



Major Product Areas:

Advanced plastics (PPS, PVDF, PGA), carbon materials

Advanced Materials revenue rose 25% year-on-year to 41.6 billion yen while operating profit jumped from 0.1 billion yen to 1.7 billion yen.

Advanced plastics: Continued growth for PVDF and PPS for automotive applications

Kureha continued to see strong performance for PVDF, a LiB binder material for which Kureha holds a global market share of 40%. This growth was driven by the expanding global market for electric and plug-in hybrid electric vehicles, particularly in China. In the PPS business, Kureha also saw demand growth for automotive applications. With sales volume increases for PVDF and PPS more than offsetting the slower performance in the PGA business, advanced plastics revenue rose by 24% to 24.4 billion yen.

Carbon products: Better-than-expected return to profitability

Kureha's carbon products business continued its recovery on the back of positive demand, price adjustments and effective structural reforms. The business recorded a 19% increase in revenue to 4.9 billion yen.

FY2018 Outlook

Kureha expects the PGA business, with its expanded frac plug lineup for oil and gas exploration, to make a stronger contribution to segment performance. Kureha also expects to see increased sales volumes in the PVDF business as a further 2,000 tons/year of production capacity will come online in the fall of 2018. The carbon products business will continue to benefit from the successful restructuring, although revenue and operating profit are expected to decline slightly.

Segment revenue is expected to increase by 9% to 45.5 billion yen, while operating profit will climb to 3.9 billion yen.

PGA frac plug used for shale oil and gas extraction

PVDF used as a binder for lithium-ion batteries

Carbon fiber insulation products

Key products

- Polyphenylene sulfide (PPS)
- Polyvinylidene fluoride (PVDF)
- Polyglycolic acid (PGA)
- Carbon fibers
- Bead-shaped activated carbon

▸ Specialty Chemicals

Major Product Areas:

Industrial chemicals, agrochemicals, pharmaceuticals

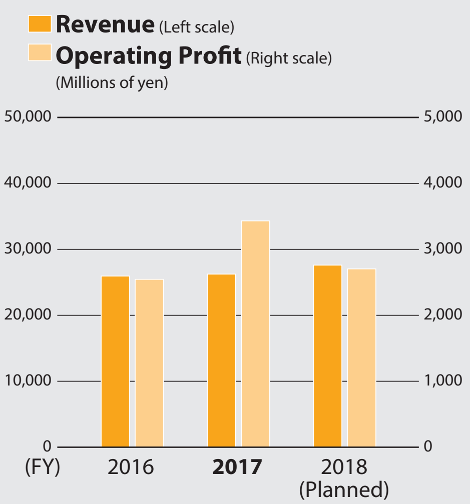
Specialty Chemicals revenue grew slightly to 26.2 billion yen from 25.9 billion yen while operating profit rose by 35% to 3.4 billion yen.

Pharmaceuticals/agrochemicals: Growth in fungicide sales volumes

Kureha saw continued growth in sales volumes and operating profit driven by the *Ipconazole* fungicide and favorable currency effects. This momentum offset declines in revenue and operating profit in the pharmaceutical business that were mainly caused by lower sales volumes for *Kremezin*, a therapeutic agent for chronic kidney disease, due to competition from generics.

Industrial chemicals: Revenue and operating profit rise on volume growth

Kureha saw healthy volume growth for both organic and non-organic chemicals, resulting in higher revenue and operating profit for this business. The growth was driven by a combination of higher demand and price adjustments.



FY2018 Outlook

Revenue and operating profit for the agrochemicals business are expected to decrease due to a decline in sales volumes. In the pharmaceuticals business, sales volumes and revenue will increase for our newly launched *Kremezin* tablets but operating profit will be affected by national drug price revisions.

In industrial chemicals, revenue and operating profit will remain at the FY2017 level on the back of measures to improve margins, including price adjustments and cost reductions.

Segment revenue is forecast to rise by 5% to 27.5 billion yen, but operating profit will decline to an estimated 2.7 billion yen.

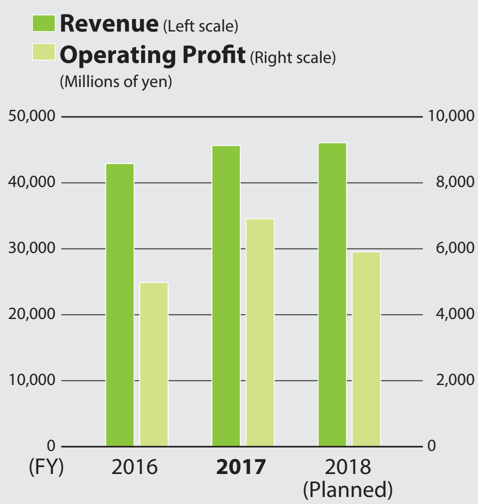
Key products

- Therapeutic agent for chronic renal failure
- Agricultural and horticulture fungicide
- Caustic soda
- Hydrochloric acid
- Sodium hypochlorite
- Monochlorobenzene
- para-Dichlorobenzene
- ortho-Dichlorobenzene

Agricultural and horticulture fungicide (*Metconazole*)

KREMEZIN® Tablets 500 mg

Specialty Plastics



Key products

- Household wrap film
- Plastic containers
- PVDF fishing lines
- Polyvinylidene chloride (PVDC) film
- Multilayer shrinkable film
- Multilayer bottles
- Machinery for auto-seal food packaging

Major Product Areas:

Household packaging products, food packaging materials, auto-packaging machinery

Specialty Plastics segment revenue rose by 6% from 42.8 billion yen to 45.4 billion yen while operating profit increased by 39% to 6.9 billion yen.

Home products: Strong sales volumes for *NEW Krewrap* and *Seaguar*

The home products business recorded growth in both revenue and operating profit due to strong sales volumes for *NEW Krewrap* plastic wrap and *Seaguar* fishing lines, the former benefitting from strategic price adjustments and increased sales of high-margin products (50m wrap).

Food packaging materials: Global sales growth for heat-shrink multilayer film

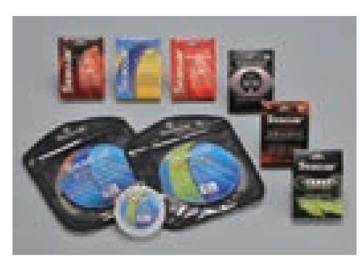
This business benefited from a successful restructuring of Kureha's food packaging sales and production network within the EU, and the launch of a new business expansion strategy. Revenue and operating profit increased, driven particularly by rising global sales of heat-shrink multilayer film.

FY2018 Outlook

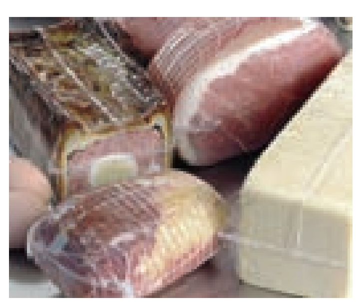
Kureha expects to see continued sales growth for *NEW Krewrap*, *Seaguar* and the *Kichinto-san* product series. However, higher costs for raw materials and promotion in the home products business are likely to affect operating profit for the segment as a whole, although continued healthy global sales of advanced heat-shrink multilayer film products will soften the decline.

Segment revenue is forecast to rise slightly to 46.0 billion yen, but operating profit will decline by 15% to 5.9 billion yen.

Home-use wrap film, *NEW Krewrap*

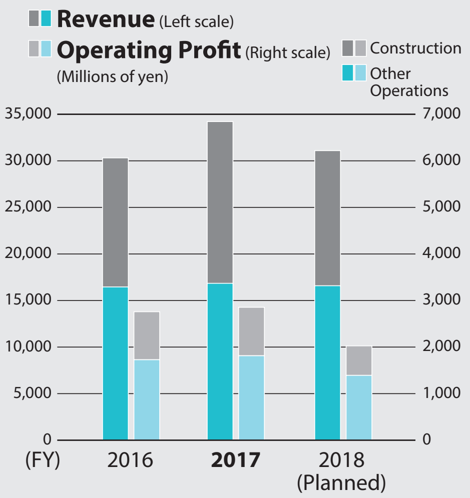


Seaguar fluorocarbon fishing lines



Krehalon food packaging film

▸ Construction and Other Operations



Key products and services

- Civil engineering and construction
- Plant engineering and maintenance
- Industrial waste treatment and environmental engineering
- Environmental and physiochemical testing and analysis
- Transport and warehousing
- Medical hospital operation

Major Product Areas:
Construction, environmental engineering, transport/ warehousing, and trading-related businesses

Construction: Post-quake reconstruction demand drives growth

The year saw expanded post-quake reconstruction demand, leading to sales volume increases for both public and private sector construction projects. This growth more than offset a slowdown in the engineering business. As a result, revenue for the Construction segment rose by 25% to 17.4 billion yen, while operating profit increased to 1.0 billion yen.

Other Operations: Continued volume growth in the waste treatment business

Kureha's environmental engineering business saw continued volume growth in the waste treatment business. In the logistics business, effective cost reduction measures compensated for lower revenue, leading to an increase in operating profit. In the hospital business, operating profit declined due to flat revenue. As a result, revenue in Other Operations increased to 16.8 billion yen while operating income rose to 1.8 billion yen.

FY2018 Outlook

Kureha expects revenue and operating profit in the Construction segment to be affected by lower demand for post-quake reconstruction as well as higher labor and raw material costs. Revenue is forecast to fall to 14.5 billion yen and operating profit will decline to 0.6 billion yen.

In Other Operations, Kureha expects to see continued demand in the environmental engineering business, but intensifying market competition will affect revenue and operating income. Revenue is expected to fall to 16.5 billion yen while operating profit will decline to 1.4 billion yen.

Facility to detoxify low-concentration PCB wastes
[Kureha Ecology Management Co.]

Construction of water gate of Nakata River in Fukushima
[Kurehanishiki Construction Co.]

Research & Development

Since its founding in 1944, Kureha has worked with creativity and passion to generate proprietary technologies that enrich people's lives and contribute to the advancement of industry. With core strengths in organic synthesis, polymer technology, carbon control, evaluation techniques, and process engineering, Kureha continues to reinforce its market position through product differentiation and innovation.

Our R&D efforts are twofold— creating new businesses and strengthening strategic growth businesses. To create new businesses, we are focusing our proprietary technologies on latent market needs, exploring business themes in the areas of environment, energy and quality of life (medicine and food). For existing businesses, we focus on enhancing competitiveness in both quality and cost, as well as strengthening secondary process technologies to further expand in the downstream businesses. For both existing and new businesses, Kureha will pursue open innovation and active collaboration with outside organizations. In everything that we do, Kureha will bring unique value creation to bear on the challenges faced by society and communities around the world.

Research Center & Process Innovation Research Laboratories

Polymer Processing Research Laboratories

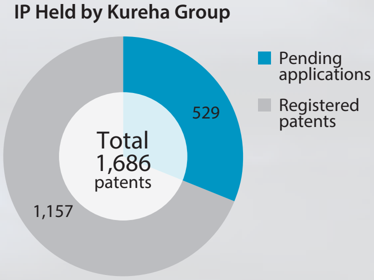
Strategy for Intellectual Property

Kureha uses three intellectual property strategies to maintain its technological advantages and advance its business operations.

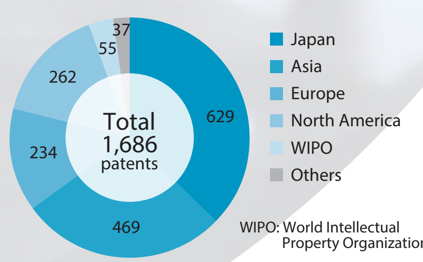
1. Assert intellectual property rights to R&D results to establish barriers to entry.
2. Utilize intellectual property rights to advance businesses.
3. Respect the intellectual property rights of others, and conduct appropriate intellectual property clearance.

The Kureha Group held 1,686 intellectual property rights as of May 2018, of which 1,157 are patent registrations. With the globalization of Kureha's business, we are also acquiring intellectual property rights in countries and territories outside Japan. Currently, 62.7% of the intellectual property rights held by the Kureha Group are outside Japan.

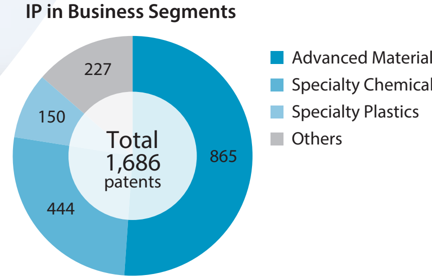
IP Held by Kureha Group



Global Distribution of IP



IP in Business Segments



FY2017 R&D Expenditure

Kureha spent a total of ¥4,962 million on a consolidated basis for R&D during the fiscal year ending March 31, 2018 (FY2017). R&D activities and expenditure for each business segment are as follows.

Advanced Materials

For *Fortron KPS* (PPS), which is widely used in automobiles and electronic devices, Kureha has determined to enhance production at its Iwaki Factory, and is developing improved manufacturing processes and exploring ways to expand applications.

For *KF Polymer* (PVDF), Kureha's R&D and Manufacturing & Technology teams are working together to raise productivity and ensure stable production for an additional facility, which will be operational during FY2018.

For *Kuredux* (PGA), we are actively developing applications while working to improve resin manufacturing technologies. Particularly in the area of shale oil and gas exploration, where PGA's easy-to-degrade attribute has proved useful, we have focused on developing new product grades reflecting customer needs informed by the sales team and Kureha Energy Solutions LLC.

Among battery materials, our development effort has centered on binder materials for the large lithium-ion batteries used in hybrid and electric vehicles. We are accelerating the development of advanced binder grades and improved solutions for customers, which will enable us to expand our market share.

FY2017 R&D spending in this segment amounted to ¥1,940 million.

Specialty Chemicals

In the agrochemicals business, we are working to expand markets in Japan and overseas for *Metconazole* agricultural and horticultural fungicide and *Ipconazole* seed treatment fungicide. We are also improving productivity for *Metconazole* fungicide.

In pharmaceuticals, we have developed and launched new easy-to-dissolve tablets of *Kremezin*, a therapeutic agent for chronic renal failure, as part of our supporting research to enhance the earnings of *Kremezin*.

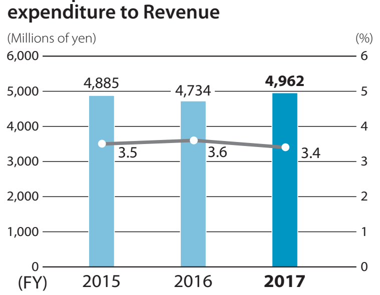
FY2017 R&D spending in this segment amounted to ¥1,792 million.

Specialty Plastics

For food packaging film, Kureha is pursuing technology development to ensure stable supply and improve quality. In addition, to further expand global sales, we are actively providing technical support to customers in Japan and overseas.

FY2017 R&D spending in this segment amounted to ¥1,229 million.

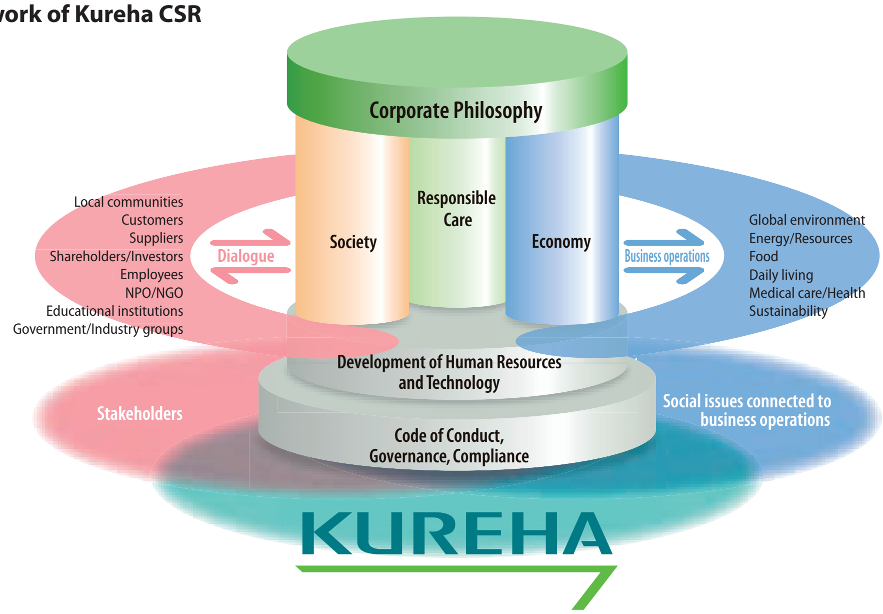
R&D Expenditure/Ratio of R&D expenditure to Revenue



Corporate Social Responsibility

Kureha is continually working to strengthen its competitiveness and enhance its enterprise value over the longer term. These efforts are founded in what we call CSR-based management, in which we seek to ensure harmony with the environment, motivate employees, support the development of local communities, reduce risks, and enhance benefits for all stakeholders. Kureha maintains a Responsible Care program centered on the types of activities expected of a chemical company, including environmental conservation, disaster risk reduction, worker safety, product safety, and quality assurance. We firmly believe that generating environmental and social value alongside economic value leads to sound, sustainable growth as a company.

The Framework of Kureha CSR



Teaching Children the Joys of Chemistry

On March 11, 2018, Dr. Hideki Shirakawa, co-recipient of the 2000 Nobel Prize in Chemistry, held a special experimental workshop for elementary and junior high school students in Tokushima Prefecture. This workshop was sponsored by the Japan Science Museum Association, with support from Kureha. Dr. Shirakawa conducts such workshops throughout Japan to convey to children the many fascinating aspects of chemistry.

In the workshop, children observed as Dr. Shirakawa coated Kureha's piezo film with an electroconductive polymer to make a transparent film, and used this to create a speaker to play music. Dr. Shirakawa discovered and developed conductive polymers, for which he was awarded the Nobel Prize.

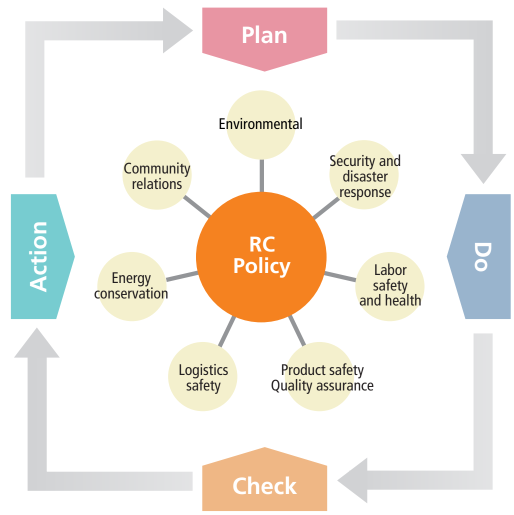
Dr. Shirakawa held a special experimental workshop for children.

Community Support during Disasters

Kureha's production centers have concluded agreements with local governments to provide material support in times of disaster. The Plastics Processing Factory signed an agreement with Omitama City (Ibaraki Prefecture) in October 2017, as did the Iwaki Factory with Iwaki City (Fukushima Prefecture) in March 2018. The agreements aim to ensure prompt and smooth provision of supplies at the request of these local governments following an earthquake or other large-scale natural disaster. Kureha plans to supply *NEW Krewrap* and other household products upon request. *NEW Krewrap* in particular is valuable in times of disaster because it can be placed over dishes during meals to save water for washing, and allows food to be transported in a hygienic manner.

Kureha signed an agreement with local governments to provide material support in times of disaster.

Kureha, an inaugural member of the Japan Responsible Care Council founded in 1995, continues to pursue Responsible Care initiatives to improve health, safety and environmental performance throughout its operations. We regard our commitment to Responsible Care as an integral part of our corporate responsibility.



Responsible Care Implementation

Kureha is continually enhancing its responsible care initiatives under the direction of the Corporate Social Responsibility Committee and the Kureha Group Responsible Care Committee. We take proactive actions to protect the environment, improve labor safety and health and ensure product safety and quality, while being responsive and sensitive to community concerns. Our actions are in line with ISO14001, the international standards for environmental management, ISO9001 for product quality management as well as OHSAS18001 for labor safety and hygiene management, and are constantly improving through the Plan-Do-Check-Act cycle.

Reducing the Burden on the Environment

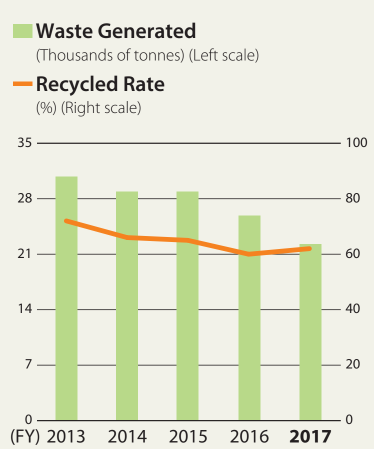
Since its establishment, Kureha has developed technologies and products with a view to reducing the burden on the environment. In our manufacturing facilities, we strive to minimize environmental impact by implementing strict measures to prevent air and water pollution, reduce chemical material and industrial wastes, and make effective use of energy.

Safety and Disaster Prevention

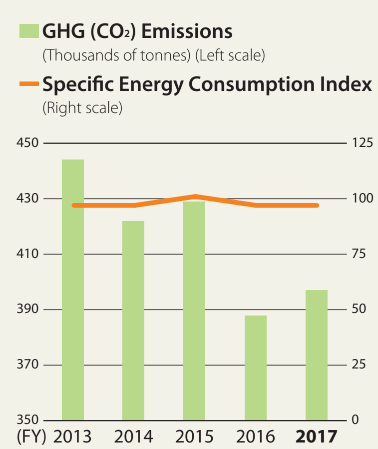
Safety and disaster prevention are among the most important responsibilities of a chemical manufacturing company. Kureha manages its facilities and operations in strict compliance with the relevant laws and regulations as well as voluntary safety standards set to best protect its employees and community. Comprehensive safety and emergency drills and training have been also conduced regularly at our manufacturing sites in order to enhance our preparedness for emergency situations, including a large-scale earthquake.

