



# A Creator of Unique Value

**KURITA WATER INDUSTRIES LTD.** 

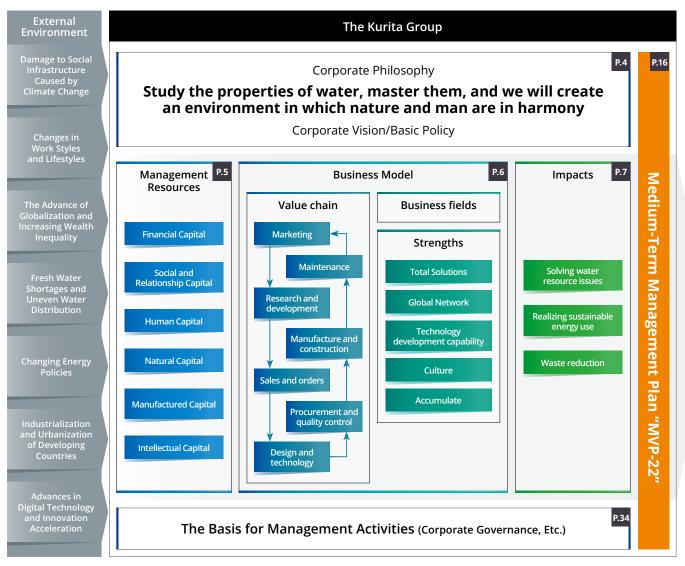
Integrated Report

2019

For the year ended March 31, 2019



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### Disclaimer

This report contains forward-looking statements from Kurita Water Industries Ltd. and its consolidated subsidiaries pertaining to plans, forecasts, strategies, and results. These forward-looking statements are based on currently available information, and actual results may vary significantly from the forward-looking statements contained in this report due to a range of variable factors.

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# A Message to Our Stakeholders

In 1989, marking its 40th anniversary, Kurita Water Industries Ltd. set out its corporate philosophy, "Study the properties of water, master them, and we will create an environment in which nature and man are in harmony." This philosophy expresses the Kurita Group's intention to create shared value with society and customers through its business. Several years after I joined Kurita Water Industries, I was involved in the project for formulating this corporate philosophy. In the process, we held discussions with employees a total of 36 times. We also conducted a questionnaire of all employees, asking them what aspects of the Company they take pride in, as well as its strengths and weaknesses. We also conducted a questionnaire for customers, which illuminated a gap between their awareness and that of our employees. Our corporate philosophy was created by pinpointing the necessary concepts and keywords for closing that gap so that we could share our values with society and our customers. It expresses the purpose of the Kurita Group as a company.

This year, as Kurita Water Industries marks its 70th founding anniversary, we have issued our first integrated report for the Group. At this point, integrated thinking has yet to fully penetrate the Group, but we have called it "Integrated Report" given the importance of reporting on the Group's efforts to realize the corporate philosophy at this time. This report presents the Group's current status and our vision for the Group in the future. By assisting the understanding of people outside the Group, and providing an opportunity for self-reflection to people inside the Group, my hope is that the report will serve as a starting point for discussion with our stakeholders in and outside the Group.

July 2019

michiya Kadota

Michiya Kadota

President and Representative Director

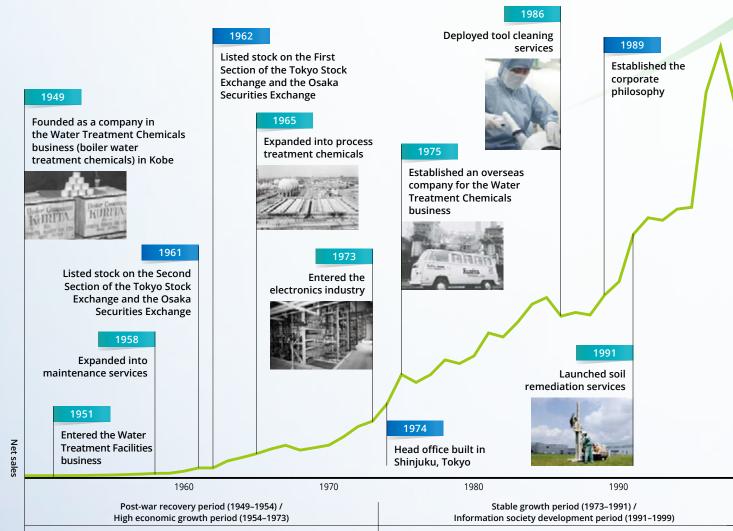


# The Kurita Group's Value Creation

# **History of Value Creation**

Since its establishment, the Kurita Group has provided value to its customers by solving water-related issues in various industries.

In 2018, the Kurita Group adopted as its corporate vision "A Creator of unique value to the solution of water and the environment," for contributing to the realization of a sustainable society and started the medium-term management plan Maximize Value Proposition 2022 (MVP-22), which positions CSR at the core. The Kurita Group will continue working to provide its stakeholders with new value, aiming to realize its corporate philosophy, "Study the properties of water, master them, and we will create an environment in which nature and man are in harmony."



Kurita Establishes the Spirit and Business that Form its Foundation

Kurita's founder developed an innovative business model that combined optimal treatment and effect verification based on data with the experience-based treatment that was the mainstream approach to boiler water treatment in Japan at the time. The principle of "Providing the unique value that only Kurita can create" became the driving force for realizing the model, and it lives on today in the Kurita Group's DNA. As Japan's industry advanced, the Company developed the three functions of water treatment chemicals, water treatment facilities, and maintenance. By supporting the steel, pulp and paper, and petrochemical industries with water treatment solutions, the Company achieved steady growth.

Development as an Environmental Company and Establishing a Position in the Field of Water Treatment for Electronics Industry

As areas all over Japan experienced worsening pollution issues accompanying economic growth, Kurita made its mark as an environmental company by working to solve pollution due to industrial and household wastewater. In the 1980s, Kurita established a firm position as a provider of water treatment solutions for the electronics industry by meeting the industry's growing demand for advanced water treatment with ultrapure water technology. In 1989, marking its 40th anniversary Kurita formulated the current corporate philosophy. It shared its mission of creating shared value with society in the fields of water and environment, and expanded its business to include soil remediation.

2018

Rebuilt the Kurita Group **Philosophy System** Formulated a **New Corporate Vision** 

# 2019

# **Medium-Term Management Plan** "Maximize Value Proposition 2022 (MVP-22)"

(April 1, 2018 - March 31, 2023)

# **Basic Policy:**

Maximize customer intimacy by dismantling preconceived ideas and dramatically raising the quality and speed of our work.

# **Management Targets:**

Net sales Organic growth rate 3% or more

Operating income margin **15**%

Return on equity (ROE) 10% or more

Adoption of management using return on invested capital (ROIC) Aim for improved capital efficiency in each business segment

# **Priority Measures:**

Development of CSV business	Enhancement of total solutions
Rebuilding of manufacturing system for water treatment facilities	Creation of new business and the promotion of innovation
Strengthening the foundation and promotion of research and development	Establishment of the Group governance system



# **Medium-Term Management Plan** "Competitive Kurita 2017 (CK-17)"

(April 1, 2015 - March 31, 2018)

# **Basic Policy:**

We will conduct a radical review of every operation to provide high-added-value for our customers

# **Priority Measures:**

# **Cultivate New Markets**

### Achievements

- Expanded the business in Europe, North America and the Middle East
- Invested in start-ups

# Challenges

- Growth accompanied by improved profitability
- Accelerating the commercialization of new businesses

# Optimize production systems and utilize the Group's network

# Achievements

- Obtained and utilized new production bases through M&A
- Improved productivity in China and South Korea

# Challenges

• Further global optimization of production

# Create competitive products and

# Achievements

 Created DReeM Polymer<sup>™</sup>, S.sensing<sup>™</sup> GW,  $\mathsf{KWSS^{\mathsf{TM}}}, \mathsf{CORR^{\mathsf{TM}}} \ \mathsf{system}$ 

### Challenges

 New business model and development of customer-oriented solutions still a work in progress

# Achievements

 Raised capital efficiency by directing funds to investing in growth and shareholder returns

Improve capital efficiency

# Challenges

 Have not reached the average level for Japanese companies

# 2012

Relocated head office to Nakano, Tokyo

Commenced the ultrapure water supply business in South Korea

Acquired a water treatment chemicals business in Europe



2003

Achieved 100% wastewater reclamation



# Launched ultrapure water supply business



# Acquired water treatment -related companies in the United States

2017 and 2019

2000 2010

# Period of IoT advancement (1999-)

# New Business Model Deployment and Globalization

In 2002, as the electronics industry continued to develop even further with the advance of IT, Kurita developed a new service contract-type business model in the form of the ultrapure water supply business. Subsequently, the Company continued to transform its business model, creating various new services that identified customers' issues from the perspectives of saving water, saving energy, and reducing waste, and provided solutions for them. From 2015, the Company began full-fledged expansion into overseas business through M&A, and is promoting global development of total solutions.

# Kurita Group Philosophy System

The missions that the Kurita Group will fulfill in society into the future, its medium- and long-term visions, and its ways of thinking and values as the foothold for achieving them are stipulated as the Kurita Group Philosophy System.

# **Corporate Philosophy**

# Study the properties of water, master them, and we will create an environment in which nature and man are in harmony

- 1. Kurita Group will contribute to facilitate the coexistence and shared prosperity of the natural environment and human society by creating shared value with society through water.
- 2. Kurita Group will generate new functions and value for water, through further exploration and exploitation of the fundamental properties of water.
- 3. Each individual of Kurita Group will adopt its customers' point of view and solve their water and environmental issues, by making full use of its unique technologies, products and services.
- \* The corporate philosophy was set out in 1989 to mark the 40th founding anniversary of the Company.

# **Corporate Visior**

# "A Creator of unique value to the solution of water and environment," contributing to the realization of a sustainable society.

- Kurita Group will seek to create shared value with society such as environmental preservation and the effective use of resources, and will realize its corporate philosophy, by continuing to innovate and through businesses contributing to the natural environment, industry and people's lives.
- 2. Kurita Group will, as an indispensable partner, create value for customers such as "pursuit of safety," "productivity enhancement" and "reduction of environmental impact."
- 3. Kurita Group will evolve its "service business" and will provide customers, at speed, with comprehensive solutions making full use of Kurita's technologies, products and services in water treatment chemicals, water treatment facilities and maintenance services.

# 3asic Pol

The basic policy encompasses the management direction and aims of the Group and forms the foundation of the Kurita Group Philosophy System.

- 1. Kurita Group Code of Conduct
- 2. Corporate Governance Policies
- 3. Basic Policies for Constructing an Internal Control System
- 4. CSR Policy
- 5. Kurita Group BCM (Business Continuity Management) Policy
- 6. Kurita Group Business Policy\*
- \* The Kurita Group Business Policy is made up of the Kurita Group Human Rights Policy, the Kurita Group Environmental Policy, and others.

# **Core values**

Fairness Transparency Integrity Safety Compatibility

Kurita Group Philosophy System
https://www.kurita.co.jp/english/philosophy\_vision/index.html

# Management Resources (Fiscal year ended March 31, 2019)

**Financial Capital** 

Shareholders' equity

¥233,417 million

+4.9% year on year

Social and Relationship Capital

- Globally expanding sales network, customer base covering a wide range of industries, supply chains, and alliances
- Certifications/Qualifications

**Human Capital** 

Number of employees

Consolidated: 6,613

Parent: 1,549

Training opportunities

**Natural Capital** 

Water intake

4 million m<sup>3</sup>

Energy

4.55 million GJ

Materials and parts

**Manufactured Capital** 

Property, plant and equipment (Net)

¥109,669 million

Global network of manufacturing bases

**Intellectual Capital** 

R&D expenses

R&D personnel
 R&D bases

Number of patents held

¥5,490 million Approx. 180

3 sites

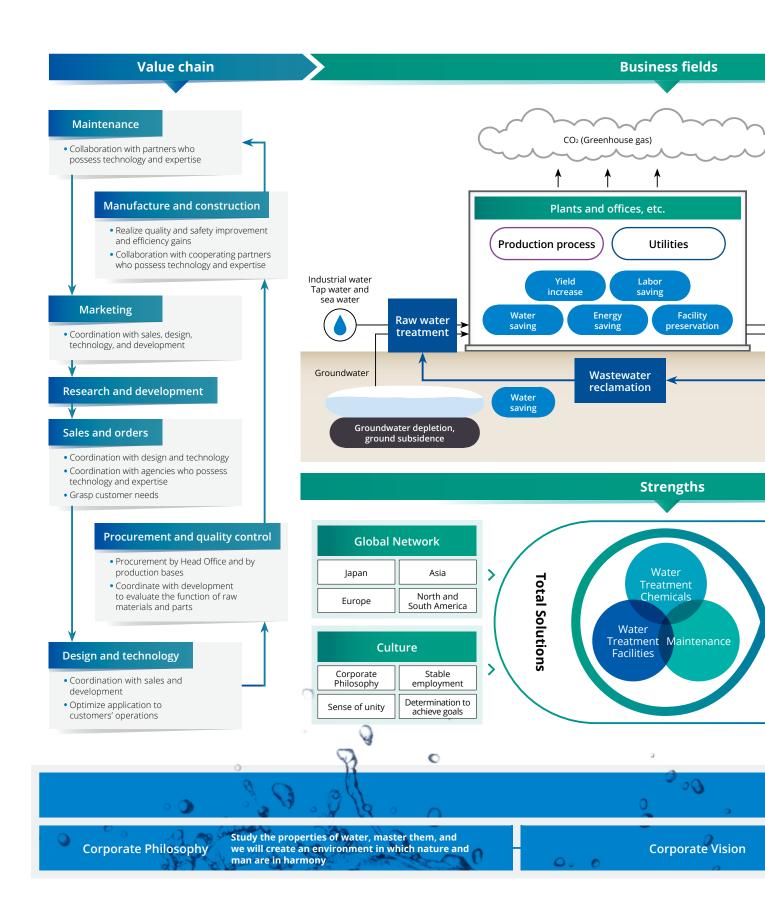
2,326

+4.4% year on year

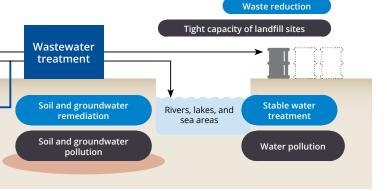
Japan, Germany, and Singapore

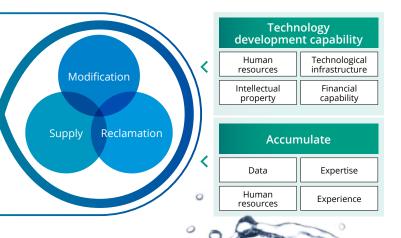
Operation management data

# **Business Model**



# Issues for customers and society Solutions CO<sub>2</sub> emission reduction Climate change (extreme weather and natural disasters)





# **Impacts**

# Solving water resource issues

### **Purification**

- By purifying polluted water, we will ensure the required quality for ecosystems, including human living, and industry.
- By purifying polluted soil and groundwater, we will secure usable land.

### Water saving

• By controlling the quality of recirculating water in industry, we will optimize the volume of water used.

### Reclamation and reuse

• By reclaiming and recycling wastewater from industry into a reusable condition, we will contribute to reducing the volume of water intake.

# Desalination

• By efficiently desalinizing sea water, we will secure water resources.

# Realizing sustainable energy use

### **Energy saving**

• By increasing heat exchange efficiency in systems that use water as a medium, we will optimize energy use and reduce CO<sub>2</sub> emissions.

# **Energy creation**

• By using waste to generate biogas that can be used for power and heat, we will create renewable energy.

# Waste reduction

# Reducing waste

• By reducing industrial waste, we will optimize the land used for final disposal sites.

### Recycling

• We will use waste as a resource to contribute to the formation of a recycling-oriented society.

# **Corporate Governance**

"A Creator of unique value to the solution of water and environment," contributing to the realization of a sustainable society.

**Basic Policy** 

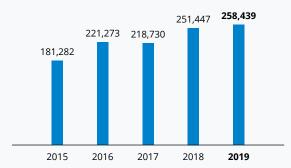
- 1. Kurita Group Code of Conduct Corporate Governance Policies
   Basic Policies for Constructing an Internal Control System
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  6. Kurita Group Business Policy

# Value Creation of the Kurita Group

# Performance (Fiscal year ended March 31, 2019)

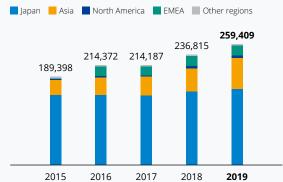
# **Financial Capital**

### Orders (Millions of Yen)



Orders declined for water treatment facilities in the flat-panel display and semiconductor sectors in China and South Korea, while orders for water treatment chemicals increased due to the consolidation of Hansu Co., Ltd. in South Korea in the fourth quarter of the previous fiscal year.

# Sales by Region (Millions of Yen)



Sales rose strongly in Asia, reflecting solid growth in demand for water treatment chemicals and the consolidation of Hansu in South Korea, as well as steady progress on construction of large water treatment facility projects for the electronics industry.

# Operating Income Margin (%)



2015 2016 2017 2018 **2019** 

The operating income margin remained at about the same level as an increase in operating income due to the effect of higher sales was offset by an increase in goodwill amortization due to acquisitions in the Water Treatment Chemicals business and temporary additional costs due to tight production capacity in the Water Treatment Facilities business.

# Return on Assets (ROA) and Return on Equity (ROE) (%)



2015 2016 2017 2018 **2019** 

ROE and ROA declined due to a decrease in net income, reflecting the impact of losses associated with the reorganization of unprofitable businesses, despite efforts to make effective use of capital by selling shares of other listed companies and allocating cash on hand to capital investment and M&As.

- $\cdot$  ROA = Net income attributable to owners of parent  $\div$  Total assets (Average)  $\times$  100
- $\cdot$  ROE = Net income attributable to owners of parent  $\div$  Equity (Average)  $\times$  100

# Dividends per Share and Dividend Payout Ratio

Dividends per share (Yen) -O-Dividend payout ratio (%)



Under a policy of striving to increase dividends, dividends increased for the 15th consecutive year. The dividend payout ratio increased slightly, partly reflecting the decrease in net income.

# Total Assets Turnover (Times)

3.7

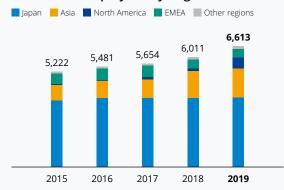


Total assets turnover improved due to aggressive allocation of our own funds into corporate acquisitions and growth in net sales against a backdrop of steady progress on construction of large water treatment facility projects.

· Total assets turnover = Net sales ÷ Total assets (Average)

# **Human Capital**

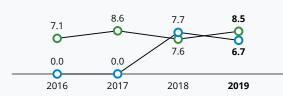
# **Number of Employees by Region**



# Ratio of Female Directors and Members of the Audit & Supervisory Board and Employees (%)

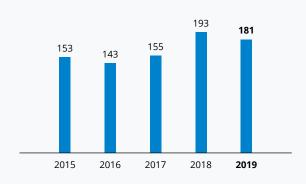
- -• Ratio of female directors and members of the Audit & Supervisory Board -• Ratio of female employees
- Ratio of women in management positions



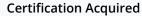


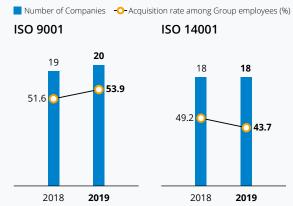
# **Intellectual Capital**

# Number of Patents Pending (Japan)



# Social and Relationship Capital

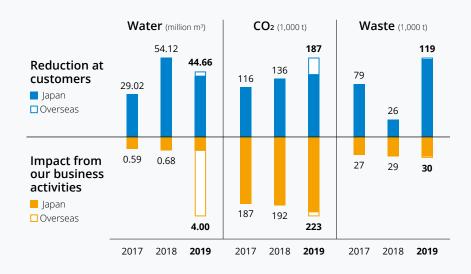




# **Natural Capital**

The Kurita Group aims to see environmental impact reduction\* in the operations of its customers offset and even exceed the environmental impacts of its own business. To this end, we have set numerical targets for the "amount of the reduction in environmental impact of customers - the amount of the Kurita Group's own environmental impact," with regard to water, CO<sub>2</sub>, and waste.

\* The Kurita Group has defined products, technologies, and business models that contribute significantly to water-saving, CO<sub>2</sub> emissions reduction, and waste reduction compared to previous levels as the "CSV business." The reduction of environmental impact from customers' operations is calculated based on results of applying the CSV business. Further information about the CSV business can be found in "Environmental Improvement Activities" on page 45.



# Interview with the President



Q. How do you view the management environment and results for the first year of the Maximize Value Proposition 2022 (MVP-22) plan?

The management environment in the fiscal year ended March 31, 2019 saw firm production activity overall in the Japanese manufacturing industry, but from the third quarter onward a slowdown in the Chinese economy and a stall in smartphone sales weighed on production activity in related industries. In the electronics industry, which is the Kurita Group's main market, we saw brisk capital investment in the fields of semiconductors, electronic components, and wafers, along with firm demand for renewal of aging facilities in the steel and petrochemicals industries. At the same time, it was also a year with frequent natural disasters that seem to be caused by climate change, such as droughts, torrential rains, and typhoons, which drove an increase in demand for water treatment for business continuity plans (BCPs).

Overseas, as in Japan, the manufacturing industry generally saw firm production activity. On the other hand, the electronics industry in East Asia, such as China, South Korea, and Taiwan, capital investment slowed from the middle of the year onward. Moreover, with the impact of the trade dispute between the United States and China, the outlook for capital investment in flat-panel displays (FPDs) and semiconductors in China became unclear.

In this environment, we were able to maintain firm

operating results. With regard to orders, there was an increase in orders in the Water Treatment Chemicals business due to consolidating 11 months of results of Hansu Co., Ltd., which became a consolidated subsidiary during the fourth quarter of the fiscal year ended March 31, 2018. However, orders for Water Treatment Facilities business decreased due to a drop in orders received for facilities overseas. Net sales grew atop the increase in orders for the Water Treatment Chemicals business, while the Water Treatment Facilities business also recorded higher sales due to progress on construction work for large projects. Operating income increased due to the effect of higher sales, which absorbed a deterioration in the cost of sales ratio and an increase in selling, general and administrative expenses. After recording other income and expenses associated with streamlining of our businesses and assets, income before income taxes was higher year on year, but net income attributable to owners of parent decreased slightly due to a temporary increase in tax expenses resulting from recording other expenses.

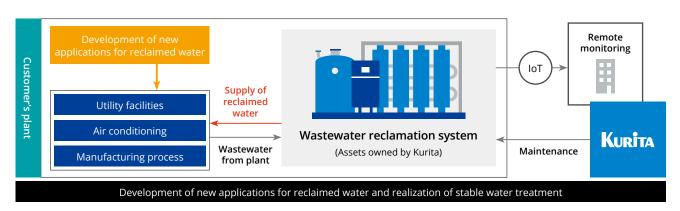
Looking back on our performance in the first year of the MVP-22 plan, we made steady progress on our priority measures, 1) Development of CSV business, 2) Enhancement of total solutions, 3) Rebuilding of manufacturing system for water treatment facilities, and 4) Streamlining of low-margin businesses and assets. I think we have really made headway on our target of establishing an earnings base.

First, with regard to development of the CSV business and enhancement of total solutions, we developed a prototype for the solution model that will form the core. Specifically, it is a service contract-type business model that shares benefits with customers based on contracts, such as recycled water supply contracts or steam-use reduction contracts. For example, with recycled water

supply contracts, we own the wastewater reclamation system that reclaims and recycles wastewater from the customer's plant, then supplies the recycled water to utilities, air conditioning, and manufacturing processes. By dramatically improving the water reclamation rate for the entire plant and realizing stable water treatment, the model solves water resource issues and resolves customers' labor shortages, thereby realizing value creation for society and customers.

Next, with regard to rebuilding our plant production system, amid vigorous capital investment by customers

# Service contract-type business that shares benefits with customers

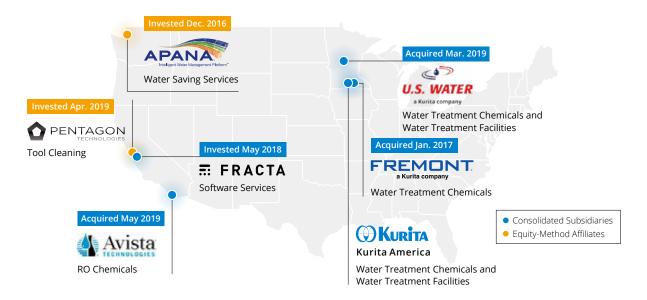


in Japan, issues have emerged in our Water Treatment Facilities business with tight production capacity and additional costs, and we have accelerated progress on our measures. We strengthened the manufacturing system for water treatment facilities through measures to enhance the accuracy of design and production, such as introducing a work allocation system for the design process, databasing case examples where faults occurred, and

introducing ICT tools.

Furthermore, in streamlining low-margin businesses and assets, we sold the aluminum compound business of Kurita Europe GmbH, which was a non-core business, and proceeded with the sale of shares in other listed companies. By reducing our balance sheet and investing management resources in growth businesses, we increased capital efficiency.

# Providing total solutions from a network expanding across the United States



# Interview with the President

We also actively pursued M&As. First, in May 2018 with the aim of creating a new digital business in using artificial intelligence (AI) and machine learning (ML) in the fields of water and the environment, we acquired shares of Fracta, Inc. (currently Kurita Fracta Holdings, Inc.), a U.S.-based provider of software services to predict the deterioration of water mains, making it a subsidiary. In March 2019, we acquired U.S. Water Services, Inc. in the United States, which manufactures and sells water treatment chemicals and water treatment facilities. We also acquired 25% of the shares of Pentagon Technologies Group, Inc., which operates a tool cleaning business for semiconductor production equipment. With these M&As, we proceeded to prepare a business foundation for deploying total solutions in the United States.

The acquisition of U.S. Water Services is expected to lift our overseas sales ratio to 40% for the fiscal year ending March 31, 2020. We started a series of M&As in 2015 with the acquisition of a water treatment chemicals business in Europe aiming to dominate the competition globally. We believe it has now resulted in the creation of a balanced business base across Japan, Asia, Europe, and North and South America.

We also worked to strengthen corporate governance as a framework supporting Group management. Based on the results of the evaluation of the effectiveness of the Board of Directors for the fiscal year ended March 31, 2018, we took steps to enhance objectivity of selections for the Company's directors, and the transparency of the selection process. Specifically, we built a system for developing and evaluating management-level personnel, which has been slower to develop than systems for auditing and remuneration. We brought in expertise from external institutions and structured the systems for development and selection of successors for president and directors, while establishing a new Successor Planning Committee comprised mainly of external directors and members of the Audit & Supervisory Board.

In this way, the first year of the MVP-22 plan has been a very fruitful one. However, we have also recognized various issues. In development of the CSV business and enhancement of total solutions, we are not entirely satisfied with the speed of our progress in terms of the timeline from establishing a prototype solution model to developing it in detail for commercial application and expanding sales. As for the organization for developing total solutions, we have made steady changes in the form of the organization, but we do not see sufficient change in the conduct and awareness of individual employees. What we need most of all right now is not to secure short-term earnings, but to create the business model and human resource base for realizing sustainable growth over the medium to long term.

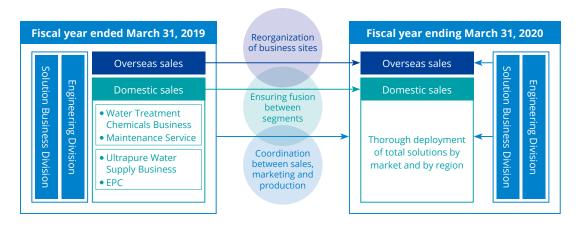
# ${f Q}$ . What policies and measures have you adopted for the fiscal year ending March 31, 2020?

The top priority for the fiscal year ending March 31, 2020, the second year of MVP-22 plan, is to accelerate the deployment of total solutions. In the first year of the plan, we worked on development of new solution models, and created dozens of prototypes. Moreover, in the second half of the first year, we started creating and integrating the details of technologies, products, services and sales methods for developing individual contracts from these prototypes. In the second year, we will continue creation

and integration of details, start the delayed horizontal deployment of the total solution models, and aim to deliver results with between five to ten models that have the potential to become core earnings drivers.

The essence of total solutions is the development of new applications for technologies, products, and services from the customer's perspective. It must begin with a deep understanding of the customer. The basic policy of the MVP-22 plan is to "Maximize customer intimacy by

# Transformation of sales system aimed at provision of total solutions





dismantling preconceived ideas and dramatically raising the quality and speed of our work." To produce new ideas from the customer's perspective, we must break down our traditional thinking based on a vertical business structure and preconceived notions based on success experienced in the past. Each individual in the Kurita Group must transform their mindset.

Moreover, to provide total solutions, it is vital to coordinate sales, marketing, production, and development. To strengthen this coordination, in April 2019 we changed the domestic sales system from a two-division to a single sales division system. We also developed the system further by market and region from the customer's perspective. We expect these organizational changes to inspire changes in the mindset of our personnel.

At the same time, we have made further progress on integrating our production and sales sites overseas as well, and will change to a structure that combines water treatment chemicals and water treatment facilities to offer total solutions. In particular, the fiscal year ending March 31, 2020 will be an important year for setting up our business structure in the United States. In our post-merger integration (PMI) of U.S. Water Services, we will integrate the production, purchasing, and sales functions of Kurita America, Inc. and Fremont Industries, LLC and develop the technologies and business model for the reverse osmosis (RO) chemicals of Avista Technologies, Inc., which we acquired in May 2019. Our goal in this is to build a system that can efficiently supply total solutions throughout the United States. By providing new services based on a deep understanding of local customers' challenges and needs, we aim to see a contribution to earnings from the fiscal year ending March 31, 2021 and onward.

The acquisition of Avista Technologies demonstrates one of our directions for M&As going forward. Although the scale of this company is small in terms of sales, at a few billion yen, it has distinctive technologies and business model in the RO chemicals field, and has achieved high profitability with businesses established in both the United States and the United Kingdom. The Kurita Group will expand these technologies and business model throughout Europe, the Middle East, Asia, and the United States with a view to capturing the top global share of the RO chemicals market, which is expected to grow going forward. As in this example, our policy for M&As going forward is to target companies that have distinctive technologies and products that we do not have.

In the fiscal year ending March 31, 2020, we will take steps to reorganize non-core businesses and downsize low-margin businesses. Naturally, with businesses that are not profitable right now, our preference is to help them become profitable through improvement measures, such as shifting to service contract-type businesses. However, where there is no prospect for improvement, we need to decide on reorganization or downsizing. An effective method for evaluating the profitability of a business and determining to reorganize or downsize it is ROIC management, which we introduced in the fiscal year ended March 31, 2019. Establishing ROIC targets and creating ROIC trees makes it an even more effective tool that we hope to use for improving capital efficiency in each business.

# ${f Q}$ . What kind of management aims do you have for the medium to long term?

The increasing inequalities caused by the globalization of the economy and technological innovation are giving rise to social division and political instability. The rise of bloc economies and increasing trade dispute have made the outlook for business uncertain, creating a risk that invested management resources may not be recoverable.

Looking at the water treatment market, the digitalization of society and industry is driving market expansion in the electronics industry, such as FPDs, semiconductors, wafers, and electronic components, while new water treatment markets using the IoT and AI to realize smart factories are presenting major business opportunities. At the same time, however, those who are too late to catch the wave of innovation face the risk that existing business models will stultify. The Kurita Group has achieved stable growth in the fortuitous field of water and the environment over the 70 years since its founding by creating a business model that uses knowledge and technological capabilities to secure a competitive advantage. However, there is a risk that this business model will become ineffective, and we could find ourselves driven out of the market.

In these uncertain times, we must overcome the challenge of a dramatically changing management environment and seize the opportunity for the Group to make a dynamic leap forward. This can only be achieved by fully executing the transformation that we have now set in motion.

We feel that total solutions through water treatment have the potential to create significant social value towards the realization of a sustainable society, and that this realization is what society expects of the Kurita Group.

Providing solutions to issues related to water and the environment and contributing to the development of society and industry are the real purpose of the Kurita Group. Now, as we reflect on our founding spirit, we will strive through water treatment to contribute to solutions for social issues such as lack of fresh water, climate change, and depletion of natural resources, which are expressed by the Sustainable Development Goals (SDGs), aiming to realize our corporate philosophy by creating shared value with society.

Furthermore, to enable the Kurita Group to leap forward as a corporate group providing services globally, we believe it is necessary for management to emphasize diversity and localization. We aim to break away from a closed, self-contained approach and move toward hiring and appointing human resources who can drive open innovation. At the same time, we must optimize our value creation process and method for achieving profits tailored for each region as we develop our solutions in various countries around the world. We will promote diversity and localization to create a corporate group that can respond to the rapidly changing environment and grow.



# Q. What is your policy on use of funds and shareholder returns?

We will use the funds that we have received from share-holders to invest aggressively in growth businesses for establishing a solid earnings base. In the fiscal year ended March 31, 2019, we invested in the ultrapure water supply business and the tool cleaning business, which have high earning potential. We also proactively allocated funds to M&As for acquiring business bases and new technologies. We sourced these funds not only from operating cash flow, but also the sale of shares in other listed companies, as well as using cash on hand.

Looking ahead, we plan to continue investing actively in growth businesses. As we make these investments, we will take a disciplined approach and remain mindful of capital efficiency. We will source investment funds in the same way as before, through operating cash flow and continued sales of shares in other listed companies. We will also work towards diversifying sources of funds, including the option of debt to finance further funding requirements.