Contributing to the Community

In addition to Kureha General Hospital serving as a community medical facility in the southern part of Iwaki City, Kureha contributes to the local community in a variety of different ways. These include opening company sports facilities for public use, volunteering for clean up activities, teaching science classes at elementary schools and holding community meetings to initiate dialogue with local neighborhood associations.



*The above data were obtained from Kureha Corporation and its facilities in Japan.



*The above data were obtained from Kureha Corporation and its facilities in Japan.

Disaster prevention and safety drill at the Iwaki Factory (November 2017)

Corporate Governance

Kureha's Corporate Philosophy, Corporate Mission, and Employee Code of Conduct together constitute our company's identity. All executives and employees share these ideals, and constantly strive to achieve ambitious goals. Corporate governance is a critical element in maintaining and acting in accordance with this identity, and we have outlined our basic policies and stance in Kureha's Corporate Governance Guidelines. Kureha follows these guidelines to ensure compliance and enhance internal control functions, provide for fair and transparent management, and ensure a high standard of corporate governance.

Corporate Philosophy

- We treasure people and the natural environment.
- We constantly evolve through innovation.
- We contribute to society by developing beneficial products.

Corporate Mission

Kureha will continually strive in the pursuit of excellence.

Employee Code of Conduct

We always act as global corporate citizens, recognizing our corporate social responsibilities.

In relation to our clients: We will act with sincerity and with customer satisfaction as our priority.

In relation to our work: We will consistently pursue progress and innovation.
We will consistently respond to change and act with a global perspective.

In relation to our colleagues: We will maintain mutual respect and exhibit teamwork.

Decision-Making, Execution and Management Framework

1. Supervisory and executive responsibilities are clearly distinguished to strengthen corporate governance and accelerate managerial decision-making and execution.

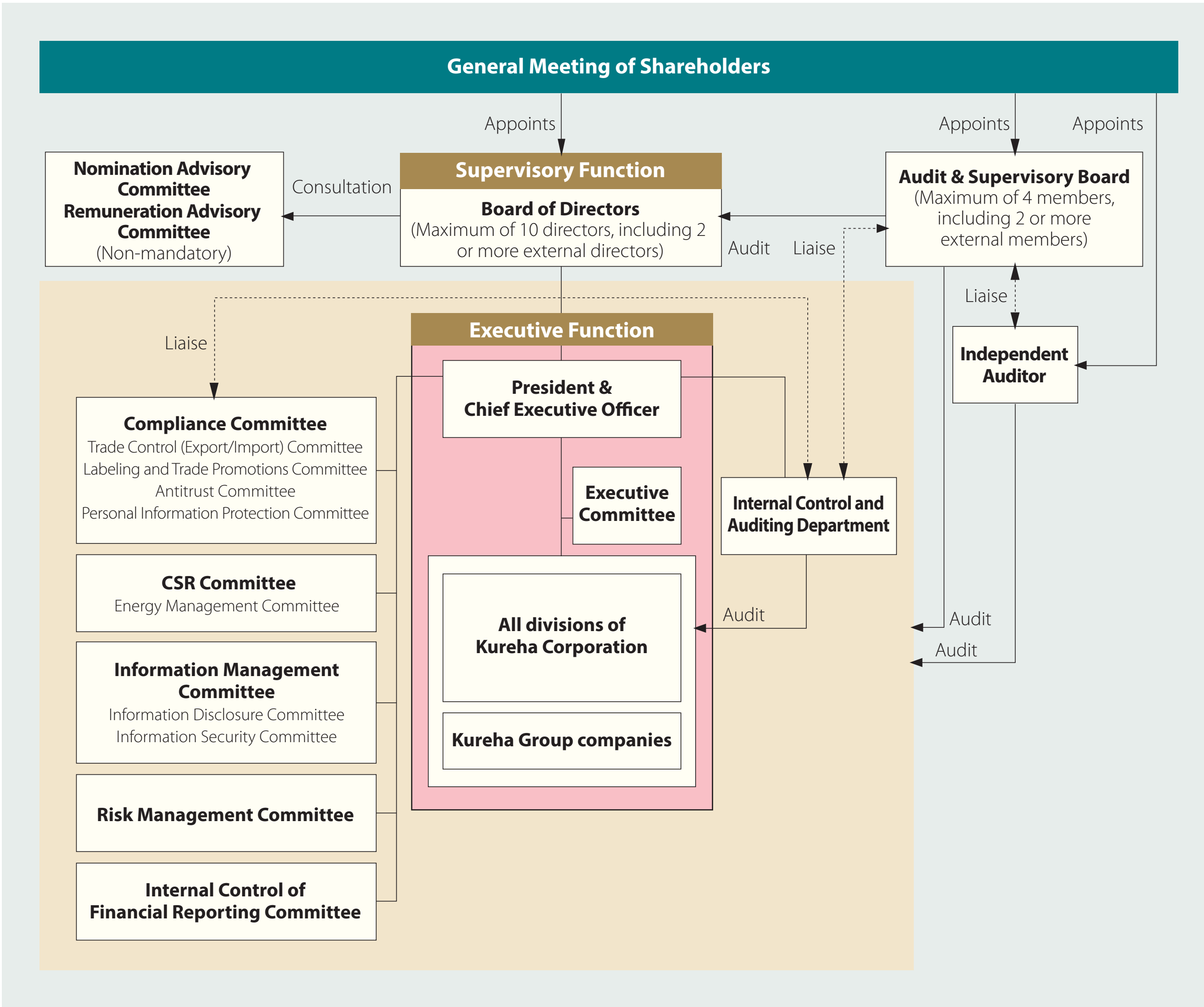
   The Board of Directors, which is limited in size to a maximum of 10 directors, of whom at least 2 should be outside directors, consists of 3 directors and 2 outside directors as of June 2017. The Board, presided over by the President & Representative Director, meets once a month in principle, to make decisions on important management issues and supervise execution.

   The Executive Committee, chaired by the President & CEO and comprised of executive officers meets twice a month in principle. The committee considers basic authoritative policies and mid- and long-term management strategy that cover all aspects of general management. The committee members pass resolutions on issues as authorized in official company regulations and take steps to ensure speedy implementation.

   To clarify responsibilities for fiscal year results, a one-year term is given to all directors and executive officers.
2. The consolidated Executive Committee, set up to unify the Kureha Group's internal policies and long-term management vision, is chaired by the President & CEO. It serves as a forum to exchange views on basic management policies and business strategies with representatives from each group company, with the aim of strengthening consolidated management. Meanwhile, the operations of group companies are supervised and managed in accordance with the Group Company Management Rules, in which the obligations of group companies are clearly specified, while giving autonomy, in terms of certain business and management issues required for reporting and consultation prior to making decisions within their companies.
3. A total of three corporate auditors (including two independent outside auditors) forms the Audit & Supervisory Board. This body works within a framework that allows them to monitor the deliberation processes of board resolutions and reports, as well as have a representative corporate auditor attend and monitor meetings of the Executive Committee and the Consolidated Executive Committee. In addition, auditors are able to access documentation including all documents requiring senior approval, results of internal audits, and documentation on the status of customer inquiries.

   Corporate auditors interact with accounting and internal control functions, for example to exchange opinions on audit planning and progress. They also regularly exchange opinions

Diagram of Internal Control Systems (As of June 26, 2018)



with the President & Representative Director and outside directors on management matters including corporate governance, business conditions and issues that the Company should address.

In addition, the Internal Control and Auditing Department acts independently of other departments and under direct management and supervision of the President & CEO. Based on an annual internal audit plan approved by the Board of Directors, this department assesses the suitability and effectiveness of internal management control systems including compliance and risk management. It then proposes necessary or desired changes and improvements, so as to enhance both management efficiency and public trust in Kureha.

4. A Nomination Advisory Committee and a Remuneration Advisory Committee have been established as voluntary advisory bodies for the Board of Directors. Each committee comprises at least three directors, with outside directors in majority.

The Nomination Advisory Committee deliberates on matters concerning the appointment and dismissal of the President and Chief Executive Officer, Representative Directors, and Directors, as well as candidates to succeed the President and Chief Executive Officer and relevant succession plans, and reports its opinions and recommendations to the Board of Directors. The Remuneration Advisory Committee deliberates on matters related to the system and policies regarding remuneration for Directors, and reports its opinions and recommendations to the Board of Directors.

The establishment of these committees enhances transparency to the Board of Director's decision-making regarding these matters, and increases accountability to stakeholders.

Internal Control System

To further strengthen its internal control system, Kureha has established a set of basic policies, committees and internal rules to ensure that it observes laws and regulations and conducts its business operations in an appropriate and fair manner.

Under this system, Kureha publishes Internal Control Reports under the responsibility of the President & CEO.

In addition, Kureha has also established a set of Basic Rules for Internal Control of Financial Reports to ensure the reliability of the financial reports and to guarantee implementation of management's assessment and certified public accountant's auditing of the effectiveness of internal control of financial reports, as stipulated in the Financial Instruments and Exchange Law.

Independent Directors and Auditors

Kureha has appointed two outside directors and two outside auditors. Outside directors utilize their extensive experience and insight as former managers to provide independent and fair supervision of the Company's management decisions. Outside auditors provide auditing from an independent perspective based on their extensive experience and expertise regarding corporate law, corporate finance, and accounting.

The outside directors and outside auditors currently serving Kureha fulfill the requirements for independent executives as prescribed by the Tokyo Stock Exchange, as well as the "Criteria for Determining the Independence of Outside Executives" established by the Company. The Company has determined that there is no conflict of interest with general shareholders.

Outside Directors

1. Osamu Tosaka

Dr. Tosaka worked at Ajinomoto Co., Inc. for over 40 years, accumulating extensive experience in business operations through overseas postings and by serving in the company's research and production divisions. He has particular experience in company management from the perspective of technology and research, having served as Representative Board Director and Corporate Executive Deputy President for Ajinomoto from 2007 to 2011. He was appointed as outside director for Kureha in June 2016.

2. Tadao Ogoshi

Mr. Ogoshi previously worked at the Fuji Bank, Ltd (currently Mizuho Bank, Ltd.) and its affiliated trust bank and securities firm for 33 years, where he was chiefly engaged in commercial banking, special financing and corporate advisory businesses. As a banker and later as a Managing Executive Officer of a hydraulic equipment manufacturer, he has accumulated experiences in business operation and management mainly in Europe. He was appointed as outside director for Kureha in June 2017.

Outside Auditors

1. Haruki Yamaguchi

Mr. Yamaguchi has served as president of domestic and overseas affiliates of Yasuda Life Insurance Company (currently Meiji Yasuda Life Insurance Company), and brings extensive insight and experience regarding global management. He has been an outside auditor for Kureha since June 2012.

2. Masaru Kitamura

Mr. Kitamura has served as a lawyer with Japan's Ministry of Foreign Affairs, and in 1992 established the Kitamura Law Office (currently Kitamura & Makiyama). He has been an outside auditor for Kureha since June 2011, and concurrently holds the positions as Corporate Auditor of Japan Pacific Century Group, Corporate Auditor of Pacific Century Hotel, and Outside Corporate Auditor of Kowabo Company, Ltd.

Executive Remuneration

Executive remuneration reflects corporate performance. It is determined with consideration to enhancing medium- to long-term enterprise value, and in accordance with the compensation structure and levels appropriate to the roles and responsibilities required of each executive.

Total remuneration paid to directors and auditors in fiscal 2017 (ended March 31, 2018) was as follows.

Board directors (for total of 8 directors)	**¥222.7 mil** (of which ¥33.2 mil was paid to 4 outside directors)
Auditors (for total of 4 auditors)	**¥52.5 mil** (of which ¥30.0 mil was paid to 2 outside auditors)

Note: The remuneration for board directors includes stock acquisition rights at a total value equivalent to 11.2 million yen, issued as reward-type stock options to 3 directors, not including outside directors.

Compliance Program Framework

Kureha has in place a compliance program framework, based on the Kureha Group Ethical Charter and its Compliance Rules.

Kureha's compliance objective is to ensure that all executives and employees act in a manner that is consistent with legal compliance and that also meets the standards of our society. This framework is constantly being improved and reinforced so as to cultivate a compliance-focused corporate culture.

The Compliance Committee, led by the President & Chief Executive Officer (CEO), keeps employees informed of compliance issues through training programs and other activities based on the Compliance Handbook and the Compliance Standards. In addition, direct access to internal and external (legal) advisers for inquiries and reporting on compliance issues is maintained so that legal violations, confirmed or suspected, can be detected and deterred at an early stage.

Disclosure and Transparency

Impartial and continuous information disclosure ensures management transparency and builds trust with stakeholders. Kureha provides timely and appropriate disclosure in accordance with all applicable laws and regulations, as well as the Timely Disclosure Rules prescribed by the Tokyo Stock Exchange. Kureha also proactively releases information deemed to be valuable to shareholders.

Kureha's General Meeting of Shareholders is held annually in June. To ensure that shareholders have sufficient time to review the proposals, the proxy statement for the shareholders' meeting is posted on the Company's website at the end of May, and mailed in early June. Shareholders are able to exercise their voting rights by post or via the Internet.

During the shareholders' meeting, Kureha uses video to clearly explain its business content and results, and makes every effort to respond directly and fully to shareholders' questions.

Kureha also holds regular briefings for institutional investors and analysts regarding its medium-term business strategies and results, and regularly provides individual hearings for investors in Japan and overseas.

Risk Management System

In response to various types of risk accompanying business activities, Kureha has established a risk management structure consisting of a Risk Management Committee, a CSR Committee and an Information Management Committee. Each committee is tasked with recognizing related risks, and proposes concrete measures to the President & Representative Director aimed at reducing and avoiding risk and manages implementation.

In addition, to respond to unforeseen circumstances, a Business Continuity Plan is in place for the establishment of an emergency response task force, with the objective of prioritizing the safety of personnel, minimizing economic damage, and ensuring the continuation of corporate activities.

In terms of information management, Kureha works rigorously to ensure appropriate security and disclosure based on its regulations for information control, security and disclosure, with individual committees set up to oversee each of these areas.

To address environmental and safety risks, management procedures for the environment, quality, and labor safety have been established that comply with ISO 14001, ISO 9001, and OHSAS 18001 standards. In addition, Kureha is also continuing with ongoing efforts to improve environmental conservation, quality assurance, and occupational health and safety.

Compliance with the Corporate Governance Code

The Corporate Governance Code is a compilation of various regulations aimed at ensuring substantive corporate governance at listed companies. It was formulated in March 2015 in response to revisions made to the Japanese government's growth strategy, the Japan Revitalization Strategy, in 2014.

Kureha considers thorough corporate governance to be of vital importance for strengthening the management base to achieve medium- to long-term corporate growth. In November 2015, the Company formulated its own Corporate Governance Guidelines to comply with the government code.

Management Team

Board of Directors

Yutaka Kobayashi
President &
Chief Executive Officer

Yoshio Noda
Senior Vice President
General Manager of
Finance & Accounting Division
General Manager of
Administration Division
General Manager of CSR Division

Michihiro Sato
Senior Vice President
General Manager of Manufacturing &
Technology Division
General Manager of R&D Division

Osamu Tosaka
Outside Director

Tadao Ogoshi
Outside Director

Audit & Supervisory Board

Toru Yoshida

Haruki Yamaguchi

Masaru Kitamura

Executive Officers

Naoki Fukuzawa
Executive Vice President, General Manager of Krehalon Division

Naomitsu Nishihata
Senior Vice President, General Manager of Corporate Planning & Strategy Division, General Manager of Specialty Products Division

Hiroyuki Tanaka
Vice President, General Manager of Iwaki Factory

Satoshi Yonezawa
Vice President, General Manager of Performance Materials Division

Masahiro Namikawa
Vice President, General Manager of Pharmaceuticals & Agrochemicals Division

Koji Suyama
Vice President, General Manager of Home Products Division

Consolidated Financial Summary

Kureha Corporation and Consolidated Subsidiaries
Years ended March 31, 2018 (FY2017) and 2017 (FY2016)

	Millions of yen	
	FY2017	FY2016
For the year:		
Revenue:	**¥ 147,329**	¥ 132,294
Domestic	**107,145**	97,630
Overseas	**40,183**	34,664
Revenue by segment:		
Advanced Materials	**41,640**	33,369
Specialty Chemicals	**26,176**	25,866
Specialty Plastics	**45,397**	42,791
Construction	**17,354**	13,934
Other Operations	**16,760**	16,332
Operating profit	**12,973**	9,255
Advanced Materials	**1,669**	79
Specialty Chemicals	**3,421**	2,538
Specialty Plastics	**6,907**	4,986
Construction	**1,037**	1,026
Other Operations	**1,812**	1,726
Elimination or corporate	**(1,876)**	(1,101)
Profit attributable to owners of parent	**9,697**	7,001
Capital expenditure	**9,768**	10,304
Depreciation and amortization	**9,898**	10,191
Research and development expenses	**4,962**	4,734
Advanced Materials	**1,940**	1,860
Specialty Chemicals	**1,792**	1,814
Specialty Plastics	**1,229**	1,059
Construction	**—**	—
Other Operations	**—**	—
Cash flows from operating activities	**20,178**	12,350
Cash flows from investing activities	**(9,698)**	(1,071)
Cash flows from financing activities	**(10,415)**	(11,727)
Year-end:		
Total assets	**¥ 242,281**	¥ 234,907
Total equity	**150,193**	124,297
Interest-bearing debt	**48,089**	71,007
	Yen	
Amounts per share:		
Basic profit per share	**¥ 507.48**	¥ 407.38
Owners' equity per share	**7,271.67**	7,232.89
Cash dividends per share	**125.00**	60.50
	Percent	
Ratios:		
Operating profit to revenue	**8.8%**	7.0%
Profit attributable to owners of parent to revenue	**6.6**	5.3
Return on equity	**7.1**	5.8
Return on assets	**5.3**	3.8
Owner's equity ratio	**62.0**	52.9

Notes: 1. For amounts per share, see Note 29 of the Notes to Consolidated Financial Statements.
2. Return on equity = Profit attributable to owners of parent/Shareholders' equity × 100
3. Return on assets = Profit before tax/Total assets × 100
4. Owner's equity ratio = Owner's equity/Total liabilities and equity

Management Discussion and Analysis

Business environment

During the fiscal year ended March 31, 2018 (FY2017), the Japanese economy continued a moderate recovery trend due to improvements in corporate earnings and the employment environment. Meanwhile, the world economy was also relatively robust in the United States, Europe, and Asia, despite geopolitical risks.

Analysis of business results

Revenue of the Kureha Group ("the Group") in the subject fiscal year increased by ¥15,034 million from the previous fiscal year to ¥147,329 million. Gross profit increased by ¥4,525 million to ¥40,028 million, and gross profit margin improved from 26.8% to 27.2%. Selling, general and administrative expenses increased by ¥560 million to ¥27,193 million. Share of profit of entities accounted for using equity method increased by ¥611 million to ¥2,230 million, and other expenses (net of other income) amounted to a loss of ¥2,092 million, an increase of ¥857 million in the loss from the previous fiscal year. As a result, operating profit increased by ¥3,717 million to ¥12,973 million, and the ratio of operating profit to revenue improved from 7.0% to 8.8%.

Finance costs (net of finance income) amounted to a loss of ¥290 million, an increase of ¥15 million in the loss from the previous fiscal year. As a result, profit before tax increased by ¥3,701 million to ¥12,683 million.

Income tax expense was ¥2,869 million, and profit for the year increased by ¥2,707 million to ¥9,813 million. The Group posted profit attributable to non-controlling interests of ¥116 million, and profit attributable to owners of parent increased by ¥2,696 million to ¥9,697 million.

Cash flow analysis

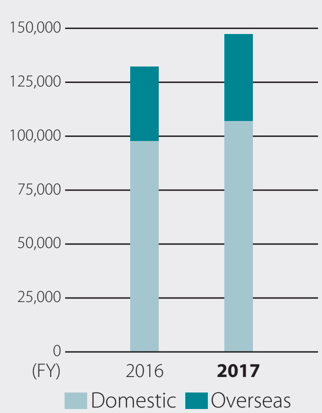
The balance of cash and cash equivalents at the end of the subject fiscal year (March 31, 2018) amounted to ¥6,475 million, an increase of ¥253 million from the end of the previous fiscal year (March 31, 2017). An outline of individual cash flows and the main factors affecting each is as follows:

Cash flows from operating activities
Net cash provided by operating activities amounted to ¥20,178 million, an increase of ¥7,827 million from the previous fiscal year. This was mainly due to an increase in profit before tax and other factors.

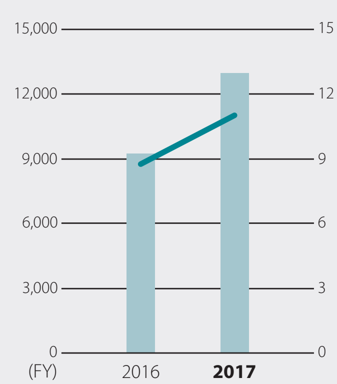
Cash flows from investing activities
Net cash used in financing activities amounted to ¥9,698 million, an increase of ¥8,627 million from the previous fiscal year. This was mainly because there were no proceeds from subsidy for Fukushima Business Investment Subsidy for Revitalization of Industries, which occurred in the previous fiscal year, and other factors.

Cash flows from financing activities
Net cash used in financing activities amounted to ¥10,415 million, a decrease of ¥1,311 million from the previous fiscal year. This was mainly due to a decline in repayments of non-current loans payable and other factors.

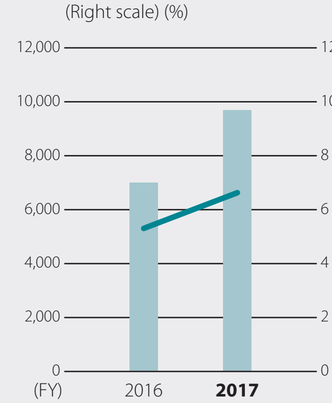
Revenue (Millions of yen)



Operating Profit (Left scale) (Millions of yen)
Operating Profit to Revenue (Right scale) (%)



Profit Attributable to Owners of Parent (Left scale) (Millions of yen)
Profit to Revenue (Right scale) (%)



Financial policy

The Kureha Group procures required capital through borrowing from financial institutions, and the issuance of corporate bonds and commercial paper. In addition, a cash management system has been introduced, in order to ensure that the Group is effectively utilizing funds and reducing finance costs. In addition to cash and cash equivalents, the Group also ensures the liquidity of funds by entering into commitment line agreements with financial institutions.

The Group's basic policy is to maximize cash flows from operating activities by securing earnings in line with its business plan and by enhancing asset efficiency, and to allocate cash with priority given to capital expenditure for new businesses and expansion of existing businesses, investments and loans, research and development, and dividend payments to investors. In line with this policy, the Group procures required capital with priority given to securing long-term funding, and in consideration of the balance between long- and short-term borrowings.

In regard to important planned outflows of capital and the sources of those funds, the Group intends to conduct capital expenditure centered on the Advanced Materials Division, and intends for capital required to be procured from cash-at-hand, corporate bonds, and borrowings.

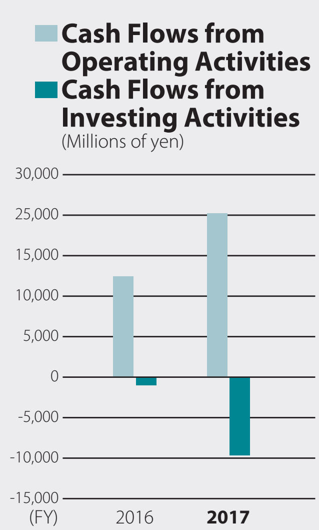
Balance sheet analysis

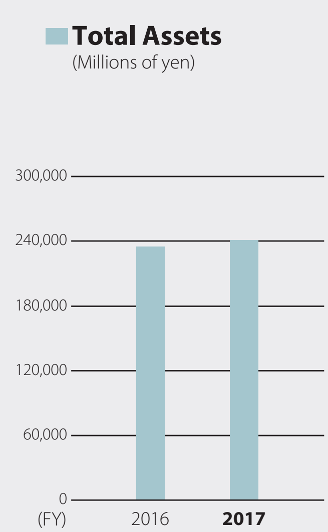
As of March 31, 2018, the Kureha Group's total assets amounted to ¥242,281 million, an increase of ¥7,374 million from the end of the previous fiscal year (March 31, 2017). Current assets totaled ¥76,963 million, an increase of ¥1,690 million from the end of the previous fiscal year. Although property, plant and equipment decreased by ¥1,674 million to ¥114,236 million owing to the completion of large-scale capital expenditures and other factors, non-current assets amounted to ¥165,318 million, an increase of ¥5,683 million from the end of the previous fiscal year. This was mainly due to an increase in gain on valuation of investment securities included in other financial assets.

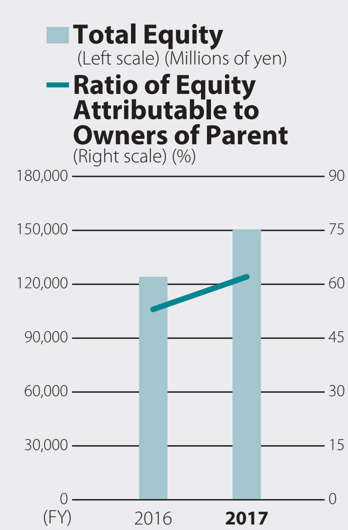
Total liabilities at the end of the subject fiscal year amounted to ¥90,240 million, a decrease of ¥18,694 million from the end of the previous fiscal year. This was mainly because of a decline in interest-bearing debt, by ¥22,918 million from the end of the previous fiscal year to ¥48,089 million, owing to the completion of the share conversion of convertible bonds and other factors.

Total equity at the end of the subject fiscal year amounted to ¥152,041 million, an increase of ¥26,068 million from the end of the previous fiscal year. This was mainly due to the posting of profit attributable to owners of parent of ¥9,697 million and an increase in other component of equity primarily associated with increases in capital stock, etc. owing to the completion of the share conversion of convertible bonds and gain on valuation of investment securities, despite the payment of dividends in an amount of ¥2,033 million.

As a result of the above, the equity-to-asset ratio (equity ratio) improved by 9.1 percentage points from the previous fiscal year to 62.0%. Return on equity (ROE) improved by 1.3 percentage points to 7.1%. Return on assets (ROA) improved by 1.5 percentage points to 5.3%.







Overview of capital expenditure

Total capital expenditure of the Kureha Group during the fiscal year ended March 31, 2018 amounted to ¥9,768 million.

Capital expenditure by business segment

The Advanced Materials segment invested ¥3,308 million, mainly in manufacturing facilities for PVDF resin (Kureha Corporation).

The Specialty Chemicals segment invested ¥661 million, primarily in production facilities for inorganic chemicals (Kureha Corporation).

The Specialty Plastics segment invested ¥2,585 million, primarily in the renewal of plastic molded product processing factory buildings (Kureha Gohsen Co., Ltd.).

The Construction segment invested ¥90 million in facilities.

The Other Operations segment invested ¥777 million, mainly in industrial waste processing facilities (Kureha Ecology Management Co., Ltd.).

In addition, as a joint initiative, the Advanced Materials, Specialty Chemicals, and Specialty Plastics segments invested ¥2,346 million in such areas as research and development facilities (Kureha Corporation) and common factory facilities (Kureha Corporation).

Capital required for these investments was procured from cash-at-hand, corporate bonds, and borrowings.

Business and other risks

The Kureha Group's business operations are diverse, comprising the Advanced Materials segment focused on PGA resin and processed products, PVDF resin, and PPS resin; the Specialty Chemicals segment focused on pharmaceuticals, agrochemicals and industrial chemicals; the Specialty Plastics segment focused on household products and food packaging; the Construction segment focused on construction and engineering; and the Other Operations segment including environmental businesses and logistics. By region, the Group conducts business in Japan as well as Europe, North America, and Asia.

The main factors that could affect the operating results, stock price, financial position and other aspects of the Kureha Group are as follows.

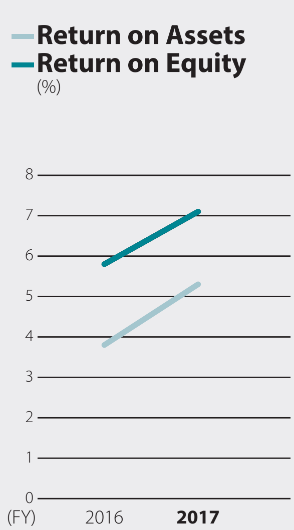
Forward-looking statements in this text are based on evaluations made as of the end of the subject fiscal year (March 31, 2018).

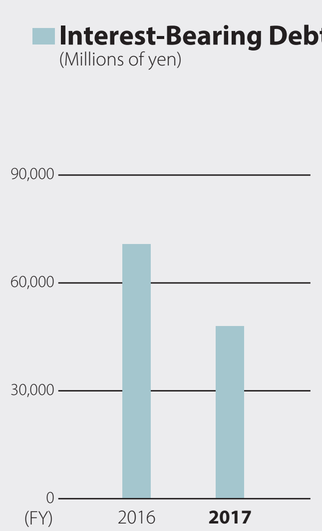
Changes in the business environment in Japan and overseas; changes in the market price of products

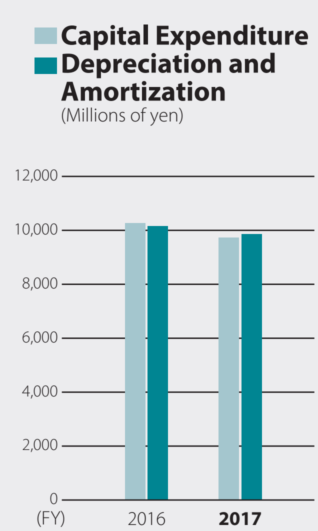
The Group's business is exposed to external factors such as changes in markets or customers, and intensification of competition with rival companies. Accordingly, changes such as a decrease in demand for the Group's principle products, customers shifting production overseas, and an increase in production capacity by competing firms, could have a negative effect on the Group's operating results and financial position.

Changes in fuel and raw material prices

Raw materials such as naphtha and coal used by the Group, as well as fuel, are susceptible to changes in market conditions. As a result, changes such as an increase in the price of these raw materials, or the inability to shift the additional cost to product prices in a timely and appropriate manner, could have a negative effect on the Group's operating results and financial position.







Product liability

The Group's core business is chemical manufacturing. The Group is acutely aware of the risks connected with its products and the manufacturing process, and is careful to continually exercise Responsible Care (autonomous management for environmental conservation, disaster safety and other measures). However, should a significant, unforeseen quality issue arise, there could be a negative effect on the Group's operating results and financial position.

The Specialty Chemicals Division's pharmaceutical business

One of the Group's main businesses is the manufacture and sale of pharmaceuticals. Accordingly, revisions to drug prices under Japan's medical insurance system, as well as the rise of the usage of generic drugs, could have a negative effect on the Group's operating results.

Country risks for overseas businesses

The Group conducts business in Europe, North America and Asia. Accordingly, changes such as deterioration in the political or economic situation in these regions, the enactment or abolishment of laws and regulations, international tax practice risks such as transfer price taxation, and deterioration in public safety, as well as unforeseen circumstances such as terrorism, armed conflict or natural disaster, could have a negative effect on the Group's operating results and financial position.

Currency fluctuations

The items in the Group's financial statements not denominated in yen are susceptible to fluctuations in exchange rates when converted into yen. The Group concludes exchange contracts and takes other steps to minimize the effects of fluctuations in exchange rates. However, fluctuations in exchange rates beyond those predicted could have a negative effect on the Group's operating results and financial position.

Investment securities

The Group holds investment securities (approximately 10% of total assets on a consolidated basis) for the purpose of long-term holdings as of the end of the subject fiscal year. Significant changes in market prices, or in the financial position of the issuing companies, could have a negative effect on the Group's operating results and financial position.

Occurrence of natural disasters or accidents

Manufacturing of the Group's principal products is concentrated in the Iwaki Factory (Iwaki, Fukushima Prefecture), and as such the Group makes continual efforts focused on this facility for environmental conservation and to ensure safety. However, damage to production facilities as a result of natural disasters such as major earthquakes or typhoons, or due to fires and other accidents, could have a negative effect on the Group's operating results and financial position.

Litigation

The Group has established the "Kureha Group Ethical Charter," "Compliance Rules" and "Compliance Standards," and strives to ensure that the Group strictly complies with all laws, regulations and societal norms. However, there is a risk that the Group's domestic or overseas businesses could be the target of lawsuits, administrative measures or other action. A major lawsuit or other action filed against Kureha could have a negative effect on the Group's operating results and financial position.

Emergence of new technologies

The Group is committed to research and development in all its business fields, aiming to "develop differentiated products in the specialty chemicals field, and become a high value-added company that continually contributes to society." Particularly in the Advanced Materials segment, the Group considers it essential to develop and bring to market new products in a timely manner, given the remarkable pace of technological innovation. However, in cases where it is not possible to continuously develop and supply new products to meet customer needs, or in cases where other companies come up with revolutionary new technologies, there is a risk of obsolescence of some Kureha products and technologies due to rapid technological advance, or of product prices falling more steeply than anticipated due to intensified price competition triggered by new entrants in Japan and overseas. In such case, they could have a negative effect on the Group's operating results and financial position.

Consolidated Statements of Financial Position

Kureha Corporation and Consolidated Subsidiaries
As of March 31, 2018 (FY2017) and 2017 (FY2016)

	Millions of yen	
	FY2017	FY2016
ASSETS		
Current assets:		
Cash and cash equivalents (Notes 7, 23)	¥ 6,475	¥ 6,222
Trade and other receivables (Notes 8, 23)	32,663	29,387
Other financial assets (Note 23)	89	332
Inventories (Note 9)	36,018	36,497
Assets held for sale (Notes 10, 23)	—	772
Other current assets	1,715	2,060
Total current assets	76,963	75,272
Non-current assets:		
Property, plant and equipment, net (Notes 11, 13, 16)	114,236	115,911
Intangible assets, net (Note 12)	1,336	1,395
Investments accounted for using equity method (Note 14)	12,091	10,714
Other financial assets (Notes 16, 23)	30,458	25,342
Deferred tax assets (Note 15)	1,191	1,350
Other non-current assets (Note 19)	6,003	4,920
Total non-current assets	165,318	159,634
Total assets	¥242,281	¥234,907

	Millions of yen	
	FY2017	FY2016
LIABILITIES AND EQUITY		
Current liabilities:		
Trade and other payables (Notes 16, 17, 23)	¥ 21,530	¥ 20,369
Bonds and loans payable (Notes 16, 23)	25,759	46,689
Other financial liabilities (Notes 16, 23)	533	836
Accrued income taxes	2,234	873
Provisions (Note 18)	5,947	5,742
Other current liabilities	6,591	6,161
Total current liabilities	62,595	80,672
Non-current liabilities:		
Bonds and loans payable (Notes 16, 23)	21,657	23,561
Other financial liabilities (Notes 16, 23)	1,201	1,291
Deferred tax liabilities (Note 15)	2,657	1,492
Provisions (Note 18)	663	386
Net defined benefit liability (Note 19)	380	382
Other non-current liabilities	1,084	1,147
Total non-current liabilities	27,644	28,261
Total liabilities	90,240	108,934
Equity:		
Shareholders' equity:		
Capital stock, no par value (Note 21)	18,169	12,460
Capital surplus (Note 21)	15,267	9,430
Less: Treasury stock, at cost (Note 21)	(685)	(4,456)
Retained earnings (Note 21)	108,715	101,731
Other components of equity (Note 21)	8,725	5,132
Total equity attributable to owners of parent	150,193	124,297
Non-controlling interests	1,847	1,674
Total equity	152,041	125,972
Total liabilities and equity	¥242,281	¥234,907

Consolidated Statements of Profit or Loss

Kureha Corporation and its Consolidated Subsidiaries
For the fiscal years ended March 31, 2018 (FY2017) and 2017 (FY2016)

	Millions of yen	
	FY2017	FY2016
Revenue (Notes 6, 25)	¥147,329	¥132,294
Cost of sales (Notes 9, 11, 12, 19)	107,300	96,791
Gross profit	40,028	35,503
Selling, general and administrative expenses (Notes 11, 12, 19, 20)	27,193	26,632
Share of profit of entities accounted for using equity method (Notes 6, 14)	2,230	1,619
Other income (Note 26)	510	1,398
Other expenses (Notes 11, 13, 27)	2,602	2,633
Operating profit (Note 6)	12,973	9,255
Finance income (Note 28)	603	577
Finance costs (Note 28)	893	852
Profit before tax	12,683	8,981
Income tax expense (Note 15)	2,869	1,874
Profit for the year	9,813	7,106
Profit attributable to:		
Owners of parent	9,697	7,001
Non-controlling interests	116	105
Total	¥ 9,813	¥ 7,106
Profit per share (in Yen):		
Basic (Note 29)	¥ 507.48	¥ 407.38
Diluted (Note 29)	469.18	338.77

Consolidated Statements of Comprehensive Income

Kureha Corporation and its Consolidated Subsidiaries
For the fiscal years ended March 31, 2018 (FY2017) and 2017 (FY2016)

	Millions of yen	
	FY2017	FY2016
Profit for the year	¥ 9,813	¥7,106
Other comprehensive income (loss):		
Items that will not be reclassified to profit or loss:		
Financial assets measured at fair value through other comprehensive income (Notes 23, 30)	3,936	1,780
Remeasurements of defined benefit plans (Note 30)	189	190
Total	4,126	1,970
Items that may be reclassified subsequently to profit or loss:		
Exchange differences on translating foreign operations (Note 30)	(778)	(698)
Cash flow hedges (Note 30)	—	2
Share of other comprehensive income of entities accounted for using equity method (Note 30)	—	(199)
Total	(778)	(896)
Total other comprehensive income (loss)	3,348	1,074
Comprehensive income (loss)	¥13,161	¥8,181
Comprehensive income (loss) attributable to:		
Owners of parent	¥13,020	¥7,993
Non-controlling interests	141	187
Comprehensive income (loss)	¥13,161	¥8,181

Consolidated Statements of Changes in Equity

Kureha Corporation and its Consolidated Subsidiaries

FY2016 (From April 1, 2016 To March 31, 2017)

Millions of yen

	Total equity attributable to owners of parent						
					Other components of equity		
	Capital, no par value	Capital surplus	Treasury stock, at cost	Retained earnings	Stock acquisition rights	Exchange differences on translating foreign operations	Cash flow hedges
BALANCE-APRIL 1, 2016	¥12,460	¥9,430	¥(4,450)	¥ 95,723	¥304	¥(2,682)	¥ (2)
Profit for the period				7,001			
Other comprehensive income						(900)	2
Comprehensive income	—	—	—	7,001	—	(900)	2
Acquisition of treasury stock (Note 21)			(5)				
Disposal of treasury stock (Note 21)		0	0				
Share-based payment transaction (Note 20)					14		
Dividends (Note 22)				(1,890)			
Increase of subsidiaries							
Reclassification from other components of equity to retained earnings				888			
Others				8			
Total transactions with owners	—	0	(5)	(993)	14	—	—
BALANCE-MARCH 31, 2017	¥12,460	¥9,430	¥(4,456)	¥101,731	¥319	¥(3,582)	¥—

	Total equity attributable to owners of parent					
	Other components of equity					
	Financial assets measured at fair value through other comprehensive income	Remeasurements of defined benefit plans	Total	Total	Non-controlling interests	Total equity
BALANCE-APRIL 1, 2016	¥7,393	¥ —	¥ 5,013	¥118,177	¥1,263	¥ 119,440
Profit for the period			—	7,001	105	7,106
Other comprehensive income	1,711	179	992	992	82	1,074
Comprehensive income	1,711	179	992	7,993	187	8,181
Acquisition of treasury stock (Note 21)			—	(5)		(5)
Disposal of treasury stock (Note 21)			—	0		0
Share-based payment transaction (Note 20)			14	14		14
Dividends (Note 22)			—	(1,890)	(35)	(1,926)
Increase of subsidiaries			—	—	260	260
Reclassification from other components of equity to retained earnings	(708)	(179)	(888)	—		—
Others			—	8		8
Total transactions with owners	(708)	(179)	(873)	(1,872)	224	(1,648)
BALANCE-MARCH 31, 2017	¥8,395	¥ —	¥5,132	¥124,297	¥1,674	¥125,972

FY2017 (From April 1, 2017 To March 31, 2018)

Millions of yen

	Total equity attributable to owners of parent					
					Other components of equity	
	Capital, no par value	Capital surplus	Treasury stock, at cost	Retained earnings	Stock acquisition rights	Exchange differences on translating foreign operations
BALANCE-APRIL 1, 2017	¥12,460	¥ 9,430	¥(4,456)	¥101,731	¥319	¥(3,582)
Profit for the period				9,697		
Other comprehensive income						(767)
Comprehensive income	—	—	—	9,697	—	(767)
Acquisition of treasury stock (Note 21)			(6)			
Disposal of treasury stock (Note 21)			0	0		
Share-based payment transaction (Note 20)		(0)	29	(4)	(12)	
Dividends (Note 22)				(2,033)		
Conversion of convertible bonds (Note 21)	5,709	5,826	3,748	(116)	(254)	
Equity transactions with non-controlling interests		10				(20)
Reclassification from other components of equity to retained earnings				(557)		
Total transactions with owners	5,709	5,837	3,771	(2,712)	(266)	(20)
BALANCE-MARCH 31, 2018	¥18,169	¥15,267	¥ (685)	¥108,715	¥ 52	¥(4,370)

	Total equity attributable to owners of parent					
	Other components of equity					
	Financial assets measured at fair value through other comprehensive income	Remeasurements of defined benefit plans	Total	Total	Non-controlling interests	Total equity
BALANCE-APRIL 1, 2017	¥ 8,395	¥ —	¥5,132	¥124,297	¥1,674	¥125,972
Profit for the period			—	9,697	116	9,813
Other comprehensive income	3,922	167	3,323	3,323	24	3,348
Comprehensive income	3,922	167	3,323	13,020	141	13,161
Acquisition of treasury stock (Note 21)			—	(6)		(6)
Disposal of treasury stock (Note 21)			—	0		0
Share-based payment transaction(Note 20)			(12)	12		12
Dividends (Note 22)			—	(2,033)	(41)	(2,075)
Conversion of convertible bonds (Note 21)			(254)	14,913		14,913
Equity transactions with non-controlling interests			(20)	(10)	73	62
Reclassification from other components of equity to retained earnings	725	(167)	557	—		—
Total transactions with owners	725	(167)	270	12,875	31	12,906
BALANCE-MARCH 31, 2018	¥13,043	¥ —	¥8,725	¥150,193	¥1,847	¥152,041