Turning to shareholder returns, we will strive to continue increasing dividends as much as possible, aiming for a dividend payout ratio of 30–50%. Our dividend paid from capital surplus for the fiscal year ended March 31, 2019 represented a dividend increase for the 15th consecutive year. Being mindful of capital efficiency in management, we will also consider repurchases of shares if capital surplus accumulates, while taking the share price status into account.

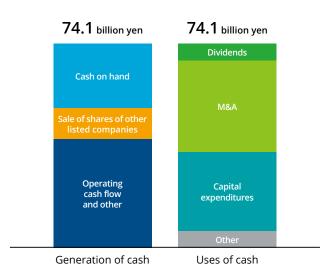
We will strive to establish a firm earnings base for the Kurita Group and to return the fruit of these efforts to our shareholders. I thank you all for your continued support for Kurita's ongoing reform initiatives.

July 2019

# Michiya Kadota

President and Representative Director

Active Investment in Growth Businesses and Diversification of Sources of Funds (Fiscal Year Ended March 31, 2019)



# Medium-Term Management Plan "MVP-22"

(April 1, 2018 - March 31, 2023)

**Basic Policy** 

Maximize customer intimacy by dismantling preconceived ideas and dramatically raising the quality and speed of our work.

Management Targets and First-year Results

# Place emphasis on profitability and capital efficiency

Net sales organic growth rate

Target 3% or more

Fiscal year ended March 31, 2019 result: **5.7%** 

# **Operating income margin**

**Target** 15%

Fiscal year ended March 31, 2019 result: **9.4%** 

# Return on equity (ROE)

arget 10% or more

Fiscal year ended March 31, 2019 result: **7.3%** 

# Adoption of business segment management using return on invested capital (ROIC)

Improved capital efficiency in each business segment

Fiscal year ended March 31, 2019 result:

Set KPIs that enable understanding and improvement of status of each segment

# **Priority Measures**

# **Development of CSV Business**

Expand earnings with highly unique technologies, products, and services that contribute to the natural environment, industry, and people's lives.

# **Enhancement of total solutions**

Rapidly develop total solutions for customers that make full use of Kurita's technologies, products, and services in water treatment chemicals, water treatment facilities, and maintenances.

# Rebuilding of manufacturing system for water treatment facilities

Rebuild the manufacturing system and processes to dramatically increase quality and speed.

# Creation of new business and the promotion of innovation

Expand and enhance existing business fields while creating new business fields that will become major sources of new earnings.

# Strengthening the foundation and promotion of research and development

Build a strong foundation as a technology-oriented company and promote advanced research and development.

# Establishment of the Group governance system

Increase the effectiveness of internal controls in Group companies.

# **Initiatives by Priority Measure**

# Initiatives for the fiscal year ended March 31, 2019

- Groupwide realization of water saving, energy saving and waste reduction through business operations
- Quantification of value provided to society
- Selection of CSV business through total solutions
- Initiatives to package technologies, products, services and selling methods that create customer value
- Expansion of solution area
- Proposal of total solutions based on customers' needs and issues
- Visualization of marginal production volume and thorough selection of projects
- Seeking alliance partners
- Standardization of water treatment facility manufacture
- Acquisition of Fracta, Inc.
- Introduction of APANA, Inc.'s water saving solutions
- Promotion in commercialization of ballast water treatment system
- Worked to encourage battery manufacturers to adopt ABSORBENT
- Promotion of global development through links with R&D bases in Japan and overseas
- Development of advanced technologies using open innovation
- Strengthening of development capabilities by building up our technological foundation
- Expansion of the Kurita Group's Basic Policy
- Building of Management Monitoring System and sharing of objectives with Group companies
- Identification of issues with internal controls caused by organizational characteristics using theme audits

# Results of the fiscal year ended March 31, 2019

- Achievement of order targets and value provision targets
- Preparation completed for system to promote integration of environmental improvement activities
- Promotion of creation and deployment of CSV business in areas around the world
- Creation of new total solution model
- Conclusion of comprehensive contracts for procurement, maintenance and management of cooling and heating water facilities
- Conclusion of service contracts for steam supply, KWSS™ and recycled water supply
- Restructuring of sales system by market
- Stabilization of quality
  - Development of new business partners
  - Start of use of ICT and new system for designing
- Strengthening of new business model creation using IoT and Al in the water and environmental fields
- Establishment of a global sales system through collaboration with overseas ship equipment manufacturers
- Development of high-performance polymer and technology for more efficient water reclamation through Group cooperation
- Development of cleaning technology for manufacturing processes of next-generation semiconductors and promotion of IoT introduction in water treatment
- Improvement of fluid and process analysis technology through acquisition of new computer simulation technology



- Strengthening of foundation for improving effectiveness of internal controls of Group companies
- Integration of internal control systems at newly acquired **Group companies**
- Follow-ups for solving issues arising from organizational characteristics



# **CSR Initiatives**

The Kurita Group has positioned CSR at the core of its management strategy in order to continue growing towards the realization of its corporate philosophy, and is strengthening its CSR initiatives.

# **CSR Policy**

The Kurita Group has established the CSR Policy as a common policy for the Group. This policy comprises two themes: "basic themes," which prevent damage to the Group's value and "themes for growth opportunities" which promote creation of shared value with society. We have set out our "ideal form for Kurita in 2030" and "initiatives" for each theme.

This policy was formulated after a discussion about materiality in the E&S (Environmental & Social) Committee,

which oversees CSR initiatives, and subsequent confirmation by the Board of Directors. Materiality was identified by specifying a total of 30 sustainability-related themes, making reference to the GRI Standard, the OECD Guidelines for Multinational Enterprises, the UNGC, and the SDGs, among others, based on two aspects: 1) stakeholders' expectations of the Kurita Group and 2) the Kurita Group's impact on society.

	Priority themes	Initiatives toward 2030	Targets for the fiscal year ending March 31, 2023
Basic themes	1. Provide highly safe services and products  3 workers	Maintain social trust by developing and providing services and products reflecting considerations for safety, health, and the environment.	1) Proportion of themes falling into "Safety improvement" and "Response to legal changes" to product development themes: 15% 2) Rate of participation in regular safety training related to "Products and services" among employees: 100%
	2. Conduct fair business activities	Maintain fair and transparent trade based on free competition. Maintain sound relationships with politics and administration.	Rate of participation in compliance-related training among officers and employees: 100%
	3. Respect human rights  3. Henting Average Av	Support and respect international norms related to human rights and promote human rights initiatives by following the Guiding Principles on Business and Human Rights established by the United Nations.	1) Rate of participation in training related to human rights among officers and employees*1: 100% 2) Severity rate*2: 0.005
Themes for g	4. Solve issues related to water resources  3 000004211   6 00000000000   9 0000000000000000000	Supply water at the optimum quality and quantity by securing as much water as necessary for the life of all	Water savings at customers*3 <b>57 million m</b> 3  – Amount of tap water used in  our business activities <b>7 million m</b> 3
		people and the development of indus- try by applying technologies for saving, purifying, and reusing water.	Difference 50 million m <sup>3</sup> *4
	5. Realize sustainable energy use  7 ***********************************	Optimize energy use in living and in industries, and introduce technologies for creating energy throughout society.	CO <sub>2</sub> emissions reduction at customers*3 253,000 t  - CO <sub>2</sub> emissions from our business activities 253,000 t
rowth			Difference 0 t*4
th opportunities	6. Reduce waste  11 SERIORIUM 12 SERIORIUM 15 III.  13 SERIORIUM 15 III.  14 SERIORIUM 15 III.  15 III.  16 III.	Introduce technologies for using waste as resources and technologies for controlling the amount of waste and	Waste reduction at customers*3 136,000 t  - Waste generated from our business activities 36,000 t
		aim to achieve zero waste.	Difference 100,000 t *4
	7. Advance industrial production technologies	Make full use of big data on water to contribute to innovations in production efficiency and product quality in industries.	Proportion of themes falling into "Contribution to improvement of production process" to product development themes: 35%

<sup>\*1</sup> One employee receives the training every three years.

<sup>\*2</sup> The subjects are divisions involved in site work and their business partners, and the rate was calculated by applying the formula, "Number of work days lost ÷ Total number of hours worked x 1,000."

<sup>\*3</sup> Amount of environmental impact that was reduced at customers' plants and offices by using products, technologies, or services from the Kurita Group

<sup>\*4</sup> We set values for "Reduction of environmental impact at customers - Environmental impact we generate" as our targets, aiming to have the reduction of environmental impact through our businesses offset and surpass the environmental impact of our business activities.

# **E&S Committee**

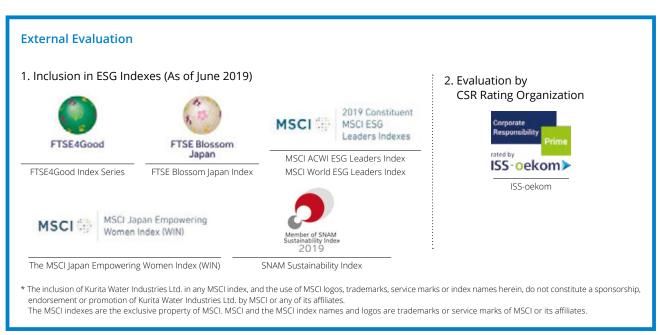
The E&S Committee oversees the Kurita Group's CSR initiatives and works to increase the Group's competitive advantage by further enhancing business competition capabilities and risk response capabilities. Specifically, the committee sets the activity targets and key performance indicators for each of the themes in the CSR Policy as the CSR medium-term plan, then confirms progress on the targets while identifying issues and making improvements. At the same time, the committee confirms stakeholders' expectations of the Kurita Group and their issues, and verifies the Group's CSR initiatives.

In the fiscal year ended March 31, 2019, the first year of the CSR medium-term plan, we confirmed the effectiveness of the Group's current targets from the status of individual activities. As a result, we reviewed some of our targets, and conducted discussions towards revising them from the fiscal year ending March 31, 2020. Furthermore, we engaged in improvements based on responses to surveys about our CSR initiatives received from customers, investors, and external institutions, linking this with expansion in our information disclosure. We conducted a Compliance Behavior Survey among employees, the results

of which were reflected in our Compliance Activity Plan for the fiscal year ending March 31, 2020. Our internal organizations responsible for compliance also conducted Surveys on Transactions with Kurita Water Industries Ltd. at the Company's suppliers to check directly the appropriateness of our transactions with them. We undertook individual measures based on the feedback received. In addition, we integrated the CSV business with our environmental improvement initiatives to expand the value we provide to society. This enabled us to increase understanding within the Group and to expand and develop the CSV business.



An E&S Committee meeting



# **CSV Business**

To promote the themes for growth opportunities in the CSR Policy, the Kurita Group has designated products, technologies, and business models that contribute significantly to increased water-saving, CO<sub>2</sub> emissions reduction, and waste reduction compared to previous levels as the "CSV business.\*" Through their creation and provision to customers, we will promote the creation of

shared value with society. Furthermore, "development of the CSV business" is one of the priority measures in the medium-term management plan, MVP-22, and we have established key performance indicators for this, taking initiatives linked with the management plan.

\*Please see page 45, "Environmental Improvement activities" for information on the CSV business.

# Challenges and Measures in the MVP-22 Plan

# **Enhancement of Total Solutions**

# We will promote development and horizontal deployment of a new business model.

The water treatment market where the Kurita Group has been operating its business for many years is maturing. Technologies and products that once held unique status are now becoming commoditized and subject to severe cost competition. The Group is currently feeling a sense of crisis: if we are to continue delivering earnings, we must transition from a business model of selling individual products in water treatment chemicals and water treatment facilities to a business model that generates recurring earnings. I believe the Solution Business Division must lead our efforts to break free from established ideas based on past successes and reform our business model.

The primary function of this division is to create a business model based on marketing and propose this model to sales divisions in order to provide new solutions to customers. This is our first attempt of this kind as a Group at the organization level. Another function of the division is to grasp the deeper needs driving customer's issues, needs that customers do not notice, from a technical perspective and carry out operations from drafting contracts to horizontal development. A further function is to propose the use of IoT and AI, which will be vital for leveraging our comprehensive capabilities. Ideally, I would like to





Transitioning to a business model that provides recurring earnings by providing solutions for customers on site

leave our manufacturing functions in place and develop total solutions and the service contract-type business model on top of these. Ultimately, we aim to be the driver of a shift from selling products to selling services.

One of the benefits for customers of using the Group's services has been the opportunity to receive technical proposals and support offered jointly by the sales and technology departments. To ensure that the Group's intended services stay attuned to customers' needs, links need to be maintained between various divisions, including sales and engineering. To this end, we have divided the Japanese markets into nine, and for each one, we will undertake joint initiatives with sales, marketing, engineering, and development working together. We will also promote coordination based on IT and AI, as well as initiatives coordinated with overseas Group companies.

The transition from individual products to a service contract-type business offers benefits for expanding our business activities and enabling recurring transactions, but will also require a more rigorous approach to risk management. Expanding the scope and time frame of contracts will certainly increase capital and cost burdens. In our contracts, we need to discern how much cost to bear from the perspective of returns, as well as how to hedge the risks. I believe it is the duty of the Solution Business Division to foster the conceptual, planning, and execution capabilities of the employees who are working on the Group's reforms, including their awareness of returns commensurate with risk.

# **Integrating and Transforming Our Business in Japan**

# We will aim to expand recurring earnings in Japan, our main market.

Japan is the Kurita Group's main market, accounting for the majority of its sales. It has continued to be a primary source of earnings. In the Water Treatment Chemicals business, we provide solutions to issues related to water and the environment on approximately 20,000 customer sites covering many market segments. In the Water Treatment Facilities business, we provide services from delivery to maintenance of water and wastewater treatment facilities used on production sites for customers in the electronics industry, general industry, and energy industries, among others.

Since the global financial crisis in 2008, however, the water treatment market in Japan has been gradually shrinking as customers consolidate their production sites and relocate them offshore. In addition to increasing price competition, a decline in Japan's working population is making it difficult to maintain earnings using our traditional sales methods.

To continue growing our earnings in this situation, we are currently engaged in a major transformation of our business model in Japan. Our priority measures here are "enhancement of total solutions," "development of CSV business," and "strengthening cost management."

In enhancing total solutions, we are creating a new service contract-type business that combines water treatment chemicals, water treatment facilities, and maintenance services. In April 2019, we consolidated all domestic sales functions in the Japan Sales Business Division, then strengthened our systems for each market and region to create a foundation for deploying total solutions. Now we need to accelerate this deployment and deliver results. Moreover, in the CSV business, we will develop products and services to resolve water and environmental issues in line with our four growth opportunity themes\*. The key point here is to build a new business model in which we first get a solid grasp of the real issues that our customers are facing, propose optimal solutions that package together product, technology, and services, and then share consideration for the value received by the customer. I am sure that the important role for this division in achieving this is to coordinate with other divisions such as the Solutions Business Division and ensure that they accurately reflect the customers' perspective and needs.

In strengthening cost management, we will work alongside the Engineering Division to reform the manufacturing system of water treatment facilities, which tends to generate additional costs. In addition, we are making progress on streamlining operation management and maintenance Priority Measure Priority Measure Development of total solutions

Priority Measure Strengthening of cost management

Organizational changes in line with priority measures

Transformation of the Sales System in Japan

with the use of Al, IoT, and sensing technologies. We also need to discern the profitability of businesses and projects rapidly and at an early stage. As the sales network in Japan is one of the Kurita Group's major strengths, we are also aligning this with the new structure by merging operations and relocating and consolidating sales offices.

For personnel, who are at the heart of our reforms, the integration of operations in the division has enabled us to assign people where their individual strengths can be of most benefit. Looking ahead, we will increase personnel exchanges with the Global Business Division and with Group companies as we strive to develop human resources equipped with a high degree of specialization and proposal capabilities.

\*For further details on the Company's four growth opportunity themes, please see page 18 "CSR Initiatives."

Yoshio



# A New Stage in Global Development

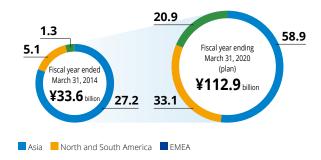
# We will expand earnings by upgrading newly acquired business bases.

The Group has been shifting its global strategy into a fourarea structure comprising Japan, Asia, EMEA (Europe, Middle East, Africa), and North and South America. We have had a structure based on Japan, where we already have a strong base, and overseas, where there is growth potential due to our low market share. One of the priorities for the Global Business Division is to build a structure that enables business expansion in every region overseas. Since 2015, we have strengthened our business bases in Europe and South Korea through M&As. With the acquisition of U.S. Water Services, Inc. in March 2019, followed by the acquisition of Fremont Industries, LLC in January 2017, we are expecting to quadruple our sales in North America. These measures have established our four-area structure. Under this structure, we plan to achieve organic growth and improvement in profits in each area. Moreover, we will work toward the global expansion of RO chemical services provided by Avista Technologies, Inc. and Avista Technologies (UK) Ltd., which we acquired in May 2019. In this way, we will increase our overseas sales ratio to around 40% for the fiscal year ending March 31, 2020. However, we still intend to examine M&A opportunities for acquiring competitive products and technologies and strengthening our business in certain regions.

The Group has identified geopolitical risks and local economic trends as important risk factors in developing globally. In the near term, we face the impact of trade



# Expanding regionally balanced overseas sales through M&As



disputes between the United States and China and a sense of uncertainty over the future of the electronics industry. Moreover, business conditions in China and South Korea are becoming increasingly severe after the last few years of brisk activity. However, as the business outside of Japan in Asia, EMEA, and North and South America is about the same in scale, I believe that we have managed to diversify our business risk.

I see the fiscal year ending March 31, 2020 as a year for business development and the creation of synergies in the United States in particular. We will promote collaboration and integration (PMI\*) of Kurita America Inc., Fremont Industries, and U.S. Water Services, while also expanding sales of Avista Technologies products, thereby promoting the proposal of total solutions incorporating water treatment chemicals, water treatment facilities, and maintenance services. To aid this development, in addition to our initiatives in each region, we will utilize the Tokyo head office marketing function to communicate our new achievements from North America.

Another important mission for the division is to promote linkages within the Group between business, technology development, and human resource development from a global perspective. In managing overseas offices, we recognize the importance of fostering a sense of unity. To achieve this, the division has to actively involve itself in making arrangements between regions and sharing the important principles of the Group, while leaving the local operations to the highly skilled personnel in each company. Furthermore, we seek to contribute to the growth of the entire Kurita Group by enhancing our sense of purpose as a global business and cooperating with the sales division in Japan to make mutual use of our strengths and expertise.

\* PMI: Post-Merger Integration

# Rebuilding the Group's Manufacturing System

# We will achieve higher quality and better production efficiency as an evolving engineering group.

With a recent rapid expansion of our global business through M&As and promotion of total solutions, the Kurita Group's business is entering a period of dramatic change. Moreover, the social and economic risks surrounding the Group include a decline in the production and delivery labor force in Japan, a worldwide increase in personnel costs and prices, and geopolitical risks.

In this situation, the Engineering Division's role is to achieve improvements in quality, including safety, and efficiency, reinforcing the business base that supports the Group's transformation. One of our urgent priorities is to completely reform the manufacturing system for water treatment facilities. In the fiscal year ended March 31, 2019, due to active capital investment among customers in Japan our production of water treatment facilities became excessively busy, and many jobs required reworking with the additional costs weighing on our profits. With this, structural issues have emerged within the Group. To remedy this, we are improving our work processes and flows, standardizing our water treatment facilities to reduce design work each time, and promoting the use of ICT and alliances to make more efficient use of limited human resources.

To match the expansion of our global business, we will establish global supply chains and optimize our procurement and manufacturing sites, while promoting use of the production functions we have gained through acquisitions. Furthermore, we will reinforce our information network and promote compliance with revisions to laws and tightening of regulations related to safety and

the environment. In promoting total solutions, we also recognize that the division has an important role to play in investigating the feasibility of business models from the perspectives of quality, safety, and cost.

Furthermore, the most important management resource for supporting our business base in terms of production is technologies, manufacturing know-how, and human resources including partner companies. In addition to developing engineers who are cost aware and versed in the principles of manufacturing, as a method of human resource management, we are introducing HR tech\*. This involves adding reductionism and system thinking to the traditional approaches of evaluating experience and technical level. We believe this approach will help us to utilize human resources strategically.

Risks for the Engineering Division also present significant opportunities for transformation through increasing the efficiency of the production system and strengthening the cost management system. By breaking free of outmoded thinking, we will contribute to increasing the capital efficiency and reducing the costs of the entire Group, aiming to be an engineering group that is sustainably evolving ahead of our competitors.

\* The application of big data analysis, artificial intelligence (AI), cloud computing and other advanced IT-related technologies for a wide range of human resource operations, including hiring, development, and assignment.



From shorter construction lead times through standardization and ICT and on to the next stage



# **Technology Development for the Creation of Customer Value**

# We will accelerate development by changing our perspectives and reforming our awareness.

Throughout its 70-year history, the Kurita Group's technological capabilities have always been a source of competitive advantage. The Research and Development Division is playing a major role in creating the key products and technologies that will underpin our efforts to promote "development of CSV business" and "enhancement of total solutions" under the MVP-22 plan. In step with the transformation of our business model, we need to pivot away from the traditional concept of development.

Over the past few years, as customers face management rationalization and a decrease in experienced engineers they are increasingly seeking to outsource water treatment and utility management to reliable experts. In addition, a general increase in awareness of CSR in wider society and the globalization of environmental issues present new business opportunities for the Company. On the other hand, water treatment itself is a maturing technology, and it is becoming difficult to differentiate through the cost and performance of individual products. Development that simply pursues excessive product specification and cost reductions could not only widen the gap with customers' needs, but also lead to a decline in earnings. Moreover, in a rapidly changing management environment, a loss of pace in development will lead directly to a loss of business opportunities.

Given our recognition of the current situation, in order to speedily create the necessary products and technologies





Links between development bases in Japan, Germany, and Singapore

for the CSV business and total solutions, we need to change our perspective from our previous focus on increasing the competitive edge of the products themselves, to development that emphasizes "optimizing customers' overall production process to create greater customer value." To achieve this, we will coordinate with the marketing department and the operating divisions to map out the customer value to be created and the business model we need as we proceed with development. In terms of transforming the development process, our priority measure is "strengthen fluid and process analysis." We will use engineering analysis to create numerical models from the abundant experience and expertise we have accumulated in water treatment to date, and combine these with rapidly advancing computer simulations of fluid phenomena. This will speed up development by making testing and performance verification more efficient, as well as enabling us to create technologies for optimizing water treatment management and production processes using the power of Al and IoT. In addition, we will strengthen ties with our overseas development bases in Germany and Singapore, and promote open innovation with research institutions in Japan and abroad to enable more efficient development in line with global needs.

The keys to achieving transformation are development of human resources who can create total solutions based on a broad knowledge of water treatment coupled with high level expertise and a change of awareness among developers. To break away from fixed ideas based on past experience, we will increase opportunities for developers to encounter the change in needs of society and our customers and to meet and exchange ideas with top engineers in and outside Japan. We will work actively to broaden their perspectives and reform their awareness.

# **Driving the Creation of New Businesses**

# We will explore potential new businesses and create core businesses.

To accelerate growth with high profitability for the Kurita Group, the Next Generation Business Division has been working to create new core businesses. We have identified ships, batteries, and water-saving as our main fields.

In the ships field, we are focusing mainly on commercialization of ballast water treatment systems to cope with tighter international regulations for preserving marine ecosystems. We are now working quickly to put sales and production systems in place with a view to acquisition of United States Coast Guard certification and rapid market entry in 2020. In the field of batteries, we are collaborating with our Group companies in China and South Korea and aiming to deliver ABSORBENT\*1 to companies manufacturing lithium-ion batteries for automobiles. In the water-saving field, we are using the data analysis and communication technologies of U.S. company APANA Inc., which became an equity-method affiliate in April 2019, to fully develop the water-saving solutions business in Japan by optimizing water use through a completely new approach.

In addition to these specific initiatives for commercialization, the division is also exploring candidates for new businesses. We narrow down promising new businesses from information acquired using venture capital and also apply the PoC\*2 method aiming to achieve early commercialization. Speed is the most important factor in exploring new businesses. Rather than working out detailed business plans as for an existing business, it requires the ability to solve immediate issues on the move and the decision-making speed to change direction quickly if mistakes are made. This approach to business is the same as that of the U.S. start-up Fracta, Inc.

(currently Kurita Fracta Holdings, Inc.), which became a subsidiary in May 2018. Fracta develops software services using artificial intelligence and machine learning (Al/ML). Its business approach is the polar opposite of the values and methods of the Kurita Group, which has maintained and refined the same business over many years. Our intention is to move beyond the established norms that Kurita has followed to date and to consider M&As and alliances flexibly.

I think the most important management resource when starting a new business is human resources. I expect individual human resources to think beyond conventional frameworks and to act accordingly. Rather than becoming fixated on the methods that have produced results in existing businesses or ways of doing things that we are particularly strong at, I want us to learn about the latest technologies and business trends, and to actively incorporate them. In the Next Generation Business Division, we will keep our eyes on the outside world and remain open to absorbing new things as we continue working to generate new businesses.

- \*1 A proprietary material of Kurita that increases the safety of lithium-ion batteries by utilizing adsorption and desorption properties of chemical substances developed in the water treatment field.
- \*2 Abbreviation for Proof of Concept. A simple test to demonstrate that a new concept or theory is feasible.



Promote commercialization with a focus on the importance of ballast water treatment

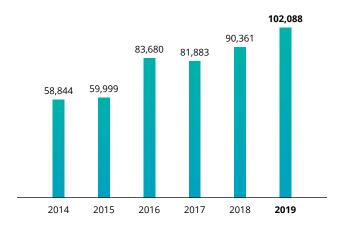


# **Review of Operations by Segment**

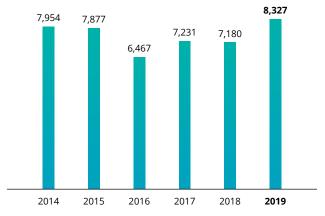
# **Water Treatment Chemicals**

# Orders\* (Millions of Yen) 102,939 90,358 83,440 82,118 59,413 59,353 2014 2015 2016 2017 2018 2019

Net Sales\* (Millions of Yen)



# Operating Income\* (Millions of Yen)



<sup>\*</sup> Years ended March 31

# Results in the Fiscal Year Ended March 31, 2019



# Overview of the Fiscal Year Ended March 31, 2019

Orders and net sales in Japan both increased year on year atop increases in cooling water treatment chemicals and process treatment chemicals for iron and steel driven by generally firm production activity in the manufacturing industry and efforts to cultivate new customers through solution proposals. The increase was partially offset by the absence of spot projects in equipment and services that were posted in the previous fiscal year.

Overseas, both orders and sales rose significantly, reflecting an increase in demand for water treatment, particularly in Asia, and an increase in the consolidation period by 11 months for operating results of Hansu Co., Ltd. in South Korea, which became a consolidated subsidiary in the fourth quarter of the previous fiscal year, despite the impact from the sale of the aluminum compound business in Europe.

Operating income increased as the effect of increased sales outweighed a rise in the cost of sales ratio and an increase in selling, general and administrative expenses.

# **Main Initiatives**

- Unified the customer contact point for domestic water treatment chemicals, maintenance and water treatment facilities business, and promoted proposal of total solutions to realize optimal overall water treatment for customers' plants.
- Developed products formulated with CETAMINE<sup>™</sup> and DReeM Polymer<sup>™</sup> to help save energy use in boilers.
- $\bullet$  Promoted the use of IT and sensing technology S.sensing  $^{\text{\tiny{TM}}}.$
- Promoted a service contract-type business to reduce steam usage in the drying process in paper manufacturing.
- Sold the low-margin aluminum compound business in Europe
- Established a new plant in Malaysia to keep pace with expanding demand for water treatment chemicals in Southeast Asia.
- Acquired a business base expanding across the entire United States with the acquisition of U.S. Water Services, Inc.

# **Principal Products and Services**

# **Boiler water treatment chemicals**

Boilers are widely used for production processes in plants and air conditioning in office buildings. Boiler water treatment chemicals are used to prevent faults that may arise in boilers and ensure stable, efficient operation. They also contribute to energy saving by preventing loss of heat efficiency in the boiler.



# **Cooling Water Treatment Chemicals**

Cooling water treatment chemicals are used to treat cooling water used in plants and office buildings. By preventing problems in pipes and heat exchanges, and prevent the growth of harmful Legionella bacteria in cooling towers, these chemicals contribute to resource and energy saving, as well as the creation of safe workplaces.



# **Wastewater Treatment Chemicals**

Wastewater treatment chemicals are used to treat the many forms of industrial wastewater discharged by plants and domestic sewage to ensure that they do not negatively impact the local environment. Proper treatment of wastewater contributes to the reduction of environmental impact.



# **Process Treatment Chemicals**

Process treatment chemicals are used in the manufacturing processes of the oil refining, petrochemical, steel, and pulp and paper industries, where they contribute to maintaining and improving production efficiency and product quality.



# Reverse Osmosis (RO) Membrane Treatment Chemicals

RO membrane treatment chemicals remove suspended substances that can reduce the filtering performance of RO membranes used in wastewater reclamation and seawater desalination facilities. By preventing clogging of the membranes, the chemicals contribute to stable, efficient operation of the facilities.



# Treatment Chemicals for Automobile Painting Booths

Water treatment chemicals that separate residual paint contained in water in automobile painting booths ensure that circulating water is of appropriate quality, contributing to improvement of productivity and reduction of environmental impact.



# Treatment Chemicals for Incinerators

Treatment chemicals for incinerators provide consistent treatment of hazardous substances, such as heavy metals contained in the fly ash, and control the emissions of dioxins, thereby contributing to the reduction of environmental impact.



# Treatment Chemicals for Civil Engineering

Various treatment chemicals are used in civil engineering to promote greenspace development, treat construction sludge appropriately, and reduce sprayed concrete dust, among other applications.



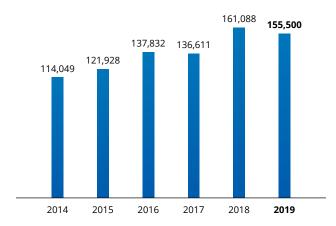
# Chemical Dosing and Injection Equipment

The Kurita Group provides water treatment-related equipment for a wide range of applications, such as automatic water quality management systems that use chemical dosing and injection equipment and sensing technologies. By enabling stable operation of customers' facilities, this equipment contributes to labor saving and reduction of environmental impact.

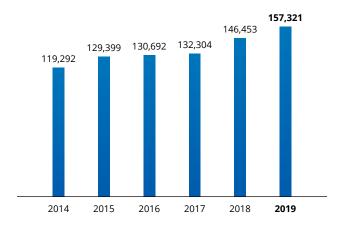


# **Water Treatment Facilities**

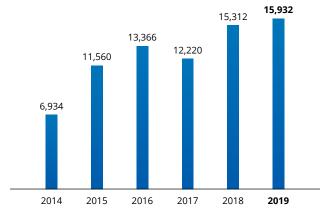
# Orders\* (Millions of Yen)



Net Sales\* (Millions of Yen)



# Operating Income\* (Millions of Yen)



<sup>\*</sup> Years ended March 31

# Results in the Fiscal Year Ended March 31, 2019



# Overview of the Fiscal Year Ended March 31, 2019

Orders and net sales both increased for the domestic electronics industry. The Group received orders for large-scale projects in facilities related to semiconductors, electronic components, and wafers, while demand for maintenance grew due to facility expansion and upgrades against a backdrop of high capacity utilization at customers' plants. Sales in the ultrapure water supply business also increased due to the impact of expansion projects.

For domestic general industries, orders increased as the Group received orders for large projects in facilities for the electric power industry and soil remediation as well as facilities for biogas power generation, with orders for maintenance services also growing atop an increase in projects to renew and expand facilities at customers' plants. On the other hand, sales decreased, mainly due to narrowing down acceptance of orders in facilities for general industries.

Overseas, there was a slowdown in capital investment demand for flat-panel displays (FPDs) and semiconductors in the second half of the year, particularly in China and South Korea, leading to a decline in orders. Sales increased due to progress in construction work for large projects for the electronics industry in China and South Korea.

Operating income increased as growth in sales and efforts to reduce costs absorbed the impact of unprofitable projects.

# **Main Initiatives**

- Promoted the proposal of total solutions in Japan for contributing to energy saving, waste reduction and water saving.
- Revised production system of water treatment facilities using ICT and alliances.
- Actively invested in the ultrapure water supply business.
- Acquired 25% of the shares of Pentagon Technologies Group, Inc., expanding the tool cleaning business.
- Promoted CSV business, such as reclaimed water supply services and dry methane fermentation technology.

# **Principal Products and Services**

# Ultrapure Water Production Systems

Ultrapure water production systems remove ions, microscopic particles and bacteria from water to produce water that is as close as possible to theoretically pure H<sub>2</sub>O—an essential ingredient in the production of semiconductors and FPDs.



# Water Treatment Systems for General Industrial Use

Kurita provides water treatment systems to cover a wide range of industrial uses, including the water for pharmaceuticals such as injectable drugs and eye medicines, water for beverages such as alcoholic and soft drinks, and boiler water for use in the electric power and steel industries.