Consolidated Statements of Cash Flows

Kureha Corporation and its Consolidated Subsidiaries
For the fiscal years ended March 31, 2018 (FY2017) and 2017 (FY2016)

	Millions of yen	
	FY2017	FY2016
Cash flows from operating activities:		
Profit before tax	¥ 12,683	¥ 8,981
Depreciation and amortization	9,898	10,191
Business restructuring costs (Note 13)	—	1,194
Loss on business withdrawal (Note 13)	—	378
Impairment loss (Note 13)	746	—
Finance income	(593)	(550)
Finance costs	468	557
Share of (profit) loss of entities accounted for using equity method	(2,230)	(1,619)
(Profit) loss on disposal and sale of property, plant and equipment, and intangible assets	1,298	486
(Increase) decrease in trade and other receivables	(3,415)	1,597
(Increase) decrease in inventories	634	(3,630)
Increase (decrease) in trade and other payables	783	340
Increase (decrease) in provision	473	(188)
Increase (decrease) in net defined benefit asset and liability	(847)	(1,172)
Other, net	838	(2,235)
Subtotal	20,737	14,328
Interest and dividends received	1,759	1,395
Interest paid	(414)	(481)
Income taxes paid	(1,903)	(2,890)
Cash flows from operating activities	20,178	12,350
Cash flows from investing activities:		
Proceeds from sales of property, plant and equipment, and intangible assets	65	32
Payments for purchases of property, plant and equipment, and intangible assets	(9,857)	(9,379)
Proceeds from sales of investment securities	247	1,320
Purchase of investment securities	(180)	(38)
Proceeds from sales of assets held for sale	793	—
Proceeds from government grants	230	7,780
Other, net	(996)	(786)
Cash flows from investing activities	(9,698)	(1,071)
Cash flows from financing activities:		
Dividends paid (Note 22)	(2,033)	(1,890)
Dividends paid to non-controlling interests	(41)	(35)
Net increase (decrease) in commercial paper and short-term loans payable (Note 31)	(4,325)	(117)
Proceeds from non-current loans payable (Note 31)	1,130	4,090
Repayments of non-current loans payable (Note 31)	(6,780)	(13,715)
Proceeds from issue of bonds (Note 31)	6,963	—
Repayments of bonds (Note 31)	(5,000)	—
Proceeds from contributions of non-controlling interests	66	260
Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation	(3)	—
Other, net	(390)	(317)
Cash flows from financing activities	(10,415)	(11,727)
Effect of exchange rate changes on cash and cash equivalents	189	(24)
Net increase (decrease) in cash and cash equivalents	253	(472)
Cash and cash equivalents at beginning of year	6,222	6,695
Cash and cash equivalents at end of year (Note 7)	¥ 6,475	¥ 6,222

Notes to the Consolidated Financial Statements

Kureha Corporation and its Consolidated Subsidiaries
For the fiscal years ended March 31, 2018 (FY2017) and 2017 (FY2016)

1. Reporting entity

Kureha Corporation (the "Company") is a company registered in Japan and listed on the Tokyo Stock Exchange. The locations of the Company's registered headquarters and main offices are available on the Company's website at http://www.kureha.co.jp/en/. The consolidated financial statements of the Company for FY2017 (from April 1, 2017 to March 31, 2018) comprise the Company and its 29 subsidiaries (collectively the "Group"), and the Group's interests in its 3 affiliates. The Group operates its businesses primarily in the manufacturing and sale of advanced materials, specialty chemicals, and specialty plastics, and engages in business activities including construction and repair of facilities, logistics and environmental protection, and other services.

2. Basis of preparation of the consolidated financial statements

(1) Matters concerning compliance with IFRS

The Group's consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards ("IFRS").

The Group has adopted the provision of Article 93 of *Ordinance on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements* because the Group satisfies the requirements for a "Designated IFRS Specified Company" as set forth in Article 1-2 of said Ordinance.

(2) Basis of measurement

The Group's consolidated financial statements have been prepared on a historical cost basis except for some of the financial assets, financial liabilities, employee benefits and other items, which have been measured at fair value, as stated in "3. Significant accounting policies."

(3) Functional currency and presentation currency

The consolidated financial statements are presented in Japanese yen, which is the Company's functional currency. In principle, all financial information presented in Japanese yen has been rounded down to the nearest million.

(4) Approval of the consolidated financial statements

The consolidated financial statements have been approved at the Board of Directors meeting held on June 26, 2018.

3. Significant accounting policies

The accounting policies set out below have been applied consistently to all the periods presented in the consolidated financial statements.

In addition, the Group has early adopted IFRS 9 *Financial Instruments* (issued in November 2009, as amended in July 2014).

(1) Basis of consolidation

1) Subsidiaries

A subsidiary is an entity which is controlled by the Group. The Group controls an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

The financial statements of a subsidiary are included in the scope of consolidation from the date the Group obtains control of the subsidiary until the date it loses such control of the subsidiary.

When the accounting policies adopted by a subsidiary differ from those adopted by the Group, the financial statements of a subsidiary are adjusted as necessary.

When the closing date of the financial statements of a subsidiary differs from that of the Group's consolidated financial statements, the Group uses the financial statements based on a provisional settlement of accounts.

Intra-group balances and transactions, and any unrealized gains and losses arising from intra-group transactions, are eliminated in preparing the consolidated financial statements.

Comprehensive income of the subsidiaries is allocated to owners of the parent and non-controlling interests, even when the non-controlling interests will result in a negative balance.

2) Affiliates

An affiliate is an entity over which the Group has significant influence in the financial and operating policy decisions, but that is not controlled or jointly controlled by the Group. If the Group holds between 20 percent and 50 percent of the voting rights of another entity, it is presumed that the Group has significant influence over the other entity. An investment in an affiliate is accounted for using the equity method.

When the closing date of the affiliate's financial statements differs from that of the Group's consolidated financial statements, the Group uses the financial statements based on a provisional settlement of accounts.

3) Joint ventures

A joint venture is an entity with a contractual agreement whereby two or more parties including the Group undertake an economic activity that is subject to joint control, which is the contractually agreed sharing of control over an economic activity, and exists only when the strategic financial and operating decisions relating to the activity require the unanimous consent of the parties sharing control.

The joint ventures held by the Group are accounted for using the equity method.

(2) Business combinations

Business combinations are accounted for using the acquisition method. The consideration transferred by the Company as an acquirer is measured as the aggregate of the acquisition-date fair value of the assets given, liabilities assumed and equity instruments issued by the Company in exchange for control of the acquiree. If (a) the aggregate of the consideration transferred by the Company, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree in a business combination achieved in stages (step acquisitions) exceeds (b) the fair value of identifiable assets and liabilities, the excess is recognized as goodwill in the consolidated statements of financial position. If, in the contrary, the amount of (a) above falls below the amount of (b), the difference is recognized immediately as profit or loss in the consolidated statements of profit or loss.

Acquisition-related costs, which are the costs the Group incurs to effect a business combination, are expensed as incurred.

As additional acquisitions of non-controlling interests in the Group's subsidiaries are accounted for as equity transactions, no goodwill is recognized as a result of such transactions.

(3) Foreign currency translation

1) Foreign currency transactions

The items included in the financial statements of each entity of the Group are measured in its functional currency. Foreign currency transactions are converted into the functional currency of each entity using the spot exchange rate at the transaction date. Monetary assets and liabilities denominated in foreign currencies are converted into the functional currency using the exchange rate at the end of the reporting period. Foreign exchange gains and losses resulting from the currency conversion and settlement are recognized in profit or loss, except where gains and losses arising from designated investments in equity instruments and cash flow hedges are recognized in other comprehensive income.

2) Financial statements of foreign operations

Assets and liabilities of foreign operations (including goodwill and fair value adjustments arising from the acquisition of foreign operations) are translated into Japanese yen using the exchange rate at the end of the reporting period, and revenue and expense items are translated into Japanese yen using the average exchange rates during the period. Exchange differences arising from the translation of financial statements of the foreign operations are recognized in other comprehensive income. In the event of a loss of control or significant influence (or joint control) due to the disposal of foreign operations, the relevant cumulative amount of translation differences associated with the foreign operations is reclassified into profit or loss as part of gain or loss on disposal.

(4) Cash and cash equivalents

Cash and cash equivalents are comprised of cash on hand; demand deposits; and short-term, highly liquid investments with a maturity of three months or less from the date of acquisition that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

(5) Inventories

Inventories are measured at the lower of cost and net realizable value. The cost of inventories includes costs of purchase, costs of conversion and all the other costs incurred in bringing the inventories to their present location and condition, and the cost is determined using the periodic average method if items of inventories are interchangeable or the specific identification method if they are not interchangeable. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. Any difference arising from the measurement is recognized in profit or loss.

(6) Assets held for sale

Non-current assets or disposal groups that recover their carrying amount principally through a sale transaction rather than through continued use are classified as held for sale if the asset is available for immediate sale in its present condition, the management is committed to a plan to sell the asset, and the asset is expected to be sold within a year.

Non-current assets or disposal groups classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell.

(7) Property, plant and equipment

The Group uses the cost model to measure items of property, plant and equipment. They are stated at cost less any accumulated depreciation and any accumulated impairment losses.

The cost of an item of property, plant and equipment includes directly attributable costs of acquisition, costs of dismantling, removing or restoring the item, and borrowing costs eligible for capitalization.

Except for non-depreciable assets such as land, an item of property, plant and equipment is depreciated using the straight-line method over the estimated useful life. The estimated useful lives of the major classes of assets are presented as follows:

Buildings and structures:	10 to 50 years
Machinery and equipment:	7 to 20 years
Vehicles, tools, furniture and fixtures:	4 to 10 years

The estimated useful life, depreciation method and residual value of an asset are reviewed at the end of each reporting period. Any changes are accounted for prospectively as a change in accounting estimate.

(8) Intangible assets

1) Goodwill

The measurement of goodwill upon initial recognition is described in "3. Significant accounting policies, (2) Business combinations." Goodwill is stated at cost less any accumulated impairment losses.

Goodwill is not amortized, but instead tested for impairment annually or whenever there are indications that goodwill may be impaired. An impairment loss for goodwill is recognized in the consolidated statement of income and is not subsequently reversed.

2) Other intangible assets

The Group uses the cost model to measure a separately acquired intangible asset other than goodwill. With respect to an internally generated intangible asset, expenditure on such an asset is recognized as expenses in the period in which they are incurred except for development expenditures that qualify for capitalization.

Intangible assets with definite useful lives are stated at cost less any accumulated depreciation and any accumulated impairment losses, depreciated using the straight-line method over the estimated useful life, and tested for impairment whenever there are indications that the assets may be impaired. The estimated useful lives of the major classes of assets are presented as follows:

Trademarks:	10 years
Software:	5 years

The estimated useful life, amortization method and residual value of an asset are reviewed at the end of each reporting period. Any changes are accounted for prospectively as a change in accounting estimate.

Intangible assets with indefinite useful lives and those not yet available for use are not amortized, but instead tested for impairment individually or at a cash-generating unit level annually or whenever there are indications that they may be impaired.

(9) Lease

The Group determines whether the agreement contains a lease based on the substance of the arrangement at the commencement date of the lease transaction.

If a lease transfers to the Group substantially all risks and rewards incidental to ownership of an asset, such a lease is classified as a finance lease, or otherwise it is classified as an operating lease.

A leased asset under a finance lease transaction is initially recognized at the lower of the fair value of the leased asset determined at inception of the lease and the present value of the minimum lease payments, and subsequently depreciated based on the applicable accounting policies using the straight-line method over shorter of the estimated useful life and the lease term. Lease payments are apportioned between the finance charge and the reduction of the outstanding liability. The finance charge is allocated to each period over the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

Lease payments under an operating lease are recognized as an expense on a straight-line basis over the lease term. Contingent rents are charged as expenses in the periods in which they are incurred.

(10) Impairment of non-financial assets

The Group assesses at the end of each reporting period whether there is any indication that its non-financial assets other than inventories and deferred tax assets may be impaired. If any such indication exists, it estimates the recoverable amount of the asset. Goodwill and an intangible asset with indefinite useful life or an intangible asset not yet available for use are tested for impairment annually regardless of whether there is an indication of impairment.

The recoverable amount of an asset or a cash-generating unit is the higher of its value in use and fair value less costs of disposal. In determining the value in use, estimated future cash flows are discounted using a pre-tax discount rate that reflects the time value of money and the risks specific to the asset.

Assets that are not individually tested for impairment are integrated with the smallest cash-generating unit that generates cash inflows from continuing use that are largely independent of the cash inflows from other assets or groups of assets. The Group's corporate assets do not generate independent cash inflows. If there is an indication that the corporate assets may be impaired, the recoverable amount is determined for the cash-generating unit to which the corporate assets belong.

Goodwill acquired in a business combination is allocated to each of the cash-generating units that is expected to benefit from the synergies of the combination to ensure that goodwill is tested for impairment reflecting the smallest unit to which the goodwill relates.

Impairment losses are recognized as profit or loss when the carrying amount of an asset or a cash-generating unit exceeds its estimated recoverable amount.

The Group assesses at the end of each reporting period whether there is any indication that an impairment loss recognized in prior periods for an asset other than goodwill may have decreased or may no longer exist. An impairment loss is reversed if there is a change in the estimates used to determine the asset's recoverable amount.

(11) Financial Instruments

1) Non-derivative financial assets

(i) Initial recognition and measurement

The Group initially recognizes a financial asset on the account day in its consolidated statements of financial position when the Group becomes party to the contractual provisions of the financial asset.

At initial recognition, the financial assets are classified as financial assets measured at fair value through profit or loss, financial assets measured at fair value through other comprehensive income, or financial assets measured at amortized cost.

Financial assets are classified as financial assets measured at amortized cost if both of the following conditions are met. Otherwise financial assets are classified as financial assets measured at fair value.

- The financial assets are held within a business model whose objective is to hold assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Of financial assets measured at fair value, certain equity instruments such as stocks that are held with the purpose of facilitating business relations with investees are initially designated as financial assets measured at fair value through other comprehensive income. Other financial assets are designated as financial assets measured at fair value through profit or loss.

All financial assets are measured at fair value plus transaction costs directly attributable to acquisition of the financial assets unless the financial assets are classified as financial assets measured at fair value through profit or loss.

(ii) Subsequent measurement

Measurement of financial assets after initial recognition is performed as follows according to the classification:

(a) Financial assets measured at amortized cost

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

(b) Financial assets measured at fair value through other comprehensive income

These financial assets are measured at fair value after initial recognition, and subsequent changes in fair value are included in other comprehensive income. If the Group disposes of an investment, or if the fair value of the investment declines significantly, for example, the cumulative gains or losses recognized in other comprehensive income are reclassified from other components of equity to retained earnings.

Dividends from the financial assets measured at fair value through other comprehensive income are recognized as finance income in profit or loss.

(c) Financial assets measured at fair value through profit or loss

Financial assets designated to be measured at fair value through profit or loss, or financial assets other than (a) and (b) above are measured at fair value at initial recognition, and subsequent changes in their fair value are recognized in profit or loss.

(iii) Derecognition of financial assets

The Group derecognizes financial assets when the rights to receive benefits expire or when the Group transfers financial assets or substantially all the risks and rewards of ownership of the financial assets.

(iv) Impairment of financial assets

With respect to financial assets measured at amortized cost, the Group recognizes allowance for doubtful accounts based on the expected credit loss model for such financial assets. At each reporting date, the Group assesses whether the credit risks on the financial assets have increased significantly since initial recognition. If the credit risk on a financial asset has increased significantly since the initial recognition, the allowance for doubtful accounts is measured at an amount equal to the lifetime expected credit losses. If the risk on a financial asset has not increased significantly since the initial recognition, the allowance for doubtful accounts for the financial asset is measured at an amount equal to the 12-month expected credit losses. However, the allowance for doubtful accounts on trade and other receivables is always measured at an amount equal to the lifetime expected credit losses.

The Group estimates expected credit losses of a financial asset in a way that reflects:

- an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
- the time value of money; and
- reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

The amounts of these measurements are recognized in profit or loss.

2) Non-derivative financial liabilities

(i) Initial recognition and measurement

The Group initially recognizes a financial liability in its consolidated statements of financial position when the Group becomes party to the contractual provisions of the financial liability.

At the initial recognition, the Group classifies financial liabilities as financial liabilities measured at fair value through profit or loss or financial liabilities measured at amortized cost.

All financial liabilities are measured in the full amount after deducting transaction costs directly attributable to the financial liabilities from the fair value unless the financial liabilities are classified as financial liabilities measured at fair value through profit or loss.

(ii) Subsequent measurement

Financial liabilities measured at fair value through profit or loss are measured at fair value, and subsequent changes in the fair value are recognized in profit or loss.

After initial recognition, financial liabilities measured at amortized cost are measured at amortized cost using the effective interest method. Amortization using the effective interest method and gains and losses upon derecognition are recognized in profit or loss in its consolidated statements of profit or loss for the period.

(iii) Derecognition of financial liabilities

The Group derecognizes financial liabilities when they are discharged, cancelled or expired.

3) Issuance of compound financial instruments

The Group issues bonds with stock acquisition rights. At initial recognition, proceeds from issuance are split between the component of consideration received for bonds and the component of consideration received for stock acquisition rights, and the bond component is classified and presented as liability while the stock acquisition right component as equity. On initial recognition, stock acquisition rights are measured as difference between the proceeds and initially measured fair value of the liability component. All of the transaction costs associated with issuing bonds with stock acquisition rights are allocated pro rata to each component on the basis of initial ratio of carrying amount of a liability component and an equity component. After initial recognition, a liability component of compound financial instrument is measured at amortized cost using the effective interest method. An equity component of compound financial instrument is not remeasured after initial recognition.

4) Derivatives and hedge accounting

The Group uses derivatives such as forward exchange contracts and interest rate swaps to hedge foreign currency risk and interest rate risk.

Derivatives are initially measured at fair value at the date when the derivative contract is entered into and are subsequently measured at fair value. Changes in the fair value of derivatives are immediately recognized in profit or loss except for those that qualify for hedge accounting.

The Group formally designates and documents the hedging relationship and the risk management objective and strategy for undertaking the hedge. The documentation includes the hedging instrument, the hedged item, the nature of the risk being hedged and the methods of assessing whether the hedging relationship meets the hedge effectiveness requirements. In addition, the Group assesses whether the hedging relationship meets the hedge effectiveness requirements, both at the inception and on an ongoing basis.

Hedging relationship that meet the criteria for hedge accounting are accounted as follows.

Changes in fair value of a derivative designated as fair value hedges are recognized in profit or loss. The carrying amount of hedged items is measured at fair value and the changes in the fair value of hedged items attributable to the hedged risk are recognized as profit or loss with adjustments to the carrying amount of the hedged items.

With regard to cash flow hedge, the effective portions of the gain or loss on the hedging instrument are recognized in other comprehensive income as the line item titled “Cash flow hedges.” Subsequently, such amounts associated with forward exchange contracts are reclassified as reclassification adjustment from equity to profit or loss in the same period in which the hedged item affects profit or loss. With regard to interest rate swaps, the changes in gains and losses on the hedging instrument are recognized as other comprehensive income.

Hedge accounting is discontinued prospectively when, and only when, the hedging relationship ceases to meet the qualifying criteria. This includes instances when the hedging instrument expires or is sold, terminated or exercised.

(12) Employee benefits

1) Post-retirement benefits

The Group has defined benefit plan and defined contribution plan as post-employment benefit plan.

The net defined benefit liability (asset) associated with the defined benefit plans is calculated by deducting the fair value of the plan assets from the present value of defined benefit obligations. The present value of defined benefit obligations and related current service costs and prior service costs are measured annually by independent actuaries based on the projected unit credit method. The discount rate is calculated by reference to market yields at the end of the fiscal year on highly rated corporate bonds denominated in the same currency as those used for future benefit payment, corresponding to the discount period determined based on the period until annual future payment dates.

Remeasurements of all of the net benefit liability (asset) arising from the defined benefit plans are recognized at once in other comprehensive income in the period in which they are incurred and immediately reclassified from other components of equity to retained earnings.

Prior service costs are immediately recognized as profit or loss for the period in which they are incurred.

Contributions to defined contribution plans are recognized as an expense when they are paid.

2) Short-term employee benefits

Short-term employee benefit obligations are measured on an undiscounted basis, and are recognized at once when the related services are rendered. When there is a legal or constructive obligation to make payments of bonuses and paid leave expenses, and the obligation can be estimated reliably, the estimated amount to be paid under the relevant plans is accounted for as a liability.

(13) Share-based payments

The Group has a stock option plan accounted for as an equity-settled share-based payment plan. Stock options are estimated using its fair value at the grant date and recognized in profit or loss as expenses over the vesting periods with corresponding increases to equity and taking into account the estimated number of options to be vested. The fair value of options granted is measured using the Black-Scholes model based on the terms and conditions of the options.

(14) Provisions

The Group recognizes a provision when the Group has a present obligation (legal or constructive) as a result of a past event; it is probable that the Group will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount of provision is measured at the present value of the expenditures expected to be required to settle the obligation. In calculating the present value, the pre-tax discount rate that reflects the current market assessment of the time value of money and the risks that are specific to the obligation is applied. Unwinding of the discount associated with the passage of time is recognized as finance costs.

(15) Levies

For levies that are an outflow of resources embodying economic benefits required by a government to the Group in accordance with laws and regulations, the estimated payment is recognized as a liability when the obligation event that triggers the payment of levies prescribed by laws and regulations occurs.

(16) Revenue

1) Sale of goods

Revenue from the sale of goods is recognized when the Group has transferred the significant risks and rewards of ownership of the goods to the buyer; the Group retains neither continuing managerial involvement nor effective control over the goods sold; it is probable that future economic benefits related to the transaction will flow to the Group; and these benefits and corresponding costs can be measured reliably. Revenue is usually recognized at the time of delivery of goods to customers. Revenue is measured at the fair value of the consideration received or receivable less any discounts, rebates and consumption taxes.

Taxes collected on behalf of the third parties and transaction amounts where the Group acted as agent are deducted from revenue, and inflow of economic benefits excluding those amounts is recognized as revenue.

2) Royalty

Royalty revenue is recognized on an accrual basis in accordance with the substance of the contractual arrangement.

3) Rendering of services

Revenue from the rendering of services is recognized in accordance with such transaction's degree of progress as of the end of the reporting period in which the service is rendered.

4) Construction contracts

Revenues from construction contracts are calculated based on the stage of completion of the contract (multiplying the most recent total selling price by the proportion of the most recent contract costs incurred to the most recent estimated total contract costs) if the outcome of the construction contract can be estimated reliably. Otherwise, contract revenues are recognized only to the extent of the contract costs incurred very likely to be recovered and contract costs are expensed when incurred.

(17) Government grants

Government grants are recognized at fair value when there is reasonable assurance that the Group will comply with the conditions attaching to them and the grants will be received.

Government grants related to expense items are recognized as revenue on a systematic basis over the period in which the Group recognizes the related expenses for which the grants are intended to compensate. Government grants related to assets are directly deducted in arriving at the carrying value of the assets. Government grants are recognized in profit or loss over the useful lives of the depreciable assets as a reduction in depreciation.

(18) Finance income and finance costs

Finance income consists mainly of interest income and dividend income. Interest income is recognized when accrued by using the effective interest method. Dividend income is recognized when the Group's right to receive the dividends is established.

Finance costs consist mainly of interest expenses. Interest expenses are recognized when incurred by using the effective interest method.

(19) Income taxes

Income tax expenses consist of current tax expense and deferred tax expense. Income taxes are recognized in profit or loss, except when they arise from business combinations, and from items that are recognized directly in equity or in other comprehensive income.

Current tax expense is measured by the expected taxes payable to or receivable from tax authorities. The tax rates and tax laws that are used to calculate the tax amount are those enacted or substantively enacted by the end of the fiscal year in jurisdictions in which the Group operates business and earns taxable income.

Deferred tax expense is calculated based on temporary differences between the carrying amounts of assets and liabilities for financial accounting purposes and the tax bases of such assets and liabilities. Deferred tax assets are recognized for deductible temporary differences, the carryforwards of unused tax credits and the carryforwards of unused tax losses to the extent that it is probable that future taxable income will be available against which such deferred tax assets can be recovered. Deferred tax liabilities are recognized, in principle, for taxable temporary differences.

Deferred tax assets and liabilities are not recognized for the following temporary differences:

- Temporary differences arising from initial recognition of goodwill,
- Temporary differences arising from initial recognition of assets and liabilities from transactions that are not business combinations and affect neither accounting profit nor taxable income (tax loss),
- Deductible temporary differences on investments in subsidiaries and affiliates, when it is probable that such temporary differences will not reverse in the foreseeable future, or when it is unlikely that taxable income will be earned against which the temporary difference can be utilized,
- Taxable temporary differences on investments in subsidiaries and affiliates, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the assets are realized or the liabilities are settled, based on the tax rates and tax laws enacted or substantively enacted by the end of the fiscal year.

Deferred tax assets and liabilities are offset if the Group has a legally enforceable right to set off current tax assets against current tax liabilities and income taxes are levied by the same taxation authority on the same taxable entity.

(20) Treasury stock

Treasury stock is recognized at cost and deducted from equity. No gains or losses are recognized on the repurchase, sale or retirement of shares of the Company's treasury stock. Any difference between the carrying amount and consideration received on the sale of shares of the treasury stock is recognized directly as capital surplus.

(21) Profit per share

Basic profit per share are calculated by dividing profit attributable to owners of parent by the weighted average number of ordinary shares outstanding during the period, adjusted for treasury stocks held. Diluted profit per share is calculated by adjusting for the effects of all dilutive potential ordinary shares.

(Change in accounting policies)
The Group has adopted the standards described below since FY2017. This adoption does not have material effect on the consolidated financial statements.

Standard	Title	Details of new or amended standard
IAS7	Statement of Cash Flows	Amendments to disclosure of changes in liabilities arising from financing activities

4. Significant accounting estimates and associated judgments

In preparing the Group's consolidated financial statements in compliance with IFRSs, the management is required to make judgments, estimates and assumptions that affect the adoption of accounting policies and the reportable amount of assets, liabilities and revenue and expenses. Actual results may differ from such estimates.

The estimates and their underlying assumptions are reviewed on an ongoing basis. The effect of a change in accounting estimates is recognized in the accounting period in which such estimates are changed and also in the future accounting periods.

Estimates and assumptions that may have material impact on the preparation of the Group's consolidated financial statements are as follows:

- Impairment of property, plant and equipment; goodwill and intangible assets (Item (10) of 3. Significant accounting policies and Note 13. Impairment of non-financial assets),
- Valuation of inventories (Item (5) of 3. Significant accounting policies and Note 9. Inventories),
- Recoverability of deferred tax assets (Item (19) of 3. Significant accounting policies and Note 15. Income taxes),
- Valuation of defined benefit obligations (Item (12) of 3. Significant accounting policies and Note 19. Employee benefits),
- Recognition of provisions (Item (14) of 3. Significant accounting policies and Note 18. Provisions) and
- Assumption on valuation of financial instruments (Item (11) of 3. Significant accounting policies and Note 23. Financial instruments).

Judgments made by the management in the course of applying the accounting policies are as follows:

- Determination of scope of consolidation (Item (1) of 3. Significant accounting policies) and
- Classification of financial instruments (Item (11) of 3. Significant accounting policies and Note 23. Financial instruments).

5. Standards and interpretations issued but not yet adopted

Of the new standards or interpretations that were established or amended by the date of approval of the consolidated financial statements, the following are the titles and other related information of the major new IFRSs. The Group has not yet adopted these standards in FY2017.

Standard	Title	Effective date	Fiscal year in which the Group will apply the standard	Summary of new or amended standard
IFRS 15	*Revenue from Contracts with Customers*	January 1, 2018	Fiscal year ending March 31, 2019	An entity shall recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.
IFRS 16	*Leases*	January 1, 2019	Fiscal year ending March 31, 2020	A lessee is required to recognize assets and liabilities for most leases.

With regard to application of IFRS 15 "Revenue from Contracts with Customers", we plan to adopt the method of recognition of cumulative effect on the date of start of application, which is accepted as transitional measure. The effect of application of these standards on the consolidated financial statements of the fiscal year ending March 31, 2019 is negligible.

The effect of application of IFRS 16 "Leases" is under evaluation.

6. Segment information

(1) Overview of reportable segments

The Group's reportable segments are components for which separate financial information is available and whose operating results are regularly reviewed by the Board of Directors to decide on the allocation of operating resources and assess their performance.

The Group has separate divisions by product, and each division formulates a comprehensive strategy for business activities in domestic and overseas markets.

Accordingly, the Group consists of segments by product and service on the basis of the business divisions, and has the five reportable segments of “Advanced Materials,” “Specialty Chemicals,” “Specialty Plastics,” “Construction,” and “Other Operations.”

Major products and services for each segment are as follows:

Segment	Products and services
Advanced Materials	polyphenylene sulfide (PPS), polyvinylidene fluoride (PVDF), polyglycolic acid (PGA) and its processed product, carbon fiber, bead-shaped activated carbon, anode materials for lithium ion batteries
Specialty Chemicals	agricultural and horticultural fungicides, therapeutic agent for chronic renal failure, caustic soda, hydrochloric acid, sodium hypochlorite, monochlorobenzene, para-dichlorobenzene, ortho-dichlorobenzene
Specialty Plastics	household plastic wrap, garbage bags for kitchen sink, plastic food containers, cooking paper, PVDF fishing lines, polyvinylidene chloride (PVDC) film, multilayer heat-shrinkable film, multilayer bottle, auto-pack machinery (for food packaging)
Construction	civil engineering and construction contracting business, construction and management service
Other Operations	environmental engineering, industrial waste management, transport and warehousing, physiochemical and biochemical testing, analysis and measurement services, medical services

(2) Information on reportable segments

The accounting policies for the reportable segments are the same as those of the Group stated in “3. Significant accounting policies.” Intersegment revenue is principally based on the market price.

The Group’s segment information is as follows:

	Millions of yen							
	FY2016 (From April 1, 2016 To March 31, 2017)							
	Reportable segments							
	Advanced Materials	Specialty Chemicals	Specialty Plastics	Construction	Other Operations	Total	Adjustment (Note)	Consolidated
Revenue								
Revenue from external customers	¥33,369	¥25,866	¥42,791	¥13,934	¥16,332	¥132,294	¥ —	¥132,294
Intersegment revenue	627	278	184	5,401	5,638	12,130	(12,130)	—
Total	33,997	26,144	42,976	19,336	21,970	144,425	(12,130)	132,294
Operating profit	79	2,538	4,986	1,026	1,726	10,357	(1,101)	9,255
Finance income								577
Finance costs								(852)
Profit before tax								8,981
Other items								
Segment assets	81,330	23,850	37,894	7,439	19,631	170,145	64,761	234,907
Depreciation and amortization	3,385	1,064	2,342	102	1,228	8,122	2,068	10,191
Impairment loss	—	—	—	—	—	—	1,572	1,572
Share of profit of entities accounted for using equity method	1,357	—	261	—	—	1,619	—	1,619
Increases in property, plant and equipment, and intangible assets	¥ 3,904	¥ 1,333	¥ 1,633	¥ 171	¥ 1,082	¥ 8,125	¥ 2,179	¥ 10,304

Note: Adjustment to operating profit consists mainly of 133 million yen of profit resulting from elimination of intersegment transactions, 1,398 million yen of other income and 2,633 million yen of other expenses not allocated to any reportable segment.
Adjustment to segment assets includes corporate assets not allocated to reportable segments, which mainly consist of cash and deposits, investment securities and shared facilities of the Company.
Adjustment to impairment losses includes impairment losses for fixed assets of 1,194 million yen associated with the Advanced Materials segment and 378 million yen for fixed assets of the Specialty Chemicals segment.

	Advanced Materials	Specialty Chemicals	Specialty Plastics	Construction	Other Operations	Total	Adjustment (Note)	Consolidated
	Millions of yen							
	FY2017 (From April 1, 2017 To March 31, 2018)							
	Reportable segments							
Revenue								
Revenue from external customers	**¥41,640**	**¥26,176**	**¥45,397**	**¥17,354**	**¥16,760**	**¥147,329**	**¥ —**	**¥147,329**
Intersegment revenue	**707**	**327**	**334**	**4,580**	**5,745**	**11,695**	**(11,695)**	**—**
Total	**42,348**	**26,504**	**45,731**	**21,935**	**22,505**	**159,025**	**(11,695)**	**147,329**
Operating profit	**1,669**	**3,421**	**6,907**	**1,037**	**1,812**	**14,850**	**(1,876)**	**12,973**
Finance income								**603**
Finance costs								**(893)**
Profit before tax								**12,683**
Other items								
Segment assets	**82,943**	**22,601**	**40,066**	**8,198**	**18,519**	**172,329**	**69,951**	**242,281**
Depreciation and amortization	**3,278**	**932**	**2,311**	**100**	**1,203**	**7,826**	**2,071**	**9,898**
Impairment loss	**—**	**—**	**—**	**—**	**—**	**—**	**746**	**746**
Share of profit of entities accounted for using equity method	**1,963**	**—**	**267**	**—**	**—**	**2,230**	**—**	**2,230**
Increases in property, plant and equipment, and intangible assets	**¥ 3,308**	**¥ 661**	**¥ 2,585**	**¥ 90**	**¥ 777**	**¥ 7,421**	**¥ 2,346**	**¥ 9,768**

Note: Adjustment to operating profit consists mainly of 216 million yen of profit resulting from elimination of intersegment transactions, 510 million yen of other income and 2,602 million yen of other expenses not allocated to any reportable segment.
Adjustment to segment assets includes corporate assets not allocated to reportable segments, which mainly consist of cash and deposits, investment securities and shared facilities of the Company.
Adjustment to impairment losses includes impairment losses for fixed assets of 194 million yen associated with the Advanced Materials segment and 552 million yen for fixed assets of the Specialty Plastics segment.

(3) Information on products and services

This information is omitted because the same information is disclosed in "(1) Overview of reportable segments" and "(2) Information on reportable segments."

(4) Information by geographical area

Revenue from external customers

	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
	Millions of yen	
Japan	**¥107,145**	¥ 97,630
Asia	**14,014**	13,986
Europe	**13,717**	10,301
Other	**12,451**	10,377
Total	**¥147,329**	¥132,294

Note: Revenues are classified based on the location of customers.

Non-current assets (property, plant and equipment and intangible assets)

	FY2017 (As of March 31,2018)	FY2016 (As of March 31,2017)
	Millions of yen	
Japan	**¥ 89,749**	¥ 89,205
U.S.	**14,432**	16,241
Other	**11,390**	11,860
Total	**¥115,573**	¥117,306

Note: Non-current assets are classified based on the location of the assets.

(5) Information on major customers
This information is omitted because no customer accounted for 10% or more of revenue from external customers in the consolidated statements of profit or loss.

7. Cash and cash equivalents
Cash and cash equivalents comprise cash and deposits. The balances of "cash and cash equivalents" in the statements of financial position as of the end of FY2016 and FY2017 equal the balances of "cash and cash equivalents" presented in the corresponding consolidated statements of cash flows.

8. Trade and other receivables
The breakdown of trade and other receivables is as follows:

	Millions of yen	
	FY2017 (As of March 31,2018)	FY2016 (As of March 31,2017)
Trade notes and accounts receivable	**¥31,907**	¥28,374
Other	**915**	1,186
Allowance for doubtful accounts	**(159)**	(173)
Total	**¥32,663**	¥29,387

9. Inventories
The breakdown of inventories is as follows:

	Millions of yen	
	FY2017 (As of March 31,2018)	FY2016 (As of March 31,2017)
Merchandise and finished goods	**¥30,278**	¥30,474
Work in process	**1,022**	1,001
Raw materials and supplies	**4,717**	5,021
Total	**¥36,018**	¥36,497

Note: The amounts of inventory write-down recognized as expense for FY2016 and FY2017 are 766 million yen and 1,827 million yen, respectively. These amounts are included in "Cost of sales" in the consolidated statements of profit or loss.

10. Assets held for sale
The breakdown of assets held for sale is as follows:

	Millions of yen	
	FY2017 (As of March 31,2018)	FY2016 (As of March 31,2017)
Assets held for sale		
Other financial assets	**¥—**	¥772
Total	**¥—**	¥772

Note: As the Company made a decision to sell its investment in an entity located in China, the assets associated with the investment were reclassified to assets held for sale in FY2016. The fair value of those assets are based on a selling price provided by the sales agreement and is classified as Level 3 of the fair value hierarchy. The sale of said assets has been completed in FY 2017.

11. Property, plant and equipment

(1) Changes in carrying amount, cost, and accumulated depreciation and accumulated impairment losses

Carrying amount

	Millions of yen					
	Buildings and structures	Machinery, equipment and vehicles	Land	Construction in progress	Other	Total
Balance as of April 1, 2016	¥43,589	¥52,156	¥18,099	¥6,996	¥4,144	¥124,987
Acquisitions	3,429	6,122	50	(243)	792	10,151
Disposals	(19)	(55)	(0)	—	(11)	(87)
Depreciation	(2,919)	(5,629)	—	—	(1,226)	(9,775)
Impairment loss	(805)	(489)	(269)	—	(8)	(1,572)
Direct deduction due to government grants	(2,940)	(3,746)	—	—	(223)	(6,910)
Exchange rate differences	(206)	(603)	(10)	(1)	(36)	(858)
Other changes	(58)	49	(5)	0	(8)	(22)
Balance as of March 31, 2017	¥40,070	¥47,802	¥17,864	¥6,752	¥3,421	¥115,911
Acquisitions	**4,009**	**3,875**	**31**	**774**	**750**	**9,441**
Disposals	**(32)**	**(172)**	**(45)**	**—**	**(16)**	**(267)**
Depreciation	**(2,856)**	**(5,524)**	**—**	**—**	**(1,133)**	**(9,514)**
Impairment loss	**(202)**	**(540)**	**—**	**—**	**(4)**	**(746)**
Direct deduction due to government grants	**(0)**	**(96)**	**—**	**—**	**(15)**	**(112)**
Exchange rate differences	**(47)**	**(442)**	**12**	**(9)**	**10**	**(475)**
Other changes	**0**	**0**	**—**	**—**	**(0)**	**0**
Balance as of March 31, 2018	**¥40,940**	**¥44,902**	**¥17,863**	**¥7,517**	**¥3,012**	**¥114,236**

Notes: 1. Depreciation is recorded in "Cost of sales" and "Selling, general and administrative expenses" in the consolidated statements of profit or loss.
2. Impairment loss is recorded in "Other expenses" in the consolidated statements of profit or loss. See the section entitled 13. Impairment of non-financial assets" for further details on impairment.
3. The line item "Acquisitions" above includes transfers from construction in progress to items of property, plant and equipment.

Cost

	Millions of yen					
	Buildings and structures	Machinery, equipment and vehicles	Land	Construction in progress	Other	Total
Balance as of April 1, 2016	¥103,061	¥166,250	¥18,425	¥6,996	¥16,648	¥311,382
Balance as of March 31, 2017	¥102,705	¥165,649	¥18,459	¥6,752	¥16,411	¥309,979
Balance as of March 31, 2018	¥106,222	¥165,733	¥18,458	¥7,517	¥16,291	¥314,223

Accumulated depreciation and accumulated impairment losses

	Millions of yen				
	Buildings and structures	Machinery, equipment and vehicles	Land	Other	Total
Balance as of April 1, 2016	¥59,471	¥114,093	¥325	¥12,503	¥186,395
Balance as of March 31, 2017	¥62,635	¥117,847	¥594	¥12,989	¥194,067
Balance as of March 31, 2018	¥65,282	¥120,830	¥594	¥13,278	¥199,986

(2) Government grants that were directly deducted from the cost of fixed assets (by applying reduction entry to fixed assets) are as follows:

	Millions of yen	
	FY2017 (As of March 31,2018)	FY2016 (As of March 31,2017)
Amount subject to reduction entry	**¥7,322**	¥7,215

Note: The amount represents direct deduction of subsidy from the carrying amounts of building, machinery and equipment, etc. related to Fukushima Business Investment Subsidy for Revitalization of Industries.

12. Intangible assets

(1) Changes in carrying amount, cost, and accumulated amortization and accumulated impairment losses

Carrying amount

	Millions of yen		
	Software	Other	Total
Balance as of April 1, 2016	¥851	¥814	¥1,666
Acquisitions	152	1	153
Disposals	(2)	(1)	(3)
Amortization	(308)	(107)	(415)
Exchange rate differences	(1)	(8)	(9)
Other changes	(0)	4	4
Balance as of March 31, 2017	¥692	¥703	¥1,395
Acquisitions	**325**	**1**	**326**
Disposals	**(1)**	**(0)**	**(1)**
Amortization	**(286)**	**(96)**	**(383)**
Exchange rate differences	**0**	**(1)**	**(1)**
Other changes	**(0)**	**—**	**(0)**
Balance as of March 31, 2018	**¥729**	**¥606**	**¥1,336**

Notes: 1. Amortization of intangible assets is recorded in "Cost of sales" and "Selling, general and administrative expenses" in the consolidated statements of profit or loss.
2. The line item "Acquisitions" above mainly represents the amounts of intangible assets purchased from external parties.

Cost

	Millions of yen		
	Software	Other	Total
Balance as of April 1, 2016	¥1,812	¥1,099	¥2,911
Balance as of March 31, 2017	¥1,883	¥1,037	¥2,920
Balance as of March 31, 2018	¥1,727	¥1,006	¥2,734

Accumulated amortization and accumulated impairment losses

	Millions of yen		
	Software	Other	Total
Balance as of April 1, 2016	¥ 960	¥284	¥1,244
Balance as of March 31, 2017	¥1,191	¥333	¥1,525
Balance as of March 31, 2018	¥ 997	¥400	¥1,397

(2) Research and development expenses

The total amounts of expenditures for research and development recognized as expense for FY2016 and FY2017 are 4,734 million yen and 4,962 million yen, respectively.

13. Impairment of non-financial assets

(1) Impairment loss

The Group recognizes impairment losses when either the carrying amount of an asset or a cash-generating unit exceeds its estimated recoverable amount.

The Group recognized impairment losses for property, plant and equipment for FY2016 and FY2017 in an amount of 1,572 million yen and 746 million yen, respectively.

(2) Main events and circumstances that led to recognition of impairment losses

FY2016 (From April 1, 2016 To March 31, 2017)

				Millions of yen
Segment	Purpose of use	Location	Type of assets	Amount
Advanced Materials	Manufacturing facility	Kasumigaura, Ibaraki	Buildings	¥ 336
			Structures	137
			Land	269
		Shanghai, PRC	Machinery and equipment	451
Specialty Chemicals	Manufacturing facility	Iwaki, Fukushima	Buildings	303
			Others	74
		Total		1,572

In principle, the Group has grouped the operating assets by segment and by company, and idle assets and assets for lease by individual properties.