# **Wastewater Treatment Systems**

Wastewater treatment systems act to detoxify the many forms of wastewater discharged by plants to ensure that it does not negatively impact the surrounding environment.



# **Wastewater Reclamation Systems**

Kurita provides systems for reclaiming and recycling wastewater. Moreover, by reclaiming marketable substances included in the wastewater, the systems contribute to the conservation of resources and cost reductions.



# **Maintenance Services**

Kurita provides maintenance services to prevent performance degrading and problems arising in water treatment facilities. Kurita also proposes modifications to meet clients' needs for reducing environmental impact and improving productivity.



# **Ultrapure Water Supply Business**

Kurita installs water treatment systems within clients' plants, handles the operation and maintenance of those systems, and charges clients for the supply of ultrapure water. This service reduces the level of investment required and the burden of system operation management.



# **Tool Cleaning**

At our own plant, we can clean and remove any deposits that adhere to tools and jigs used by customers in the manufacture of semiconductors and FPDs. The provision of tool cleaning services helps customers to maintain and improve their productivity.



# Soil and Groundwater Remediation

Kurita conducts pollution assessments and remediation of soil and groundwater polluted by harmful substances. Using various decontamination methods, Kurita helps customers to hedge against the risk of soil pollution. Other services include support for the effective use or sale of restored land.



# **Chemical Cleaning**

Kurita also provides chemical cleaning services using chemicals and high-pressure water to clean accumulated deposits from boilers, heat exchangers and pipes, ensuring that large-scale plants such as industrial complexes and electric power plants continue to operate safely and efficiently.



# **R&D** and Intellectual Property

# Activities in the Fiscal Year Ended March 31, 2019

The Kurita Group has contributed to solving various problems facing society and customers through its products and services. These have been developed by leveraging the high technological capabilities that Kurita has accumulated in the water and environment fields over many years.

In the fiscal year ended March 31, 2019, the Kurita Group worked to develop water treatment chemicals that help to save energy, reduce environmental impact, and increase productivity at customers' plants, and to develop diagnostic technologies for chemical treatment effects. Other activities included improving quality of our ultrapure

water for application in the electronics industry, as well as making efforts to develop technologies for a recycling-oriented society, such as wastewater reclamation and reuse technology and biogas power generation technology.

On the systems front, we promoted our global research and development systems, achieving links between our three development bases in Japan, Germany, and Singapore, and making full use of technology assets and human resources to promote human resource exchanges and joint development.

# Achievements in the Fiscal Year Ended March 31, 2019

Research and Development Bases	Kurita Global Technology Center (Japan), Kurita Europe GmbH (Germany), Kurita R&D Asia Pte. Ltd. (Singapore)		
R&D staff	Approx. 180		
R&D expenses	Approx. ¥5.5 billion (2.1% of net sales)		
Main Results	Water Treatment Chemicals	Developed systems for optimizing control of chemical dosage for suppressing clogging of membrane in reverse osmosis (RO) membrane equipment used for wastewater reclamation and seawater desalination     Developed a sludge treatment system combining water treatment chemicals, a sludge granulation concentrator, and a dehydrator     Developed water treatment chemicals for plants that use open circulation cooling water systems to comply with Chinese environmental and safety regulations	
	Water Treatment Facilities	Improved the function of each component unit in the ultrapure water production system and developed automatic control function that responds to required water quality     Developed a space-saving pure water production system with enhanced boron-removal function     Developed pre-treatment facility capable of stably processing water of high turbidity and enhanced the functions of the remote monitoring system to expand application of pure water supply service in small- to medium-sized pure water equipment	

# Initiatives under the Medium-Term Management Plan, MVP-22

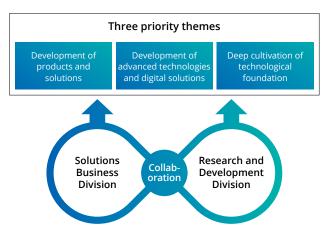
Under the MVP-22 plan, R&D plays a role in creating core products and technologies for the CSV business and total solutions, as well as strengthening the Company's technological foundation. To realize these objectives, we have classified our R&D themes into three areas: development of products and solutions, development of advanced technologies and digital solutions, and deep cultivation of a technological foundation. We manage development according to the characteristics of the development themes.

With regard to development of products and solutions, our activities are oriented towards realizing a service contract-type business that corresponds to social needs and customer issues from the perspectives of water resources, energy, waste, and production technology. In development, the Research and Development Division and the Solution Business Division work together to maximize the value provided to customers while also achieving high profitability.

In development of advanced technologies and digital solutions, our efforts are concentrated in the fields of polymer materials, next-generation semiconductor process technologies, and water treatment technologies for saving and creating energy. In deploying total solutions and the

CSV business, proprietary materials and technologies will play a vital part in increasing our competitive advantage and profitability. We will utilize the technological expertise that we have accumulated over many years in addition to open innovation to strengthen our development and make it more efficient. In addition, we will leverage IoT and

# R&D System Under the MVP-22 Plan





Al technologies to promote development of digital solutions that will advance water treatment control and operation management.

In addition, the Kurita Group has a technological foundation that includes technologies for membrane separation, corrosion prevention and dispersion, and analysis, which have been accumulated through 70 years of experience on the front lines of water treatment. These technologies are the source of the Kurita Group's competitive advantage and its solutions. In our efforts on deep cultivation of technological foundation, we are working on the theme of strengthening fluid and process analysis through new combinations of water treatment knowledge and expertise with computer technology. In addition, we are working to improve the level of completion of developed products and to accelerate development.

# **Cultivation of Technological Foundation**



# **Utilization of Intellectual Property**

The Kurita Group strives to secure and properly manage intellectual property with the aim of increasing the competitiveness of its core products and technologies in Japan and overseas.

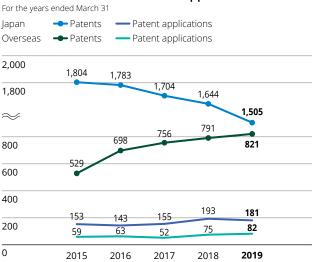
In the fiscal year ended March 31, 2019, we strove to build a system to support our management initiatives of promoting total solutions and building a global business system from an intellectual property perspective. In promoting total solutions, it is important to build solution models that incorporate products and sales methods and can be deployed horizontally. However, to leverage this as a strength of the Company, each model must be protected as intellectual property. During the fiscal year under review, we focused on creation and integration of solution model details and cooperated with relevant divisions in the Group and affiliated companies to apply for relevant patents. In particular, for our technology for increasing thermal conductivity using chemicals with water repellent characteristics and our recycled water supply service, we worked to build a web of patents combining the business model and component technologies. Furthermore, as we develop our global business system, we have further developed relevant rules for overseas affiliated companies aimed at strengthening intellectual property management for the entire Group.

As a result, the number of patent applications in Japan for the fiscal year ended March 31, 2019 was slightly lower than the previous fiscal year at 181. However, the number of patent applications related to the solutions business increased. Moreover, overseas patent applications

recorded a new record high at 82 following overseas business expansion.

Looking ahead, we will advance our initiatives even further, accelerating patent applications that support the CSV business and the total solutions business and developing an internal reward system. We will also build and utilize a web of patents for protecting products deployed overseas, while implementing centralized management and efficient utilization of intellectual property across the entire Group.

# **Number of Patents and Patent Applications**



# Directors, Members of the Audit & Supervisory Board, and Executive Officers

(As of July 1, 2019)

# **Directors**



Chairman and Director

### Koichi lioka

- 2018 Chairman and Director (to present) Chief Business Officer for Global Operation (to present)
- 2016 Executive Senior Managing Director and Representative Director
- 2013 Managing Director
- 2011 President and Representative Director, Kuritec Service Co. Ltd.
- 2007 Director
- 2005 Executive Officer
- 1975 Joined Kurita Water Industries Ltd.



President and Representative Director

### Michiya Kadota

- 2016 President and Representative Director
- (to present) 2014 Director
- 2013 Executive Officer
- 1983 Joined Kurita Water Industries Ltd.



Executive Senior Managing Director and Representative Director

### Kiyoshi Itou

- 2019 Executive General Manager of Corporate Planning and Control Division (to present)
- 2018 Executive Senior Managing Director and Representative Director 2014 Director (to present)
- 2013 Managing Director 2009 Director
- 2007 Executive Officer
- 1979 Joined Kurita Water Industries Ltd.



Managing Director

# Toshitaka Kodama

- 2019 Executive General Manager of Solution Business Division and Chief Business Officer for Facility Operation (to present)

- 2011 Executive Officer 1977 Joined Kurita Water Industries Ltd.



Managing Director

# Yoshio Yamada

- 2019 Executive General Manager of Japan Sales Business Division and Chief Business Officer for Chemical Operation (to present)
- 2018 Managing Director (to present)
- 2014 Director 2011 Executive Officer
- 1982 Joined Kurita Water Industries Ltd.



Managing Director

# Hirohiko Ejiri

- 2019 Managing Director (to present) 2018 Executive General Manager of Engineering Division (to present)
- 2016 Director
- 2014 Executive Officer
- 1985 Joined Kurita Water Industries Ltd.



Director

# Toshimi Kobayashi

- 2019 Senior General Manager of Administration Group, Japan Sales Business Division (to present)
- 2018 Director (to present) 2011 Executive Officer
- 1982 Joined Kurita Seibi KK\*
- \* Kurita Seibi KK was merged to Kurita Water Industries Ltd. in 1997.



Director

# Yasuo Suzuki

- 2018 Executive General Manager of Global Business Division (to present)
  Director (to present)
  2014 Executive Officer
  1997 Joined Kurita Water Industries Ltd.

# **External Directors**



External Director

### Tsuguto Moriwaki

- 2015 External Director of Kurita Water
- Industries Ltd. (to present)
  2004 President and Representative Director of Shinsho Corporation 2002 Executive Vice President and
- Representative Director of Kobe Steel, Ltd. 1999 President and Representative
- Director of Kobelco Construction Machinery Co., Ltd. 1967 Joined Kobe Steel, Ltd.



External Director

### Ryoko Sugiyama

- 2017 External Director of Kurita Water
- Industries Ltd. (to present)
  2015 External Director of UACJ Corporation (to present)
- 2010 External Director and Audit and Supervisory Committee Member of **LECIP Holdings Corporation** (to present)
- 2010 Professor at the Faculty of Social and Environmental Studies of Fuji Tokoha University
- (current Tokoha University) Director of Sugiyama & Kurihara Environmental Consultants, Inc. (to present)
- 1996 Established Sugiyama & Kurihara Environmental Consultants, Inc., Representative Director



External Director

# Keiko Tanaka

- 2019 External Director of Kurita Water
- Industries Ltd. (to present)
  2018 Vice President of Nissan Financial Services Co., Ltd. (to present)
- 2014 Ambassador Extraordinary and
- Plenipotentiary of Japan to Uruguay
  2013 Acted as Vice President of JATCO Ltd.
- 1984 Joined NISSAN MOTOR CO., LTD.

# Members of the Audit & Supervisory Board



External Member of the Audit & Supervisory Board

# Kenjiro Kobayashi

- 2016 External Member of the Audit & Supervisory Board of Kurita Water Industries Ltd. (to present)
- 2010 Representative Director and Executive Vice President of Japan Industrial Solutions Co., Ltd.
- 1977 Joined Japan Development Bank (current Development Bank of Japan Inc.)



Member of the Audit & Supervisory Board

# Yukihiko Mutou

- 2019 Member of the Audit & Supervisory Board (to present)
- 2018 Director
- 2016 Executive Officer
  1991 Joined Kurita Water Industries Ltd.



External Member of the Audit & Supervisory Board (Part time)

# Shigekazu Torikai

- 2018 Outside Director of RISO KAGAKU CORPORATION (to present)
- 2017 External Member of the Audit & Supervisory Board of Kurita Water Industries Ltd. (part time) (to present)
- 2015 External Director of United Super Markets Holdings Inc. (to present) 1994 Established Torikai Management Law Office
- (current Torikai Law Office) 1990 Registered as an attorney

# **Executive Officers**

# Shuji Shirode

Deputy Executive General Manager of Corporate Planning and Control Division

# Matsuhiro Omaki

Global Business Division

### Tatsushi Kuramae

Executive General Manager of Research and Development Division and President of Kurita R&D Asia Pte. Ltd.

### Masaya Kawai

Senior General Manager of East Japan Group, Japan Sales Business Division

### Hiroaki Mori

Executive General Manager of Next Generation Business Division

### **Tatsuhiro Oosuga**

Senior General Manager of West Japan Group, Japan Sales Business Division

# Kunihiro Kuse

Senior General Manager of Engineering Group, Engineering Division

### Hirohisa Kamata

Senior General Manager of Energy & Infrastructure Industries Group. Japan Sales Business Division

# The Basis for Management Activities

# **Corporate Governance**

# **Basic Concept**

The Kurita Group aims to contribute broadly to society through corporate activities in the fields of water and environment in accordance with the Kurita corporate philosophy, "Study the properties of water, master them, and we will create an environment in which nature and man are in harmony." The Kurita Group will make efforts to promote sustainable growth and enhance its corporate value in the medium and long term, deferring to the rights and position of various stakeholders such as customers, business partners, employees, shareholders, and local communities while striving to meet their expectations. To this end, the Kurita Group is striving to establish corporate governance, with the aim of realizing transparent, fair, prompt, and decisive decision-making measures and highly effective management supervision.

# **Corporate Governance Structure**

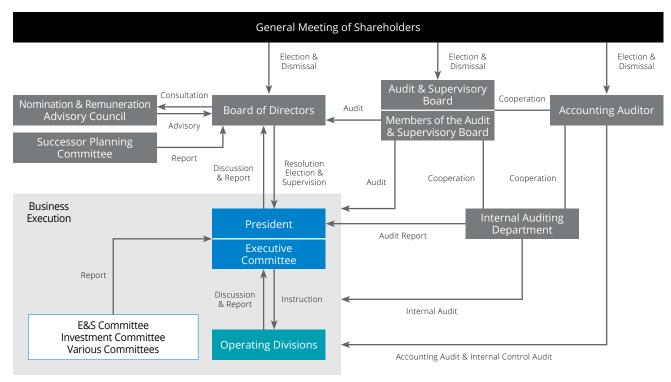
As a company with an Audit & Supervisory Board, the Company's Board of Directors has the two functions of decision-making and supervision over business execution. The Board sets the strategic direction for the Kurita Group and supervises management in general, as well as deciding on the execution of business for important investment and financing projects, the transfer of business, and so forth. For matters other than important matters, business execution is decided by the Executive Committee, which is composed of management executives, or by management executives who have been given deciding authority under the Internal Decision Approval and Review Rules.

# **Overview of Corporate Governance Structure**

(As of June 27, 2019)

Company with an Audit &
Supervisory Board
11
3
1 year
Performance-linked remuneration
Disclosure is restricted to persons with ¥100 million or more.
Nomination & Remuneration Advisory Council, Successor Planning Committee
3
2
5
Grant Thornton Taiyo LLC
Yes

# Corporate Governance Structure (As of June 27, 2019)



# Composition of the Board of Directors

The Board of Directors shall be organized in a way that complements the necessary knowledge, experience and diversity over the entire Board for appropriate management decision making and supervision of business execution. The Company will ensure that the Board will consist of personnel with

a high degree of expertise in various business fields, management planning, finance and accounting, legal affairs, and technologies, etc., taking into consideration gender, international experience, etc.

# Distribution of Knowledge and Experience in the Board of Directors

	Sa	Sales		Finance and accounting		Knowledge and experience expected of external directors		
Name	Japan	Overseas	_ Management planning	Legal affairs Human resources	Technology -	Corporate management	Environment	International
Koichi lioka	•	•			•	_	_	_
Michiya Kadota			•	•		_	_	_
Kiyoshi Itou			•	•		_	_	_
Toshitaka Kodama	•	•			•	_	_	_
Yoshio Yamada	•				•	_	_	_
Hirohiko Ejiri	•	•	•		•	_	_	_
Toshimi Kobayashi	•				•	_	_	_
Yasuo Suzuki	•	•			•	_	_	_
Tsuguto Moriwaki (external director)	-	_	_	_	_	•		
Ryoko Sugiyama (external director)	-	_	_	_	_	•	•	
Keiko Tanaka (external director)	_	_	_	_	_	•		•

Notes: 1. This table is created based on the brief personal histories, positions and assignments in the Company, and reasons for deciding to make the person a candidate for director provided in Proposal No. 3 of the Notice of Convocation of the 83rd Ordinary General Meeting of Shareholders.

2. "Technology" includes both R&D and production.

# **Business Execution Structure**

#### **Executive Committee**

The Executive Committee is established to conduct reviews of matters resolved at the Board of Directors meetings when necessary to expedite and facilitate the decision-making process at the Board of Directors meetings. The Executive Committee consists of the president and representative director, directors at the level of managing director and above, the executive general manager of the Corporate Planning and Control Division, and directors and executive officers designated by the president.

## **Executive Officers**

The Company has in place the executive officer system since June 2005 for the purpose of strengthening business execution capabilities and has appointed eight executive officers as of June 27, 2019. In the fiscal year ended March 31, 2019, the executive officer system was revised. Executive officers who were previously employed under an employment contract as employees were changed to a one-year appointment contract. The Company will continuously strengthen the business execution functions of executive officers.

# **Investment Committee**

To enhance and strengthen the screening of investments and financing of the Kurita Group, the Company established the Investment Committee in April 2017. The Committee is chaired by the deputy executive general manager of the Corporate Planning and Control Division, who is the chief officer responsible for financial management, and composed of people responsible for the main departments within the Administrative Division. The role of the Investment Committee is to pre-screen investment and financing projects to be discussed by the Board of Directors or the Executive Committee and report the pre-screening result and major discussion points to the Board of Directors and the Executive Committee. Organizing the major discussion points through the pre-screening by the Investment Committee helped to enhance the quality of discussion and the speed of investment decision-making by the Board of Directors and the Executive Committee.

In accordance with the policy of striving to maintain return on equity (ROE) at levels above the cost of shareholders' equity, when making an investment decision, the Kurita Group sets a hurdle rate in consideration of risks for each investment project against the cost of shareholders' equity.

# The Basis for Management Activities

# **Corporate Governance**

# Roles and Results of the Investment Committee (The fiscal year ended March 31, 2019)

Roles		<ul> <li>Pre-screening of investment and loan projects to be discussed by the Board of Directors or the Executive Committee</li> <li>Report the pre-screening result and major discussion points to the Board of Directors or the Executive Committee</li> </ul>		
Constituent memb	oers	Chairperson: Deputy executive general manager of Corporate Planning Division  Members: Executive general manager of Group Administrative Division, general manager of the Corporate  Planning Department, general manager of the Accounting Department, general manager of the Finance  Department, general manager of the Group General Affairs Department, manager of the Group Legal  Department, and general managers of business management departments		
	Number of meetings held	14		
Results in the fiscal year ended March 31, 2019	Number of projects pre-screened	Equity investment and M&A projects:  Capital investment projects:  Financing and fund procurement projects:  Company establishments, relocations, reorganizations:  Business facility sales:		
-	Results	Improved quality of discussion at the Board of Directors and the Executive Committee meetings.  Enabled earlier filing of requests by requesting departments and increased request activity as a result		
(Reference) Invest	ment Standard	Hurdle rate calculated as "cost of capital (estimated at slightly under 8%) + risk premium for each project"		

# Fulfilling the Function of the Audit & Supervisory Board Members

The Company's Audit & Supervisory Board members attend important meetings including meetings of the Board of Directors, the Executive Committee, and the E&S Committee, and audit execution of duties by directors. They also audit the status of performance of oversight duties by the Board of Directors. Furthermore, they also conduct asset status surveys of the entire Kurita Group and audit the development and operation of internal control systems implemented by the directors.

# Cooperation with the Accounting Auditor and the Internal Auditing Department

The members of the Audit & Supervisory Board confirm the Accounting Auditor's independence and the status of their performance of duties and hold discussions and exchanges of opinions with the Accounting Auditors about accounting audits on a periodic basis and as required. Furthermore, the members of the Audit & Supervisory Board discuss internal audit plans with the Internal Auditing Department in charge of internal audits of the Company and exchange opinions with them about audit results and evaluations of internal controls, risk management, etc., relating to financial reporting.

# Experience, Capability, and Knowledge of the Audit & Supervisory Board Members

Name		Eventiones Canability and Knowledge	Attendance (Fiscal year ended March 31, 2019)		
		Experience, Capability, and Knowledge	Board of Directors' meetings	Audit & Supervisory Board meetings	
Kenjiro Kobayashi	External member of the Audit & Supervisory Board Independent officer	Mr. Kenjiro Kobayashi has been active in different fields to those of the Kurita Group's businesses and has high expertise in the areas of finance, corporate planning, new business development, M&As, etc., along with a wealth of international experience.	15 / 15	11 /	
Yukihiko Mutou		Mr. Yukihiko Mutou has held important positions in the Administrative Division. He possesses a wealth of knowledge and experience in the areas of finance, accounting, and management.	_	_	
Shigekazu Torikai	External member of the Audit & Supervisory Board Independent officer	Mr. Shigekazu Torikai has special knowledge as well as a wealth of experience and deep insight into corporate legal affairs as an attorney.	13 / / 15	10 / 11	

### Evaluation of the Effectiveness of the Board of Directors

The Board of Directors analyzes and evaluates its effectiveness every year in order to fulfill its expected roles and functions more effectively.

#### **Evaluation Method**

The evaluation is carried out via a written survey with each of the respondents identified. Following a discussion on the aggregate results, the Board of Directors, evaluates its effectiveness, identifies problems, designates issues to be addressed and establishes measures. These matters are then adopted by a resolution of the Board. In the fiscal year ended March 31, 2019, the survey was partially revised to make it more specific based on the results of the previous year's survey.

Evaluation method	Self-Evaluation This evaluation was conducted via a written survey, with each of the respondents identified. Following a discussion on the aggregate results, the Board of Directors, evaluated its effectiveness, clarified issues and adopted measures for the future.
Evaluation items	The following six themes were evaluated 1) Roles and responsibilities of the Board of Directors 2) Collaboration with members of the Audit & Supervisory Board and external directors 3) Composition of the Board of Directors 4) Operation of the Board of Directors 5) Contributions of individual directors and members of the Audit & Supervisory Board 6) Dialogue with shareholders
Evaluation period	From January to December 2018

#### **Evaluation Results**

According to the evaluation results for January to December 2018, the average self-evaluation of all Directors and members of the Audit & Supervisory Board was generally good in all six areas, indicating that the effectiveness of the Board of

Directors is ensured. The area of "collaboration with members of the Audit & Supervisory Board and external directors" was highly evaluated with less variance of evaluation among inside directors, external directors and members of the Audit & Supervisory Board. On the other hand, while evaluation scores generally showed increasing trends, certain items related to the establishment of structures that support risk-taking of the Kurita Group and the organization of the Kurita Group's risk management systems were evaluated relatively lower than other items. The issue and measures to be addressed in the fiscal year ending March 2020 were resolved to improve such evaluation.

#### Issue

Further improvement of governance standards for the Kurita Group as a whole, including group companies in Japan and overseas, is necessary.

#### Measures

In order to strengthen governance at Group companies in Japan and overseas, we will further improve the systems and structures provided by the Company, and the Board of Directors will accurately evaluate operational status and aim to improve effectiveness.

# Status of Initiative on Issues Based on Evaluation Result for the Fiscal Year Ended March 31, 2018

The evaluation result for the fiscal year ended March 31, 2018, identified the issue that "More in-depth discussion regarding the selection of successors is necessary." Based on this, in the fiscal year ended March 31, 2019, the Company built a system for selecting and developing successor candidates for the president, the directors, and the executive officers. A structure was established for systematic selection based on objective evaluation of successor candidates, for the president, directors, and the executive officers, and for the development of successors. This served to enhance the content of discussions by the Board of Directors on selection of directors and executive officers.

# Advisory Councils for the Board of Directors

### Nomination & Remuneration Advisory Council

The Company has in place a Nomination & Remuneration Advisory Council, a voluntary committee to increase transparency in the decision-making process regarding remuneration for directors and nomination of directors and members of the Audit & Supervisory Board. The frequency of meetings in the fiscal year ended March 31, 2019 was twice for nomination (directors and members of the Audit & Supervisory Board) and once for remuneration. The Council was chaired by an external director, with the main members being the external directors and the external members of the Audit & Supervisory Board.

The chairperson of the Board of Directors consults with the Nomination & Remuneration Advisory Council beforehand when proposals are made to the Board of Directors regarding candidates for director or member of the Audit & Supervisory Board or remuneration for directors. Having received the request, the Council reports on the suitability or unsuitability of the candidates to the Board of Directors.

# **Corporate Governance**

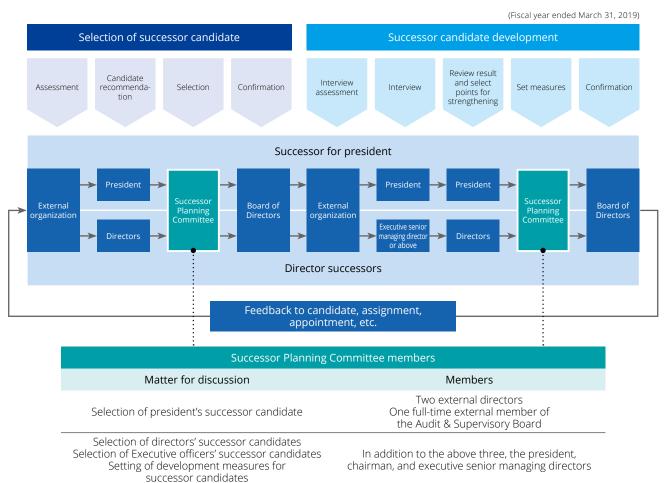
# Profile of Nomination & Remuneration Advisory Council (Fiscal year ended March 31, 2019)

		Constituent members	Results in the fiscal year ended March 31, 2019
Nomination	Candidates for directors Candidates for representative directors Candidates for executive directors	• Two external directors    • President     • One full-time external member of the Audit & Supervisory Board	Determining the appropriateness of all candidates for director
	Candidates for members of the Audit & Supervisory Board	<ul> <li>One full-time external member of the Audit &amp; Supervisory Board</li> <li>President</li> <li>One full-time internal member of the Audit &amp; Supervisory Board</li> <li>Executive general manager of the Corporate Planning Division</li> </ul>	Determining the appropriateness of candidates for members of the Audit & Supervisory Board
Remuneration		Two external directors President One full-time external member of the Audit & Supervisory Board	Performance evaluation of directors     Discussion of the appropriateness of incentive remuneration     Discussion of the appropriateness of fixed remuneration

### **Successor Planning Committee**

Based on the decision on issues to be addressed and measures for them in the evaluation of the effectiveness of the Board of Directors for the fiscal year ended March 31, 2018, in May 2018 the Company established the Successor Planning Committee, mainly comprising external officers, as an organization for selecting successor candidates for the president, directors, and executive officers and deciding on

measures for their development. The committee refers to objective information such as external organization assessment results for the successor candidates and selects successor candidates for the president, directors, and the executive officers, as well as setting the development measures for the successor candidate for president, and reports these to the Board of Directors.



# Remuneration for Directors and Members of the Audit & Supervisory Board

The Company's remuneration system for directors excluding external directors is composed of fixed remuneration as base remuneration, and incentive remuneration reflecting business results. For external directors and members of the Audit & Supervisory Board, who perform oversight functions, only the fixed remuneration system is adopted. An amount of the fixed remuneration is decided for each job title in the case of directors and for each working style in the case of members of the Audit & Supervisory Board. Part of the remuneration is appropriated for the directors' and Audit & Supervisory Board members' Shareholding Scheme for purchasing the Company's shares in order that directors and members of the Audit & Supervisory Board share the risk of stock price fluctuation with shareholders.

To provide an incentive to directors excluding external directors to continuously increase corporate value, the Company provides short-term and long-term incentive remuneration. The short-term incentive remuneration is variable depending on the degree to which consolidated operating

income achieves an annual business plan and the performance of duties for which each person is responsible. For the long-term incentive remuneration, the Company has introduced a performance-linked stock compensation program under which points are awarded according to business performance and job title during the term of office, and shares of the Company are granted at the time of retirement in an amount corresponding to the number of accumulated points.

The remuneration system and level and performance evaluation of directors are adopted by resolution of the Board of Directors after consulting in advance with the Nomination & Remuneration Advisory Council. Based on the report given by the Nomination & Remuneration Advisory Council, the Board of Directors will decide the allocation of remuneration of the directors within the total amount determined by a General Meeting of Shareholders. The allocation of remuneration for each member of the Audit & Supervisory Board is adopted by resolution of the Audit & Supervisory Board.

# The Remuneration System for Directors and Members of the Audit & Supervisory Board

Payment Ratio of Base Remuneration and Incentive Remuneration (Average)

Base re	muneration	Performance-link		
	Of which, payment to shareholding scheme	Short-term incentive remuneration	Long-term incentive remuneration	Total
50%—90%	10%—20%	0%—30%	10%—20%	100%

# Remuneration for Directors and Members of the Audit & Supervisory Board

Total amount of remuneration, etc., for each officer classification, total amount by type of remuneration, etc., and number of eligible officers (Fiscal year ended March 31, 2019)

Officer clearification	Total amount of	Total ar	Number of eligible		
Officer classification	remuneration, etc. (millions of yen)	Base remuneration	Performance-linked remuneration	Retirement benefits	payees for base remuneration
Directors (excluding external directors)	543	310	233	_	10
Members of the Audit & Supervisory Board (excluding external members)	34	34	_	_	1
External officers	75	75	_	_	4

# The Basis for Management Activities

# **Corporate Governance**

# Total Amounts of Consolidated Remuneration, etc., for Each Officer of the Company (Fiscal year ended March 31, 2019)

Nama	Total Amount of Consolidated		Amounts of consolidated remuneration, etc., by type (Millions of yen)		
Name	Remuneration (Millions of yen)	Officer classification	Base remuneration	Performance-linked remuneration	Retirement benefits
Michiya Kadota	112	President and Representative Director	64	47	_

Note: Only directors whose total consolidated remuneration, etc., is ¥100 million or more are listed.

# **Independent External Directors**

The Company's external directors are appointed for a term of one year and may concurrently hold positions at up to three listed companies including the Company. The independent external directors use their knowledge and specialist insight accumulated through experience in management to evaluate management and express opinions from the perspectives of the Kurita Group's sustainable growth and medium- to long-term increase in corporate value, helping to enhance the rationality and transparency of decision-making by the Board of Directors.

The activities of the independent external directors include making active statements and proposals in the Board of Directors' meetings, the Nomination & Remuneration

Advisory Council, and the Successor Planning Committee, as well as attending as observers in internal committees such as the E&S Committee, the Solutions Business Committee, and the Health and Safety Committee. They also make onsite visits to gain a deeper understanding of operations for evaluating management.

In June 2019, we welcomed Ms. Keiko Tanaka as an external director, bringing the number of external directors to three. Ms. Tanaka has experience in business fields that differ from those of the Group and a great deal of knowledge about public relations and marketing, as well as international experience. The Company expects her to use these in expressing opinions from an external perspective.

# Status of External Directors (As of June 27, 2019)

Post	Name	Number of meetings of the Board of Directors attended (Fiscal year ended March 31, 2019)	Reasons for election as a director	
	Tsuguto Moriwaki	Board of Directors' meetings: 14/15	Mr. Tsuguto Moriwaki is an individual who possesses a great deal of knowledge about manufacturing and corporate reform. The Company judged that he could take advantage of his knowledge and experience, having held important positions such as representative director in other companies, to deliver opinions from an outside perspective and increase the rationality and transparency of the Company's management.	
Directors	Ryoko Sugiyama	Board of Directors' meetings: 14/15	Ms. Ryoko Sugiyama is an expert on the environment and waste and has held important positions such as an external director of listed companies. The Company judged that she was capable of providing opinions from an outside perspective, different from those within the Company, and increasing its rationality and transparency.	
	Keiko _ Tanaka _		Ms. Keiko Tanaka has experience in business fields that differ from those of the Kurita Group and a great deal of knowledge about public relations and marketing, as well as international experience. The Company judged that she was capable of using these to express opinion from an outside perspective to increase the rationality and transparency of the Company management.	

# **Shareholdings of Other Listed Companies**

The Company holds shares of other listed companies for strengthening business relationships. We verify the economic rationality for respective shareholdings by comparing the expected earnings based on capital cost and the earnings from holding the shares. We also examine the relationships with companies whose shares the Company holds by carefully examining our transaction histories with

them. Based on the results of this examination, the Board of Directors reviews the appropriateness of holdings periodically and at other times as necessary, and reduces the number of shares held. In the fiscal year ended March 31, 2019, we sold the shares of 13 companies, including partial sales, and allocated the funds acquired from the sales to capital investments and M&As.