Recoverable value is the higher of value in use and fair value less costs of disposal. Value in use is the present value of future cash flows calculated by using pre-tax weighted average cost of capital (between 3% and 13%) of a cash-generating unit. If future cash flows are not expected to be derived from a cash-generating unit, the value in use is taken as zero. Fair value less costs of disposal is evaluated either by the estimated disposal amount or the amount reasonably calculated based on assessed values of fixed assets for property tax, and it is taken as zero when sale cannot be expected.

1) Advanced Materials segment

For manufacturing facility in Kasumigaura City, Ibaraki Prefecture, after reviewing the future operating environment and projected earnings following the change in the expected use of the facilities associated with restructuring of resin processing systems in the advanced plastics business, the Group wrote down the carrying amount of fixed assets associated with the advanced plastics business to their recoverable value and recognized the reduction of 743 million yen under other expenses. In addition, the Group applies value in use for recoverable value, which is calculated as 567 million yen.

For manufacturing facility in Shanghai City, PRC, under the carbon products business in the Advanced Materials segment which was affected by the weak demand and increasingly fierce competition, the Group conducted a thorough review and assessment of business, including its future operating environment and projected earnings. Consequently, for the above mentioned manufacturing facility, the Group wrote down the carrying amount of fixed assets associated with carbon products business to their recoverable value and recognized the reduction of 451 million yen as other expenses. In addition, the Group applies value in use for recoverable value, which is calculated as 996 million yen.

2) Specialty Chemicals segment

For manufacturing facility in Iwaki City, Fukushima Prefecture, after reviewing the future operating environment and projected earnings following the change in the expected use of the facilities associated with discontinuance of some production in the pharmaceuticals business, the Group wrote down the carrying amount of fixed assets associated with the pharmaceuticals business to their recoverable value and recognized the reduction of 378 million yen under other expenses. In addition, the Group applies value in use for recoverable value, which is calculated as zero.

FY2017 (From April 1, 2017 To March 31, 2018)

Segment	Purpose of use	Location	Type of assets	Amount (Millions of yen)
Advanced Materials	Manufacturing facility	Shanghai, PRC	Machinery and equipment	¥194
Specialty Plastics	Idle assets	Iwaki, Fukushima	Buildings	122
			Structures	80
			Machinery and equipment	346
			Tools, furniture and fixtures	4
			Total	552
		Total		746

In principle, the Group has grouped the operating assets by segment and by company, and idle assets and assets for lease by individual properties.

Recoverable value is the higher of value in use and fair value less costs of disposal. Value in use is the present value of future cash flows calculated by using pre-tax weighted average cost of capital of a cash-generating unit. If future cash flows are not expected to be derived from a cash-generating unit, the value in use is taken as zero. Fair value less costs of disposal is evaluated either by the estimated disposal amount or the amount reasonably calculated based on assessed values of fixed assets for property tax, and it is taken as zero when sale cannot be expected.

1) Advanced Materials segment
For manufacturing facility, under the carbon products business in the Advanced Materials segment which was affected by the weak demand and increasingly fierce competition in China, the Group conducted a thorough review and assessment of business, including its projected earnings. Consequently, for the above mentioned manufacturing facility, the Group wrote down the carrying amount of fixed assets associated with the carbon products business to their recoverable value and recognized the reduction of 194 million yen as other expenses. In addition, the Group applies value in use for recoverable value, which is calculated as 768 million yen after discounting future cash flows of 13%.

2) Specialty Plastics segment
For idle assets, due to change in market conditions, they are no longer expected to be used in the future. Consequently, the Group wrote down the carrying amount of above mentioned fixed assets to their recoverable value and recognized the reduction of 552 million yen as other expenses. In addition, the Group applies value in use for recoverable value, which is calculated as zero.

14. Investments accounted for using the equity method

(1) The aggregate carrying amounts of the Group's interests in individually immaterial affiliates and joint ventures are as follows:

	Millions of yen	
	FY2017 (As of March 31,2018)	FY2016 (As of March 31,2017)
Joint ventures	**¥9,130**	¥8,124
Affiliates	**2,960**	2,590

(2) The aggregate amounts of profit for the year, other comprehensive income and comprehensive income of individually immaterial affiliates and joint venture that are adjusted to reflect the portion of ownership interests are as follows:

Joint ventures

	Millions of yen	
	FY2017 (From April 1, 2017 to March 31, 2018)	FY2016 (From April 1, 2016 to March 31, 2017)
Profit for the year	**¥1,963**	¥1,357
Other comprehensive income	**—**	(10)
Comprehensive income	**1,963**	1,347

Affiliates

	Millions of yen	
	FY2017 (From April 1, 2017 to March 31, 2018)	FY2016 (From April 1, 2016 to March 31, 2017)
Profit for the year	**¥267**	¥ 261
Other comprehensive income	**—**	(189)
Comprehensive income	**267**	72

15. Income taxes

(1) Breakdown of deferred tax assets and deferred tax liabilities

The breakdown of deferred tax assets and deferred tax liabilities by major cause and the details of changes are as follows:

FY2016 (From April 1, 2016 To March 31, 2017)

	Millions of yen			
	As of April 1, 2016	Amount recognized in profit or loss	Amount recognized in other comprehensive income	As of March 31, 2017
Deferred tax assets				
Tax loss carryforwards	¥ 6,273	¥(492)	¥ —	¥ 5,781
Provisions	1,863	(70)	—	1,793
Unrealized gain on fixed assets	1,711	26	—	1,737
Loss on valuation of inventories	506	297	—	804
Impairment loss	1,037	115	—	1,153
Amount in excess of allowed depreciation limit	562	45	—	607
Other	2,254	504	(20)	2,739
Subtotal	14,210	427	(20)	14,617
Deferred tax liabilities				
Financial assets measured at fair value through other comprehensive income	(3,258)	—	(928)	(4,187)
Accelerated depreciation and amortization of foreign operations	(6,368)	(233)	—	(6,601)
Deemed cost	(2,200)	—	—	(2,200)
Net defined benefit assets	(885)	(300)	(65)	(1,252)
Other	(676)	156	—	(519)
Subtotal	(13,389)	(377)	(994)	(14,760)
Net amount	¥ 821	¥ 50	¥(1,014)	¥ (142)

Note: A difference between the amount recognized in profit or loss and total deferred tax expenses is due to exchange rate fluctuations.

FY2017 (From April 1, 2017 To March 31, 2018)

	Millions of yen			
	As of April 1, 2017	Amount recognized in profit or loss	Amount recognized in other comprehensive income	As of March 31, 2018
Deferred tax assets				
Tax loss carryforwards	¥ 5,781	¥(2,612)	¥ —	**¥ 3,169**
Provisions	1,793	91	—	**1,885**
Unrealized gain on fixed assets	1,737	(5)	—	**1,732**
Loss on valuation of inventories	804	529	—	**1,334**
Impairment loss	1,153	24	—	**1,177**
Amount in excess of allowed depreciation limit	607	(32)	—	**574**
Other	2,739	(469)	(22)	**2,246**
Subtotal	14,617	(2,474)	(22)	**12,120**
Deferred tax liabilities				
Financial assets measured at fair value through other comprehensive income	(4,187)	—	(1,656)	**(5,843)**
Accelerated depreciation and amortization of foreign operations	(6,601)	3,137	—	**(3,464)**
Deemed cost	(2,200)	—	—	**(2,200)**
Net defined benefit assets	(1,252)	(228)	(58)	**(1,538)**
Other	(519)	(20)	—	**(539)**
Subtotal	(14,760)	2,889	(1,714)	**(13,585)**
Net amount	¥ (142)	¥ 415	¥(1,737)	**¥ (1,465)**

Note: A difference between the amount recognized in profit or loss and total deferred tax expenses is due to exchange rate fluctuations.

(2) Deductible temporary differences, etc. for which deferred tax assets are not recognized

Deductible temporary differences and tax loss carryforwards for which deferred tax assets were not recognized are as follows:

	Millions of yen	
	FY2017 (As of March 31, 2018)	FY2016 (As of March 31, 2017)
Deductible temporary differences	**¥ 7,156**	¥6,875
Tax loss carryforwards	**3,731**	3,008
Total	**¥10,887**	¥9,884

Note: The breakdown by expiry date of tax loss carryforwards for which deferred tax assets were not recognized is as follows:

	Millions of yen	
	FY2017 (As of March 31, 2018)	FY2016 (As of March 31, 2017)
Due in one year or less	**¥ 448**	¥ 706
Due after one year through five years	**3,282**	2,301
Total	**¥3,731**	¥3,008

(3) Temporary differences arising from investments in subsidiaries for which deferred tax liabilities were not recognized

Not applicable.

(4) Income tax expense

The breakdown of income tax expense is as follows:

	Millions of yen	
	FY2017 (From April 1, 2017 to March 31, 2018)	FY2016 (From April 1, 2016 to March 31, 2017)
Current tax expense	**¥3,278**	¥1,921
Deferred tax expense	**(409)**	(47)
Total	**¥2,869**	¥1,874

(5) Reconciliation of statutory effective tax rate and actual tax rate

The reconciliation of the statutory effective tax rate and actual tax rate is as follows.

The actual tax rate represents the ratio of income tax expense to profit before tax.

	FY2017 (From April 1, 2017 to March 31, 2018)	FY2016 (From April 1, 2016 to March 31, 2017)
Statutory effective tax rate	**30.69%**	30.69%
Permanently non-deductible items such as entertainment expenses	**0.83%**	1.14%
Permanently non-taxable items such as dividend income	**(0.68)%**	(0.37)%
Tax credit on research expense	**(6.03)%**	(6.71)%
Effect of unrecognized tax loss carryforwards or temporary differences	**0.47%**	(8.22)%
Adjustment of ending balance of deferred tax assets due to changes in tax rates	**(0.54)%**	0.13%
Other	**(2.12)%**	4.21%
Actual tax rate	**22.62%**	20.87%

Note: The Group is subject mainly to income tax, inhabitant tax and enterprise tax, based on which the statutory effective tax rate above is calculated. The Group's foreign operations are subject to income and other taxes at their respective locations.

(6) Adjustment of the amounts of deferred tax assets and deferred tax liabilities due to change income tax rates

In accordance with the tax reform legislation approved on December 22, 2017 in the United States, the U.S. federal corporate income tax rate applied to consolidated subsidiaries in the United States was lowered from 35 percent to 21 percent.

The impact of this change on the tax rate is immaterial.

16. Assets pledged as collateral and secured obligations

Assets pledged as collateral and obligations with pledged assets are as follows:

(1) Assets pledged as collateral

	Millions of yen	
	FY2017 (As of March 31, 2018)	FY2016 (As of March 31, 2017)
Property, plant and equipment	**¥38,842**	¥42,183
Other financial assets	**322**	947
Total	**¥39,164**	¥43,130

(2) Obligations with pledged assets

	Millions of yen	
	FY2017 (As of March 31, 2018)	FY2016 (As of March 31, 2017)
Trade and other payables	¥ 865	¥ 785
Loans payable	480	582
Other financial liabilities	278	295
Total	1,624	1,663
Current liabilities	1,007	927
Non-current liabilities	¥ 617	¥ 736

17. Trade and other payables

The breakdown of trade and other payables is as follows:

	Millions of yen	
	FY2017 (As of March 31, 2018)	FY2016 (As of March 31, 2017)
Trade notes and accounts payable	¥16,013	¥15,014
Other	5,517	5,355
Total	¥21,530	¥20,369

18. Provisions

The breakdown of provisions and the details of changes are as follows:

	Millions of yen		
	Provision for employee benefits (Note)	Other	Total
Balance as of April 1, 2016	¥ 5,643	¥ 682	¥ 6,325
Increases during the period	4,019	297	4,316
Decreases during the period (provisions used)	(4,088)	(414)	(4,503)
Decreases during the period (provisions reversed)	—	(1)	(1)
Exchange rate differences	(9)	—	(9)
Balance as of March 31, 2017	5,564	563	6,128
Increases during the period	4,216	698	4,914
Decreases during the period (provisions used)	(4,049)	(391)	(4,440)
Decreases during the period (provisions reversed)	—	—	—
Exchange rate differences	8	—	8
Balance as of March 31, 2018	¥ 5,740	¥ 870	¥ 6,610

	Millions of yen	
	FY2017 (As of March 31, 2018)	FY2016 (As of March 31, 2017)
Current liabilities	¥5,947	¥5,742
Non-current liabilities	663	386
Total	¥6,610	¥6,128

Note: Provision for employee benefits represent an estimated amount of expenditures for costs associated mainly with unused paid leaves and bonuses. The expected timing of any resulting outflows of economic benefits is mostly within one year from the end of each fiscal year.

19. Employee benefits

The Company and certain consolidated subsidiaries have adopted the funded and unfunded defined benefit plans and defined contribution plans to provide for retirement benefits to the employees.

(1) Defined benefit plan

The defined benefit plans adopted by the Group mainly consists of defined benefit corporate pension plans and lump-sum retirement benefit plans.

The Group's defined benefit corporate pension plan is a contract-type corporate pension plan managed under a cash balance plan. Under the plan, each participant is given a hypothetical individual account to record their funded amount which will be the source of pension payment. Interest credit based on the market interest rate trends and contribution credit based primarily on a level of compensation are the two main items accumulated in the hypothetical individual account. Certain consolidated subsidiaries make lump-sum or pension payments based on the amount of salary and the lengths of service.

Under the contract-type corporate pension plan, plan assets management is entrusted to asset management institutions in accordance with the defined benefit corporate pension regulations agreed between labor and management. In addition, the Group abides by the rules provided under the Defined-Benefit Corporate Pension Law that requires recalculation of the amount of contribution at least every five years to maintain the plan's funded status into the future.

Under the lump-sum retirement benefit plan, lump-sum payment is made based on the amount of salary and the lengths of service.

(2) Amounts related to defined benefit plans reported in the consolidated financial statements

1) Amounts recognized in the consolidated statements of financial position

The amounts recognized in the consolidated statements of financial position are as follows:

	Millions of yen	
	FY2017 (As of March 31, 2018)	FY2016 (As of March 31, 2017)
Present value of defined benefit obligations under funded plans (with plan assets)	**¥ 22,138**	¥ 21,999
Fair value of plan assets	**(26,956)**	(25,696)
Funded status	**(4,818)**	(3,697)
Present value of defined benefit obligations under unfunded plans (without plan assets)	**261**	251
Net amount of liability and asset recognized in the consolidated statements of financial position	**(4,557)**	(3,446)
Net defined benefit liability	**380**	382
Net defined benefit asset	**¥ 4,937**	¥ 3,829

Note: Net defined benefit asset is recorded under "Other non-current assets" in the consolidated statement of financial position.

2) Amounts recognized in the consolidated statements of profit or loss

The amounts of defined benefit cost recognized in the consolidated statements of profit or loss are as follows:

	Millions of yen	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Service cost	**¥1,162**	¥1,182
Net interest	**(23)**	(4)
Total defined benefit cost	**¥1,138**	¥1,178

Note: Defined benefit cost is recorded under "Cost of sales" and "Selling, general and administrative expenses" in the consolidated statements of profit or loss.

3) Changes in the present value of defined benefit obligations
Changes in the present value of defined benefit obligations are as follows:

	Millions of yen	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Present value of defined benefit obligations (beginning of the year)	**¥22,250**	¥22,613
Service cost	**1,162**	1,182
Interest cost	**136**	118
Benefits paid	**(1,555)**	(1,552)
Remeasurements	**388**	(86)
(i) Actuarial differences arising from changes in demographical assumptions	**(66)**	—
(ii) Actuarial differences arising from changes in financial assumptions	**150**	(200)
(iii) Other adjustments to actual results	**303**	114
Exchange rate differences	**17**	(25)
Present value of defined benefit obligations (end of the year) (Note)	**¥22,399**	¥22,250

Note: The weighted average duration of defined benefit obligations for the FY2016 and FY2017 were 10.3 years and 9.9 years, respectively.

4) Fair value of plan assets
The Group's investment policy is designed to ensure the total return in a long term to fund for the stable payments of pension benefits and lump-sum payments into the future.

Accordingly, taking into account the maturity and financial position of the Group by giving consideration to expected rate of return from fundamental investment assets, standard deviation of the rate of return, and the correlation coefficient of these rates, the Group formulates a strategic asset mix ratio from a mid-to-long term standpoint, which is considered as an optimal portfolio on a long-term basis. The Group reviews the investment policy as necessary and provides comprehensive management over its assets and liabilities.

The Group manages risks appropriately through diversified asset management by investing in multiple asset classes and funds that have different risk and return characteristics, thereby balancing the risk exposure.

Changes in fair value of plan assets are as follows:

	Millions of yen	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Fair value of plan assets (beginning of the year)	**¥25,696**	¥24,611
Interest income	**160**	122
Return on plan assets	**658**	189
Contributions by the employer (Note)	**1,947**	2,254
Benefits paid	**(1,516)**	(1,461)
Exchange rate differences	**9**	(19)
Fair value of plan assets (end of the year)	**¥26,956**	¥25,696

Note: Expected contribution for the year ending March 31, 2019 is 1,657 million yen.

5) The breakdown of the fair value of plan assets
The breakdown of the fair value of plan assets are as follows:

	Millions of yen			
	FY2017 (As of March 31, 2018)		FY2016 (As of March 31, 2017)	
	Quoted market price in an active market		Quoted market price in an active market	
	Available	Not available	Available	Not available
Bonds	¥13,541	¥ —	¥15,908	¥ —
Stocks	7,627	—	4,932	—
General accounts of life insurance companies	—	4,414	—	4,344
Other	—	1,373	—	511
Total	¥21,168	¥5,787	¥20,840	¥4,855

6) Major assumptions used for actuarial calculations
Major assumptions used for actuarial calculations are as follows:

	FY2017 (As of March 31, 2018)	FY2016 (As of March 31, 2017)
Discount rate (weighted average)	0.5%	0.6%

7) Sensitivity analysis
Effects on defined benefit obligations due to changes in actuarial assumptions are as follows:
Sensitivity analysis is performed by applying the same method used to calculate defined benefit obligations recognized in the consolidated statements of financial position, based on the change in assumption that can be reasonably estimated at the end of the reporting period. Under the analysis, all other variables are assumed to remain constant.

	Millions of yen	
	FY2017 (As of March 31, 2018)	FY2016 (As of March 31, 2017)
0.5% increase in discount rate	¥(1,076)	¥(1,114)
0.5% decrease in discount rate	1,076	1,114

(3) Defined contribution plan
Amounts of contribution to the defined contribution plan recognized as expenses for FY2016 and FY2017 were 2,025 million yen and 2,005 million yen, respectively. The amounts are recorded under “Cost of sales” and “Selling, general and administrative expenses” in the consolidated statements of profit or loss.

(4) Employee benefit expenses
Total employee benefit expenses excluding the above items for FY2016 and FY2017 were 29,200 million yen and 29,476 million yen, respectively. The amounts are recorded under “Cost of sales” and “Selling, general and administrative expenses” in the consolidated statements of profit or loss.

20. Share-based payments

(1) Details of share-based payment plan

The Company has a stock option plan that grants rights to its directors (excluding outside directors) to purchase the Company's shares. The plan is accounted for as an equity-settled share-based payment plan.

The Company's stock option plan outstanding in FY2016 and FY2017 are as follows:

Date of resolution	June 25, 2009	June 25, 2010	June 24, 2011	June 26, 2012	June 25, 2013
Number of shares granted (shares)	5,550	5,530	5,660	7,650	5,670
Grant date	July 22, 2009	July 21, 2010	July 20, 2011	July 18, 2012	July 17, 2013
Fair value at grant date (yen)	4,870	4,060	3,600	2,780	2,890
Vesting condition (Note)	Continued service from June 25, 2009 to June 24, 2010	Continued service from June 25, 2010 to June 24, 2011	Continued service from June 24, 2011 to June 23, 2012	Continued service from June 26, 2012 to June 25, 2013	Continued service from June 25, 2013 to June 24, 2014
Expiry date	July 21, 2039	July 20, 2040	July 19, 2041	July 17, 2042	July 16, 2043
Shares outstanding as of the end of FY2016	1,060	1,160	1,320	2,140	3,060
Shares outstanding as of the end of FY2017	530	580	660	1,300	1,810

Date of resolution	June 25, 2014	June 24, 2015	June 24, 2016	June 27, 2017	Total
Number of shares granted (shares)	3,390	3,410	4,050	2,120	43,030
Grant date	July 16, 2014	July 22, 2015	July 20, 2016	July 19, 2017	—
Fair value at grant date (Yen)	5,060	4,260	3,680	5,299	—
Vesting condition (Note)	Continued service from June 25, 2014 to June 24, 2015	Continued service from June 24, 2015 to June 23, 2016	Continued service from June 24, 2016 to June 23, 2017	Continued service from June 27, 2017 to June 26, 2018	—
Expiry date	July 15, 2044	July 21, 2045	July 19, 2046	July 18, 2047	—
Shares outstanding as of the end of FY2016	1,870	3,410	4,050	—	18,070
Shares outstanding as of the end of FY2017	1,140	2,570	3,050	2,120	13,760

Note: If a director retires during the vesting period, exercisable stock acquisition rights will decrease in accordance with the director's service period.