# Policy regarding shareholding of other listed companies

# Increasing capital efficiency by selling shareholdings in line with the policy of the medium-term management plan

Policy		<ul> <li>In some cases, the Company holds shares of other listed companies to strengthen business relationships, etc.</li> <li>When holding such shares, the Company makes efforts to minimize the risk of holding the shares. The propriety of holding each individual stock is reviewed on a regular or timely basis at the Board of Directors. Based on the results of the examination, the Company aims to reduce the holding of shares of other listed companies.</li> <li>The Company exercises decision-making authority for each proposal giving consideration to whether it will contribute to increase shareholder value.</li> <li>If a shareholder indicates its intention to sell the Company's shares, the Company will not prevent the shareholder from making such sale, etc.</li> </ul>
Review of	Frequency	Once a year or as necessary
shareholdings	Standard	• Total of operating profit and dividends received is less than expected return for five consecutive years • An improper incident occurs, etc.
Record of	Fiscal year ended March 31, 2018	• 9 of 46 stocks
sales	Fiscal year ended March 31, 2019	• 13 of 37 stocks (includes partial sales)

# Dialogue with Shareholders and Investors

The Kurita Group aims to respect its shareholders in management and strives to listen to its shareholders and investors and promote constructive dialogue with them in order to contribute to increasing medium- to long-term corporate value. In communicating information, the Company emphasizes fairness and transparency. The materials and summary of the Q&A sessions of the Company's presentation meetings is posted on its IR website as much as possible in an effort to prevent information gaps.

#### **IR** Activities

The Group strives to secure opportunities for dialogue with institutional investors in Japan and overseas and individual investors in Japan through various presentations, conferences, and individual meetings. The president is the main speaker at the financial results presentations. For routine dialogues, the personnel in charge of investor and shareholder relations and the personnel in charge of CSR serve as the main speakers, except for silent periods.

#### IR Activities in the Fiscal Year Ended March 31, 2019

	Dialogue events	Number of events
	Financial results presentations (including teleconferences)	4 times
Institutional investors	Small group meetings	4 times
(including shareholders)	Individual meetings	Total approx. 200 times
	Overseas roadshows	2 times
	Shareholders presentation after Annual General Meeting of Shareholders	1 time
Individual investors (including shareholders)	Presentations for individual investors	2 times
	Issue of letter to shareholders	1 time

# **Corporate Governance**

# Communication with People Responsible for Exercising Voting Rights

The Company is working to increase opportunities for dialogue with members of institutional investors responsible for exercising voting rights in an effort to listen to their opinions and reflect them in improvement of management. In the fiscal year ended March 31, 2019, personnel responsible for investor and shareholder relations visited the offices of major investors and voting advisory institutions in Japan 14 times to hear the voting policies of institutional investors and their opinions and expectations for the Group's management, as well as improvement on corporate governance. The opinions and expectations are being swiftly relayed back to management.

# Initiatives to Continuously Improve Convenience for Exercising Voting Rights

Initiative	Starting time
Adoption of full-color convocation notices	June 2018
Increase in English translation scope of the convocation notice	June 2018
Preparation of English version of the corporate governance report	October 2016
Early disclosure prior to convocation notice dispatch	June 2016
Preparation of English-language convocation notice (reference documents)	June 2013
Shareholder relations visits	November 2011

# **Revision of Disclosure Policy**

With the introduction of the so-called "fair disclosure rule" with the revision of the Financial Instruments and Exchange Act in April 2018, the Company has revised its disclosure policy. In the revision, the Company has clearly documented the purpose of disclosure, handling of important information, systems for ensuring fairness of disclosures, and so

forth. At the same time, the Company has prepared a practical internal manual for disclosures. Making use of this, we will strive to ensure fair and timely disclosures to investors, while making sure that our disclosures do not become constrained by an over-emphasis on ensuring fairness.

# Review by External Directors Tsuguto Moriwaki, Director

The Company's corporate governance has made significant advances compared with one year ago. Last year, I indicated the need to establish a system for selecting and developing successors to the president and directors, and we have now seen the establishment of the Successor Planning Committee. Schemes provided



by external organizations may not necessarily be suitable for the Company, but the Company can revise them in instances where reforms have gone too far. Moreover, by including myself in the discussion, I believe the process will be more transparent. I also think that the current method and system for deciding on director remuneration is appropriate.

On the other hand, I believe there is some room for improvement of the Investment Committee. Rather than having the discussion in the Investment Committee pass through the Executive Committee as it does now, if it were reported directly to the Board of Directors, the Board would be able to have deeper discussion.

In terms of enhancing the discussion regarding medium- to long-term strategy, by making the medium-term management plan cover five years, the Board of Directors' perspective has changed by being able to observe events over a longer span. They have also been able to cultivate a medium- to long-term perspective on the SDGs, which is in keeping with the spirit of the Company. I would like to see all Group employees incorporate this into their actual working activities and build on them.

### Ryoko Sugiyama, Director

In terms of corporate governance in the fiscal year ended March 31, 2019, the Company appears to have made bold reforms in the selection and development of successors to the president. I consider this approach to be consistent with the trend of governance reform generally. A few years on from this reform, I think that



points for revision will emerge, and I hope that the Company will make revisions at that time. I believe that involving external directors in the personnel selection process will bring transparency and acceptability to the discussion.

Now the number of external directors has been increased from two to three, which is a step in the right direction for strengthening their function. The discussion in the Board of Directors is very lively, and I feel that it has changed compared to one year ago when I was appointed.

From the fiscal year ended March 31, 2019, I have attended several committees multiple times, which has afforded me a deeper understanding of the Company. In particular, in the E&S Committee, which deals with environmental and social issues, there is an overlap with my own field of expertise so learning about the discussion and consideration process in this committee really helped me to understand the Company. Looking ahead, I plan not only to listen, but also to participate in the discussion. I also find that observing Group companies and customers' sites helps me to know the Company.

# The Basis for Management Activities

# Risk Management

The Kurita Group defines risk as any event that makes its sustainable growth and enhancement of the Group's corporate value uncertain. We identify risks that need to be addressed while minimizing losses and damage caused by risks by taking measures to avoid and mitigate risks, so that we can continue securing business opportunities for further growth.

# Risk Management System

The executive general manager of the Corporate Planning and Control Division is the officer responsible for monitoring risks and implementing risk management in the Kurita Group. The executive general manager regularly conducts analysis and evaluation of the Group's risks, conducts ongoing monitoring based on the Company-wide risk map, and takes steps to prevent risks from occurring.

If a risk that could have a serious impact on management occurs, the general manager formulates systems with those responsible for responding to the risk, obtains approval from the president and the representative director, and immediately issues orders. Those responsible for responding to the risk promptly take action and report to the president and the representative director and the executive general manager of the Corporate Planning and Control Division regarding the status of the effects of the risk, remediation, and measures to prevent reoccurrence.

Among serious risks, those related to compliance are the

responsibility of the chairperson of the E&S (Environmental & Social) Committee, while those related to health, safety, and disasters are the responsibility of the chairperson of the Head-quarters Health and Safety Committee. The executive general manager of each division is responsible for responding to risks directly associated with day-to-day business operations. Also, responding to commonly seen risks relating to quality, environment, information security, export controls, and so on are handled by the respective divisions responsible.

The executive general manager of the Corporate Planning and Control Division, the chairperson of each committee, and the executive general manager of each division report periodically to the Board of Directors on the status of risk management implementation, and report as necessary to the Board of Directors and the Audit & Supervisory Board on the occurrence and effects of serious risks. Furthermore, monitoring of the execution status and improvement status of risk management is conducted by the Internal Auditing Department.

# **Risk Management System**



Monitoring implementation status and improvement status

**Internal Auditing Department** 

# **Business Continuity Management (BCM) Policy**

The Kurita Group formulated the Business Continuity Management (BCM) Policy to set out the Kurita Group's principles for handling emergencies that pose a risk to the continuity of the Group's businesses, such as severe earthquakes, typhoons, or pandemics. The policy enables Kurita Group officers and employees to make judgements and act appropriately by clarifying our basic approach as follows.

1. Highest priority on ensuring the preservation of human life The Kurita Group will place highest priority on ensuring the peace of mind and safety and security of the officers and employees, and their family members.

#### 2. Early restoration of business operations

The Kurita Group will endeavor to quickly restore the operations at its own facilities, completed properties, properties under construction, and so forth. In this way, it will make efforts to supply products and services in a stable manner and to support its customers' recovery efforts.

# 3. Community support

While making efforts to prevent secondary disasters at its own sites, the Kurita Group will support reconstruction of the local community.

# The Basis for Management Activities

# Compliance

All Kurita Group officers and employees share fairness, transparency, integrity, safety, and compatibility as five core values, and the Kurita Group Code of Conduct has been created to set out basic guidelines for judgment and conduct for how all Kurita Group officers and employees should conduct themselves and what conduct is prohibited.



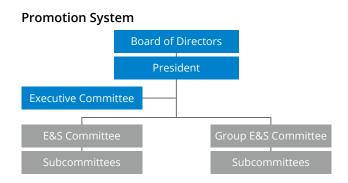
Please see the following website for our Code of Conduct.

Please see the following website for our code of conduct.

Kurita Group Code of Conduct https://www.kurita.co.jp/english/philosophy\_vision/pdf/philosophy\_vision\_01.pdf

# **Promotion System**

The Kurita Group has established the E&S (Environmental & Social) Committee, and the Group E&S Committee as organizations for overseeing compliance activities. Both committees are chaired by the Company's director, and the Group Committee's members are representatives of Group companies or members designated by these representatives. In these committees, the Group sets out policies and important measures for compliance activities and conveys them to all employees through subcommittees at each headquarters division and Group company.



#### Main Initiatives

#### **Anti-Bribery Initiatives**

The Kurita Group has formulated the Kurita Group Anti-Bribery Policy and the Kurita Group Antitrust Policy to ensure the promotion of fair business practices throughout the entire Group. These policies have been translated into 16 languages so that all Kurita Group officers and employees throughout the world can understand them.

In the fiscal year ended March 31, 2019, the Company and its domestic affiliates provided anti-bribery e-learning training for all their officers and employees.

# **Compliance Training for Management**

The Company conducts ongoing compliance training for its management team and those of its domestic Group companies. In the fiscal year ended March 31, 2019, a training program about plea bargaining was held and attended by 59 people from the Company.

# Compliance Behavior Survey

The Kurita Group conducts the Compliance Behavior Survey for employees and dispatch staff each year in order to clarify the impact of compliance activities and any problems, and to identify latent legal and regulatory infringement risks to help reduce risks going forward. In the fiscal year ended March 31, 2019, the survey was conducted for 6,944 employees and dispatch staff with a 98.9% response rate.

#### Consultation and Whistle-Blowing Desk

The Kurita Group has established consultation desks within each company and outside organizations where people can report or consult if they observe behavior that violates or potentially violates the Kurita Group Code of Conduct, policies related to compliance, or internal company rules. These consultation desks are provided not only for Kurita Group employees, but also for dispatch staff sent to work in the Kurita Group and personnel at our business partners and so forth. They are designed in an effort to protect persons who consult or make reports and to achieve early detection of dishonest practices. Moreover, the Company also operates the Kurita Global Helpline, which allows the employees of overseas Group companies to make reports to a consultation desk.

# Requests to Business Partners for Compliance Initiatives

In accordance with the Kurita Group Procurement Policy, the Company absolutely refrains from any transactions that would benefit antisocial forces or terrorist groups. Furthermore, we have formulated the Kurita Group CSR Procurement Guidelines, which require our business partners to observe laws, regulations, and social norms, while refusing relationships with antisocial forces. In the fiscal year ended March 31, 2019, we asked our business partners who receive particularly large orders from us to conduct a self-evaluation based on the Guidelines, and to carry out improvement measures.

# **Environmental Improvement Activities**

The Kurita Group defines its environmental improvement activities as follows: 1) activities to comply with the environment-related laws and regulations of each country and region that are applicable in conducting business activities; 2) initiatives to solve international issues related to the sustainability of water and the environment through business activities; and 3) disclosure of information related to 1) and 2), and engagement with customers, business partners, employees, shareholders and investors, and local communities related to such activities. Moreover, we strive to make environmental improvements not only within the Company, but also in the operations of customers using our products and services. These efforts are conducted under the Kurita Group Environmental Policy, and the entire Group is promoting activities based on the policy.

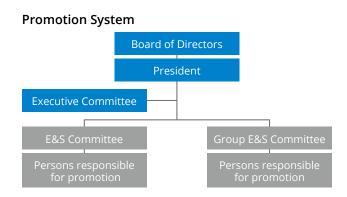


Please see the following website for our environmental policy.

Kurita Group Environmental Policy https://www.kurita.co.jp/english/csr/management/policy/environment/index.html

# **Promotion System**

The Kurita Group has established the E&S Committee, which is chaired by a director of the Company, and the Group E&S Committee, chaired by the same director and composed of representatives of domestic Group companies. These committees oversee environmental improvement initiatives in the Kurita Group. The committees formulate unified medium-term goals for the Kurita Group's environmental improvement initiatives and action plans for each fiscal year. Personnel responsible for promotion are designated by the committee chair to promote activities for achieving the targets of the environmental improvement initiatives at their assigned company or organization. They report the status and results of the activities to the E&S Committee.



# Environmental Improvement of Customers' Operations (Promotion of CSV Business)

From the fiscal year ended March 31, 2019, the Kurita Group has defined products, technologies, and business models that contribute significantly to water-saving,  $CO_2$  emissions reduction and waste reduction compared to previous levels as the "CSV business," and has expressed these advantages as respective coefficients. The reduction of environmental impact from customers' operations is calculated based on these CSV business coefficients and application results. The CSV business is also constantly reviewed in light of the development status of more competitive products, technologies, and business models.

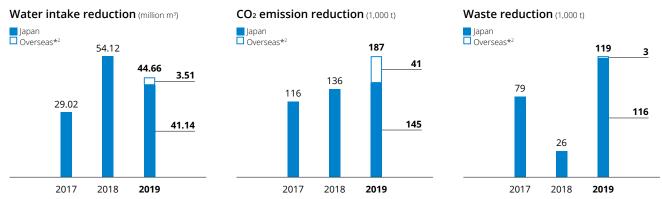
\*Please see "Performance" on p. 9 for results for the fiscal year ended March

# **CSV Business Selection Standard**

CSV businesses demonstrate the following standards with regard to water-saving,  $CO_2$  emissions reduction, and waste reduction:

- 1) Are significantly more effective than previous or competing technologies.
- 2) Are new technologies or applications of existing technologies in new markets.
- 3) Contribute to the action plans presented in the SDGs.

# Environmental Improvement of Customers' Operations\*1



<sup>\*1</sup> Years ended March 31

<sup>\*2</sup> The reduction of impacts at overseas Group companies have been ascertained since the fiscal year ended March 31, 2019.

# **Environmental Improvement Activities**

Example of Initiatives

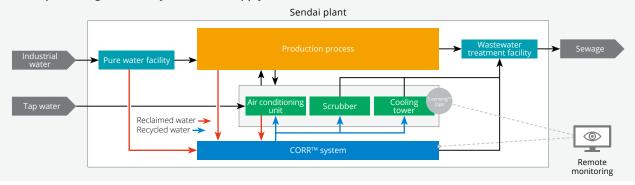
# With Kurita's Recycled Water Supply Service to Reduce Water Usage at the Sendai Plant of Kanazawa Murata Manufacturing —Expected Reductions of 40% in Tap Water Usage and 30% in Sewage

At the electronic components manufacturer Kanazawa Murata Manufacturing Co., Ltd., an environmental initiative based on the Murata Manufacturing group's environmental action plan is under way. The Group has set a target for reducing water usage per production volume, and has set about reducing the volume of water used at its Sendai plant.

Kurita Water Industries proposed a recycled water supply service that reclaims and recycles wastewater to help this customer achieve its goals. The service is a contract with the customer to supply recycled water, including operation and management of the CORR™ wastewater reclamation system. In applying this service, we cooperated with the customer to investigate the volume and quality of the reclaimable wastewater at each outlet, and to select areas for use of the recycled water depending on its quality. In this case, since the recycled water is used as make-up water for a cooling water system, we also provided cooling water quality management using the S.sensing™ Opti remote monitoring system.

Using the service has enabled the customer to use water in the plant more efficiently, and the customer expects to achieve reductions of 40% for tap water and 30% for sewage compared to the fiscal year ended March 31, 2018.

### Conceptual Diagram of Recycled Water Supply Service



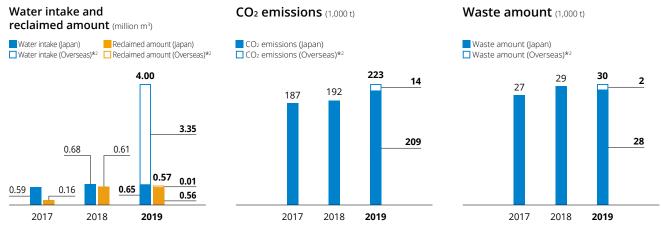
### **Internal Environmental Improvement Activities**

The Kurita Group works to reduce water usage, energy usage, and waste, while adhering to the environmental laws and ordinances of each country and region that apply to the Group's business activities. Based on the characteristics of each company and business site, we select the items that are strongly correlated with environmental impact, such as production volume, net sales, or site area, as the denominators for a per-unit measurement of environmental impact, then set about reducing this.

# Evaluation of Water Risk at Internal Facilities

Kurita Water Industries assesses and confirms the water risk of the areas where Group production bases are located once a year using the Aqueduct Water Risk Atlas provided by the World Resources Institute. In the fiscal year ended March 31, 2019, we surveyed all of the Group's production sites and found that there were four sites located in areas ranked "High risk" or above. The total amount of water intake for these sites was confirmed to be 0.2% of the intake volume for all production sites.

# Internal Promotion of Environmental Improvements\*1



\*1 Years ended March 31 \*2 The reduction of impacts at overseas Group companies have been ascertained since the fiscal year ended March 31, 2019.

# Participation in the Ministry of the Environment's Water Project

Kurita Water Industries is participating in the Water Project of the Ministry of the Environment, which provides an opportunity to disseminate information about its technologies and business activities related to efficient use of water resources and preservation of the water environment.

# Participation in the Japan Society of Industrial Machinery Manufacturers' Basic Environmental Action Plan

Kurita Water Industries participates in the basic environmental action plan of the Japan Society of Industrial Machinery Manufacturers, which is working on countermeasures for global warming. We report regularly on the status of our response to climate change.

# Increasing Environmental Awareness of Employees

The Kurita Group holds an employee-participation event called Kurita Environment Month to foster awareness of the

environment among employees. The event calls for all Kurita Group officers, employees, temporary workers, and their families to submit experiences and ideas relating to environmental improvement. In the fiscal year ended March 31, 2019, 833 people participated, with 641 submissions. The submissions were collated into a collection and published on the intranet to be shared and utilized throughout the Group.

# Requesting Business Partners to Make Environmental Improvements

The Kurita Group considers it vital to reduce environmental impacts across the entire supply chain with the cooperation of suppliers. To this end, we have established the Kurita Group CSR Procurement Guidelines, and we have asked suppliers to comply with environmental laws and regulations, take steps to reduce their environmental impact by setting voluntary standards to reduce water and energy usage, and to provide appropriate information. In particular, we ask major suppliers to conduct a self-evaluation based on the guidelines and to implement improvement measures.

# Example of Initiatives

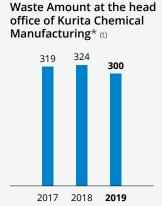
# Reducing Waste at Kurita Chemical Manufacturing –Improvements through Collaboration with Kuritaz

Kurita Chemical Manufacturing Ltd. is a manufacturing base for water treatment chemicals in the Kurita Group. The company's Egawa Plant manufactures over 3,000 types of water treatment chemicals. In the past few years, fluctuations in the raw wastewater quality arising from day-to-day changes in the products being manufactured and aging of the water treatment facility itself caused the sedimentation process to become unstable. This led to lower concentrations of sludge in the sedimentation tanks, which caused an issue that the sludge could not undergo dehydration when it was removed and had to be discarded untreated.

Kurita Chemical Manufacturing utilized the onsite inspection service of Kuritaz Co., Ltd., which conducts water treatment facility operation, maintenance, and management services, and took measures to improve the operation management approach according to changes in the raw wastewater quality. This enabled the amount of waste to be reduced. In May 2019, the company upgraded its wastewater treatment facility based on the result of Kuritaz's investigations. The initiative realized a reduction in work hours spent on operation management for stabilizing the quality of treated wastewater.



Newly installed dissolved air floatation tank (front view)



\* Years ended March 31

# ISO 14001 Certified Bases

Company	Office
Kurita Water Industries Ltd.	Shizuoka, Yamaguchi, Toyoura, Tsuruga plants
Kurita Chemical Manufacturing Ltd.	Head Office, Ako plant
Kurita Buil-Tech Co., Ltd.	
Kuritaz Co., Ltd.	
Kuritec Service Co. Ltd.	
Kurita-GK Chemical Co., Ltd.	
Kurita (Taiwan) Co., Ltd.	
Kurita Water Industries (Dalian) Co., Ltd.	

Company	Office
Kurita Water Industries (Jiangyin) Co., Ltd.	
Hansu Co., Ltd.	
Kurita Europe GmbH	Ludwigshafen, Viersen
Kurita Turkey Kimya A.S.	
Kurita do Brasil LTDA.	
Hansu Technical Service Ltd.	
Kurita (Singapore) Pte. Ltd.	
P.T. Kurita Indonesia	

# **Human Resources Management**

The Kurita Group sees human resources as the bedrock for its sustainable growth. To enhance customer intimacy, each Kurita employee must develop a high level of expertise and give their full effort to resolving customers' issues. The Kurita Group will work to secure and develop human resources while passing on water-related technologies that it has accumulated over many years. At the same time, we will create a work environment where individual employees can fully utilize their own abilities and aptitudes and an organizational culture that allows diverse human resources to play a role.

# **Human Resource Development**

The Company works to develop human resources by having departments responsible for human resource development conduct training for employees in each rank and position, and the "Greater Adaptability to Globalization Course," which is designed to nurture human resources that are capable of working at a global level. We also provide employees in Kurita Water Industries and its Group companies in Japan

and overseas with specialist knowledge training on Kurita Group products, technologies, and services, training on safety and legal matters, and training for acquisition of communication and problem-solving skills. We are also working to develop human resources that will play central roles in our overseas Group companies by conducting training for future executives among national staff and managers.

# Promoting Women's Participation and Advancement in the Workplace

Promoting women's participation and advancement in the workplace has been an issue for Japan as a country. The average number of years of service among female employees of the Company is 17.1, indicating a working environment that encourages women to continue working for a relatively long period. On the other hand, due to the longstanding system of developing core business personnel mainly though on-the-job training (OJT) at customers' worksites, traditionally considered unsuitable for female workers, little progress was made in appointing women to management positions. However, as Japan faces the prospect of a society with a shrinking population, the ability to successfully promote women's participation and advancement in the workplace has become an urgent issue for the Company in terms of securing management resources. In response, we are working to improve this situation under an action plan based on the Act on Promotion of Women's Participation and Advancement in the Workplace and the Act on Advancement of Measures to

Support Raising Next-Generation Children. Furthermore, since 2017 Kurita Water Industries has been selected for the MSCI Japan Empowering Women (WIN) Index\*.

\* Please see page 19 "CSR Initiatives."

Action Plan Based on the Act on Promotion of Women's Participation and Advancement in the Workplace In the five-year plan for the period from April 2018 to March 2023, Kurita Water Industries has set the following targets.

- Have 15 or more women in management positions by April 1, 2023
- Achieve a ratio of 30% or more for women among new graduate recruits for career track positions

We will continue taking the following initiatives in order to achieve these targets.

Initiative	Measures taken					
Career planning support for women in career track positions	Provide opportunities that motivate women in career track positions to actively build their careers, such as career development training.					
Increase the ratio of female recruits	Provide opportunities to talk with female employees in responsible positions at various junctures in the recruitment process as part of our graduate recruiting activities for career track employees.					
Expand the roles of female employees	Assign female employees to departments that have few female workers. Systematically appoint women to management positions.					
Support career development through the self-reporting system	Use consultations with supervisors in the self-reporting system as an opportunity to support career development.					

# Action Plan Based on the Act on Advancement of Measures to Support Raising Next-Generation Children

Initiative	Measures taken
Ease workplace regulations	Increase the options for work styles by promoting use of satellite offices (rental offices outside the Company) and recognizing working at home for employees who have restrictions on their work.
Promote use of annual paid leave	Formulate and implement measures to promote use of annual paid leave.
Promote male participation in childcare	Remind employees that childcare leave can be taken in small increments, and aim to increase the number of men taking this leave.
Ensure time for spending on childcare	Subsidize costs of childcare services and ensure that employees have time for childcare.

# **Work Style Reforms**

The Company is promoting work style reforms centered on reducing long working hours with a view to maintaining employees' physical and mental health and increasing their productivity.

### Initiatives to Reduce Long Working Hours

Issue	Measures
Restrict working hours	- Established no overtime day (Wednesday) - Set the hours that the Company's facilities can be used (until 8:00 p.m.)
Promote use of paid annual leave	- Encourage employees to take at least seven days leave, including at least five days of continuous leave in the summer holiday period (June-October)
Changing employee awareness	- Provide Work Style Reform Seminars for engineers - Run e-learning programs for acquisition of time-management skills and effi- cient meeting operation
Reform and introduction of systems and schemes	- Introduction of satellite offices - Trial of interval system to break up work hours

# We will develop human resources who can build ongoing relationships with customers.

Human resources are a limited management resource, especially in Japan, where the working population is projected to decline. Enabling human resources to generate added value is therefore an important theme for management. The Kurita Group approaches management by recognizing that added value is always created by people. Human resources who create added value have two attributes: they aspire to achieve something for others, and they have a strong desire to continue working together as part of their team within the organization.

People's mindset has a huge impact on the Group's businesses. Therefore, it is important that every employee shares a sense of fulfillment in participating to ensure the continuity of the Group. Owing to several M&As in recent years, it has become more important to share our values within the Group. By reaffirming the purpose of the Group based on the corporate philosophy and aligning the awareness of all Group employees, including those that have joined the Group recently, I believe we will create an even greater driving force to propel our business forward.

In addition, as we work to pivot our Group businesses towards services, it will be more important than ever to build ongoing relationships of trust with our customers. Individual human resources need to have a high level of knowledge and skill as professionals in their business fields, but it is also important for them to have the sensitivity to connect and communicate with customers on the human level. Acquisition of this kind of depth of character requires people to mature as individuals through the accumulated experience of dedicating themselves to their work. It takes a relatively long time to develop these kinds of human resources, so stable employment is an essential condition for this.

On the other hand, in order to respond to technological innovation and secure human resources in the business fields that seem likely to become more important going forward, there are some situations where we may not have the

necessary time to develop these kinds of human resources thoroughly. In these cases, rather than taking on all of the development ourselves, we need to explore the potential of mid-career hiring and wide-ranging business alliances.

As the changes in the business environment becoming more extreme, development of human resources who can take on the role of management in the future is an urgent task. In the fiscal year ended March 31, 2019, we set about developing management human resources, a task that we have been slow to address. Bringing in expertise from external organizations, we systemized the requirements and evaluation methods for management human resources and applied the evaluation results to skills development. We will also use this system for nominating future management team members. This system is already in operation, and by accumulating results we will use it to develop high-performing management human resources.



# **Initiatives on Quality**

The Kurita Group recognizes that continuing its business and growing as a company depends on maintaining its status as a trusted supplier for its customers. We therefore strive to manage quality at every stage, from the development of our products and services to their manufacture and delivery. We have established the "Kurita Group Product Quality Policy" as a groupwide policy for promoting these initiatives.



Please see the following website for our product quality policy.

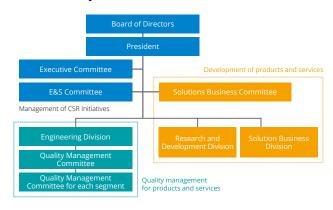
Kurita Group Product Quality Policy http://www.kurita.co.jp/english/csr/group/materiality/customer/index.html

# **Promotion System**

In developing products and services, we consider safety, health, and environmental impact throughout the product lifecycle. Specifically, we screen the development themes of high-performance materials, units, and solution technologies in the Solutions Business Committee, narrowing them down to the themes that are expected to be most effective. The themes are used to develop products and services by the Research and Development Division and the Solution Business Division.

For quality management for the stages from manufacture to provision of products, the Quality Management Committee has been established within the Engineering Division to oversee the quality improvement activities of each organization. The Company has also created systems for autonomously carrying out continuous quality improvements and maintains quality management systems.

#### **Promotion System**



#### **Main Initiatives**

#### **Product Safety Evaluation**

The Company has a rule that, when it uses a new chemical substance, it assesses the risk the chemical substance poses to the environment and health at the product development stage based on internal rules. In addition, when we manufacture a product, we submit mandatory notifications and reports following laws and regulations, including the Industrial Safety and Health Act, the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., and the Fire Service Act.

#### **Product Safety Training**

The Company runs a product safety e-learning course for all employees and dispatch staff except for those in its Administrative Division. The course is designed to deepen employees' understanding around product safety and was taken by around 2,000 people in the fiscal year ended March 31, 2019. We will continue to run the course in the future.

### Providing Training to Improve Knowledge and Skills

In order to raise the quality of services provided to customers, the Company offers training to improve the water treatment

knowledge and skills of its own employees, as well as those of Group companies in Japan and local overseas staff.

#### **Conducting CS Survey**

The Company's engineering departments continuously conducts customer satisfaction (CS) surveys of all customers who have purchased large water treatment plants. Based on the results of the survey, the Company continually works to revise and improve various items, including its operations procedure manual and specification sheets.

	Number of Surveys Conducted	Question items		
Fiscal year ended March 31, 2018	27	8 items, including specifi-		
Fiscal year ended March 31, 2019	14	cation, quality manage- ment, and construction		

#### Response to Problems

Problems that arise prior to delivery to customers and complaints received from customers are entered in the in-house "problem information" database and that information is shared throughout the Company to ensure that all departments take necessary measures. In the fiscal year ended March 31, 2019, there were no serious product accidents or service accidents in the overall Kurita Group.

Number of Participants in Training (Total)	Water Treatment Chemicals (Basic knowledge of water treatment chemicals, communication skills, etc.)	Water Treatment Facilities and Maintenance (Technical training about raw water and wastewater, as well as safety and legal education)	Total
Fiscal year ended March 31, 2017	274	477	751
Fiscal year ended March 31, 2018	431	409	840
Fiscal year ended March 31, 2019	593	520	1,113

# The Basis for Management Activities

# **Initiatives on Safety**

The Kurita Group recognizes that due to the nature of its business, its employees and those of subcontractors are often faced with various safety risks for manufacture and delivery of water treatment chemicals or assembly, delivery, and installation of water treatment facilities. We have therefore positioned "occupational health and safety as the top priority in business operations." We are working to ensure the safety and support the health of Kurita Group officers and employees, as well as employees of subcontractors, to create working environments where they can work with confidence. We formulated the Kurita Group Occupational Health and Safety Policy, and we continuously promote initiatives based on shared policies across the Group.



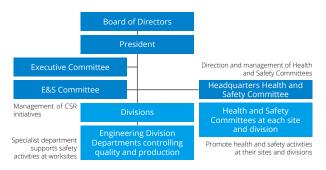
Please see the following website for our Occupational Health and Safety Policy.

Kurita Group Occupational Health and Safety Policy https://www.kurita.co.jp/english/csr/management/policy/health\_and\_safety/index.html

# **Promotion System**

The Company and its domestic Group companies have established a health and safety management system based on labor safety laws and regulations such as the Industrial Safety and Health Act. Under the Headquarters Health and Safety Committee, a joint labor-management committee that is chaired by the general manager of the Corporate Planning and Control Division, each office and division of the Company has established a Health and Safety Committee. These work to maintain and enhance the workplace environment. Furthermore, a specialist department has been established to promote safety within worksites, supporting on-site safety initiatives as well as planning and taking measures to prevent work-related accidents. The department also follows up on the activities of the Headquarters Health and Safety Committee.

# **Promotion System**



# **Main Initiatives**

In the fiscal year ended March 31, 2019, the Headquarters Health and Safety Committees stated the direction for its initiatives as "every one of us must have a sense of danger and establish the behavior of thinking for ourselves to remove any potential risks." The main themes for our priority measures have been 1) disaster response, 2) preventing work-related accidents, 3) preventing traffic accidents, and 4) health management. Our main initiatives in the fiscal year ended March 31, 2019 were as follows.

# Disaster Response

The Company and its Group companies in Japan follow the Kurita Group BCM (Business Continuity Management) Policy to carry out countermeasures for earthquake risks, safety inspections and disaster preparations, and confirm the status of drills at all 153 business sites in Japan, and implement improvements.

#### Initiatives to Prevent Work-Related Accidents

The Company takes measures to prevent work-related accidents for employees on construction sites and for subcontractors by conducting safety education before starting construction and safety patrols on construction sites.

# **Number of Safety Patrols**

	Fiscal year ended March 31, 2018	Fiscal year ended March 31, 2019
Japan	507	449
Overseas	8	22
Total	515	471

# **Number of Participants in Safety Education**

Training name	Fiscal year ended March 31, 2018	Fiscal year ended March 31, 2019
Training on handling fires	42	95
Training on handling chemicals	74	86
Safety training for new employees	142	209
Safety training for national staff overseas	32	32
Special training on full-harness-type fall prevention devices	_	288
Others	303	263
Total	593	973

#### Health Management

The Company ensures that all employees receive regular health examinations, and all employees who handle items such as organic solvents and designated chemicals receive special health examinations. The participation rates in both regular and special health examinations in the fiscal year ended March 31, 2019 were 100%. To improve the health of employees, we held 50 health-related events such as lectures on dietary improvement and body age assessments. In our efforts to prevent mental health issues, we held lectures on mental health 16 times in the fiscal year ended March 31, 2019. In addition, we conduct a Stress Check, which is a survey given to all employees for promoting self-awareness, carried out under the guidance of the stress check systems designed by the Ministry of Health, Labour and Welfare according to the Industrial Safety and Health Act. In the fiscal year ended March 31, 2019, 98.4% of employees took the Stress Check.

# **Corporate Citizenship Initiatives**

The Kurita Group's corporate citizenship initiatives are centered on four fields: promotion of science and technology, development of human resources, humanitarian support, and regional and community activities. We cooperate in many areas across society, making effective use of our resources to help solve social issues.

# **Promotion of Science and Technology**

Kurita Water Industries, Ltd. established the Kurita Water and Environment Foundation in 1997 (converting it into a public interest incorporated foundation in 2009) with the aim of contributing to the promotion of science and technology relating to water and the environment. The Foundation's main activities include making a public call for research applications for grant projects relating to water and the environment each year and then providing grants to young researchers in Japan

and other countries in Asia. In the fiscal year ended March 31, 2019, grants were given to 102 projects. As international exchange support projects, the Foundation supports the Nepalese NPO, Center of Research for Environment, Energy and Water (CREEW), and offers support for master's course students at the Asian Institute of Technology through payment of scholarship grants and so forth.

# **Development of Human Resources**

The Kurita Group utilizes its specialist knowledge, skills, and networks related to water and the environment to develop human resources who can assist the realization of a society in which people are in greater harmony with nature. In November 2018, we ran workshops at P.T. YAKULT INDONE-SIA PERSADA's Plant in Mojokerto to students of Surabaya

Japanese Elementary School. The lectures were on the theme of "Water is the Treasure of the Earth," and covered filtration and coagulation and sedimentation experiments, the ratio of fresh to saltwater on earth, and virtual water, aiming to communicate the importance of water and the role of water treatment technology.

# **Humanitarian Support**

#### Supporting Access to Water

The Kurita Group works with NPOs and NGOs to support disadvantaged members of society who find it difficult to obtain access to safe water due to conflict, poverty, or poor supply of usable fresh water. As part of these activities, in March 2019, we made monetary donations to assist the Japan Center for Conflict Prevention (JCCP) and WaterAid Japan. These donations are being used to support initiatives for people living in parts of Africa where it is difficult to gain access to clean water to create a hygienic living environment.

#### Support for Areas Affected by Disasters

The Kurita Group provides assistance to areas affected by severe natural disasters in countries where it has business sites. We help to supply water using emergency clean water facilities and so forth when water is polluted or supplies are cut due to an earthquake, drought, or other disaster. In the fiscal year ended March 31, 2019, we donated financial aid to areas in Japan affected by torrential rain in July 2018 and to the island of Sulawesi in Indonesia, which was struck by an earthquake. We also supplied drinking water to local governments and our customers in disaster affected areas in Japan.

# **Regional and Community Activities**

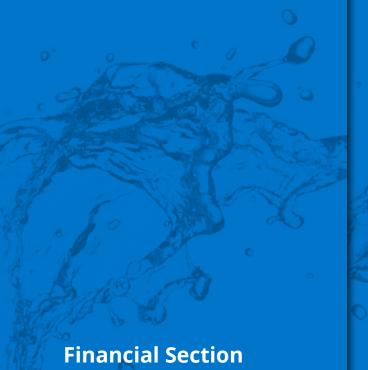
The Kurita Group strives to be accepted as a valuable member of the community and to develop along with the local communities in regions where the Group has business sites. Regional and community activities consist of 1) activities relating to

Research grant presentation ceremony held in the fiscal year ended March 31, 2019  $\,$ 

local cleanup and preservation of the natural environment, 2) activities relating to the promotion of health and welfare within the community, and 3) activities relating to disaster and crime prevention within the community.



Guest workshops at a Japanese elementary school in Indonesia



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# **Management Indicators**

For the years ended March 31

(Millions of yen)

Net Sales 178,520 181,234 193,792 180,143 178,137 189,398 214,372 214,187 236,815 259,409   Operating Income											, ,
Net Sales 178,520 181,234 193,792 180,143 178,137 189,398 214,372 214,187 236,815 259,405   Operating Income 26,358 27,131 29,382 20,989 14,886 19,435 19,833 19,452 22,475 24,326   Operating Income Margin (%) 14.8 15.0 15.2 11.7 8.4 10.3 9.3 9.1 9.5 9.4   Profit Attributable to Owners of Parent Notes 1 17,288 17,138 16,548 11,476 9,352 10,434 12,577 14,506 17,897 17,323   Return on Sales (%) Notes 2 9.7 9.5 8.5 6.4 5.2 5.5 5.9 6.8 7.6 6.7   Total Assets (At Fiscal Year-End) 251,620 253,298 271,141 263,580 274,925 294,492 298,107 299,249 323,046 349,885   Total Assets Turnover (Times) Notes 3 0.72 0.72 0.74 0.67 0.66 0.67 0.72 0.72 0.76 0.77   Equity (At Fiscal Year-End) Notes 4 192,588 198,042 208,891 207,871 217,691 222,330 227,896 227,623 238,803 237,604   Equity Ratio (%) Notes 5 76.5 78.2 77.0 78.9 79.2 75.5 76.4 76.1 73.9 67.5   Return on Assets (%) Notes 6 7.0 6.8 6.3 4.3 3.5 3.7 4.2 4.9 5.8 5.1   Return on Equity (%) Notes 7 9.3 8.8 8.1 5.5 4.4 4.7 5.6 6.4 7.7 7.3   Capital Expenditures (Excluding Intangibles) 7,525 5,469 7,721 6,108 5,268 8,489 18,818 9,289 22,070 36,926   Experiention 14,840 15,375 15,410 14,493 14,250 14,378 13,409 13,248 13,507 13,883   R&D Expenses 3,990 4,225 4,232 4,362 4,534 4,397 5,269 5,038 5,258 5,490   Net Income per Share Notes 14,496,98 1,563,57 1,649,24 1,744,41 1,826,84 1,907,80 1,961,30 1,991,91 2,126,96 2,116,15   Dividends per Share Notes 36 38.0 40.0 42.0 44.0 46.0 48.0 50.0 52.0 54.0   Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0   Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0   Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0   Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0   Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0   Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0   Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0   Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Operating Income 26,358 27,131 29,382 20,989 14,886 19,435 19,833 19,452 22,475 24,326 Operating Income Margin (%) 14.8 15.0 15.2 11.7 8.4 10.3 9.3 9.1 9.5 9.4 Profit Attributable to Owners of Parent News 1 17,288 17,138 16,548 11,476 9,352 10,434 12,577 14,506 17,897 17,323 Return on Sales (%) Notes 2 9.7 9.5 8.5 6.4 5.2 5.5 5.9 6.8 7.6 6.7 Total Assets (At Fiscal Year-End) 251,620 253,298 271,141 263,580 274,925 294,492 298,107 299,249 323,046 349,885 Total Assets Turnover (Times) Notes 3 0.72 0.72 0.74 0.67 0.66 0.67 0.72 0.72 0.72 0.76 0.77 Equity (At Fiscal Year-End) Notes 4 192,588 198,042 208,891 207,871 217,691 222,330 227,896 227,623 238,803 237,604 Equity Ratio (%) Notes 5 76.5 78.2 77.0 78.9 79.2 75.5 76.4 76.1 73.9 67.5 Return on Assets (%) Notes 6 7.0 6.8 6.3 4.3 3.5 3.7 4.2 4.9 5.8 5.1 Return on Equity (%) Notes 7 9.3 8.8 8.1 5.5 4.4 4.7 5.6 6.4 7.7 7.3 67.2 Capital Expenditures (Excluding Intangibles) 7,555 5,469 7,721 6,108 5,268 8,489 18,818 9,289 22,070 36,920 Depreciation 14,840 15,375 15,410 14,493 14,250 14,378 13,409 13,248 13,507 13,883 R&D Expenses 3,990 4,225 4,232 4,362 4,534 4,397 5,269 5,038 5,258 5,490 Notes 9 1,496,98 1,563,57 1,649,24 1,744,41 1,826,84 1,907,80 1,961,30 1,991,91 2,126,96 2,116,15 Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 Dividend Payout Ratio (%) 26.8 28.4 30.	Orders	175,162	181,951	197,256	186,741	173,463	181,282	221,273	218,730	251,447	258,439
Operating Income Margin (%) 14.8 15.0 15.2 11.7 8.4 10.3 9.3 9.1 9.5 9.4  Profit Attributable to Owners of Parent Note: 17,288 17,138 16,548 11,476 9,352 10,434 12,577 14,506 17,897 17,323 17,323 17,324 17,325 17,325 15,410 14,493 14,257 14,506 17,897 17,325 15,410 14,965 19 Capital Expenses 13,990 4,225 4,232 4,362 4,534 4,397 5,269 5,038 5,258 5,400 19,10	Net Sales	178,520	181,234	193,792	180,143	178,137	189,398	214,372	214,187	236,815	259,409
Profit Attributable to Owners of Parent Note: 17,288   17,138   16,548   11,476   9,352   10,434   12,577   14,506   17,897   17,323   17,	Operating Income	26,358	27,131	29,382	20,989	14,886	19,435	19,833	19,452	22,475	24,326
of Parent Note: 1         17,288         17,138         16,548         11,476         9,352         10,434         12,577         14,506         17,897         17,323           Return on Sales (%) Note: 2         9.7         9.5         8.5         6.4         5.2         5.5         5.9         6.8         7.6         6.7           Total Assets (At Fiscal Year-End)         251,620         253,298         271,141         263,580         274,925         294,492         298,107         299,249         323,046         349,885           Total Assets Turnover (Times) Note: 3         0.72         0.72         0.74         0.67         0.66         0.67         0.72         0.72         0.76         0.77           Equity (At Fiscal Year-End) Note: 4         192,588         198,042         208,891         207,871         217,691         222,330         227,896         227,623         238,803         237,604           Equity Ratio (%) Note: 5         76.5         78.2         77.0         78.9         79.2         75.5         76.4         76.1         73.9         67.5           Return on Assets (%) Note: 6         7.0         6.8         6.3         4.3         3.5         3.7         4.2         4.9         5.8         5.1<	Operating Income Margin (%)	14.8	15.0	15.2	11.7	8.4	10.3	9.3	9.1	9.5	9.4
Total Assets (At Fiscal Year-End) 251,620 253,298 271,141 263,580 274,925 294,492 298,107 299,249 323,046 349,885   Total Assets Turnover (Times) Note 3 0.72 0.72 0.74 0.67 0.66 0.67 0.72 0.72 0.72 0.76 0.77   Equity (At Fiscal Year-End) Note 4 192,588 198,042 208,891 207,871 217,691 222,330 227,896 227,623 238,803 237,604   Equity Ratio (%) Note 5 76.5 78.2 77.0 78.9 79.2 75.5 76.4 76.1 73.9 67.9   Return on Assets (%) Note 6 7.0 6.8 6.3 4.3 3.5 3.7 4.2 4.9 5.8 5.1   Return on Equity (%) Note 7 9.3 8.8 8.1 5.5 4.4 4.7 5.6 6.4 7.7 7.3   Capital Expenditures (Excluding Intangibles) 7,525 5,469 7,721 6,108 5,268 8,489 18,818 9,289 22,070 36,926   Depreciation 14,840 15,375 15,410 14,493 14,250 14,378 13,409 13,248 13,507 13,883   R&D Expenses 3,990 4,225 4,232 4,362 4,534 4,397 5,269 5,038 5,258 5,490   Net Income per Share Note 9 1,496.98 1,563.57 1,649.24 1,744.41 1,826.84 1,907.80 1,961.30 1,991.91 2,126.96 2,116.15   Dividends per Share Note 9 1,496.98 1,563.57 1,649.24 1,744.41 1,826.84 1,907.80 1,961.30 1,991.91 2,126.96 2,116.15   Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0   350.		17,288	17,138	16,548	11,476	9,352	10,434	12,577	14,506	17,897	17,323
Total Assets Turnover (Times) Note 3 0.72 0.72 0.74 0.67 0.66 0.67 0.72 0.72 0.72 0.76 0.77 Equity (At Fiscal Year-End) Note 4 192,588 198,042 208,891 207,871 217,691 222,330 227,896 227,623 238,803 237,604 Equity Ratio (%) Note 5 76.5 78.2 77.0 78.9 79.2 75.5 76.4 76.1 73.9 67.5 Return on Assets (%) Note 6 7.0 6.8 6.3 4.3 3.5 3.7 4.2 4.9 5.8 5.1 Return on Equity (%) Note 7 9.3 8.8 8.1 5.5 4.4 4.7 5.6 6.4 7.7 7.3 Capital Expenditures (Excluding Intangibles) 7,525 5,469 7,721 6,108 5,268 8,489 18,818 9,289 22,070 36,920 Depreciation 14,840 15,375 15,410 14,493 14,250 14,378 13,409 13,248 13,507 13,883 R&D Expenses 3,990 4,225 4,232 4,362 4,534 4,397 5,269 5,038 5,258 5,490 Note Income per Share Note 8 134,38 134,02 130.65 92.43 78,48 87,81 108,24 125,23 159,37 154,25 Equity per Share Note 9 1,496,98 1,563,57 1,649,24 1,744,41 1,826,84 1,907,80 1,961,30 1,991,91 2,126,96 2,116,15 Dividend Payout Ratio (%) 26.8 28,4 30.6 45,4 56,1 52,4 44,3 39,9 32,6 35,0 0 1,900 1,9	Return on Sales (%) Note 2	9.7	9.5	8.5	6.4	5.2	5.5	5.9	6.8	7.6	6.7
Equity (At Fiscal Year-End) Note 4 192,588 198,042 208,891 207,871 217,691 222,330 227,896 227,623 238,803 237,604 Equity Ratio (%) Note 5 76.5 78.2 77.0 78.9 79.2 75.5 76.4 76.1 73.9 67.5 Return on Assets (%) Note 6 7.0 6.8 6.3 4.3 3.5 3.7 4.2 4.9 5.8 5.1 Return on Equity (%) Note 7 9.3 8.8 8.1 5.5 4.4 4.7 5.6 6.4 7.7 7.3 Capital Expenditures (Excluding Intangibles) 7,525 5,469 7,721 6,108 5,268 8,489 18,818 9,289 22,070 36,920 Depreciation 14,840 15,375 15,410 14,493 14,250 14,378 13,409 13,248 13,507 13,883 R&D Expenses 3,990 4,225 4,232 4,362 4,534 4,397 5,269 5,038 5,258 5,490 (yer Net Income per Share Note 8 134.38 134.02 130.65 92.43 78.48 87.81 108.24 125.23 159.37 154.29 Dividends per Share Note 9 1,496.98 1,563.57 1,649.24 1,744.41 1,826.84 1,907.80 1,961.30 1,991.91 2,126.96 2,116.19 Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%	Total Assets (At Fiscal Year-End)	251,620	253,298	271,141	263,580	274,925	294,492	298,107	299,249	323,046	349,885
Equity Ratio (%) Note 5 76.5 78.2 77.0 78.9 79.2 75.5 76.4 76.1 73.9 67.5 Return on Assets (%) Note 6 7.0 6.8 6.3 4.3 3.5 3.7 4.2 4.9 5.8 5.1 Return on Equity (%) Note 7 9.3 8.8 8.1 5.5 4.4 4.7 5.6 6.4 7.7 7.3 Capital Expenditures (Excluding Intangibles) 7,525 5,469 7,721 6,108 5,268 8,489 18,818 9,289 22,070 36,920 Depreciation 14,840 15,375 15,410 14,493 14,250 14,378 13,409 13,248 13,507 13,883 R&D Expenses 3,990 4,225 4,232 4,362 4,534 4,397 5,269 5,038 5,258 5,490 (yer Net Income per Share Note 8 134.38 134.02 130.65 92.43 78.48 87.81 108.24 125.23 159.37 154.25 Equity per Share Note 9 1,496.98 1,563.57 1,649.24 1,744.41 1,826.84 1,907.80 1,961.30 1,991.91 2,126.96 2,116.15 Dividends per Share 36.0 38.0 40.0 42.0 44.0 46.0 48.0 50.0 52.0 54.0 Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 dividend Payout Ratio (%)	Total Assets Turnover (Times) Note 3	0.72	0.72	0.74	0.67	0.66	0.67	0.72	0.72	0.76	0.77
Return on Assets (%) Note 6 7.0 6.8 6.3 4.3 3.5 3.7 4.2 4.9 5.8 5.1 Return on Equity (%) Note 7 9.3 8.8 8.1 5.5 4.4 4.7 5.6 6.4 7.7 7.3 Capital Expenditures (Excluding Intangibles) 7,525 5,469 7,721 6,108 5,268 8,489 18,818 9,289 22,070 36,920 Depreciation 14,840 15,375 15,410 14,493 14,250 14,378 13,409 13,248 13,507 13,883 R&D Expenses 3,990 4,225 4,232 4,362 4,534 4,397 5,269 5,038 5,258 5,490 (yer Net Income per Share Note 8 134.38 134.02 130.65 92.43 78.48 87.81 108.24 125.23 159.37 154.25 Equity per Share Note 9 1,496.98 1,563.57 1,649.24 1,744.41 1,826.84 1,907.80 1,961.30 1,991.91 2,126.96 2,116.15 Dividends per Share 36.0 38.0 40.0 42.0 44.0 46.0 48.0 50.0 52.0 54.0 Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0	Equity (At Fiscal Year-End) Note 4	192,588	198,042	208,891	207,871	217,691	222,330	227,896	227,623	238,803	237,604
Return on Equity (%) Note 7         9.3         8.8         8.1         5.5         4.4         4.7         5.6         6.4         7.7         7.3           Capital Expenditures (Excluding Intangibles)         7,525         5,469         7,721         6,108         5,268         8,489         18,818         9,289         22,070         36,920           Depreciation         14,840         15,375         15,410         14,493         14,250         14,378         13,409         13,248         13,507         13,883           R&D Expenses         3,990         4,225         4,232         4,362         4,534         4,397         5,269         5,038         5,258         5,490           Net Income per Share Note 8         134.38         134.02         130.65         92.43         78.48         87.81         108.24         125.23         159.37         154.29           Equity per Share Note 9         1,496.98         1,563.57         1,649.24         1,744.41         1,826.84         1,907.80         1,961.30         1,991.91         2,126.96         2,116.19           Dividends per Share         36.0         38.0         40.0         42.0         44.0         46.0         48.0         50.0         52.0         54.0	Equity Ratio (%) Note 5	76.5	78.2	77.0	78.9	79.2	75.5	76.4	76.1	73.9	67.9
Capital Expenditures (Excluding Intangibles)  7,525 5,469 7,721 6,108 5,268 8,489 18,818 9,289 22,070 36,920 Depreciation  14,840 15,375 15,410 14,493 14,250 14,378 13,409 13,248 13,507 13,883 R&D Expenses  3,990 4,225 4,232 4,362 4,534 4,397 5,269 5,038 5,258 5,490 (yer Net Income per Share Note 8 134.38 134.02 130.65 92.43 78.48 87.81 108.24 125.23 159.37 154.29 Equity per Share Note 9 1,496.98 1,563.57 1,649.24 1,744.41 1,826.84 1,907.80 1,961.30 1,991.91 2,126.96 2,116.19 Dividends per Share 36.0 38.0 40.0 42.0 44.0 46.0 48.0 50.0 52.0 54.0 Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0	Return on Assets (%) Note 6	7.0	6.8	6.3	4.3	3.5	3.7	4.2	4.9	5.8	5.1
(Excluding Intangibles)         7,525         5,469         7,721         6,108         5,268         8,489         18,818         9,289         22,070         36,920           Depreciation         14,840         15,375         15,410         14,493         14,250         14,378         13,409         13,248         13,507         13,883           R&D Expenses         3,990         4,225         4,232         4,362         4,534         4,397         5,269         5,038         5,258         5,490           Net Income per Share Note 8         134.38         134.02         130.65         92.43         78.48         87.81         108.24         125.23         159.37         154.29           Equity per Share Note 9         1,496.98         1,563.57         1,649.24         1,744.41         1,826.84         1,907.80         1,961.30         1,991.91         2,126.96         2,116.19           Dividends per Share         36.0         38.0         40.0         42.0         44.0         46.0         48.0         50.0         52.0         54.0           Dividend Payout Ratio (%)         26.8         28.4         30.6         45.4         56.1         52.4         44.3         39.9         32.6         35.0	Return on Equity (%) Note 7	9.3	8.8	8.1	5.5	4.4	4.7	5.6	6.4	7.7	7.3
R&D Expenses 3,990 4,225 4,232 4,362 4,534 4,397 5,269 5,038 5,258 5,490 (yer Net Income per Share Note 8 134.38 134.02 130.65 92.43 78.48 87.81 108.24 125.23 159.37 154.29 (Equity per Share Note 9 1,496.98 1,563.57 1,649.24 1,744.41 1,826.84 1,907.80 1,961.30 1,991.91 2,126.96 2,116.19 (Dividends per Share 36.0 38.0 40.0 42.0 44.0 46.0 48.0 50.0 52.0 54.0 (Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0 (Solution of the state o		7,525	5,469	7,721	6,108	5,268	8,489	18,818	9,289	22,070	36,920
Net Income per Share Note 8 134.38 134.02 130.65 92.43 78.48 87.81 108.24 125.23 159.37 <b>154.29</b> Equity per Share Note 9 1,496.98 1,563.57 1,649.24 1,744.41 1,826.84 1,907.80 1,961.30 1,991.91 2,126.96 <b>2,116.19</b> Dividends per Share 36.0 38.0 40.0 42.0 44.0 46.0 48.0 50.0 52.0 <b>54.0</b> Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 <b>35.0</b>	Depreciation	14,840	15,375	15,410	14,493	14,250	14,378	13,409	13,248	13,507	13,883
Net Income per Share Note 8         134.38         134.02         130.65         92.43         78.48         87.81         108.24         125.23         159.37         154.29           Equity per Share Note 9         1,496.98         1,563.57         1,649.24         1,744.41         1,826.84         1,907.80         1,961.30         1,991.91         2,126.96         2,116.19           Dividends per Share         36.0         38.0         40.0         42.0         44.0         46.0         48.0         50.0         52.0         54.0           Dividend Payout Ratio (%)         26.8         28.4         30.6         45.4         56.1         52.4         44.3         39.9         32.6         35.0	R&D Expenses	3,990	4,225	4,232	4,362	4,534	4,397	5,269	5,038	5,258	5,490
Equity per Share Note 9 1,496.98 1,563.57 1,649.24 1,744.41 1,826.84 1,907.80 1,961.30 1,991.91 2,126.96 2,116.19 Dividends per Share 36.0 38.0 40.0 42.0 44.0 46.0 48.0 50.0 52.0 54.0 Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 35.0				,							( yen)
Dividends per Share       36.0       38.0       40.0       42.0       44.0       46.0       48.0       50.0       52.0       54.0         Dividend Payout Ratio (%)       26.8       28.4       30.6       45.4       56.1       52.4       44.3       39.9       32.6       35.0	Net Income per Share Note 8	134.38	134.02	130.65	92.43	78.48	87.81	108.24	125.23	159.37	154.29
Dividend Payout Ratio (%) 26.8 28.4 30.6 45.4 56.1 52.4 44.3 39.9 32.6 <b>35.0</b>	Equity per Share Note 9	1,496.98	1,563.57	1,649.24	1,744.41	1,826.84	1,907.80	1,961.30	1,991.91	2,126.96	2,116.19
	Dividends per Share	36.0	38.0	40.0	42.0	44.0	46.0	48.0	50.0	52.0	54.0
Number of Employees 4,445 4,490 4,555 4,640 4,635 5,222 5,481 5,654 6,011 <b>6,613</b>	Dividend Payout Ratio (%)	26.8	28.4	30.6	45.4	56.1	52.4	44.3	39.9	32.6	35.0
	Number of Employees	4,445	4,490	4,555	4,640	4,635	5,222	5,481	5,654	6,011	6,613

Notes: 1. Accompanying the revision of Accounting Standards for Business Combinations, etc., the names of items presented have been changed. The revised standards have been applied from the fiscal year ended March 31, 2016.

- 2. Return on sales = Profit attributable to owners of parent  $\div$  Net sales
- 3. Total assets turnover = Net sales ÷ Total assets (Average)
- 4. "Equity" represents Net assets less non-controlling interests (hereinafter, the same).
- 5. Equity ratio = Equity ÷ Total assets × 100
- 6. Return on assets = Profit attributable to owners of parent  $\div$  Total assets (Average)  $\times$  100
- 7. Return on equity = Profit attributable to owners of parent  $\div$  Equity (Average)  $\times$  100
- 8. Calculation of Net income per share is based on average number of shares outstanding (excluding treasury stock).
- 9. Calculation of Equity per share is based on the number of shares at year-end (excluding treasury stock).

# Segment Information For the years ended March 31

(Millions of yen)

										(14	illions of yen)
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Orders	Water treatment chemicals	53,370	56,714	56,748	56,040	59,413	59,353	83,440	82,118	90,358	102,939
	Water treatment facilities	121,791	125,237	140,507	130,700	114,049	121,928	137,832	136,611	161,088	155,500
	Total	175,162	181,951	197,256	186,741	173,463	181,282	221,273	218,730	251,447	258,439
Net Sales	Water treatment chemicals	53,743	56,735	56,443	56,091	58,844	59,999	83,680	81,883	90,361	102,088
	Water treatment facilities	124,777	124,499	137,348	124,052	119,292	129,399	130,692	132,304	146,453	157,321
	Total	178,520	181,234	193,792	180,143	178,137	189,398	214,372	214,187	236,815	259,409
Operating Income	Water treatment chemicals	8,177	10,099	9,268	8,334	7,954	7,877	6,467	7,231	7,180	8,327
	Water treatment facilities	18,181	17,032	20,127	12,641	6,934	11,560	13,366	12,220	15,312	15,932
	Adjustment	_	0	(13)	13	(2)	(2)	(0)	1	(18)	65
	Total	26,358	27,131	29,382	20,989	14,886	19,435	19,833	19,452	22,475	24,326
Assets Employed	Water treatment chemicals	35,194	36,444	36,580	34,647	37,310	79,790	79,365	80,120	95,589	111,580
	Water treatment facilities	168,119	158,414	161,750	143,772	133,620	136,391	142,564	134,623	158,631	196,152
	Total	203,314	194,859	198,330	178,419	170,931	216,182	221,930	214,744	254,220	307,733
Capital Expenditures	Water treatment chemicals	1,151	1,183	1,463	1,458	1,792	5,378	2,434	2,175	3,162	3,502
	Water treatment facilities	6,932	4,781	6,641	5,230	3,917	7,486	17,188	7,911	19,805	34,668
	Total	8,083	5,965	8,105	6,688	5,709	12,864	19,623	10,087	22,967	38,170
Depreciation and Amortiza- tion	Water treatment chemicals	1,662	1,539	1,485	1,369	1,386	1,406	2,613	2,926	3,593	4,117
	Water treatment facilities	13,860	14,527	14,550	13,684	13,387	13,457	12,068	11,950	12,083	12,001
	Total	15,523	16,066	16,035	15,054	14,774	14,863	14,682	14,877	15,677	16,118
R&D Expenses	Water treatment chemicals	1,114	1,285	1,335	1,367	1,556	1,485	2,129	2,123	2,066	1,899
	Water treatment facilities	2,875	2,940	2,897	2,994	2,978	2,911	3,139	2,914	3,192	3,590
	Total	3,990	4,225	4,232	4,362	4,534	4,397	5,269	5,038	5,258	5,490

# Management's Discussion and Analysis

# **Business Overview**

During the fiscal year ended March 31, 2019, the global economy grew at a moderate pace overall, supported by a solid U.S. economy and continued economic growth in emerging countries in Asia excluding China. However China and Europe lost momentum in the second half of the fiscal year amid an increasingly uncertain economic outlook caused by trade friction between the United States and China. The Japanese economy, while not vigorous, continued to expand at a modest pace.

The Kurita Group's market environment was firm in Japan, despite a temporary slowdown in production activity in the manufacturing sector due to a string of natural disasters in the summer. Capital expenditure increased on the back of strong corporate earnings. Overseas, capital expenditure remained at a high level, particularly in the electronics industry in East Asia.

In this environment, the Group started its five-year medium-term management plan, Maximize Value Proposition 2022 (MVP-22). In the fiscal year under review, in line with the plan's basic policy – "Maximize customer intimacy by dismantling preconceived ideas and dramatically raising the quality and speed of our work," the Group focused on providing value to customers with total solutions that leverage its technologies, products and services in water treatment chemicals, water treatment facilities and maintenance services.

In particular, the Group positioned technologies, products and services that excel in water saving, CO<sub>2</sub> reduction and waste reduction for customers and that create shared

value for society as Creating Shared Value (CSV) business. Specifically, the Group used wastewater reclamation systems to provide recycled water services that contribute to solving water resource issues faced by customers, developed water treatment chemicals that contribute to the energy-efficient operation of boilers by preventing the formation of scale (substances with poor solubility), and implemented major projects for resource recycling facilities using methane fermentation technology to reduce waste and realize sustainable energy use at waste incineration plants.

The Kurita Group also continued to develop competitive products and services that utilize IT and sensing technology, as well as related markets, in order to strengthen its lineup of total solutions. Overseas, the Group strengthened its business platform to support the provision of total solutions in the United States. Specifically, the Group acquired U.S. Water Services, Inc., which manufactures and sells water treatment chemicals and water treatment facilities, and entered into an agreement to acquire 25% of the total number of shares outstanding of Pentagon Technologies Group, Inc., which operates a tool cleaning business in the semiconductor sector. The Group also acquired a majority of shares of U.S. software services company Fracta, Inc., making it a subsidiary. Fracta, Inc. develops software to predict deterioration in underground water mains, which the Group will use to create and expand a new digital business that applies IoT and AI in the fields of water and the environment.

# **Operating Results**

#### a) Orders

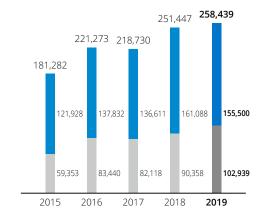
In the Water Treatment Chemicals segment, orders increased year on year, supported by order growth mainly in Asia, as well as a full-year contribution to consolidated earnings from Hansu Co., Ltd., a South Korean company that became a subsidiary in the fourth quarter of the previous fiscal year. However, despite firm orders in Japan, orders in the Water Treatment Facilities segment declined year on year amid a drop in overseas demand.

As a result, total consolidated orders were ¥258,439 million, an increase of 2.8% compared with the previous fiscal year.

# Orders by Segment

Years ended March 31 (Millions of yen)

■ Water Treatment Chemicals ■ Water Treatment Facilities



#### b) Net Sales

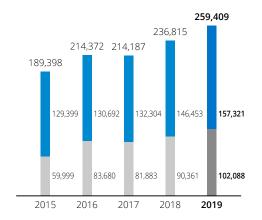
Sales increased in the Water Treatment Chemicals segment on the back of order growth, while sales also rose in the Water Treatment Facilities segment, supported by steady progress with major projects in Japan and overseas, and reflecting an expansion of the scope of application of the percentage-of-completion method to construction work.

As a result, total consolidated net sales amounted to \$259,409\$ million, an increase of 9.5% compared with the previous fiscal year.

#### **Net Sales by Segment**

Years ended March 31 (Millions of ven)

■ Water Treatment Chemicals ■ Water Treatment Facilities

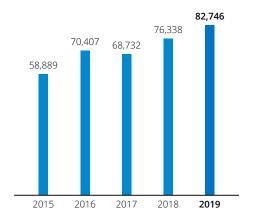


### c) Cost of Sales and Gross Profit

Cost of sales increased 10.0%, from ¥160,476 million in the previous fiscal year to ¥176,663 million, reflecting higher sales. The cost of sales ratio was 68.1%, slightly increased from 67.8% in the previous fiscal year, reflecting changes in the sales mix and unprofitable projects in the Water Treatment Facilities segment.

#### **Gross Profit**

Years ended March 31 (Millions of yen)

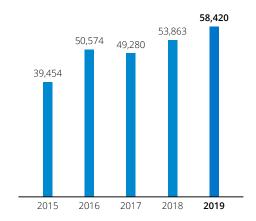


### d) Selling, General and Administrative (SG&A) Expenses

SG&A expenses totaled ¥58,420 million, up 8.5% from ¥53,863 million in the previous fiscal year. The increase reflected a rise in salaries and bonuses, as well as amortization expenses for intangible assets and an increase in research and development expenses.

#### **SG&A Expenses**

Years ended March 31 (Millions of yen)



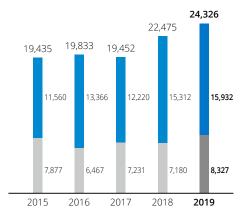
#### e) Operating Income

Consolidated operating income rose 8.2%, from ¥22,475 million in the previous fiscal year to ¥24,326 million, with sales growth outweighing increases in the cost of sales ratio and SG&A expenses. The operating income margin fell to 9.4% from 9.5% in the previous fiscal year.

### **Operating Income by Segment**

Years ended March 31 (Millions of yen)

■ Water Treatment Chemicals ■ Water Treatment Facilities

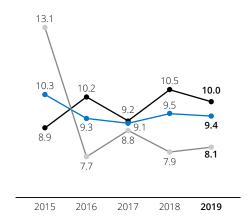


#### **Operating Income Margin by Segment**

Years ended March 31

(%)





### f) Results by Business Segment

#### **Water Treatment Chemicals**

Despite a pullback in sales from one-off projects for equipment and services posted in the previous fiscal year, orders and sales in Japan increased year on year, reflecting efforts by the Group to attract new customers by offering solutions based on new products and services, which supported growth in business for cooling water treatment chemicals and process treatment chemicals for iron and steel.