(2) Number of outstanding stock options and weighted average exercise price

	FY2017 (From April 1, 2017 To March 31, 2018)		FY2016 (From April 1, 2016 To March 31, 2017)	
	Number of options (shares)	Weighted average exercise price (yen)	Number of options (shares)	Weighted average exercise price (yen)
Outstanding at the beginning of the year	**18,070**	**1**	14,020	1
Granted	**2,120**	**1**	4,050	1
Exercised	**(6,430)**	**1**	—	—
Outstanding at the end of the year	**13,760**	**1**	18,070	1
Exercisable at the end of the year	**—**	**—**	—	—

Notes: 1. For stock options exercised during the period, the weighted average share price as of the exercise date was 5,500 yen for FY2017.

2. Weighted average fair value of stock options outstanding at the end of FY2016 and FY2017 were 3,780 yen and 4,021 yen, respectively. Weighted average contractual life remaining for FY2016 and FY2017 were 26.4 years and 26.2 years, respectively.

(3) Expenses in relation to stock options are as follows:

	Millions of yen	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Selling, general and administrative expenses	**¥12**	¥14

(4) Fair value of stock options granted were calculated as follows:

	FY2017 (As of March 31, 2018)	FY2016 (As of March 31, 2017)
Expected volatility (Note 1)	**27.2%**	29.0%
Expected remaining life (Note 2)	**3.0 years**	3.0 years
Expected dividend (Note 3)	**110 yen/share**	110 yen/share
Risk-free rate (Note 4)	**(0.09)%**	(0.33)%

Notes: 1. Expected volatility for FY2016 and FY2017 are calculated using the actual share price over a period of three years (from July 2013 to July 2016) and three years (from July 2014 to July 2017), respectively.
2. Expected retirement date used in the computation is estimated based on the average service period.
3. Expected dividend for FY2016 and FY2017 are calculated based on the actual annual dividend amounts for the year ended March 2016 and March 2017, respectively.
4. Risk-free rates are calculated by linear interpolation between spot rates of separated principal component of Japanese Government Bonds with a maturity corresponding to the expected remaining life.

21. Paid-in capital and other equity items

(1) Numbers of authorized shares and issued (and fully paid) shares

Changes in the numbers of authorized shares and issued shares are as follows:

	Shares	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Number of authorized shares		
Common stock	**60,000,000**	60,000,000
Number of issued shares		
Balance as of the beginning of the year	**18,168,390**	181,683,909
Increases during the year (Note 2)	**2,637,017**	—
Decreases during the year (Note 3)	**—**	163,515,519
Balance as of the end of the year	**20,805,407**	18,168,390

Notes: 1. All of the shares issued by the Company are shares of common stock with no par value and no limits to any rights of the shareholders.
2. Increases during the current fiscal year were due to the exercise of stock acquisition rights of convertible bond-type bonds with stock acquisition rights.
3. Decreases during the current fiscal year were due to the share consolidation.

(2) Treasury stock

Changes in treasury stock are as follows:

	Shares	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Balance as of the beginning of the year	**983,280**	9,819,315
Increases during the year (Note 1)	**1,068**	4,000
Decreases during the year (Note 2)	**833,608**	8,840,035
Balance as of the end of the year	**150,740**	983,280

Notes: 1. Increases during the year were due to the purchase of shares less than one trading unit and the purchase of fractional shares less than one share that resulted from the share consolidation. The Company conducted a ten-to-one share consolidation on October 1, 2016, and the major components of the 4,000 shares of the Company's stock acquired during FY2016 are as follows: 2,938 shares resulting from the purchase of shares less than one trading unit before the share consolidation, 890 shares resulting from the purchase of shares less than one trading unit after the share consolidation, and 172 shares resulting from the purchase of fractional shares less than one share due to the share consolidation.
2. Decreases during FY2016 were due to the share consolidation and sale of shares less than one trading unit. Decreases during FY2017 were due to the exercise of stock acquisition rights of convertible bond-type bonds with stock acquisition rights and the exercise of stock option, etc.

(3) Capital surplus and retained earnings

(a) Capital surplus

Under the Companies Act, 50% or more of the total amount paid in or contributed upon share issue must be recorded as share capital while the remaining amount must be recorded as legal capital surplus, which is a component of capital surplus. The amount of legal capital surplus may be transferred to share capital by a resolution of a general meeting of shareholders.

(b) Retained earnings

Under the Companies Act, 10% of the amount of surplus that decreased due to distribution of surplus must be accumulated as legal capital surplus or legal retained earnings until the aggregate amount of legal capital surplus and legal retained earnings equals 25% of the capital stock. The amount reserved in legal retained earnings may be appropriated to compensate accumulated deficit. It may also be reversed by a resolution of a shareholders' meeting.

(4) Other components of equity

(a) Stock acquisition rights

This amount represents the increase in equity arising from the reception or acquisition of goods or services pertaining to equity-settled share-based payment plan.

(b) Exchange differences on translating foreign operations

This amount represents exchange differences arising from translating the financial statements of foreign operations to Japanese yen, which is the presentation currency of the Group.

(c) Financial assets measured at fair value through other comprehensive income

The amount represents the difference between the cost and the year-end fair value of equity instruments measured at fair value through other comprehensive income.

22. Dividends

(1) Amounts of dividends paid

FY2016 (From April 1, 2016 To March 31, 2017)

Resolution	Class of shares	Total amount of dividends (Millions of yen)	Dividend per share (Yen)	Record date	Effective date
Board of Directors' meeting held on April 19, 2016	Common stock	**¥945**	**¥5.50**	March 31, 2016	June 2, 2016
Board of Directors' meeting held on October 18, 2016	Common stock	**945**	**5.50**	September 30, 2016	December 2, 2016

Note: The Company conducted a ten-to-one share consolidation on October 1, 2016. Dividend per share shown above represents the amount before the share consolidation.

FY2017 (From April 1, 2017 To March 31, 2018)

Resolution	Class of shares	Total amount of dividends (Millions of yen)	Dividend per share (Yen)	Record date	Effective date
Board of Directors' meeting held on April 18, 2017	Common stock	**¥ 945**	**¥55.00**	March 31, 2017	June 2, 2017
Board of Directors' meeting held on October 24, 2017	Common stock	**1,088**	**55.00**	September 30, 2017	December 4, 2017

(2) Dividends whose record date is in the current fiscal year but whose effective date is in the following fiscal year

FY2016 (From April 1, 2016 To March 31, 2017)

Resolution	Class of shares	Source of dividends	Total amount of dividends (Millions of yen)	Dividend per share (Yen)	Record date	Effective date
Board of Directors' meeting held on April 18, 2017	Common stock	Retained earnings	**¥945**	**¥55.00**	March 31, 2017	June 2, 2017

FY2017 (From April 1, 2017 To March 31, 2018)

Resolution	Class of shares	Source of dividends	Total amount of dividends (Millions of yen)	Dividend per share (Yen)	Record date	Effective date
Board of Directors' meeting held on April 17, 2018	Common stock	Retained earnings	**¥1,445**	**¥70.00**	March 31, 2018	June 4, 2018

23. Financial instruments

(1) Capital management

In order to maintain proper capital adequacy ratio and to maximize shareholder's value, the Group determines an appropriate amount of dividends, acquires its own shares, grants stock acquisition rights and raises funds through debt capital and equity capital.

The followings are the key indicators employed by the Group in managing the Group's capital.

The Group is not subject to any significant externally imposed capital requirements (except for general requirements such as those required by the Companies Act and other laws and regulations).

	Millions of yen	
	FY2017 (As of March 31, 2018)	FY2016 (As of March 31, 2017)
Interest-bearing debt	**¥ 48,089**	¥ 71,007
Less: Cash and cash equivalents	**(6,475)**	(6,222)
Net interest-bearing debt	**41,613**	64,785
Equity capital	**150,193**	124,297
Equity-to-asset ratio (Equity ratio)	**62.0%**	52.9%

Note: Equity capital presented above represents total equity attributable to owners of the parent.
Equity-to-asset ratio (Equity ratio) = Equity capital / Total liabilities and equity

(2) Basic policies on financial instruments

The Group uses financial instruments, mainly bank loans and bonds for the purpose of raising its necessary fund based on its capital expenditure plan. Cash surpluses, if any, are invested only in short-term deposits, etc. Working capital for short-term ongoing operations is procured from short-term bank loans. Derivatives are used, not for speculative purposes, but to manage exposure to financial risks as described below.

(3) Description of financial instruments and associated risk

Receivables such as trade notes and trade accounts are exposed to customer credit risk. Although receivables in foreign currencies are exposed to the market risk of fluctuation in foreign currency exchange rates, the position, net of payables in foreign currencies, is hedged principally by using forward foreign currency contracts. Other financial assets such as investments securities are equity instruments of customers and suppliers of the Group, and are exposed to the risk of market price fluctuations. The Group also provides long-term loans to the employees.

Payment terms of payables, such as trade notes and trade accounts, are less than one year. Although payables in foreign currencies, partly accompanied by the import of materials, are exposed to the market risk of fluctuation in foreign currency exchange rates, the position, net of payables in foreign currencies, is hedged principally by using forward foreign currency contracts.

Loans payable, bonds payable and lease obligations related to finance lease are mainly used to procure necessary funds for capital expenditure, most of which carry fixed interest rates.

Derivatives mainly include forward foreign currency contracts which are used to manage exposure to risks from fluctuations in foreign currency exchange rates of trade receivables and payables denominated in foreign currencies.

(4) Risk management structure related to financial instruments and quantitative information on risk

a. Credit risk

1) Management of risk pertaining to counterparty default

Credit risk is the risk of economic loss arising from counterparty's failure to repay or service debt according to the contractual terms. The Group manages its credit risk from receivables on the basis of internal guidelines, which include setting up an individual credit limit and monitoring of payment terms and balances of major customers by each business administration department to identify the default risk of customers at an early stage. A credit limit is changed, if necessary, based on a periodic monitoring of customers' financial positions. The Group mitigates the risk of receivable collection due to deteriorating financial position by utilizing such facilities as credit insurance or factoring.

In using derivatives, the Group chooses highly creditworthy financial institutions to avoid counterparty risk.

The same method of risk control is applicable to consolidated subsidiaries.

2) Quantitative information on credit risk

i) Maximum exposure to credit risk

Maximum exposure to the credit risk is the sum of the carrying amounts of financial assets, net of impairment losses presented in the consolidated statements of financial position, and the balance of guarantee obligations.

ii) Credit risk exposure of the Group pertaining to trade and other receivables

The credit risk exposure of the Group pertaining to trade and other receivables are as follows:

FY2016 (As of March 31, 2017)

		(Millions of yen)			
		Financial assets for which the allowance for doubtful accounts is measured at an amount equal to lifetime expected credit loss			
Days in arrears	Financial assets for which the allowance for doubtful accounts is measured at an amount equal to 12-month expected credit loss	Financial assets for which credit risk increased significantly after initial recognition	Financial asset for which the allowance for doubtful accounts is always measured at an amount equal to a lifetime expected credit loss	Credit-impaired financial assets	Total
Current	¥2,708	¥—	¥27,789	¥ 35	¥30,533
Within 30 days	1	—	319	—	321
Between 31 to 60 days	0	—	50	—	50
Between 61 to 90 days	0	—	26	—	26
Over 90 days	11	—	188	76	275
Total	¥2,721	¥—	¥28,374	¥111	¥31,208

FY2017 (As of March 31, 2018)

(Millions of yen)					
		Financial assets for which the allowance for doubtful accounts is measured at an amount equal to lifetime expected credit loss			
Days in arrears	Financial assets for which the allowance for doubtful accounts is measured at an amount equal to 12-month expected credit loss	Financial assets for which credit risk increased significantly after initial recognition	Financial asset for which the allowance for doubtful accounts is always measured at an amount equal to a lifetime expected credit loss	Credit-impaired financial assets	Total
Current	**¥2,177**	**¥—**	**¥31,186**	**¥30**	**¥33,393**
Within 30 days	**0**	**—**	**535**	**—**	**535**
Between 31 to 60 days	**—**	**—**	**56**	**—**	**56**
Between 61 to 90 days	**—**	**—**	**10**	**—**	**10**
Over 90 days	**—**	**—**	**117**	**62**	**180**
Total	**¥2,177**	**¥—**	**¥31,907**	**¥93**	**¥34,177**

iii) Analysis of changes in allowance for doubtful accounts
The Group reviews the recoverability of trade receivables depending on the credit conditions of counterparties and records allowance for doubtful accounts accordingly. Changes in allowance for doubtful accounts are as follows:

FY2016 (From April 1, 2016 To March 31, 2017)

(Millions of yen)					
		Lifetime expected credit loss			
	12-month expected credit loss	Financial assets for which credit risk increased significantly after initial recognition	Financial asset for which the allowance for doubtful accounts is always measured at an amount equal to a lifetime expected credit loss	Credit-impaired financial assets	Total
Beginning balance	¥—	¥—	¥ 211	¥104	¥ 316
Increases during the year (allowances made)	—	—	172	3	175
Decreases during the year (allowances used)	—	—	—	(0)	(0)
Decreases during the year (allowances reversed)	—	—	(201)	(13)	(214)
Exchange differences	—	—	(9)	0	(9)
Ending balance	¥—	¥—	¥ 173	¥ 94	¥ 267

FY2017 (From April 1, 2017 To March 31, 2018)

(Millions of yen)

	12-month expected credit loss	Lifetime expected credit loss: Financial assets for which credit risk increased significantly after initial recognition	Lifetime expected credit loss: Financial asset for which the allowance for doubtful accounts is always measured at an amount equal to a lifetime expected credit loss	Credit-impaired financial assets	Total
Beginning balance	**¥—**	**¥—**	**¥ 173**	**¥ 94**	**¥ 267**
Increases during the year (allowances made)	**—**	**—**	**159**	**0**	**159**
Decreases during the year (allowances used)	**—**	**—**	**—**	**—**	**—**
Decreases during the year (allowances reversed)	**—**	**—**	**(183)**	**(16)**	**(200)**
Exchange differences	**—**	**—**	**9**	**(0)**	**9**
Ending balance	**¥—**	**¥—**	**¥ 159**	**¥ 77**	**¥ 237**

b. Liquidity risk

1) Management of liquidity risk related to fund procurement

The Group manages its liquidity risk by formulating a monthly cash flow plan and the Company manages it by using commercial paper and commitment line.

2) Quantitative information on liquidity risk

The breakdown of financial liabilities including derivative financial instruments by due date is as follows:

FY2016 (As of March 31, 2017)

(Millions of yen)

	Carrying amount	Contractual cash flows	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
Trade and other payables	¥20,369	¥20,369	¥20,369	¥ —	¥ —	¥ —	¥ —	¥ —
Bonds and loans payable	70,250	70,351	46,758	9,831	10,886	1,952	694	227
Other financial liabilities	2,127	2,127	836	287	181	102	45	673
Derivative liabilities	—	—	—	—	—	—	—	—
Total	¥92,748	¥92,849	¥67,965	¥10,119	¥11,068	¥2,054	¥740	¥901

FY2017 (As of March 31, 2018)

(Millions of yen)

	Carrying amount	Contractual cash flows	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
Trade and other payables	**¥21,530**	**¥21,530**	**¥21,530**	**¥ —**	**¥ —**	**¥ —**	**¥ —**	**¥ —**
Bonds and loans payable	**47,416**	**47,467**	**25,760**	**11,157**	**2,226**	**1,055**	**7,053**	**212**
Other financial liabilities	**1,734**	**1,734**	**533**	**196**	**146**	**123**	**54**	**680**
Derivative liabilities	**66**	**66**	**66**	**—**	**—**	**—**	**—**	**—**
Total	**¥70,748**	**¥70,798**	**¥47,891**	**¥11,353**	**¥2,373**	**¥1,179**	**¥7,108**	**¥892**

c. Market risk

1) Market risk management

The Company and certain consolidated subsidiaries manage market risk resulting from fluctuations in foreign currency exchange rates of foreign currency trade receivables and payables, which are to be identified through management per month and per currency. Such foreign exchange risk is hedged principally by forward foreign currency contracts.
Investment securities are managed by monitoring market values and financial position of issuers on a regular basis.
Basic principles of derivative transactions are based on the internal guidelines which prescribe the authority and the limit for each transaction. The same principles are applicable to the consolidated subsidiaries.

2) Quantitative information on market risk

i) Sensitivity analysis of foreign currency risk

With regard to the foreign-currency-denominated loans payable and receivable held by the Group as of the end of the FY2016 and FY2017, the following sensitivity analysis shows an impact on profit before tax in the consolidated statements of profit or loss of the Group, when the yen depreciates by 1% against the U.S. dollar and Chinese yuan (sensitivity to foreign currency). The analysis is based on the assumption that all other variable factors are held constant.

Item	Millions of yen	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
U.S. dollar	**¥19**	¥24
Chinese yuan	**1**	2

ii) Sensitivity analysis of interest rate risk

With regard to the financial instruments held by the Group as of the end of FY2016 and FY2017, the following sensitivity analysis shows an impact on profit before income taxes in the consolidated statements of profit or loss of the Group, when the interest rate increases by 1% (sensitivity to interest rate). The analysis is based on the assumption that all other variable factors are held constant.

Item	Millions of yen	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Effect on profit before tax	**¥(137)**	¥(149)

iii) Sensitivity analysis of share price fluctuation risk

With regard to the listed shares held by the Group as of the end of FY2016 and FY2017, the following sensitivity analysis shows an impact on other comprehensive income (before taking into account tax benefit) in the consolidated statements of comprehensive income of the Group, when the share price declines by 10% (sensitivity to share price). The analysis is based on the assumption that all other variable factors are held constant.

Item	Millions of yen	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Effect on other comprehensive income	**¥(2,773)**	¥(2,260)

(5) Fair value of financial instruments

1) Carrying amounts and fair values of financial assets and financial liabilities

Carrying amounts and fair values of financial assets and financial liabilities by class held by the Group are as follow:

	Millions of yen			
	FY2017 (As of March 31, 2018)		FY2016 (As of March 31, 2017)	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets				
Financial assets measured at amortized cost				
Other financial assets	¥ 1,276	¥ 1,276	¥ 1,552	¥ 1,553
Financial assets measured at fair value through other comprehensive income				
Other financial assets	29,271	29,271	24,121	24,121
Assets held for sale	—	—	772	772
Financial assets measured at fair value through profit or loss				
Derivative assets	—	—	36	36
Total	30,547	30,547	26,482	26,483
Financial liabilities				
Financial liabilities measured at amortized cost				
Bonds and loans payable	47,416	47,560	70,250	73,114
Other financial liabilities	1,734	1,734	2,127	2,127
Financial liabilities measured at fair value through profit or loss				
Derivative liabilities	66	66	—	—
Total	¥49,217	¥49,361	¥72,378	¥75,241

2) Method of fair value measurement

Fair values of key financial assets and financial liabilities are determined as follows.

i) Cash and cash equivalents, trade and other receivables and trade and other payables

Classified as financial assets measured at amortized cost. The carrying amounts of these accounts approximate fair value because of their short maturities. Therefore, information on fair values is omitted.

ii) Other financial assets and assets held for sale

The fair values of marketable shares are presented based on the price on the stock exchange. The fair values of unlisted shares are determined using reasonable valuation techniques.

The fair values of long-term loans receivable are measured at the present value of the future cash flows discounted by a rate of return, an appropriate rate such as government bond rate added to a credit spread, with respect to each credit risk segment of credit control.

The carrying amount of others approximates fair value because of its short maturities.

iii) Bonds and borrowings

The fair values of bonds are measured based on the market price or the price presented by counterparty financial institutions.

The fair values of borrowings are measured by discounting the principal and interest by an assumed new borrowing rate.

iv) Other financial liabilities

The fair values of lease obligations are measured by discounting them at the prevailing interest rate to be applied for similar lease transactions.

The carrying amount of others approximates fair value because of its short maturities.

v) Derivative transactions

The fair values of forward exchange contracts are measured based on forward exchange rates.

3) Classification of the fair values of financial instruments measured at fair value by hierarchy level
The fair value measurements are categorized into the following three levels in a fair value hierarchy.
Level 1: Quoted prices (unadjusted) in active markets for identical assets and liabilities that the Group can access at the measurement date.
Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
Level 3: Unobservable inputs for the asset or liability.
In the case of several inputs used to measure the fair value, the fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement. Transfers between the levels of fair value hierarchy are recognized assuming that such transfers occurred at the end of each reporting period.

i) Financial assets and liabilities recognized at fair value

FY2016 (As of March 31, 2017)

	Millions of yen			
	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets measured at fair value through other comprehensive income				
Other financial assets	¥22,605	¥—	¥1,516	¥24,121
Assets held for sale	—	—	772	772
Financial assets measured at fair value through profit or loss				
Derivative assets	—	36	—	36
Total	¥22,605	¥36	¥2,288	¥24,930

Note: There were no transfers between different levels of the fair value hierarchy.