Overseas, orders and sales rose year on year, reflecting higher demand for water treatment services, particularly in Asia, and an eleven-month increase in the consolidation period for operating results of Hansu Co., Ltd. in South Korea, which became a consolidated subsidiary in the fourth quarter of the previous fiscal year. Segment profits increased year on year, mainly driven by higher sales overseas.

As a result, orders in the Group's Water Treatment Chemicals segment increased to  $\pm 102,939$  million, up 13.9% from the previous fiscal year, and segment sales increased to  $\pm 102,088$  million, up 13.0% from the previous fiscal year. Segment operating income rose 16.0% year on year, to  $\pm 8,327$  million.

# **Water Treatment Facilities**

In Japan, orders and sales for water treatment facilities increased, supported by large-scale orders and progress with construction work in the electronics industry. In maintenance services, orders and sales also increased, driven by growth in facility upgrade and expansion projects amid rising capacity utilization at customers' plants. In general industries, orders for water treatment facilities increased on the back of orders for large-scale projects for resource recycling facilities, although sales declined. Orders and sales rose in maintenance services for general industries, reflecting growth in facility expansion projects to upgrade equipment or expand

capacity at customers' plants. Orders for maintenance services in the public sector increased, but sales declined due to construction delays for a number of projects. Orders for water treatment facilities for the electric power industry and soil remediation increased due to orders for large-scale projects, while work progress of major orders received in the previous fiscal year led to higher sales year on year.

Overseas, orders for water treatment facilities declined following large-scale projects in the previous fiscal year, but sales increased due to progress with construction work for large-scale projects for the electronics industry in China and South Korea.

Sales in the ultrapure water supply business increased, mainly reflecting facility expansion projects in Japan.

Overall, profits in the Water Treatment Facilities segment increased, reflecting sales growth and cost-saving efforts to offset the impact of unprofitable projects.

As a result, orders in the Group's Water Treatment Facilities segment totaled ¥155,500 million, down 3.5% from the previous fiscal year, and segment sales were ¥157,321 million, up 7.4% from the previous fiscal year, reflecting the expansion of the scope of application of the percentage-of-completion method to construction work. Segment operating income increased 4.0% year on year, to ¥15,932 million.

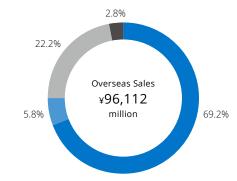
### g) Overseas Sales

# Sales by Region

In the fiscal year under review, overseas sales increased 22.3% year on year to ¥96,112 million, supported by growth in the Water Treatment Chemicals segment and the Water Treatment Facilities segment. Overseas sales accounted for 37.1% of consolidated net sales, up from 33.2% in the previous fiscal year.

#### Overseas Sales by Region

Fiscal year ended March 31, 2019



- Asia: Up 36.0%, to ¥66,513 million; 69.2% of total overseas sales
- North America: Up 7.9%, to ¥5,589 million; 5.8% of total overseas sales
- EMEA\*: Down 0.2%, to ¥21,297 million; 22.2% of total overseas sales
- Other regions: Down 13.7%, to ¥2,711 million; 2.8% of total overseas sales
- \* EMEA comprises Europe, the Middle East, and Africa.

#### Regional Breakdown

Sales rose strongly in Asia, reflecting a full-year contribution from Hansu Co., Ltd. in the Water Treatment Chemicals segment and growth in facilities for the electronics industry in China and South Korea in the Water Treatment Facilities segment.

#### h) Other Income and Expenses

Other income, net totaled ¥3,206 million, compared with ¥3,060 million in the previous fiscal year.

The main reasons were an increase in gain on sales of investment securities related to the sales of shareholdings in other listed companies, which outweighed loss on transfer of the aluminum compounds business, impairment losses on goodwill for a subsidiary in China and losses related to the streamlining of other assets.

#### i) Income Before Income Taxes

Income before income taxes increased 7.8% to ¥27,532 million, compared with ¥25,535 million in the previous fiscal year, reflecting an increase in operating income and other income, net.

The pretax profit margin decreased to 10.6%, from 10.8% in the previous fiscal year.

#### j) Net Income Attributable to Owners of Parent

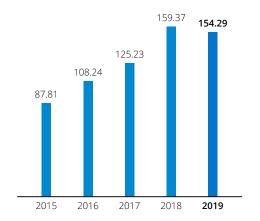
Despite an increase in pretax profit, the Company reported consolidated net income attributable to owners of parent of ¥17,323 million for the fiscal year ended March 31, 2019, down 3.2% from ¥17,897 million from the previous fiscal year, reflecting a temporary increase in tax expenses due to losses related to business and asset streamlining.

Net income per share decreased to ¥154.29 from ¥159.37 in the previous fiscal year. The net income margin fell to 6.7% from 7.6%.

Return on equity (ROE) decreased to 7.3%, from 7.7%.

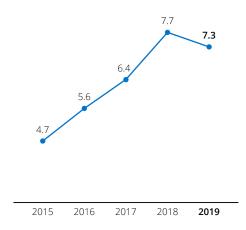
### Net Income per Share

Years ended March 31 (Yen)



#### **Return on Equity**

Years ended March 31 (%)



#### k) Policies on Shareholder Returns

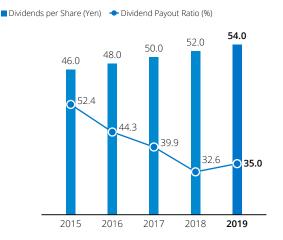
Setting a payout ratio of 30–50% as our target, Kurita will work to continue dividend increases, making decisions based on the payout ratios for the most recent five years to respond flexibly to fluctuations in business performance each year.

With regard to the use of internal reserves, the Company prioritizes business investment for growth, after securing precautionary funds to prepare for working capital. If excess funds remain, the Company will consider buying back its own stock, taking the share price into consideration, in order to improve capital efficiency and return profits to shareholders.

During the fiscal year under review, the Company paid dividends of ¥54 per share, including an interim dividend of ¥27, for a dividend payout ratio of 35.0%. The dividend takes the Company's plans for future business development into consideration, as well as the support that it has received from shareholders.

# Dividends per Share and Dividend Payout Ratio

Years ended March 31



# **Capital Expenditures**

The Kurita Group is committed to making investments necessary for technological innovation and production capacity expansion, and to enhancing competitiveness in response to intensified sales competition. In the fiscal year ended March 31, 2019, capital expenditures totaled ¥38,170 million, an increase of ¥15,203 million compared with the previous fiscal year, mainly due to the acquisition of business facilities. The capital expenditures include the amount of lease assets related to finance leases that do not transfer ownership.

The Water Treatment Chemicals segment undertook capital expenditures totaling ¥3,502 million, mainly for expanding and upgrading water treatment chemicals production facilities. This represented an increase of ¥340 million compared with the previous fiscal year.

The Water Treatment Facilities segment carried out capital expenditures totaling ¥34,668 million, mainly for the installation and expansion of facilities for the ultrapure water supply business. This represented a ¥14,863 million increase compared with the previous fiscal year.

There were no disposals or sales of key facilities during

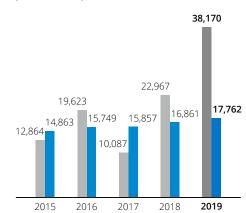
the fiscal year under review.

Depreciation and amortization increased 5.3%, to \$17,762\$ million.

#### Capital Expenditures/Depreciation and Amortization

Years ended March 31 (Millions of yen)

■ Capital Expenditures ■ Depreciation and Amortization



# Research and Development

The Kurita Group develops technologies to reinforce its core businesses, such as technologies related to boiler and cooling water treatment, ultrapure water production, water treatment and wastewater treatment, water reclamation, and soil and groundwater remediation. The Group also strives to deepen its technological foundation, such as the assay and analysis technologies that underpin its technologies, as well as development of new materials. In addition, the Group is actively working to develop new products and technologies essential to provide innovative solutions that increase the corporate value and competitiveness of customers and that help to address social issues.

Going forward, the Group's development centers in Japan, Germany and Singapore will work together, proactively engaging in product and technology development that meets the broad-ranging needs of industry and society.

The Kurita Group's R&D activities are performed mainly by the Research and Development Division of Kurita Water Industries Ltd. R&D staff number approximately 180, accounting for 2.7% of overall Group employees. In the fiscal year ended March 31, 2019, Kurita's R&D expenses totaled ¥5,490 million, equivalent to 2.1% of net sales.

In the Water Treatment Chemicals segment, the Kurita Group is engaged in the development of chemicals for water treatment, environmental improvement, and production processes, which contribute to customers' energy savings, environmental burden reduction, and productivity enhancements. Other development activities include diagnostic technology for chemical treatment effectiveness. R&D expenses for the segment for the fiscal year ended March 31, 2019 totaled ¥1,899 million.

The segment's main achievements during the fiscal year were as follows:

In reverse osmosis (RO) membrane facilities, which are used in wastewater reclamation and seawater desalination, the segment developed a new system that optimally controls chemical dosage for suppressing clogging of RO membranes, reducing water treatment costs and ensuring stable operation.

In the wastewater sludge treatment market, the segment developed an integrated sludge treatment system that combines water treatment chemicals, a sludge granulation concentrator, and a dehydrator to reduce sludge waste volume and total operating costs.

Amid recent moves by China to strengthen environmental and safety regulations, the segment developed new technology utilizing safer, more eco-friendly treatment chemicals for plants that use open circulation cooling water systems.

In the Water Treatment Facilities segment, Kurita is working to deliver further advances in the quality of ultrapure water to support productivity improvements in the electronics industry. The Group is also pursuing development in wastewater treatment to stay ahead of environmental regulations. Another focus of R&D is the development of technologies to meet the needs of recycling-oriented societies, such as wastewater reclamation and reuse technology and sludge reduction technology. R&D expenses for the segment for the fiscal year ended March 31, 2019 amounted to ¥3,590 million.

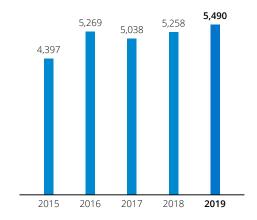
The segment's main achievements during the fiscal year were as follows:

In the growing electronics industry market, the segment worked to increase the competitiveness of its ultrapure water production system by improving the function of each component unit in the system and by using an automatic control function that responds to water quality to reduce the utility cost of the whole system.

To address rising demand for high-purity water in the semiconductor industry, the segment developed a compact pure water production system that removes boron to the maximum possible extent, something that is difficult to achieve with ion-exchange resin. In the small and medium-sized pure water treatment equipment market, the segment expanded the application of its pure water supply services by developing pre-treatment equipment capable of stably processing water of high turbidity and by enhancing the functions of its remote monitoring system.

**R&D Expenses** 

Years ended March 31 (Millions of yen)



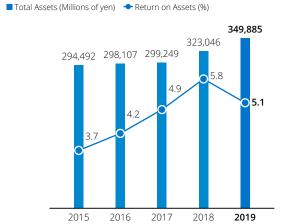
# **Financial Position**

#### a) Assets

As of March 31, 2019, Kurita had total assets of ¥349,885 million, an increase of ¥26,839 million compared with ¥323,046 million as of March 31, 2018.

# **Total Assets and Return on Assets**

Years ended March 31



# **Breakdown of Assets**

#### **Current Assets**

Current assets as of March 31, 2019 totaled ¥149,550 million, a decrease of ¥10,859 million compared with March 31, 2018. That primarily reflected an increase of ¥12,383 million in notes and accounts receivable, which was outweighed by a decrease of ¥2,386 million for work in process, reflecting the expansion of the scope of application of the percentage-of-completion method to construction work, and a decrease of ¥24,503 million for cash on hand (total for cash and time deposits and marketable securities), mainly due to acquisitions in North America (Water Treatment Chemicals segment and Water Treatment Facilities segment) and capital investment in the ultrapure water supply business (Water Treatment Facilities segment).

# Investments and Long-Term Receivables, Property, Plant and Equipment, and Intangible Assets

As of March 31, 2019, investments and long-term receivables totaled ¥36,708 million, a decrease of ¥8,897 million from ¥45,605 million as of March 31, 2018.

Property, plant and equipment, net as of March 31, 2019 amounted to ¥109,669 million, an increase of ¥23,641 million compared with ¥86,028 million as of March 31, 2018.

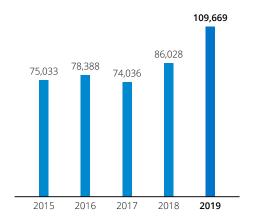
Intangible assets as of March 31, 2019 were \$53,958 million, up \$22,955 million compared with \$31,003 million as of March 31, 2018.

The decrease in investments and long-term receivables was mainly due to a decline in investment securities of ¥13,480 in line with the sales of shareholdings in other listed companies.

The respective increases in property, plant and equipment and in intangible assets were mainly caused by capital expenditures in the ultrapure water supply business and the aforementioned acquisitions.

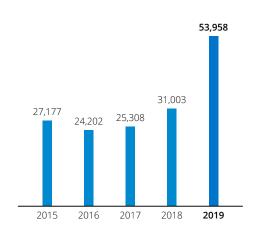
# Property, Plant and Equipment, Net

As of March 31 (Millions of ven)



#### **Intangible Assets**

As of March 31 (Millions of yen)



#### b) Liabilities

As of March 31, 2019, liabilities totaled \$110,412\$ million, an increase of \$28,219\$ million compared with \$82,193\$ million as of March 31, 2018.

#### Current Assets

Current liabilities as of March 31, 2019 totaled ¥68,072 million, an increase of ¥11,923 million from March 31, 2018. That mainly reflected an increase in accounts payable, other of ¥8,742 million, reflecting the purchase of facilities in the ultrapure water supply business, and an increase in other current liabilities of ¥1,766 million, largely due to a rise in advances received.

#### Long-Term Liabilities

Long-term liabilities as of March 31, 2019 were ¥42,339 million, an increase of ¥16,295 million from March 31, 2018, mainly reflecting an increase of ¥14,877 million in other long-term liabilities due to a rise in long-term advances received.

# c) Net Assets

Net assets as of March 31, 2019 totaled ¥239,473 million, a decrease of ¥1,380 million compared with March 31, 2018. That was primarily due to an increase of ¥10,801 million in shareholders' equity, outweighed by a decrease of ¥12,000 million of accumulated other comprehensive income.

The main factor behind the increase in shareholders' equity was a rise in retained earnings of ¥11,084 million, reflecting net income attributable to owners of parent that exceeded year-end and interim dividends paid. The decrease in accumulated other comprehensive income mainly reflected a drop of ¥4,584 million for foreign currency translation adjustments due to the stronger yen and a decline in unrealized gains on investment securities due to the sales of shareholdings in other listed companies, resulting in

a decrease of ¥7,907 million for unrealized gains on availablefor-sale securities.

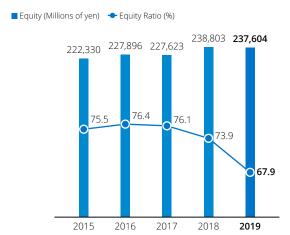
As a result, total liabilities and net assets amounted to \$349,885 million as of March 31, 2019, a decrease of \$26,839 million compared with \$323,046 million as of March 31, 2018.

Kurita's equity ratio was 67.9%, down 6.0 percentage points from 73.9% a year earlier. Net assets per share as of March 31, 2019 were ¥2,116.19, a decrease of ¥10.77 compared with ¥2,126.96 as of March 31, 2018.

Note: Equity is defined as net assets less non-controlling interests.

#### **Equity and Equity Ratio**

Years ended March 31



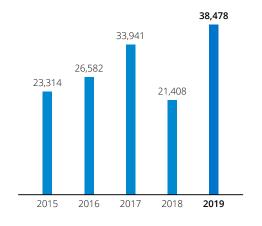
# **Cash Flows**

# **Cash Flows from Operating Activities**

Net cash provided by operating activities during the fiscal year ended March 31, 2019 totaled ¥38,478 million, an increase of ¥17,070 million from the previous fiscal year. That mainly reflected cash provided from income before income taxes of ¥27,532 million, depreciation and amortization of ¥17,762 million, including goodwill amortization, and an increase in advances received of ¥15,920 million, partially offset by cash used from increase in trade receivables of ¥10,907 million and income taxes paid of ¥8,915 million.

# **Cash Flows from Operating Activities**

Years ended March 31 (Millions of yen)



#### **Cash Flows from Investing Activities**

Net cash used in investing activities totaled ¥51,559 million, an increase of ¥35,631 million from the previous fiscal year. That mainly reflected proceeds from sales and redemption of marketable securities and investment securities of ¥13,335 million, against cash used for payments for acquisition of business of ¥33,374 million and payments for purchase of property, plant and equipment of ¥28,600 million.

#### **Cash Flows from Financing Activities**

Net cash used in financing activities totaled \$11,280 million, a decrease of \$1,139 million from the previous fiscal year. That mainly reflected cash used for cash dividends paid of \$6,009 million and decrease in short-term borrowings, net of \$2,417 million.

#### Cash and Cash Equivalents at End of Year

As of March 31, 2019, Kurita had cash and cash equivalents totaling ¥35,548 million, a decrease of ¥23,369 million from March 31, 2018.

# **Commitment Line**

The Kurita Group's basic policy is to secure stable liquidity and a source of funds required for managing its business. The Group basically uses its own funds to meet short-term working capital, and also basically uses its own funds for capital investments and other investments in growth fields,

while envisaging procurement through bank loans as required. As of the end of the fiscal year under review, the Group has concluded commitment line agreements with four financial institutions, with no executed borrowings and an unused available balance of ¥70.600 million.

# **Business Risks**

The following are summaries of major foreseeable risks present in the business environments in which the Kurita Group operates. Forward-looking statements herein are based on judgments made by management as of March 31, 2019.

#### 1. Economic and Market Conditions

The Group's Water Treatment Chemicals and Water Treatment Facilities businesses are affected by economic conditions in Japan and countries and regions outside Japan where the Group operates. Demand in the Water Treatment Chemicals business fluctuates in response to factory capacity utilization rates in industries such as steel, petroleum refining and petrochemicals, and pulp and paper—the main areas of demand for the business. Such demand fluctuations may affect the Group's financial results. Demand in the Water Treatment Facilities business fluctuates in response to trends in capital expenditures in electronics—the main area of demand for the business—and other industries. Such demand fluctuations may affect the Group's financial results.

More intense competition with rivals in the Group's business domains could lead to declines in prices of products and services, which could lower the Group's profitability.

#### 2. Materials and Parts Procurement

The Group procures raw materials and parts from outside the Group for the manufacture of products and fabrication of facilities. The prices of raw materials and parts fluctuate based on changes in market conditions, and this may affect the Group's financial results.

# 3. Overseas Business Development

The Group is striving to expand its business outside Japan. In contrast to the Japanese market, doing business in overseas markets involves a number of inherent risks, including the risk of changes to local laws and regulations, the risk of political and economic instability, and the risk of foreign exchange rate fluctuations. If such risks materialized, the Group's financial results could be affected.

#### 4. New Product Development

The Group continuously endeavors to develop new technology and appealing new products.

The success of new technology and product development efforts cannot be guaranteed. The Group may not be able to offer new technologies and products that meet the needs of its customers or launch new products in a timely fashion. The Group may also fail to keep pace with rapid technological innovation and changing customer needs. If the Group were to fail to develop outstanding new products, this could hamper its future growth and profitability or otherwise affect its financial results.

### 5. Intellectual Property

The Group recognizes the importance of intellectual property and continually seeks to register its own intellectual property while avoiding infringing the intellectual property rights held by third parties, both in Japan and overseas. Given the wide scope of the Group's business, however, there is potential for the Group's intellectual property rights to be infringed and potential for the Group to infringe the rights held by third parties. Such occurrences may affect the Group's financial results.

# 6. Dependence on Information Systems

The Group's use of information systems is increasing, as is the importance of information systems to the Group's business. If a computer virus or some other factor were to obstruct the functions of the Group's information systems, the Group's business activities, financial results, and financial condition could be negatively affected.

### 7. Large-Scale Natural Disasters

If an earthquake, typhoon, or other kind of natural disaster were to directly or indirectly disrupt the Group's business execution, the Group's business activities, financial results, and financial condition could be negatively affected.

# **Consolidated Balance Sheets**

Kurita Water Industries Ltd. and Consolidated Subsidiaries As of March 31, 2019 and 2018

	Millions	s of yen	Thousands of U.S. dollars (Note 1)
Assets	2019	2018	2019
Current assets:			
Cash and time deposits (Notes 3 and 5)	¥ 35,351	¥ 61,086	\$ 318,477
Notes and accounts receivable, trade (Notes 4 and 5)	99,247	86,865	894,117
Allowance for doubtful accounts	(659)	(464)	(5,936)
Marketable securities (Notes 5 and 6)	1,235	3	11,126
Inventories (Note 8)	9,474	10,390	85,351
Other current assets	4,900	2,528	44,144
Total current assets	149,550	160,409	1,347,297
Investments and long-term receivables:			
Investment securities (Notes 5 and 6)	21,104	34,535	190,126
Investments in unconsolidated subsidiaries and affiliates (Note 5)	1,099	1,147	9,900
Deferred tax assets (Note 10)	7,929	4,860	71,432
Other investments	6,724	5,238	60,576
Allowance for doubtful accounts	(149)	(176)	(1,342)
Total investments and long-term receivables	36,708	45,605	330,702
Property, plant and equipment, at cost (Note 16): Land (Note 13)	14,510	15,596	130,720
Buildings and structures	65,743	63,191	592,279
Machinery and equipment	145,560	137,176	1,311,351
Construction in progress	28,088	7,880	253,045
Other facilities	16,859	15,292	151,882
Leased assets	11,878	8,256	107,009
	282,640	247,393	2,546,306
Total			
Total Accumulated depreciation	(172,971)	(161,365)	
	(172,971) 109,669	(161,365) 86,028	
Accumulated depreciation			(1,558,297)
Accumulated depreciation  Property, plant and equipment, net			(1,558,297)
Accumulated depreciation  Property, plant and equipment, net  Intangible assets:	109,669	86,028	988,009
Accumulated depreciation  Property, plant and equipment, net  Intangible assets:  Goodwill	109,669 36,301	20,362	(1,558,297) 988,009 327,036

	Millions	s of yen	Thousands of U.S. dollars (Note 1)
Liabilities and Net Assets	2019	2018	2019
Current liabilities:			
Short-term borrowings and current portion of long-term debt (Note 9)	¥ 1,562	¥ 1,973	\$ 14,072
Notes and accounts payable, trade (Notes 4 and 5)	26,362	28,875	237,495
Accounts payable, other	19,737	10,995	177,810
Income taxes payable	5,890	4,806	53,063
Advances received	4,757	2,065	42,855
Accrued employees' bonuses	2,520	2,420	22,702
Accrued bonuses for directors and corporate auditors	133	145	1,198
Provision for product warranties	785	455	7,072
Provision for loss on construction contracts (Note 8)	238	94	2,144
Other current liabilities	6,083	4,317	54,801
Total current liabilities	68,072	56,149	613,261
Long-term liabilities:			
Lease obligations (Note 9)	5,250	4,038	47,297
Net defined benefit liability (Note 11)	16,648	16,610	149,981
Accrued retirement benefits for directors and corporate auditors	6	7	54
Provision for directors' stock benefits	352	183	3,171
Deferred tax liabilities on revaluation of land (Note 13)	1,119	1,119	10,081
Other long-term liabilities (Note 9)	18,961	4,084	170,819
Total long-term liabilities	42,339	26,044	381,432
Total liabilities	110,412	82,193	994,702
Net assets:			
Shareholders' equity (Note 12):			
Common stock, 2019 and 2018			
Authorized: 531,000,000 shares			
Issued: 116,200,694 shares in 2019 and 2018	13,450	13,450	121,171
Capital surplus	10,665	10,959	96,081
Retained earnings	220,234	209,149	1,984,090
Treasury stock, at cost			
2019—3,921,075 shares			
2018—3,926,398 shares	(10,932)	(10,943)	(98,486)
Total shareholders' equity	233,417	222,615	2,102,855
Accumulated other comprehensive income:			
Unrealized gains on available-for-sale securities	8,651	16,558	77,936
Deferred gains or losses on hedges	314	(1)	2,828
Revaluation reserve for land (Note 13)	(200)	(380)	(1,801)
Foreign currency translation adjustments	(4,578)	6	(41,243)
Remeasurements of defined benefit plans	0	3	0
Total accumulated other comprehensive income	4,187	16,187	37,720
Non-controlling interests	1,868	2,049	16,828
Total net assets	239 473	240.853	2 157 414

Total net assets

Total liabilities and net assets

2,157,414

\$3,152,117

240,853

¥323,046

239,473

¥349,885

# **Consolidated Statements of Income**

Kurita Water Industries Ltd. and Consolidated Subsidiaries For the years ended March 31, 2019 and 2018

	Million	Millions of yen		
	2019	2018	2019	
Net sales (Note 20)	¥259,409	¥236,815	\$2,337,018	
Cost of sales (Note 14)	176,663	160,476	1,591,558	
Gross profit	82,746	76,338	745,459	
Selling, general and administrative expenses (Note 15)	58,420	53,863	526,306	
Operating income (Note 20)	24,326	22,475	219,153	
Other income (expenses):				
Interest and dividend income	733	737	6,603	
Rent income	269	107	2,423	
Equity in earnings of unconsolidated subsidiaries and affiliates	136	73	1,225	
Interest expense	(317)	(352)	(2,855)	
Foreign exchange losses		(192)		
Commitment fee	(320)	(250)	(2,882)	
Acquisition-related costs	(1,284)	(732)	(11,567)	
Loss on valuation of investment in capital	(262)	_	(2,360)	
Gain on sales of investment securities	8,676	1,720	78,162	
Gain on step acquisitions	_	2,443	_	
Loss on sales of properties (Note 17)	(579)	_	(5,216)	
Impairment loss (Note 16)	(1,097)	(413)	(9,882)	
Loss on liquidation of business (Note 17)	(519)	_	(4,675)	
Loss on transfer of business (Note 17)	(2,867)	_	(25,828)	
Provision for building demolition expenses (Note 17)	_	(320)	_	
Other, net	638	237	5,747	
Other income, net	3,206	3,060	28,882	
Income before income taxes	27,532	25,535	248,036	
Income taxes (Note 10):				
Current	9,715	7,906	87,522	
Deferred	491	(408)	4,423	
Total income taxes	10,207	7,498	91,954	
Net income	17,325	18,037	156,081	
Net income attributable to non-controlling interests	1	139	9	
Net income attributable to owners of parent	¥ 17,323	¥ 17,897	\$ 156,063	
	Ye	en	U.S. dollars (Note 1)	
	2019	2018	2019	
Per share of common stock (Note 22):				
Net income	¥154.29	¥159.37	\$1.39	
Cash dividends applicable to the year	54.00	52.00	0.49	

# **Consolidated Statements of Comprehensive Income**

Kurita Water Industries Ltd. and Consolidated Subsidiaries For the years ended March 31, 2019 and 2018

	Millions	of yen	Thousands of U.S. dollars (Note 1)
	2019	2018	2019
Net income	¥17,325	¥18,037	\$156,081
Other comprehensive income (Note 18):			
Unrealized gains or losses on available-for-sale securities	(7,904)	1,739	(71,207)
Deferred gains or losses on hedges	315	(671)	2,837
Revaluation reserve for land	_	0	_
Foreign currency translation adjustments	(2,208)	3,219	(19,891)
Remeasurements of defined benefit plans	(3)	7	(27)
Share of other comprehensive income of entities accounted for using equity method	(46)	93	(414)
Total other comprehensive income	(9,848)	4,389	(88,720)
Comprehensive income	¥ 7,476	¥22,426	\$ 67,351
Comprehensive income attributable to:			
Comprehensive income attributable to owners of parent	¥ 7,535	¥22,255	\$ 67,882
Comprehensive income attributable to non-controlling interests	(58)	170	(522)

# **Consolidated Statements of Changes in Net Assets**

Kurita Water Industries Ltd. and Consolidated Subsidiaries For the years ended March 31, 2019 and 2018

	Millions of yen												
		S	hareholders' eq	uity			Accum	ulated other	comprehens	ive income			
						Unrealized	Deferred		Foreign	Remeasure-	Total accumu-		
	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity	gains on available-for- sale securities	losses on	Revaluation reserve for land	translation	ments of defined benefit plans	lated other comprehensive income	Non- controlling interests	Total net assets
Balance as of March 31, 2017	¥13,450	¥10,993	¥205,586	¥(13,891)	¥216,138	¥14,792	¥ 670	¥(380)	¥(3,593)	¥(3)	¥ 11,484	¥1,135	¥228,758
Changes during the year Cash dividends paid			(5,793)		(5,793)								(5,793)
Net income attributable to owners of parent			17,897		17,897								17,897
Acquisition of treasury stock				(5,592)	(5,592)								(5,592)
Disposal of treasury stock				14	14								14
Retirement of treasury stock			(8,525)	8,525	_								_
Reversal of revaluation reserve for land			(0)		(0)								(0)
Changes in equity interest in consolidated subsidiaries		(33)			(33)								(33)
Other			(15)		(15)								(15)
Net changes of net assets other than shareholders'													
equity						1,766	(671)		3,600	7	4,703	914	5,617
Total changes during the year		(33)	3,563	2,947	6,476	1,766	(671)		3,600	7	4,703	914	12,094
Balance as of March 31, 2018	¥13,450	¥10,959	¥209,149	¥(10,943)	¥222,615	¥16,558	¥ (1)	¥(380)	¥ 6	¥ 3	¥ 16,187	¥2,049	¥240,853
Changes during the year													
Cash dividends paid			(5,968)		(5,968)								(5,968)
Net income attributable to			17,323		17,323								17,323
owners of parent Acquisition of treasury stock			17,323	(2)	(2)								
Disposal of treasury stock				(2) 14	14								(2) 14
Reversal of revaluation				14	14								14
reserve for land			(180)		(180)								(180)
Adjustments due to change of fiscal year-end of			(100)		(180)								(100)
consolidated subsidiaries			(123)		(123)								(123)
Changes in equity interest in													
consolidated subsidiaries		(294)			(294)								(294)
Other			32		32								32
Net changes of net assets other than shareholders'													
equity					_	(7,907)	315	180	(4,584)	(3)	(12,000)	(181)	(12,181)
Total changes during the year	_	(294)	11,084	11	10,801	(7,907)	315	180	(4,584)	(3)	(12,000)	(181)	(1,379)
Balance as of March 31, 2019	¥13,450	¥10,665	¥220,234	¥(10,932)	¥233,417	¥ 8,651	¥ 314	¥(200)	¥(4,578)	¥ 0	¥ 4,187	¥1,868	¥239,473

					Т	housands of	f U.S. do	llars (Note	1)				
	Shareholders' equity Accumulated other comprehensive income												
	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity	Unrealized gains on available-for- sale securities	losses on	Revaluation reserve for land	translation	Remeasure- ments of defined benefit plans	Total accumu- lated other comprehensive income	Non- controlling interests	Total net assets
Balance as of March 31, 2018	\$121,171	\$98,729	\$1,884,225	\$(98,585)	\$2,005,540	\$149,171	\$ (9)	) \$ (3,423)	\$ 54	\$ 27	\$ 145,828	\$18,459	\$2,169,846
Changes during the year													
Cash dividends paid			(53,765)		(53,765)								(53,765)
Net income attributable to owners of parent			156,063		156,063								156,063
Acquisition of treasury stock				(18)	(18)								(18)
Disposal of treasury stock				126	126								126
Reversal of revaluation reserve for land			(1,621)		(1,621)								(1,621)
Adjustments due to change of fiscal year-end of consolidated subsidiaries			(1,108)		(1,108)								(1,108)
Changes in equity interest in consolidated subsidiaries		(2,648)	(1,100)		(2,648)								(2,648)
Other		( ) /	288		288								288
Net changes of net assets other than shareholders' equity					_	(71,234)	2,837	1,621	(41,297)	) (27)	(108,108)	(1,630)	(109,738)
Total changes during the year	_	(2,648)	99,855	99	97,306	(71,234)	2,837		(41,297)		(108,108)	(1,630)	(12,423)
Balance as of March 31, 2019	\$121,171	\$96,081	\$1,984,090		\$2,102,855	\$ 77,936	\$2,828				\$ 37,720	\$16,828	\$2,157,414

# **Consolidated Statements of Cash Flows**

Kurita Water Industries Ltd. and Consolidated Subsidiaries For the years ended March 31, 2019 and 2018

Cash flows from operating activities   Income before income taxes   V27,532   V25,535   S 248,936   Depreciation and amortization   17,762   16,868   169,018   Increase in the dishined benefit liability   Cash			Millions of yen		Thousands of U.S. dollars (Note 1)
Income before income taxes   Y27,532   Y25,535   \$248,036     Deprevation and amortization   17,762   16,861     Increase in net defined benefit liability   206   387   1,855     Increase in net defined benefit liability   206   387   1,855     Increase in other allowances   666   6   6   6   6   6   6     Equity in earnings of unconsolidated subsidiaries and affiliates   (136)   (73)   (1,225)     Interest and divided in income   313   737   352   2,855     Gain on step acquisitions   — (2,443)   — (2,443)   —     Provision for building demolition expenses   — (2,403)   — (2,443)   —     Provision for building demolition expenses   — (2,403)			2019	2018	2019
Deprecation and amortization   17,762   16,861   160,018   Increase in not defined benefit liability   206   387   1,855   Increase in other allowances   666   6   6   6,000   6,00	I.	Cash flows from operating activities			
Increase in not defined benefit liability   206   897   1,555     Increase in other allowances   666   6   6,000     Equity in earnings of unconsolidated subsidiaries and affiliates   (136)   (73)   (1,225)     Interest and dividend income   317   352   2,555     Interest and dividend income   317   352   2,555     Gain on step acquisitions   - (2,443)   - (2,443)   - (2,443)     Provision for building demolition expenses   666   54   6,000     Loss on liquidation of business   519   - (2,473)   - (2,47			¥ 27,532	¥ 25,535	\$ 248,036
Increase in other allowances		Depreciation and amortization	17,762	16,861	160,018
Equity in earnings of unconsolidated subsidiaries and affiliates   136   173   173   173   173   173   173   174   173   174		Increase in net defined benefit liability	206	387	1,855
Interest and dividend income Interest pare depense Interest pace spense		Increase in other allowances	666	6	6,000
Interest expense		Equity in earnings of unconsolidated subsidiaries and affiliates	(136)	(73)	(1,225)
Gain on step acquisitions		Interest and dividend income	(733)	(737)	(6,603)
Provision for building demolition expenses		Interest expense	317	352	2,855
Loss on Ingliadation of business   519		Gain on step acquisitions	_	(2,443)	_
Loss on Inquidation of business		Provision for building demolition expenses	_	320	_
Loss on transfer of business   2,867		Loss on sales and disposal of properties	666	54	6,000
Impairment loss   1,097   413   9,882   Gain on sales of investment securities   (8,676)   (1,720)   (78,162)   Changes in assets and liabilities:   Increase in trade receivables   (10,907)   (16,332)   (98,261)   Decrease (increase) in inventories   1,463   (29)   13,180   Decrease (increase) in intered assets   (692)   1,073   (6,234)   Increase in advances received   1,088   3,699   (9,801)   Increase in advances received   15,920   74   143,423   Increase in advances received   15,920   74   143,423   Increase in advances received   200   431   1,801   Other, net   200   431   1,801   Other, net   200   431   1,801   Other, net   47,956   28,095   432,036   Increast paid   (448   (514 ) (4,036)   Increast paid   (488   (514 ) (4,036)   Increast paid   (8,915 ) (10,003   (899)   (9,576)   Net cash provided by operating activities   38,478   21,408   346,648    II. Cash flows from investing activities  Decrease in time deposits, net   933   5,787   8,405   Payments for purchase of property, plant and equipment   (28,600)   (17,924 ) (257,657)   Proceeds from sales of property, plant and equipment   479   15   4,315   Payments for purchase of intangible assets   1,235   (972)   (11,126)   Proceeds from sales of marketable securities and investment securities   2,144   (6) (19,315)   Payments for purchase of marketable securities and investment securities   13,335   2,115   120,135   Payments for acquisition of business (Note 3)   4,000   (794)   (8,738)   Net cash used in investments in unconsolidated subsidiaries and affiliates (Note 3)   (790)   (794)   (8,738)   Net cash used in investment servities   (1,000		Loss on liquidation of business	519	_	4,675
Gain on sales of investment securities Changes in assets and liabilities: Increase in trade receivables Decrease (increase) in inventiones Decrease (increase) in other assets Decrease (increase) in other assets (692) 1,073 (6,234) Increase (accrease) in trade payables Increase (accrease) in trade payables Increase (increase) in trade payables Increase in advances received 15,920 74 143,423 Increase in other liabilities 971 223 8,747 Other, net 200 431 1,801 Other, net 47,956 28,095 432,036 Interest and dividends received 950 897 8,558 Interest paid (448) 5(14) (4,036) Income taxes paid Increase pa		Loss on transfer of business	2,867	_	25,828
Changes in assets and liabilities:		Impairment loss	1,097	413	9,882
Increase in trade receivables   10,907   (16,332   98,261   Decrease (increase) in inventories   1,463   (29)   13,180   Decrease (increase) in other assets   (692   1,073   (6,234)   Increase (decrease) in trade payables   (1,088   3,699   9,801)   Increase in advances received   15,920   74   143,423   Increase in other liabilities   971   223   8,747   (20,441)   1,801   (4,048   4,995   28,095   432,036   (448   6,514   4,036   (448   6,514   4,036   (448   6,514   4,036   (448   6,514   4,036   (4,036   (4,036   4,036   (4,036   4,036   4,036   (4,036   4,036   4,036   (4,036   4,036   4,036   (4,036   4,036   4,036   (4,036   4,036   4,036   (4,036   4,036   4,036   (4,036   4,036   4,036   (4,036   4,036   4,036   (4,036   4,036   4,036   4,036   (4,036   4,036   4,036   4,036   (4,036   4,036   4,036   4,036   (4,036   4,036   4,036   4,036   4,036   (4,036   4,03		Gain on sales of investment securities	(8,676)	(1,720)	(78,162)
Decrease (increase) in inventories   1,463   (7.9)   13,180		Changes in assets and liabilities:			
Decrease (increase) in inventories		Increase in trade receivables	(10,907)	(16,332)	(98,261)
Decrease (Increase) in other assets		Decrease (increase) in inventories	1,463	(29)	
Increase in advances received Increase in advances received Increase in other liabilities Other, net Other, ne		Decrease (increase) in other assets	(692)	1,073	(6,234)
Increase in other liabilities		Increase (decrease) in trade payables	(1,088)	3,699	(9,801)
Other, net   200   431   1,801   1,801   1,801   1,956   28.095   432,036   1,000   2,000   2,000   3,000		Increase in advances received	15,920	74	143,423
Interest and dividends received 950 897 8,558 8,		Increase in other liabilities	971	223	8,747
Interest and dividends received 950 897 8,558 8,		Other, net	200	431	1,801
Interest paid   (448) (514) (4,036)   Income taxes paid (8,915) (6,170) (80,315)   Other, net (1,063) (899) (9,576)   Net cash provided by operating activities   38,478   21,408   346,648      I. Cash flows from investing activities   933   5,787   8,405     Payments for purchase of property, plant and equipment (28,600) (17,924) (257,657)     Proceeds from sales of property, plant and equipment (479   15   4,315     Payments for purchase of intangible assets (1,235) (972) (11,126)     Proceeds from sales of intangible assets (1,235) (972) (11,126)     Proceeds from sales of intangible assets (1,235) (972) (11,126)     Proceeds from sales of intangible assets (1,235) (972) (11,126)     Proceeds from sales and redemption of marketable securities and investment securities securities of payments for purchase of marketable securities and investment securities securities of investments in unconsolidated subsidiaries and affiliates (Note 3) (33,374) (136) (300,666)     Payments for investments in unconsolidated subsidiaries and affiliates (Note 3) (1,012) (1		<u> </u>	47,956	28,095	
Interest paid (448) (514) (4,036) Income taxes paid (8,915) (6,170) (80,315) (0,170) (1,063) (899) (9,576) (1,063) (899) (9,576) (1,063) (899) (9,576) (1,063) (899) (9,576) (1,063) (899) (9,576) (1,063) (899) (9,576) (1,063) (899) (1,063) (899) (1,063) (899) (1,063) (899) (1,063) (1,063) (1,063) (1,063) (1,063) (1,064) (1,063) (1,063) (1,064) (1,063) (1,064) (1,063) (1,064) (1,064) (1,063) (1,064) (1,06		Interest and dividends received	950	897	8,558
Income taxes paid   (8,915)   (6,170)   (80,315)   (1,063)   (899)   (9,576)   (1,063)   (899)   (9,576)   (1,063)   (899)   (9,576)   (1,063)   (899)   (9,576)   (1,063)   (899)   (9,576)   (1,063)   (899)   (9,576)   (1,063)   (899)   (9,576)   (1,063)   (1,063)   (899)   (9,576)   (1,063)		Interest paid	(448)	(514)	
Other, net					
II. Cash flows from investing activities   933   5,787   8,405     Payments for purchase of property, plant and equipment   (28,600)   (1,7924)   (257,657)     Payments for purchase of property, plant and equipment   479   15   4,315     Payments for purchase of intangible assets   (1,235)   (972)   (11,126)     Proceeds from sales of intangible assets   18   -   162     Payments for purchase of marketable securities and investment securities   (2,144)   (6)   (19,315)     Proceeds from sales of intangible assets   18   -   162     Payments for purchase of marketable securities and investment securities   (2,144)   (6)   (19,315)     Proceeds from sales and redemption of marketable securities and investment   (2,144)   (6)   (19,315)     Payments for acquisition of business (Note 3)   (33,374)   (136)   (300,666)     Payments for investments in unconsolidated subsidiaries and affiliates (Note 3)   (970)   (794)   (8,738)     Net cash used in investing activities   (51,559)   (15,928)   (15,928)     III. Cash flows from financing activities   (594)   (400)   (5,351)     Cash dividends paid to non-controlling shareholders of consolidated subsidiaries   (1,65)   (5,966)   (5,753)   (53,747)     Cash dividends paid to non-controlling shareholders of consolidated subsidiaries   (1,65)   (610)   (10,495)     Payments for lease obligations   (1,65)   (610)   (10,495)     Payments for clase of treasury stock, net   (2)   (5,592)   (18)     Payments for changes in ownership interests in subsidiaries that do not result in change in scope of consolidation   (1,094)   (173)   (9,855)     Net cash used in financing activities   (11,280)   (12,419)   (101,621)     V. Effect of exchange rate changes on cash and cash equivalents   (24,465)   (6,521)   (220,405)     V. Lincrease in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries in cash and cash equivalents due to change of fiscal year-end of cons		Other, net	(1,063)	(899)	
Decrease in time deposits, net   933   5,787   8,405   Payments for purchase of property, plant and equipment   (28,600) (17,924) (257,657)   Proceeds from sales of property, plant and equipment   479   15   4,315   Payments for purchase of intangible assets   (1,235) (972) (11,126)   Proceeds from sales of intangible assets   18   —   162   Payments for purchase of marketable securities and investment securities   (2,144) (6) (19,315)   Proceeds from sales and redemption of marketable securities and investment securities   (2,144) (6) (19,315)   Payments for acquisition of business (Note 3)   (33,374) (136) (300,666)   Payments for investments in unconsolidated subsidiaries and affiliates (Note 3)   — (4,012)   —		Net cash provided by operating activities	38,478	21,408	
Decrease in time deposits, net   933   5,787   8,405   Payments for purchase of property, plant and equipment   (28,600) (17,924) (257,657)   Proceeds from sales of property, plant and equipment   479   15   4,315   Payments for purchase of intangible assets   (1,235) (972) (11,126)   Proceeds from sales of intangible assets   18   —   162   Payments for purchase of marketable securities and investment securities   (2,144) (6) (19,315)   Proceeds from sales and redemption of marketable securities and investment securities   (2,144) (6) (19,315)   Payments for acquisition of business (Note 3)   (33,374) (136) (300,666)   Payments for investments in unconsolidated subsidiaries and affiliates (Note 3)   — (4,012)   —					
Payments for purchase of property, plant and equipment Proceeds from sales of property, plant and equipment Payments for purchase of intangible assets Payments for purchase of intangible assets Payments for purchase of intangible assets Payments for purchase of marketable securities and investment securities Proceeds from sales of marketable securities and investment securities Proceeds from sales and redemption of marketable securities and investment securities Proceeds from sales and redemption of marketable securities and investment securities Payments for acquisition of business (Note 3) Payments for investments in unconsolidated subsidiaries and affiliates (Note 3) Other, net Net cash used in investing activities  III. Cash flows from financing activities  III. Cash flows from financing activities  III. Cash dividends paid Cash dividends paid to non-controlling shareholders of consolidated subsidiaries Payments for lease obligations Payments for purchase of treasury stock, net Payments for purchase of treasury stock, net Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation  V. Net cash used in financing activities  VI. Lash and cash equivalents VI. Lash and cash equivalents at beginning of year  VI. Lash and cash equivalents at beginning of year  VII. Increase in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries 1,097  - 9,882	II.	Cash flows from investing activities			
Proceeds from sales of property, plant and equipment Payments for purchase of intangible assets Payments for purchase of intangible assets Payments for purchase of marketable securities and investment securities Payments for purchase of marketable securities and investment securities Proceeds from sales and redemption of marketable securities and investment securities Payments for acquisition of business (Note 3) Payments for acquisition of business (Note 3) Payments for investments in unconsolidated subsidiaries and affiliates (Note 3) Payments for investments in unconsolidated subsidiaries and affiliates (Note 3) Pet cash used in investing activities  III. Cash flows from financing activities  III. Cash flows from financing activities  III. Cash flows from financing activities  III. Cash dividends paid to non-controlling shareholders of consolidated subsidiaries Payments for lease obligations Payments for lease obligations Payments for lease obligations Payments for purchase of treasury stock, net Payments for purchase of treasury stock, net Payments for purchase of treasury stock, net Payments for lease obligations Payments fo		Decrease in time deposits, net	933	5,787	8,405
Payments for purchase of intangible assets Proceeds from sales of intangible assets Payments for purchase of marketable securities and investment securities Proceeds from sales and redemption of marketable securities and investment securities Proceeds from sales and redemption of marketable securities and investment securities Payments for acquisition of business (Note 3) Payments for investments in unconsolidated subsidiaries and affiliates (Note 3) Payments for investments in unconsolidated subsidiaries and affiliates (Note 3) Other, net    (4,012)		Payments for purchase of property, plant and equipment	(28,600)	(17,924)	(257,657)
Proceeds from sales of intangible assets Payments for purchase of marketable securities and investment securities Proceeds from sales and redemption of marketable securities and investment securities Payments for acquisition of business (Note 3) Payments for investments in unconsolidated subsidiaries and affiliates (Note 3) Payments for investments in unconsolidated subsidiaries and affiliates (Note 3) Payments for investments in unconsolidated subsidiaries and affiliates (Note 3) Payments for investments in unconsolidated subsidiaries and affiliates (Note 3) Payments for investments in unconsolidated subsidiaries and affiliates (Note 3) Payments for investments in unconsolidated subsidiaries with subsidiaries and affiliates (Note 3) Payment for investments in unconsolidated subsidiaries with subsidiaries and affiliates (Note 3) Payments for for investments in unconsolidated subsidiaries with subsidiaries and affiliates (Note 3) Payments for lease obligations Payments for lease obligations Payments for purchase of treasury stock, net (2) (5,592) (18) Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation (1,094) (173) (9,855) Pattent of exchange rate changes on cash and cash equivalents (104) 417 (936) Payments for exchange rate changes on cash and cash equivalents (104) 417 (936) Payments in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries and cash equivalents due to change of fiscal year-end of consolidated subsidiaries unit change in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries unit change in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries unit change in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries		Proceeds from sales of property, plant and equipment	479	15	4,315
Payments for purchase of marketable securities and investment securities Proceeds from sales and redemption of marketable securities and investment securities Securities Payments for acquisition of business (Note 3) Payments for investments in unconsolidated subsidiaries and affiliates (Note 3) Other, net Other, net Net cash used in investing activities  III. Cash flows from financing activities Increase (decrease) in short-term borrowings, net Repayment of long-term loans payable Cash dividends paid Cash dividends paid to non-controlling shareholders of consolidated subsidiaries Payments for lease obligations Payments for purchase of treasury stock, net Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation  IV. Effect of exchange rate changes on cash and cash equivalents V. Net decrease in cash and cash equivalents VII. Increase in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries and investment securities and affiliates (Note 3)  13,335 2,115 120,135 2,115 120,135 2,115 120,135 2,115 120,135 2,115 120,135 2,115 120,135 2,115 120,135 2,115 120,135 2,117 2,141, V. From controlling shareholders of securities and affiliates (Note 3)  1,155 1,155 1,155 1,155 1,177		Payments for purchase of intangible assets	(1,235)	(972)	(11,126)
Proceeds from sales and redemption of marketable securities and investment securities  Payments for acquisition of business (Note 3)  Payments for investments in unconsolidated subsidiaries and affiliates (Note 3)  Other, net  Other, net  Net cash used in investing activities  III. Cash flows from financing flows fl		Proceeds from sales of intangible assets	18	_	162
securities Payments for acquisition of business (Note 3) Payments for acquisition of business (Note 3) Payments for investments in unconsolidated subsidiaries and affiliates (Note 3) Other, net  Other, net  Net cash used in investing activities  Ill. Cash flows from financing activities  Increase (decrease) in short-term borrowings, net Repayment of long-term loans payable Cash dividends paid Cash dividends paid to non-controlling shareholders of consolidated subsidiaries Payments for lease obligations Payments for purchase of treasury stock, net Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation Net cash used in financing activities  IV. Effect of exchange rate changes on cash and cash equivalents V. Net decrease in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries and affiliates (Note 3)  (1,094)  (173) (1936) (1947) (173) (1948) (1956) (1948) (1957) (1948) (1956) (1957) (1958) (1968)		Payments for purchase of marketable securities and investment securities	(2,144)	(6)	(19,315)
Payments for acquisition of business (Note 3) Payments for investments in unconsolidated subsidiaries and affiliates (Note 3) Other, net  Net cash used in investing activities  III. Cash flows from financing activities  Increase (decrease) in short-term borrowings, net Repayment of long-term loans payable Cash dividends paid Cash dividends paid (5,966) Cash dividends paid (5,966) Cash dividends paid to non-controlling shareholders of consolidated subsidiaries Payments for lease obligations Payments for lease obligations Payments for changes in ownership interests in subsidiaries that do not result in change in scope of consolidation Net cash used in financing activities  IV. Effect of exchange rate changes on cash and cash equivalents V. Net decrease in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries  1,097  1,097  2,04,012  2,04,012  3,744  4,77  4,012  4,724  4,745  4,744  4,745  4,744  4,747  4,745  4,745  4,747  4,74  4,74  4,74  4,74  4,74  4,74  4,74  4,74  4,74  4,74  4,74  4,		Proceeds from sales and redemption of marketable securities and investment			
Payments for investments in unconsolidated subsidiaries and affiliates (Note 3) Other, net  Net cash used in investing activities  III. Cash flows from financing activities  Increase (decrease) in short-term borrowings, net Repayment of long-term loans payable Cash dividends paid Cash dividends paid to non-controlling shareholders of consolidated subsidiaries Payments for lease obligations Payments for purchase of treasury stock, net Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation Net cash used in financing activities  IV. Effect of exchange rate changes on cash and cash equivalents VI. Cash and cash equivalents at beginning of year  III. Cash flows from financing activities  (400) (5,351) (5,966) (5,753) (53,747) (5,966) (5,753) (53,747) (610) (10,495) (11,165) (610) (10,495) (11,620) (11,094) (173) (9,855) (11,280) (12,419) (101,621)  IV. Effect of exchange rate changes on cash and cash equivalents VI. Cash and cash equivalents at beginning of year  VIII. Increase in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries  1,097  9,882		securities	13,335	2,115	120,135
Other, net  Net cash used in investing activities  III. Cash flows from financing activities  Increase (decrease) in short-term borrowings, net Repayment of long-term loans payable Cash dividends paid Cash dividends paid (5,966) (5,753) (53,747) Cash dividends paid to non-controlling shareholders of consolidated subsidiaries Payments for lease obligations Payments for purchase of treasury stock, net Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation Net cash used in financing activities  IV. Effect of exchange rate changes on cash and cash equivalents V. Net decrease in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries  III. Cash flows from financing activities  (40,00) (5,351) (5,966) (5,753) (53,747) (6,506) (11,65) (610) (10,495) (6,501) (10,495) (11,695) (6,101) (10,495) (11,695) (11,695) (11,695) (11,694) (173) (9,855) (11,280) (12,419) (101,621)  IV. Effect of exchange rate changes on cash and cash equivalents V. Net decrease in cash and cash equivalents V. Net decrease in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries  VII. Increase in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries  1,097 — 9,882			(33,374)	(136)	(300,666)
Net cash used in investing activities  III. Cash flows from financing activities  Increase (decrease) in short-term borrowings, net  Repayment of long-term loans payable  Cash dividends paid  Cash dividends paid to non-controlling shareholders of consolidated subsidiaries  Payments for lease obligations  Payments for purchase of treasury stock, net  Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation  Net cash used in financing activities  IV. Effect of exchange rate changes on cash and cash equivalents  VI. Cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries  1,097  1,097  1,097  1,774  1,774  1,777  1,774  1,774  1,774  1,777  1,774  1,774  1,774  1,777  1,774  1,774  1,777  1,774  1,777  1,774  1,774  1,777  1,774  1,774  1,777  1,774  1,777  1,774  1,777  1,774  1,777  1,774  1,774  1,777		Payments for investments in unconsolidated subsidiaries and affiliates (Note 3)	_	(4,012)	_
III. Cash flows from financing activities  Increase (decrease) in short-term borrowings, net  Repayment of long-term loans payable  Cash dividends paid  Cash dividends paid to non-controlling shareholders of consolidated subsidiaries  Payments for lease obligations  Payments for purchase of treasury stock, net  Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation  Net cash used in financing activities  IV. Effect of exchange rate changes on cash and cash equivalents  V. Net decrease in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries  III. 177  \$ (21,774)  \$ (22,417)  \$ (400)  (5,351)  (5,966)  (5,753)  (53,747)  (6)  (6)  (10,495)  (11,65)  (6)  (10,66)  (10,495)  (11,094)  (173)  (173)  (9,855)  (11,280)  (12,419)  (101,621)  IV. Effect of exchange rate changes on cash and cash equivalents  V. Net decrease in cash and cash equivalents  V. Net decrease in cash and cash equivalents  VII. Increase in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries  VIII. Increase in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries  1,097  9,882					
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Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation  Net cash used in financing activities  (104) 417 (936)  V. Net decrease in cash and cash equivalents  VI. Cash and cash equivalents (24,465) (6,521)  VI. Cash and cash equivalents at beginning of year  VII. Increase in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries  Payments from changes in output (173) (9,855)  (104) 417 (936)  (220,405)  (220,405)  VI. Cash and cash equivalents at beginning of year  VII. Increase in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries					
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Net cash used in financing activities (11,280) (12,419) (101,621)  IV. Effect of exchange rate changes on cash and cash equivalents (104) 417 (936)  V. Net decrease in cash and cash equivalents (24,465) (6,521) (220,405)  VI. Cash and cash equivalents at beginning of year 58,917 65,438 530,783  VII. Increase in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries 1,097 — 9,882		Payments from changes in ownership interests in subsidiaries that do not	(4.004)	(4.70)	(0.055)
IV. Effect of exchange rate changes on cash and cash equivalents(104)417(936)V. Net decrease in cash and cash equivalents(24,465)(6,521)(220,405)VI. Cash and cash equivalents at beginning of year58,91765,438530,783VII. Increase in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries1,097—9,882					
V. Net decrease in cash and cash equivalents(24,465)(6,521)(220,405)VI. Cash and cash equivalents at beginning of year58,91765,438530,783VII. Increase in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries1,097—9,882		iver cash asea in illiancing activities	(11,280)	(12,419)	(101,621)
V. Net decrease in cash and cash equivalents(24,465)(6,521)(220,405)VI. Cash and cash equivalents at beginning of year58,91765,438530,783VII. Increase in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries1,097—9,882	IV	Effect of exchange rate changes on cash and cash equivalents	(104)	<i>/</i> 17	(026)
VI. Cash and cash equivalents at beginning of year58,91765,438530,783VII. Increase in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries1,097—9,882					
VII. Increase in cash and cash equivalents due to change of fiscal year-end of consolidated subsidiaries  1,097  9,882					
consolidated subsidiaries 1,097 — 9,882			30,317	05, 150	000,700
			1,097		9,882
	VIII	.Cash and cash equivalents at end of year (Note 3)	¥ 35,548	¥ 58,917	\$ 320,252

The accompanying notes are an integral part of these statements.

# Notes to Consolidated Financial Statements

Kurita Water Industries Ltd. and Consolidated Subsidiaries

#### 1. Basis of presentation of consolidated financial statements

Kurita Water Industries Ltd. (the "Company") and its domestic subsidiaries maintain their books of account and prepare their financial statements in accordance with accounting principles and practices generally accepted in Japan, while its foreign subsidiaries maintain their books of account and prepare their financial statements in conformity with those of the countries of their domicile. Certain accounting principles and practices generally accepted in Japan are different from International Financial Reporting Standards and standards in other countries in certain respects as to application and disclosure requirements. Accordingly, the accompanying consolidated financial statements are intended for use by those who are informed about Japanese accounting principles and practices.

The Company's consolidated financial statements, prepared in accordance with accounting principles and practices generally accepted in Japan, were filed with the Japanese Ministry of Finance and the Tokyo Stock Exchange as required by the Financial Instruments and Exchange Law of Japan.

Certain reclassifications of accounts and modifications have been made in the accompanying consolidated financial statements to facilitate understanding by readers outside Japan. In addition, certain reclassifications have been made in the 2018 financial statements to conform to the classification used in 2019.

All figures in the consolidated financial statements and notes are stated in millions of Japanese yen by discarding fractional amounts of less than ¥1 million. As a result, the totals shown in the consolidated financial statements and notes in yen do not necessarily agree with the sum of the individual amounts.

The translation of yen amounts as of or for the year ended March 31, 2019 into U.S. dollars is included solely for the convenience of readers and has been made, as a matter of arithmetical computation only, at the rate of ¥111 to US\$1, the prevailing rate on the Tokyo Foreign Exchange Market on March 29, 2019. The translation should not be construed as a representation that yen amounts have been, could have been or could in the future be converted into U.S. dollars at the above or any other rate.

#### 2. Significant accounting policies

#### (1) Consolidation

#### Scope of consolidation

The consolidated financial statements included the accounts of the Company and its significant subsidiaries (together, the "Group"). For the years ended March 31, 2019 and 2018, 60 and 52 subsidiaries were consolidated, respectively.

Under the control concept, those companies in which the Company, directly or indirectly, is able to exercise control over operations are fully consolidated.

All significant intercompany transactions and balances have been eliminated in consolidation. *Names of principal consolidated subsidiaries:* 

Kurita Europe GmbH

Kurita Water Industries (Jiangyin) Co., Ltd.

Hansu Technical Service Ltd.

Hansu Co., Ltd.

Kurita Water Industries (Suzhou) Ltd.

Kuritaz Co., Ltd.

Kurita Engineering Co., Ltd.

Kuritec Service Co. Ltd.

Kurita Chemical Manufacturing Ltd.

From the year ended March 31, 2019, Fracta, Inc., Fracta, Global Water Services Holding Company, Inc., U.S. Water Services, Inc., U.S. Water Services Canada, Inc. and U.S. Water Services Dominica, S.R.L. were newly included in the scope of consolidation due to acquisition of shares. Also, Kurita Water Industries (Taixing) Co., Ltd. and Kurita Capital (Singapore) Pte. Ltd. were included due to incorporation.

#### Fiscal years of consolidated subsidiaries

Previously, the fiscal years of all of the foreign consolidated subsidiaries ended on December 31, and for these consolidated subsidiaries, the financial statements as of December 31 were used for consolidation purposes, with material transactions that occurred during the three-month period from January 1 to March 31 of the following year adjusted as necessary for consolidation. However, for better understanding of management information and presentation of consolidated financial statements, the fiscal year ends of all foreign subsidiaries have been changed to March 31, except for Kurita Water Industries (Dalian) Co., Ltd., Kurita Water Industries (Jiangyin) Co., Ltd., Kurita Water Industries (Suzhou) Ltd., Kuritec (Shanghai) Co., Ltd., and Kurita do Brasil LTDA. These five companies have conducted a provisional financial closing in accordance with the actual closing on the consolidated fiscal year-end date. In line with this change, for the fiscal year under review, profit and loss for the three months from January 1, 2018 to March 31, 2018 has been adjusted in retained earnings for consolidation.

The new consolidated subsidiaries Fracta, Inc., Fracta and Kurita Water Industries (Taixing) Co., Ltd. have fiscal years ending on December 31, and the Company conducts a provisional accounting closing for them in accordance with the actual closing on the consolidated fiscal year-end date.

Moreover, for Global Water Services Holding Company, Inc., U.S. Water Services, Inc., U.S. Water Services - Canada, Inc., and U.S. Water Services Dominica, S.R.L., only the opening balances of the balance sheets as of March 26, 2019 have been consolidated for the fiscal year under review.

#### Amortization of goodwill

Goodwill is amortized using the straight-line method over a reasonable number of years, not exceeding 20 years, on a case-by-case basis, except for minor amounts that are charged to income in the period of acquisition.

### (2) Equity method

# Scope of equity method application

Under the influence concept, significant investments in unconsolidated subsidiaries and affiliates over which the Company has the ability to exercise significant influence with regard to the operating and financial policies of the investees are accounted for by the equity method. For the years ended March 31, 2019 and 2018, 4 companies were accounted for by the equity method.

Name of principal company applying the equity method:

Angang Kurita Water Treatment Co., Ltd.

Investments in the remaining unconsolidated subsidiaries and affiliates were stated at cost. If the equity method of accounting had been applied to the investments in these companies, the effect on the accompanying consolidated financial statements would not be material.

# Fiscal years of companies accounted for by the equity method

The companies accounted for by the equity method that have different closing dates are included in the consolidated financial statements based on their respective fiscal year-end.

# (3) Cash and cash equivalents

Cash and cash equivalents in the consolidated statements of cash flows are composed of cash on hand, readily available bank deposits and short-term investments with an original maturity of three months or less and subject to a minor risk of fluctuations in value.

# (4) Available-for-sale securities

Available-for-sale securities that have available fair values are stated at fair value at the balance sheet date, with resulting unrealized holding gains and losses reported as a separate component of net assets. Available-for-sale securities with no available fair values are stated at cost computed by the moving-average method. The cost of sold securities is computed by the moving-average method.

#### (5) Inventories

Inventories held for sale in the ordinary course of business are stated at the lower of cost determined by the moving-average method, except for work in process determined by the specific-identification method, or net selling value.

#### (6) Derivative transactions

Derivative transactions are measured at fair value in principle.

#### (7) Depreciation of property, plant and equipment

Property, plant and equipment are mainly depreciated by the straight-line method.

(Changes to accounting policies that are difficult differentiating from changes to accounting estimates)

(Changes in depreciation method of property, plant and equipment)

In the past, property, plant and equipment (excluding leased assets) were depreciated by the declining-balance method for the Company and its domestic consolidates subsidiaries, except for buildings (other than building equipment) acquired on or after April 1, 1998, building equipment and structures acquired on or after April 1, 2016 and ultrapure water supply equipment located at clients' sites, for which the straight-line method was applied. However, the Group has changed the depreciation method for them to the straight-line method since April 1, 2018.

The Group has made this change because the pattern of consumption of the economic benefits of property, plant and equipment has changed as the expansion of the global business and a transition to the optimum production system have become clear. Given that actual production on a consolidated basis generally stays at a certain level and that the operation of facilities is also stable, the Group has determined that the straight-line method is more suitable for the consumption pattern of the economic benefits of property, plant and equipment.

The effect of this change on profits and loss for the year ended March 31. 2019 was immaterial.

#### (8) Intangible assets

Intangible assets are amortized by the straight-line method.

# (9) Impairment of long-lived assets

The Company reviews its long-lived assets for impairment in accordance with the accounting standards for impairment of fixed assets whenever events or changes in circumstances indicate the carrying amount of an asset or asset group may not be recoverable. An impairment loss would be recognized if the carrying amount of an asset or asset group exceeds the sum of the undiscounted future cash flows expected to result from the continued use and eventual disposition of the asset or asset group. The impairment loss would be measured as the amount by which the carrying amount of the asset exceeds its recoverable amount, which is the higher of the discounted cash flows from the continued use and eventual disposition of the asset or the net selling price at disposition.

# (10) Accrued employees' bonuses

The Company and its domestic consolidated subsidiaries accrue the amount of employees' bonuses based on the anticipated bonus payments to employees.

#### (11) Hedges

Gain or loss on derivatives designated as hedging instruments is deferred until the gain or loss on the underlying hedged items is recognized.

The Company uses forward foreign exchange contracts only in order to manage certain risks arising from fluctuations in foreign exchange rates and do not use derivative transactions for speculative purposes.

The Company evaluates the effectiveness of its hedging activities by comparing cumulative changes in cash flows on the hedging instruments with those of the related hedged items.

Hedging instruments: Forward foreign exchange contracts

Hedged items: Forecasted transactions denominated in foreign currencies

#### (12) Accounting method for employees' retirement benefits

The straight-line method is used as a method of attributing expected benefits to be paid to the current period in calculating retirement benefit obligations.

Actuarial differences are subject to amortization over a period of 1–2 years from the year when they are incurred.

#### (13) Leases

Finance leases which do not transfer ownership are capitalized to recognize leased assets and lease obligations in the consolidated balance sheets. Leased assets are depreciated using the straight-line method over the respective lease periods without residual value.

#### (14) Consumption taxes

Consumption taxes are accounted for separately from transaction prices and are not reflected in the consolidated statements of income.

#### (15) Construction contracts

The percentage-of-completion method has been applied to the contracts if the outcome of the construction activity is deemed certain for the percentage of performance of the contractor's obligation at the end of the balance sheet date, otherwise the completed-contract method is applied. The percentage of completion is determined using the cost incurred to the estimated total cost.

(Expansion of the scope of application of the percentage-of-completion method) In the past, the Group applied the percentage-of-completion method to construction work for progress of which the certainty of outcome can be recognized and applied the completed-contract method to other construction work. However, the Group has applied the percentage-of-completion method to other construction work from the fiscal year under review because a reliable estimate has become possible for most of them due to the development and strengthening of the cost management system.