FY2017 (As of March 31, 2018)

	Millions of yen			
	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets measured at fair value through other comprehensive income				
Other financial assets	¥27,730	¥—	¥1,540	¥29,271
Total	27,730	—	1,540	29,271
Financial liabilities				
Financial liabilities measured at fair value through profit or loss				
Derivative liabilities	—	66	—	66
Total	¥ —	¥66	¥ —	¥ 66

Note: There were no transfers between different levels of the fair value hierarchy.

ii) Information on fair value measurement categorized in Level 2 and Level 3
Financial assets and financial liabilities categorized in Level 2 arise from derivative transactions. The fair value of these assets and liabilities are measured based on the observable inputs such as the forward exchange rate or the interest rate.
Financial assets categorized in Level 3 are mainly unlisted equity instruments. The fair values of unlisted equity instruments are measured by applying valuation techniques such as market multiple method and net asset value method, in addition to using unobservable inputs including valuation multiples.
The fair values of financial assets categorized in Level 3 on a recurring or non-recurring basis are measured in accordance with the provisions of the Group's accounting policies. In measuring the fair value, the Group uses valuation techniques and inputs that reflect the nature, characteristics and risks of the relevant financial instruments most appropriately. The results of the measurement are reviewed by senior managers.
If each unobservable input used to measure financial instruments categorized in Level 3 is changed to a reasonable alternative assumption, no material changes in the amount of fair values would be assumed.

iii) Changes in financial instruments categorized in Level 3

	Millions of yen	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
	Financial assets measured at fair value through other comprehensive income	Financial assets measured at fair value through other comprehensive income
Beginning balance	**¥2,288**	¥3,571
Gains or losses for the period (Note 1)	**285**	(1,167)
Purchase	**161**	20
Sale	**(775)**	(135)
Transfer (Note 2)	**(421)**	—
Ending balance	**¥1,540**	¥2,288

Notes: 1. The line item "Gains or losses for the period" above is presented in "Financial assets measured at fair value through other comprehensive income" in the consolidated statements of comprehensive income.
2. The line item "Transfer" above is transfer to investments accounted for using the equity method.

iv) Information on financial assets measured at fair value through other comprehensive income
The Group classifies long-term investments held mainly for the purpose of maintaining amicable relationships with its business partners as financial assets measured at fair value through other comprehensive income.

(a) Major items and fair values
The fair values of financial assets measured at fair value through other comprehensive income by item are as follows:

FY2016 (As of March 31, 2017)

	Millions of yen
Item	Fair value
Daiichi Sankyo Company, Limited	¥7,521
Tosoh Corporation	2,554
NOF Corporation	2,153
Taiyo Nippon Sanso Corporation	1,206
Kuraray Co., Ltd.	1,110

FY2017 (As of March 31, 2018)

	Millions of yen
Item	Fair value
Daiichi Sankyo Company, Limited	¥10,578
NOF Corporation	2,865
Tosoh Corporation	2,727
Taiyo Nippon Sanso Corporation	1,493
Kuraray Co., Ltd.	1,190

(b) Dividend income

The breakdown of dividend income on financial assets measured at fair value through other comprehensive income is as follows:

Item	Millions of yen	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Investments held at the end of the year	**¥570**	¥494
Investments derecognized during the year	**5**	33
Total	**¥576**	¥527

(c) Derecognized financial assets measured at fair value through other comprehensive income

The fair values on the date of derecognition and cumulative gains and losses (before taxes) of the financial assets measured at fair value through other comprehensive income that were derecognized during the year are as follows:

Item	Millions of yen	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Fair value	**¥1,466**	¥1,320
Cumulative gains or losses	**(585)**	973

Notes: 1. For the purpose mainly of reviewing the relationship with the customers, the Group disposes the financial assets measured at fair value through other comprehensive income and derecognizes such financial assets.

2. The Group reclassifies to retained earnings cumulative gains or losses arising from changes in the fair values of financial assets measured at fair values through other comprehensive income in either of the following cases: when an asset is derecognized; or when there is a significant decline in the fair value, etc. The amount of cumulative gains or losses (after taxes) in other comprehensive income reclassified to retained earnings for FY2016 and FY2017 were 708 million yen and (725) million yen, respectively.

v) Breakdown of fair values of financial instruments measured at amortized cost by hierarchy level

The breakdown of financial assets and liabilities measured at amortized cost by fair value hierarchy is as follows. The financial assets whose carrying amounts approximate their fair values are not included in the table below.

FY2016 (As of March 31, 2017)

	Millions of yen			
	Level 1	Level 2	Level 3	Total
Financial assets				
Other financial assets	¥—	¥ 1,553	¥—	¥ 1,553
Total	—	1,553	—	1,553
Financial liabilities				
Bonds payable	—	34,706	—	34,706
Loans payable	—	36,407	—	36,407
Commercial papers	—	2,000	—	2,000
Total	¥—	¥73,114	¥—	¥73,114

FY2017 (As of March 31, 2018)

	Millions of yen			
	Level 1	Level 2	Level 3	Total
Financial assets				
Other financial assets	**¥—**	**¥ 1,276**	**¥—**	**¥ 1,276**
Total	**—**	**1,276**	**—**	**1,276**
Financial liabilities				
Bonds payable	**—**	**19,042**	**—**	**19,042**
Loans payable	**—**	**26,518**	**—**	**26,518**
Commercial papers	**—**	**2,000**	**—**	**2,000**
Total	**¥—**	**¥47,560**	**¥—**	**¥47,560**

(6) Derivatives

Derivative transactions to which hedge accounting is not applied

FY2016 (As of March 31, 2017)

	Type	Millions of yen			
		Contract amount	Contract amount due after one year	Fair value	Unrealized gains or losses
Off-market transactions	Forward exchange contracts				
	(Selling)				
	Euro	¥ 301	¥ —	¥ 2	¥ 2
	Chinese yuan	139	24	0	0
	U.S. dollar	1,457	54	4	4
	(Buying)				
	Euro	132	—	(1)	(1)
	Chinese yuan	49	—	(0)	(0)
	Japanese yen	1,884	935	45	45
	U.S. dollar	2,958	7	(14)	(14)
	Total	¥6,923	¥1,021	¥ 36	¥ 36

Notes: 1. The fair values of derivative transactions are calculated using forward exchange rates.
2. Unrealized gains or losses on foreign exchange contracts are presented as the fair values of the contracts.

FY2017 (As of March 31, 2018)

	Type	Millions of yen			
		Contract amount	Contract amount due after one year	Fair value	Unrealized gains or losses
Off-market transactions	Forward exchange contracts				
	(Selling)				
	Euro	**¥ 621**	**¥ —**	**¥ 6**	**¥ 6**
	Chinese yuan	**124**	**24**	**(8)**	**(8)**
	U.S. dollar	**593**	—	**7**	**7**
	(Buying)				
	Euro	**74**	—	**(0)**	**(0)**
	Japanese yen	**971**	**450**	**(55)**	**(55)**
	U.S. dollar	**1,381**	—	**(17)**	**(17)**
	British pound	**65**	—	**0**	**0**
	Total	**¥3,831**	**¥475**	**¥(66)**	**¥(66)**

Notes: 1. The fair values of derivative transactions are calculated using forward exchange rates.
2. Unrealized gains or losses on foreign exchange contracts are presented as the fair values of the contracts.

24. Construction contracts

The amounts due from and to clients for construction contracts at the end of FY2016 and FY2017 are as follows:

	Millions of yen	
	FY2017 (As of March 31, 2018)	FY2016 (As of March 31, 2017)
Amount due from clients based on contracts	**¥ 2,036**	¥ 992
Amount due to clients based on contracts	**—**	—
Cumulative costs incurred and gross profit earned (less gross loss incurred)	**7,084**	4,089
Amount of progress billings	**(5,047)**	(3,097)
Amount due from and to clients	**¥ 2,036**	¥ 992

The balances of advances received from clients before associated services were rendered as of the end of FY2016 and FY2017 were 103 million yen and 320 million yen, respectively. There were no balances withheld by clients at the end of FY2016 and FY2017. Revenue from construction contracts recognized for FY2016 and FY2017 were 15,165 million yen and 19,247 million yen, respectively.

25. Revenue

The Group's revenue is generated primarily from sale of goods. See "6. Segment information" for further details.

26. Other income

The breakdown of "Other income" is as follows:

	Millions of yen	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Gain on government grants (Note)	**¥250**	¥1,014
Compensation income	**60**	22
Other	**198**	361
Total	**¥510**	¥1,398

Note: Gain on government grants for FY2016 mainly consists of 7,780 million yen of proceeds from subsidy for Fukushima Business Investment Subsidy for Revitalization of Industries, net of 6,910 million yen as a direct deduction from the cost of property, plant and equipment acquired using said subsidy. Gain on government grants for FY2017 mainly consists of 230 million yen of proceeds from subsidy for Subsidy for Operating Expenses for Businesses that Promote Regional Reconstruction and Commercialization Development, etc., net of 112 million yen as a direct deduction from the cost of property, plant and equipment acquired using said subsidy.

27. Other expenses

The breakdown of "Other expenses" is as follows:

	Millions of yen	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Loss on retirement and sale of property, plant and equipment, and intangible assets	**¥1,311**	¥ 501
Impairment loss	**746**	—
Provision for environmental measures	**375**	51
Business restructuring costs (Note 1)	**—**	1,194
Loss on business withdrawal (Note 2)	**—**	713
Other	**170**	173
Total	**¥2,602**	¥2,633

Notes: 1. Business restructuring costs for FY2016 include an impairment loss on property, plant and equipment of 1,194 million yen.

2. Loss on business withdrawal for FY2016 includes an impairment loss on property, plant and equipment of 378 million yen.

28. Finance income and finance costs

The breakdown of finance income is as follows:

	Millions of yen	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Interest income	**¥ 17**	¥ 22
Dividend income	**576**	527
Other	**9**	27
Total	**¥603**	¥577

The breakdown of finance costs is as follows:

	Millions of yen	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Interest expenses	**¥468**	¥557
Foreign exchange losses	**397**	279
Other	**27**	15
Total	**¥893**	¥852

29. Profit per share

(1) Basis for determining basic profit per share

	Millions of yen, unless otherwise stated	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Profit attributable to ordinary equity holders of parent:		
Profit attributable to owners of parent	**¥9,697**	¥7,001
Profit not attributable to ordinary equity holders of parent	**—**	—
Profit used for determining basic profit per share	**9,697**	7,001
Weighted average number of common stock during the period (shares)	**19,109,108**	17,185,950
Basic profit per share (yen)	**507.48**	407.38

Note: Since the Group conducted a ten-to-one share consolidation on October 1, 2016, basic profit per share was calculated on the assumption that the share consolidation was conducted at the beginning of FY2016.

(2) Basis for determining diluted profit per share

	Millions of yen, unless otherwise stated	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Profit attributable to ordinary equity holders including dilutive effects:		
Profit used for determining basic profit per share	**¥9,697**	¥7,001
Adjustments on profit	**—**	—
Profit used for determining diluted profit per share	**9,697**	7,001
Weighted average number of common stock during the period (shares):	**19,109,108**	17,185,950
Dilutive effects	**1,559,543**	3,480,568
Weighted average number of common stock including dilutive effects (shares)	**20,668,651**	20,666,518
Diluted profit per share (yen)	**469.18**	338.77

Note: Since the Company conducted a ten-to-one share consolidation on October 1, 2016, basic profit per share was calculated on the assumption that the share consolidation was conducted at the beginning of FY2016.

30. Other comprehensive income

Reclassification adjustment and tax effect for other comprehensive income are as follows:

FY2016 (From April 1, 2016 To March 31, 2017)

	Millions of yen				
	Amount arising during the year	Reclassification adjustment	Amount before tax effect	Tax effect	Amount after tax effect
Items that will not be reclassified to profit or loss:					
Financial assets measured at fair value through other comprehensive income	¥3,006	¥—	¥3,006	¥(1,226)	¥1,780
Remeasurements of defined benefit plans	275	—	275	(85)	190
Total	3,282	—	3,282	(1,311)	1,970
Items that may be reclassified subsequently to profit or loss:					
Exchange differences on translating foreign operations	(698)	—	(698)	—	(698)
Cash flow hedges	1	1	2	(0)	2
Share of other comprehensive income of entities accounted for using equity method	(199)	—	(199)	—	(199)
Total	(896)	1	(895)	(0)	(896)
Total	¥2,385	¥ 1	¥2,386	¥(1,312)	¥1,074

FY2017 (From April 1, 2017 To March 31, 2018)

	Millions of yen				
	Amount arising during the year	Reclassification adjustment	Amount before tax effect	Tax effect	Amount after tax effect
Items that will not be reclassified to profit or loss:					
Financial assets measured at fair value through other comprehensive income	**¥5,652**	**¥—**	**¥5,652**	**¥(1,716)**	**¥3,936**
Remeasurements of defined benefit plans	**269**	**—**	**269**	**(80)**	**189**
Total	**5,922**	**—**	**5,922**	**(1,796)**	**4,126**
Items that may be reclassified subsequently to profit or loss:					
Exchange differences on translating foreign operations	**(778)**	**—**	**(778)**	**—**	**(778)**
Total	**(778)**	**—**	**(778)**	**—**	**(778)**
Total	**¥5,144**	**¥—**	**¥5,144**	**¥(1,796)**	**¥3,348**

31. Cash flow information

The table below presents reconciliations regarding liabilities arising from financing activities.

FY2017 (From April 1, 2017 To March 31, 2018)

	Millions of yen					
			Non-cash transactions			
	As of April 1, 2017	Cash flow	Amortized cost measurement	Exchange rate changes	Conversion to stock	**As of March 31, 2018**
Short-term loans payable and commercial paper	**¥19,974**	¥(4,325)	**¥—**	**¥55**	**¥—**	**¥15,704**
Long-term loans payable	**18,377**	(5,650)	**—**	**36**	**—**	**12,762**
Bonds	**16,965**	1,963	**19**	**—**	**—**	**18,949**
Bonds with stock acquisition rights	**14,933**	—	**29**	**—**	**(14,962)**	**—**
Total	**¥70,250**	¥(8,012)	**¥49**	**¥91**	**¥(14,962)**	**¥47,416**

32. Related party transactions

(1) Related party transactions

There were no related party transactions to be reported (excluding those eliminated in the consolidated financial statements).

(2) Executive compensation

The compensation for the Group's management executives was as follows:

	Millions of yen	
	FY2017 (From April 1, 2017 To March 31, 2018)	FY2016 (From April 1, 2016 To March 31, 2017)
Basic compensation	**¥226**	¥288
Bonus	**37**	30
Share-based compensation	**11**	14
Total	**¥275**	¥332

33. Major subsidiaries

Major subsidiaries of the Group are disclosed in page 80 of our Business Report.

34. Loan commitments

The Company and certain consolidated subsidiaries have entered into overdraft agreements and loan commitment agreements with multiple financial institutions in order to efficiently procure working capital. The balances of undrawn credit facilities pursuant to these agreements are as follows:

	Millions of yen	
	FY2017 (As of March 31, 2018)	FY2016 (As of March 31, 2017)
Aggregate amount of maximum overdraft limit and loan commitment	**¥6,710**	¥7,275
Less: Drawn down balance	**—**	55
Balance of undrawn credit facilities	**¥6,710**	¥7,220

35. Subsequent events

Not applicable.

5) Consolidated supplementary schedules
[Details of bonds]

(Millions of yen)							
Issuer	Type	Issue date	Beginning balance FY2017 (as of Apr. 1, 2017)	Ending balance FY2017 (as of Mar. 31, 2018)	Interest rate (%)	Collateral	Maturity date
Kureha Corporation	The 3rd unsecured bonds	September 16, 2010	¥ 4,997	¥ —	0.95 per annum	None	September 15, 2017
Kureha Corporation	The 4th unsecured bonds	October 20, 2011	4,992	4,998 (4,998)	0.82 per annum	None	October 19, 2018
Kureha Corporation	The 5th unsecured bonds	March 6, 2015	6,976	6,984	0.30 per annum	None	March 6, 2020
Kureha Corporation	The 6th unsecured bonds	September 1, 2017	—	6,967	0.14 per annum	None	September 1, 2022
Kureha Corporation	Zero coupon convertible bonds due 2018 (bonds with stock acquisition rights)	March 14, 2013 (London time)	14,933	—	—	None	March 14, 2018
Total	—	—	¥31,898	18,949 ¥(4,998)	—	—	—

Notes: 1. The amounts shown in parenthesis in "Ending balance" column represent the current portion of bonds payable.
2. The aggregate annual amounts to be redeemed within five years after the end of FY2017 are as follows:

(Millions of yen)				
Within one year	Over one year and within two years	Over two years and within three years	Over three years and within four years	Over four years and within five years
¥5,000	¥7,000	¥—	¥—	¥7,000

[Details of loans payable]

Classifications	(Millions of yen)			
	Beginning balance FY2017 (as of Apr. 1, 2017)	Ending balance FY2017 (as of Mar. 31, 2018)	Average interest rate (%)	Maturity date
Short-term loans payable	¥17,974	¥13,704	1.38	—
Current portion of long-term loans payable	6,784	5,055	0.64	—
Current portion of lease obligations	278	252	0.61	—
Commercial papers (current portion)	2,000	2,000	(0.00)	—
Long-term loans payable (excluding the current portion)	11,592	7,706	0.64	April 2019 to March 2033
Lease obligations (excluding the current portion)	478	420	0.61	April 2019 to July 2027
Total	¥39,108	¥29,140	—	—

Notes: 1. "Average interest rate" is presented as the weighted average interest rate against the loans outstanding at the end of the year.
2. The aggregate annual amounts of long-term loans payable and lease obligations to be repaid within five years after the end of FY2017 are as follows:

	(Millions of yen)			
	Over one year and within two years	Over two years and within three years	Over three years and within four years	Over four years and within five years
Long-term loans payable	¥4,157	¥2,226	¥1,055	¥53
Lease obligations	148	120	98	29

[Details of asset retirement obligations]
The disclosure is omitted because the amounts of asset retirement obligations as of the beginning and end of FY2017 were less than 1% of the total liabilities and equity as of the same dates.

(2) Other information
Quarterly information for FY2017

	(Millions of yen, unless otherwise stated)			
(Cumulative period)	First quarter	Second quarter	Third quarter	FY2017
Revenue	¥32,443	¥69,497	¥110,248	¥147,329
Profit before tax	2,328	7,177	12,562	12,683
Profit attributable to owners of parent	1,601	5,763	9,518	9,697
Basic profit per share (yen)	93.16	325.46	511.90	507.48

				(Yen)
(Each quarter)	First quarter	Second quarter	Third quarter	Fourth quarter
Basic profit per share	¥93.16	¥228.31	¥184.38	¥8.65

Major Subsidiaries and Affiliates

Country	Company Name	Major Business
Japan	**Kureha Trading Co., Ltd.**	Trading of chemical and plastic products
	Resinous Kasei Co., Ltd.	Manufacture/sale of advanced materials
	Kureha Extech Co., Ltd.	Manufacture/sale of plastic film and products
	Kureha Extron Co., Ltd.	Manufacture/sale of plastic products
	Kureha Gohsen Co., Ltd.	Manufacture/sale of plastic fiber and products
	Kurehanishiki Construction Co., Ltd.	Construction
	Kureha Engineering Co., Ltd.	Plant engineering and maintenance
	Kureha Ecology Management Co., Ltd.	Waste treatment and management
	Kureha Special Laboratory Co., Ltd.	Environmental/physiochemical evaluation and analysis
	Kureha Unyu Co., Ltd.	Transportation and storage services
	Kureha Service Co., Ltd.	Real estate, travel and welfare services for Kureha Group
	Kureha Staff Service Co., Ltd.	Recruiting and staffing services
	Kureha-kai Medical Corporation	Hospital operations (Kureha General Hospital)
USA	**Kureha America Inc.**	Holding company and finance
	Kureha America LLC	Sale of advanced products and packaging materials
	Kureha PGA LLC	Manufacture/sale of PGA resins
	Kureha Energy Solutions LLC	Sale of PGA downhole tools
	Fortron Industries LLC*	Manufacture/sale of PPS resins and compounds
Germany	**Kureha GmbH**	Sale of advanced products
Netherlands	**Kureha Europe B.V.**	Holding company and finance
	Krehalon B.V.	Manufacture/sale of food packaging products
Australia	**Krehalon Australia Pty. Ltd.**	Sale of food packaging products
China	**Kureha (China) Investment Co., Ltd.**	Holding company and finance
	Kureha (Shanghai) Carbon Fiber Materials Co., Ltd.	Manufacture/sale of carbon fiber products
	Kureha (Changshu) Fluoropolymers Co., Ltd.	Manufacture/sale of PVDF resins and compounds
	Nantong SKT New Material Co., Ltd.*	Manufacture/sale of PVDC resins and compounds
Vietnam	**Kureha Vietnam Co., Ltd.**	Manufacture/sale of food packaging films

*Affiliates accounted for by equity method

Investor Information

(As of March 31, 2018)

Corporate Data

Corporate Name	Kureha Corporation
Headquarters	3-3-2, Nihonbashi-Hamacho, Chuo-ku, Tokyo 103-8552, Japan Tel: 81-3-3249-4666 Fax: 81-3-3249-4744
Establishment	June 21, 1944
Paid-in Capital	¥18,169 million
Number of Employees	4,374 (Consolidated)
Independent Auditor	Ernst & Young ShinNihon LLC

Stock Information

Number of Shares of Common Stock Issued	20,805,407 shares
Number of Shareholders	11,236
Number of Shares Held by Foreign Shareholders	6,300,136 (30.3% of total)
Stock Exchange Listings	Tokyo Stock Exchange
Transfer Agent	Mizuho Trust & Banking Co., Ltd.

Major Stockholders

Japan Trustee Services Bank, Ltd. (Trust account)
Meiji Yasuda Life Insurance Company
The Master Trust Bank of Japan Ltd. (Trust account)
Japan Trustee Services Bank, Ltd. (9 trust accounts)
Tokio Marine & Nichido Fire Insurance Co., Ltd.
JP MORGAN CHASE BANK 385166 (UK)
J.P. MORGAN BANK LUXEMBOURG S.A. 380578
Mizuho Bank, Ltd.
J.P. MORGAN BANK LUXEMBOURG S.A. 385576
GOVERNMENT OF NORWAY

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