As a result, net sales have increased ¥7,355 million (US\$66,261 thousand), and operating income and income before income taxes have increased ¥1,421 million (US\$12,801 thousand), respectively.

#### (16) Foreign currency translation

Monetary receivables and payables denominated in foreign currency are translated using the spot exchange rate prevailing at the balance sheet date, and the differences are charged to income as foreign exchange gains or losses.

Foreign subsidiaries' assets and liabilities are translated using the spot exchange rate at their balance sheet dates, and their income and expenses are translated using the average exchange rate during the year. The translation differences are recorded in "Foreign currency translation adjustments" and "Non-controlling interests" in net assets.

# (17) Appropriation of retained earnings

The accompanying consolidated statements of changes in net assets reflect the appropriations of retained earnings of the Company in the fiscal year in which the appropriations are approved at the general shareholders' meeting.

#### (18) Earnings per share

Earnings per share are computed by dividing net income attributable to common shareholders of parent by the weighted-average number of common shares outstanding.

#### (19) New accounting standards not yet applied

# Accounting Standard for Revenue Recognition, etc.

- · Accounting Standard for Revenue Recognition (ASBI Statement No. 29, March 30, 2018)
- Implementation Guidance on Accounting Standard for Revenue (ASBJ Guidance No. 30, March 30, 2018)

# 1) Overview

The International Accounting Standards Board (IASB) and the Federal Accounting Standards Board (FASB) jointly developed a comprehensive accounting standard for revenue recognition and in May 2014 announced "Revenue from Contract with Customers" (IFRS 15 of the IASB, Topic 606 of the FASB). IFRS 15 is applied to for fiscal years starting on or after January 1, 2018, and Topic 606 to fiscal years starting on or after December 15, 2017. In response, the Accounting Standards Board of Japan (ASBJ) developed a comprehensive accounting standard for revenue recognition, which it has announced together with implementation guidance. The basic policy for development of the ASBJ's accounting standard for revenue recognition was to start by incorporating the basic principle of IFRS 15 and determine the accounting standard from a perspective of comparability between financial statements, which is one of the advantages of compatibility with IFRS 15. Moreover, in cases where there are items to consider regarding the accounting practice that has conducted in Japan so far, alternative approaches have been added to the extent possible without compromising comparability.

### 2) Effect of adoption

The effect of adoption of the new accounting standard and guidance is not evaluated since the Kurita Group has decided to voluntarily apply IFRS from the first quarter of the fiscal year ending March 31, 2020 for its consolidated financial statements.

#### (20) Change in Presentation Method

# Partial Amendments to Accounting Standard for Tax Effect Accounting, etc.

Effective April 1,2018, the Group retrospectively adopted the "Partial Amendments to Accounting Standard for Tax Effect Accounting" (ASBJ Statement No. 28, February 16, 2018), which requires deferred tax assets are presented in investments and long-term receivables, and deferred tax liabilities are presented in long-term liabilities, respectively.

As a result, "Deferred tax assets" of ¥1,595 million which was previously classified as current assets has been presented by being included in "Deferred tax assets" of ¥4,860 million in investments and long-term receivables in the consolidated balance sheet for the previous fiscal year.

# 3. Reconciliation between cash and cash equivalents

(1) The reconciliation between the fiscal year-end cash and cash equivalents (See Note 2 (3)) in the consolidated statements of cash flows and cash and time deposits in the consolidated balance sheet items is as follows:

	Millions	s of yen	U.S. dollars (Note 1)
	2019	2018	2019
Cash and time deposits	¥35,351	¥61,086	\$318,477
Time deposits with original maturity of more than three months	(1,030)	(2,168)	(9,279)
Certificates of deposits and money trust included in marketable securities, excluding deposits maturing over three months	1,228	_	11,063
Cash and cash equivalents	¥35,548	¥58,917	\$320,252

(2) The details of assets and liabilities of a newly consolidated subsidiary due to acquisition of shares

### For the year ended March 31, 2019

The details of assets and liabilities in relation to acquisition of Fracta, Inc. and Fracta, which was acquired through an investment in Fracta, Inc., and reconciliation between acquisition costs of Fracta, Inc. and net payment for the acquisition are as follows:

Year ended March 31, 2019	Millions of yen	Thousands of U.S. dollars (Note 1)
Current assets	¥ 1,793	\$ 16,153
Non-current assets	43	387
Goodwill	2,941	26,495
Current liabilities	(142)	(1,279)
Non-controlling interests	(667)	(6,009)
Total acquisition costs	3,968	35,747
Cash and cash equivalents	(1,778)	(16,018)
Net payment for the acquisition of business	¥ 2,190	\$ 19,729

The details of assets and liabilities in relation to acquisition of U.S. Water Services, Inc. and two other companies, which were acquired through an investment in Global Water Services Holding Company, Inc., and reconciliation between acquisition costs of Global Water Services Holding Company, Inc. and net payment for the acquisition are as follows:

Year ended March 31, 2019	Millions of yen	Thousands of U.S. dollars (Note 1)
Current assets	¥ 4,899	\$ 44,135
Non-current assets	26,337	237,270
Goodwill	1,148	10,342
Current liabilities	(1,737)	(15,648)
Non-current liabilities	(279)	(2,513)
Total acquisition costs	30,369	273,594
Cash and cash equivalents	(428)	(3,855)
Net payment for the acquisition of business	¥29,941	\$269,738

#### For the year ended March 31, 2018

The details of assets and liabilities in relation to acquisition of Hansu Co., Ltd., a manufacturer and distributor of water treatment chemicals, and reconciliation between acquisition costs of Hansu Co., Ltd. and net payment for the acquisition are as follows:

Year ended March 31, 2018	Millions of yen
Current assets	¥ 4,225
Non-current assets	4,092
Goodwill	5,155
Current liabilities	(1,523)
Non-current liabilities	(460)
Deferred tax liabilities on retained earnings recognized at the point of acquisition of control	(306)
Non-controlling interests	(950)
Subtotal	10,232
Equity-method valuation up to the point of acquisition of control	(1,547)
Gain on step acquisition	(2,443)
Acquisition cost of additional shares	6,241
Cash and cash equivalents	(2,229)
Net payment for investments in subsidiaries and affiliates	¥ 4,012

#### 4. Trade notes with maturity on the balance sheet date

The following amount of trade notes had March 31, 2019 and 2018 as their maturity date, which fell on a holiday of financial institutions. These trade notes were accounted for as if they had been cleared on their maturity date.

	Millions of yen		Thousands of U.S. dollars (Note 1)	
	2019	2018	2019	
Notes receivable	¥801	¥796	\$7,216	
Notes payable	259	192	2,333	

#### 5. Financial instruments and related disclosures

#### (1) Policy for financial instruments

The Group invests its funds in low-risk financial assets (deposits, etc.) in principle. With respect to customers' credit risk of notes and accounts receivable, trade, the Company is making efforts to prevent them from damages and to improve the soundness of the transactions by monitoring of the level of transaction within the predetermined transaction limit and regular collection of credit information based on the Credit Control Policy and Manual. Investment securities are primarily comprised of stocks and the fair value of listed stocks are reviewed on a quarterly basis. With respect to derivatives, forward foreign currency contracts are used only for actual demand, and not for speculative purposes.

#### (2) Nature of financial instruments and their related risks

Trade receivables such as notes and accounts are exposed to customer credit risk. Certain trade receivables denominated in foreign currencies arising from overseas operations are exposed to the market risk of fluctuation in foreign currency exchange rates.

Marketable securities and investment securities are exposed to the risk of market price fluctuations and business risk of the investees.

Payment terms of trade payables such as notes and accounts are mostly less than one year. Lease obligations under finance lease transactions are mainly related to the ultrapure water supply business and its payment term is 10 years (11 in 2018) later at maximum.

#### (3) Risk management system for financial instruments

#### Credit risk management (customers' default risk):

The Company manages its credit risk involved in trade receivables based on the Credit Control Policy and Manual. The Control Division of each business unit and the Legal Department collect credit information on a regular basis and control the payment terms and outstanding balances by customer, and the Company is making efforts to prevent them from damages and to improve the soundness of the transactions by monitoring the default risk of customers due to the deterioration of their financial position at an early stage. The consolidated subsidiaries are also making efforts to reduce credit risk by controlling payment terms and outstanding balances of customers. Counterparties of forward foreign currency contracts to be used to avoid foreign exchange risk when necessary are limited to high-credit-rating financial institutions and, accordingly, we believe there is very little credit risk.

#### Market risk management (foreign exchange risk and interest rate risk):

The Company and certain consolidated subsidiaries utilize forward foreign currency contracts to hedge the market risk of fluctuations in foreign exchange rates involved in trade receivables and payables by currency and by month. Forward foreign currency contracts are executed and controlled by the Finance & Accounting Department after the individual contract is approved in accordance with the predetermined rule.

The fair value of marketable securities and investment securities and the financial position of the issuers are regularly reviewed. The Finance & Accounting Department of the Company executes and monitors each of the forward foreign currency contracts individually, followed by appropriate authorization procedures prescribed in the internal rules.

# Liquidity risk management (risk that the Company may not be able to settle on the payment due date):

The Finance & Accounting Department of the Company and its consolidated subsidiaries prepare and update the fund management plan every month based on reports from each business unit and hold a sufficient amount of liquidity in hand and manage the liquidity risk.

Carrying amounts, fair values and unrealized gain (loss) of financial instruments at March 31, 2019 and 2018 were as follows (financial instruments whose fair values cannot be reliably determined are not included in the following tables):

	Millions of yen		
At March 31, 2019	Carrying amount	Fair value	Difference
Cash and time deposits	¥ 35,351	¥ 35,351	¥—
Notes and accounts receivable, trade	99,247	99,247	_
Marketable securities and investment securities			
Available-for-sale securities	22,024	22,024	_
Total assets	¥156,623	¥156,623	¥—
Notes and accounts payable, trade	¥ 26,362	¥ 26,362	¥—
Total liabilities	¥ 26,362	¥ 26,362	¥—
Derivatives	¥ 535	¥ 535	¥—

#### Thousands of U.S. dollars (Note 1) Carrying At March 31, 2019 Fair value Difference amount Cash and time deposits \$ 318,477 \$ 318,477 Notes and accounts receivable, trade 894,117 894,117 Marketable securities and investment securities Available-for-sale securities 198,414 198,414 Total assets \$1,411,018 \$1,411,018 Notes and accounts payable, trade \$ 237,495 \$ 237,495 Total liabilities \$ 237,495 \$ 237,495 Derivatives 4,819 4,819

		Millions of yen			
At March 31, 2018	Carrying amount	Fair value	Difference		
Cash and time deposits	¥ 61,086	¥ 61,086	¥—		
Notes and accounts receivable, trade	86,865	86,865	_		
Marketable securities and investment securities					
Available-for-sale securities	34,238	34,238	_		
Total assets	¥182,190	¥182,190	¥—		
Notes and accounts payable, trade	¥ 28,875	¥ 28,875	¥—		
Total liabilities	¥ 28,875	¥ 28,875	¥—		
Derivatives	¥ 93	¥ 93	¥—		

# Notes:

a. Computation method of fair values

Cash and time deposits and notes and accounts receivable, trade:

Fair values approximate carrying amounts because of their short maturities.

Marketable securities and investment securities:

Fair values approximate carrying amounts because of their short maturities since marketable securities consist of national bonds and others. Fair values of investment securities are determined based on the quoted market price of the stock exchange.

Notes and accounts payable, trade:

 $\label{lem:carrying} \textit{Fair values approximate carrying amounts because of short maturities}.$ 

Derivatives:

Details and information are discussed in Note 7.

b. Financial instruments whose fair values cannot be reliably determined are as follows:

	Million:	Thousands of U.S. dollars (Note 1)	
	2019	2018	2019
Unlisted equity securities (Unlisted shares)	¥ 315	¥ 300	\$2,837
Investments in capital	727	786	6,549
Shares of unconsolidated subsidiaries and affiliates	1,099	1,147	9,900

These securities are not included in "Marketable securities and investment securities" above since their fair values cannot be reliably determined.

# c. Maturities of monetary receivables and securities after the balance sheet date

		Millions	s of yen	
At March 31, 2019	Due in one year or less	Due after one year through five years	Due after five years through ten years	Due after ten years
Deposits	¥ 35,333	¥—	¥—	¥—
Notes and accounts receivable, trade	99,247	_	_	_
Marketable securities and investment securities				
Available-for-sale securities with maturities				
(National bonds, etc.)	7	3	_	_
Total	¥134,588	¥ 3	¥—	¥—

	Thousands of U.S. dollars (Note 1)			
At March 31, 2019	Due in one year or less	Due after one year through five years	Due after five years through ten years	Due after ten years
Deposits	\$ 318,315	<b>\$</b> —	\$—	\$—
Notes and accounts receivable, trade	894,117	_	_	_
Marketable securities and investment securities				
Available-for-sale securities with maturities				
(National bonds, etc.)	63	27	_	_
Total	\$1,212,504	\$27	\$—	\$—

# 6. Marketable securities and investment securities

(1) Available-for-sale securities with fair value at March 31, 2019 and 2018 are summarized as follows:

	Millions of yen			
At March 31, 2019	Carrying amount	Acquisition cost	Difference	
Carrying amount exceeding acquisition cost:				
Stocks	¥20,763	¥8,497	¥12,265	
Bonds	_	_	_	
Other	_	_	_	
Subtotal	20,763	8,497	12,265	
Carrying amount not exceeding acquisition cost:				
Stocks	21	21	(0)	
Bonds	1,239	1,431	(192)	
Other	_	_	_	
Subtotal	1,260	1,453	(192)	
Total	¥22,024	¥9,950	¥12,073	

	Thous	Thousands of U.S. dollars (Note 1)		
At March 31, 2019	Carrying amount	Acquisition cost	Difference	
Carrying amount exceeding acquisition cost:				
Stocks	\$187,054	\$76,549	\$110,495	
Bonds	_	_	_	
Other	_	_	_	
Subtotal	187,054	76,549	110,495	
Carrying amount not exceeding acquisition cost:				
Stocks	189	189	(0)	
Bonds	11,162	12,891	(1,729)	
Other	_	_	_	
Subtotal	11,351	13,090	(1,729)	
Total	\$198,414	\$89,639	\$108,765	

Note: The above table does not include unlisted shares (value on consolidated balance sheets: ¥315 million (US\$2,837 thousand)) and investments in unaffiliated companies (value on consolidated balance sheets: ¥727 million (US\$6,549 thousand)).

	Millions of yen			
At March 31, 2018	Carrying amount	Acquisition cost	Difference	
Carrying amount exceeding acquisition cost:				
Stocks	¥34,157	¥11,038	¥23,118	
Bonds	_	_	_	
Other	_	_	_	
Subtotal	34,157	11,038	23,118	
Carrying amount not exceeding acquisition cost:				
Stocks	70	90	(20)	
Bonds	10	10	_	
Other	_	_	_	
Subtotal	81	101	(20)	
Total	¥34,238	¥11,140	¥23,098	

Note: The above table does not include unlisted shares (value on consolidated balance sheets: ¥300 million) and investments in unaffiliated companies (value on consolidated balance sheets: ¥786 million).

(2) Available-for-sale securities sold during the years ended March 31, 2019 and 2018 are summarized as follows:

	Million	s of yen	Thousands of U.S. dollars (Note 1)
	2019	2018	2019
Sales amount	¥13,334	¥2,115	\$120,126
Total gains on sales	8,676	1,720	78,162
Total losses on sales	_		_

# 7. Derivatives

Derivatives for which hedge accounting was not applied at March 31, 2019 and 2018 are as follows:

# **Currency related**

		Millions of yen			
At March 31, 2019	Hedging instrument	Contract amount	Due after one year	Fair value	Unrealized gains (losses)
	Currency swaps: Receive Yen, Pay Korean Won	¥1,339	¥632	¥83	¥83
	Foreign exchange forward contracts: Buying U.S.\$	144	0	0	0
	Total	¥1,483	¥632	¥83	¥83
			Thousands of U.S	. dollars (Note 1)	
At March 31, 2019	Hedging instrument	Contract amount	Due after one year	Fair value	Unrealized gains (losses)
	Currency swaps: Receive Yen, Pay Korean Won	\$12,063	\$5,693	\$747	\$747
	Foreign exchange forward contracts:  Buying  U.S.\$	1,297	0	0	0
	Total	\$13,360	\$5,693	\$747	\$747
			Millions	of yen	
At March 31, 2018	Hedging instrument	Contract amount	Due after one year	Fair value	Unrealized gains (losses)
	Currency swaps: Receive Yen, Pay Korean Won	¥2,099	¥1,339	¥94	¥94

Note: Fair value is based on the prices provided by the counterparty financial institutions.

Derivatives for which hedge accounting was applied at March 31, 2019 and 2018 are as follows:

# **Currency related**

				Millions of yen		
At March 31, 2019	Hedging instrument	Hedged item	Contract amount	Due after one year	Fair value	
	Currency swap contr	acts:				
	Receive Yen, Pay Euro	Forecasted transactions denominated in foreign currencies	¥ 8,258	¥6,882	¥488	
	Receive Yen, Pay Korean Won	Forecasted transactions denominated in foreign currencies	1,741	908	(35)	
F	oreign exchange fo	rward contracts:				
	Buying U.S.\$	Forecasted transactions denominated in foreign currencies	309	0	0	
Т	Total		¥10,308	¥7,790	¥453	

			Thousands of U.S. dollars (Note 1)		
At March 31, 2019	Hedging instrument	Hedged item	Contract amount	Due after one year	Fair value
	Currency swap contr	acts:			
	Receive Yen, Pay Euro	Forecasted transactions denominated in foreign currencies	\$74,396	\$62,000	\$4,396
	Receive Yen, Pay Korean Won	Forecasted transactions denominated in foreign currencies	15,684	8,180	(315)
	Foreign exchange fo	rward contracts:			
	Buying U.S.\$	Forecasted transactions denominated in foreign currencies	2,783	0	0
	Total		\$92,864	\$70,180	\$4,081

		Millions of yen			
At March 31, 2018	Hedging instrument	Hedged item	Contract amount	Due after one year	Fair value
	Currency swap cont	racts:			
	Receive Yen, Pay Euro	Forecasted transac- tions denominated in foreign currencies	¥ 9,635	¥8,258	¥ 141
	Receive Yen, Pay Korean Won	Forecasted transac- tions denominated in foreign currencies	2,574	1,741	(130)
-	Total		¥12,209	¥9,999	¥ 11

Millians of you

Notes: 1. Fair value is based on the prices provided by the counterparty financial institutions.

#### 8. Inventories

Inventories at March 31, 2019 and 2018 consist of the following:

	Million	Thousands of U.S. dollars (Note 1)	
	2019	2018	2019
Finished products	¥5,106	¥ 3,968	\$46,000
Raw materials	3,133	2,800	28,225
Work in process	1,235	3,621	11,126
Total	¥9,474	¥10,390	\$85,351

Inventories and provision for loss on construction contracts related to construction contracts that are likely to incur losses are presented as is and are not offset. The amount of inventories (work in process) corresponding to the provision for loss on construction contracts is immaterial.

<sup>2.</sup> For year ended Mach 31, 2019, designation (furiate-shori) is applied to monetary receivables and payables denominated in foreign currencies with foreign exchange forward contacts qualifying for such designation. Such hedged monetary receivables and payables are translated at the contracted rates.

# 9. Short-term borrowings and long-term debt

# (1) Short-term borrowings and current portion of long-term debt

The short-term borrowings and current portion of long-term debt at March 31, 2019 and 2018 consist of the following:

	Millions	s of yen	U.S. dollars (Note 1)
	2019	2018	2019
Short-term borrowings	¥ —	¥ 868	\$ —
Current portion of long-term borrowings	385	469	3,468
Current portion of lease obligations	1,176	635	10,594
Total	¥1,562	¥1,973	\$14,072

The weighted-average annual interest rate of short-term borrowings for the years ended March 31, 2018 was 3.73%.

# (2) Long-term debt

Long-term debt at March 31, 2019 and 2018 are summarized as follows:

	Millions of yen		U.S. dollars (Note 1)
	2019	2018	2019
Long-term borrowings	¥ 2,103	¥2,857	\$ 18,945
Less current portion of long-term borrowings	(385)	(469)	(3,468)
Long-term borrowings (Excluding current portion)	ng-term borrowings (Excluding current portion) ¥ 1,717 ¥2,388		\$ 15,468
Lease obligations Less current portion of lease obligations	¥ 6,427 (1,176)	¥4,674 (635)	\$ 57,900 (10,594)
Lease obligations (Excluding current portion)	¥ 5,250	¥4,038	\$ 47,297

The weighted-average annual interest rate of long-term borrowings for the years ended March 31, 2019 and 2018 were 3.36% and 3.27%, respectively.

Annual maturities of long-term borrowings at March 31, 2019 are as follows:

Years ending March 31	Millions of yen	Thousands of U.S. dollars (Note 1)
2020	¥385	\$3,468
2021	385	3,468
2022	221	1,990
2023	221	1,990
2024	221	1,990

Annual maturities of lease obligations at March 31, 2019 are as follows:

Years ending March 31	Millions of yen	U.S. dollars (Note 1)
2020	¥1,176	\$10,594
2021	1,022	9,207
2022	669	6,027
2023	686	6,180
2024	523	4,711

Thousands of

# (3) Other long-term liabilities

Other than the short-term borrowings, long-term borrowings and lease obligations described above, ¥744 million (US\$6,702 thousand) and ¥725 million of interest-bearing long-term deposits received were included in other long-term liabilities as of March 31, 2019 and 2018, respectively.

The weighted-average annual interest rates for such deposits received for the years ended March 31, 2019 and 2018 were 0.36%.

#### (4) Commitment line

The Company has concluded the commitment line agreements with four counterparty financial institutions to efficiently fund. Information of the commitment line agreements was as follows:

	Millions	s of yen	Thousands of U.S. dollars (Note 1)
	2019	2018	2019
Contract amounts	¥70,600	¥70,600	\$636,036
Borrowing outstanding	_	_	_
Unused balance	¥70,600	¥70,600	\$636,036

#### 10. Income taxes

Significant components of the deferred tax assets and liabilities as of March 31, 2019 and 2018 are as follows:

Thousands of

	Millions	U.S. dollars (Note 1)	
	2019	2018	2019
Deferred tax assets:		_	
Excess depreciation of property, plant and equipment	¥ 6,357	¥ 6,251	\$ 57,270
Net defined benefit liability	4,933	4,811	44,441
Tax loss carry-forward of consolidated subsidiaries	2,410	167	21,711
Excess provision for accrued bonuses to employees	722	728	6,504
Accrued enterprise taxes not deductible	278	403	2,504
Unrealized gains on sales of property, plant and equipment	225	239	2,027
Excess provision of allowance for product warranty	176	114	1,585
Impairment loss	175	424	1,576
Loss on revaluation of investment securities	_	645	_
Other	1,166	1,489	10,504
Subtotal	16,446	15,275	148,162
Less valuation allowance for tax loss carryforward	(1,783)	_	(16,063)
Less valuation allowance for temporally differences	(783)	_	(7,054)
Total valuation allowance	(2,567)	(1,052)	(23,126)
Total deferred tax assets	13,879	14,223	125,036
Deferred tax liabilities:			
Unrealized losses on available-for-sale securities	(3,771)	(6,474)	(33,972)
Estimated income taxes pertaining to retained earnings of foreign consolidated subsidiaries	(1,591)	(1,314)	(14,333)
Tangible and intangible assets identified due to business combinations	(865)	(965)	(7,792)
Capital gains on properties deferred for tax purposes	(341)	(537)	(3,072)
Other	(139)	(76)	(1,252)
Total deferred tax liabilities	(6,708)	(9,367)	(60,432)
Deferred tax assets, net	¥ 7,170	¥ 4,855	\$ 64,594

The valuation allowance increased by  $\pm 1,515$  million (US\$13,648 thousand). The main component of the increase was the additional recognition of valuation allowance for tax loss carryforward of  $\pm 1,783$  million (US\$16,063 thousand) in a consolidated subsidiary.

The expiration of tax carryforwards, the related valuation allowances and the resulting net deferred tax assets as of March 31, 2019 is as follows:

	Millions of yen						
Year ended March 31, 2019	one year or less	After one year through two years	After two years through three years	After three years through four years	After four years through five years	After five years	Total
Deferred tax assets relating to tax loss carryforwards	¥—	¥—	¥—	¥—	¥—	¥ 2,410	¥ 2,410
Less valuation allowances for tax loss carryforwards	_	_	_	_	_	(1,783)	(1,783)
Net deferred tax assets relating to tax loss carryforwards	_	_	-	-	-	626	626

	Thousands of U.S. dollars (Note 1)						
Year ended March 31, 2019	one year or less	After one year through two years	After two years through three years	After three years through four years	After four years through five years	After five years	Total
Deferred tax assets relating to tax loss carryforwards	\$—	\$—	\$—	\$—	\$—	\$ 21,711	\$ 21,711
Less valuation allowances for tax loss carryforwards	_	_	_	_	_	(16,063)	(16,063)
Net deferred tax assets relating to tax loss carryforwards	_	_	_	_	_	5,639	5,639

The amount of tax loss carryforward is the amount obtained by multiplying by the effective statutory tax rate.

Deferred tax assets of  $\pm 626$  million (US\$5,639 thousand) were recorded for tax loss carryforwards of  $\pm 2,410$  million (US\$21,711 thousand) (the amount obtained by multiplying by the effective statutory tax rate). The deferred tax asset of  $\pm 626$  million (US\$5,639 thousand) was recognized for part of the balance of tax loss carryforward of  $\pm 2,410$  million (US\$21,711 thousand) (the amount obtained by multiplying by the effective statutory tax rate) at a consolidated subsidiary. The tax loss carryforward for which the deferred tax asset was recorded is deemed to be recoverable due to the forecast for future taxable income, and an allowance was not recognized for it.

A reconciliation between the normal effective statutory tax rate and the effective tax rate as a percentage of income before income taxes for the years ended March 31, 2019 was as follows:

	2019
Normal effective statutory tax rate	30.6%
Expenses not deductible for income tax purposes	0.7
Withholding tax withheld from foreign subsidiaries' dividends	0.3
R&D expense tax credit	(1.2)
Dividend income and other not taxable for income tax purposes	(0.1)
Deferred tax liabilities on retained earnings of foreign consolidated subsidiaries	(0.9)
Difference in statutory tax rates of foreign subsidiaries	(1.8)
Per capita inhabitant taxes	0.4
Valuation allowance for tax loss carryforward	5.6
Other	3.5
Effective tax rate	37.1%

A reconciliation between the normal effective statutory tax rate and the effective tax rate for the March 31, 2018 were not presented because the differences were not material (less than 5%).

# 11. Retirement benefits and pension plans

# Defined benefit plans

The Company and certain consolidated subsidiaries provide lump-sum retirement benefit plans for defined benefit plans. Also, the Company and certain consolidated subsidiaries provide defined contribution pension plans. Certain consolidated subsidiaries use the simplified method for computing retirement benefit obligations.

# (1) Movement in retirement benefit obligations, except plans applying the simplified method

Thousands of

Thousands of

	Millions	U.S. dollars (Note 1)	
	2019	2018	2019
Balance at beginning of year	¥15,459	¥14,503	\$139,270
Service cost	917	829	8,261
Interest cost	66	66	594
Actuarial differences incurred	(26)	152	(234)
Benefits paid	(753)	(678)	(6,783)
Other	(167)	585	(1,504)
Balance at end of year	¥15,495	¥15,459	\$139,594

# (2) Movement in plan assets, except plans applying the simplified method

	Millions	U.S. dollars (Note 1)	
	2019	2018	2019
Balance at beginning of year	¥436	¥ —	\$3,927
Expected return on plan assets	12	1	108
Actuarial differences incurred	3	0	27
Contribution from the employer	96	29	864
Benefits paid	(19)	0	(171)
Increase due to newly consolidated subsidiaries	_	328	_
Other	(19)	78	(171)
Balance at end of year	¥508	¥436	\$4,576

# (3) Movement in net defined benefit liability for plans applying the simplified method

	Millions	Thousands of U.S. dollars (Note 1)	
	2019	2018	2019
Balance at beginning of year	¥1,587	¥1,550	\$14,297
Net periodic benefit costs	225	207	2,027
Benefits paid	(150)	(170)	(1,351)
Balance at end of year	¥1,662	¥1,587	\$14,972

# (4) Reconciliation between retirement benefit obligations and net defined benefit liability

	Millions	U.S. dollars (Note 1)	
	2019	2018	2019
Retirement benefit obligations	¥17,157	¥17,047	\$154,567
Plan assets	(508)	(436)	(4,576)
Net liability on the consolidated balance sheet	¥16,648	¥16,610	\$149,981
Net defined benefit liability	¥16,648	¥16,610	\$149,981
Net liability on the consolidated balance sheet	¥16,648	¥16,610	\$149,981

# (5) Net periodic benefit costs

	Million	U.S. dollars (Note 1)	
	2019	2018	2019
Service cost	¥ 917	¥ 829	\$ 8,261
Interest cost	66	66	594
Expected return on plan assets	(12)	(1)	(108)
Amortization of actuarial differences	(30)	164	(270)
Net periodic benefit costs computed by simplified method	225	207	2,027
Other	231	7	2,081
Net periodic benefit costs	¥1,397	¥1,274	\$12,585

# (6) Remeasurements of defined benefit plans, before income tax effect in other comprehensive income

	Million:	s of yen	Thousands of U.S. dollars (Note 1)
	2019	2018	2019
Actuarial differences	¥(5)	¥11	\$(45)
Total	¥(5)	¥11	\$(45)

# (7) Remeasurements of defined benefit plans, before income tax effect in accumulated other comprehensive income

	Million:	s of yen	Thousands of U.S. dollars (Note 1)
	2019	2018	2019
Unrecognized actuarial differences	¥0	¥5	\$0
Total	¥0	¥5	\$0

Thousands of

#### (8) Plan assets

# 1) Percentage by major category of plan assets

	2019	2018
Debt securities	<b>-%</b>	2.2%
Equity securities	_	1.2
Cash and time deposits	100.0	89.1
Other	_	7.5
Total	100.0%	100.0%

# 2) Determination procedure of long-term expected rate of plan assets

In determining long-term expected rate of plan assets, the Company considers the current and projected asset allocations, as well as current and future long-term rate of returns for various categories of the plan assets.

#### (9) Assumptions for actuarial calculation

The Company uses multiple weighted-average discount rates determined by reflecting the estimated periods of retirement benefit payments.

#### Defined contribution pension plans

The amount to be contributed to the defined contribution pension plans by the Company and its consolidated subsidiaries was ¥971 million (US\$8,747 thousand) and ¥1,078 million for the years ended March 31, 2019 and 2018, respectively.

#### 12. Shareholders' equity

Japanese companies are subject to the Companies Act. A summary of the sections of the Companies Act that affect financial statements and accounting matters is as follows:

#### (1) Distribution of dividends to shareholders

Under the Companies Act, if companies meet certain criteria, dividends can be paid at any time during the fiscal year in addition to the year-end dividend upon resolution at the shareholders' meeting. Semiannual interim dividends may also be paid once a year upon resolution by the Board of Directors' meeting if the articles of incorporation of the company so stipulate.

The Companies Act provides certain limitations on the amounts available for dividends and/or the purchase of treasury stock. The limitation is defined as the amount available for distribution to the shareholders, and it is calculated mainly based on capital surplus other than paid-in capital, retained earnings and treasury stock, but the amount of net assets after dividends must be maintained at no less than ¥3 million.

#### (2) Increases/decreases; transfer of common stock, reserve and surplus

The Companies Act requires that an amount equal to 10% of dividends must be appropriated as a legal reserve (a component of retained earnings) or as additional paid-in capital (a component of capital surplus) depending on the equity account charged upon the payment of such dividends. However, such appropriation may not be made if the aggregate amount of legal reserve and additional paid-in capital exceeds 25% of the common stock. Under the Companies Act, this legal reserve and additional paid-in capital may be reversed without limitation.

The Companies Act also provides that common stock, legal reserve, additional paid-in capital, other capital surplus and retained earnings can be transferred among the accounts under certain conditions upon resolution of the shareholders.

# (3) Treasury stock

The Companies Act provides that companies may purchase, hold or dispose of such treasury stock by resolution of the Board of Directors' meeting. The amount of treasury stock purchased cannot exceed the amount available for distribution to the shareholders which is determined by a specific formula.

The number of treasury stock includes treasury stock of 327 thousand shares and 333 thousand shares (entrusted for the performance-linked stock compensation for directors) held by the trust account of Japan Trustee Services Bank, Ltd. at March 31, 2019 and 2018, respectively.

#### 13. Revaluation reserve for land

The Company implemented a revaluation of land for business use in accordance with the Land Revaluation Law (enacted on March 31, 1998). The revaluation difference, net of taxes is stated as "Revaluation reserve for land" in accumulated other comprehensive income in net assets. The tax equivalent is stated as deferred tax liabilities in long-term liabilities.

When any revaluated land is sold, the related unrealized gain or loss on revaluation of land is transferred to retained earnings.

Revaluation method: The revaluation of land was computed in accordance with Article Two,

Item One of the Land Revaluation Law Enforcement Order.

Revaluation date: March 31, 2002

#### 14. Cost of sales

Provision for loss on construction contracts included in cost of sales were ¥119 million (US\$1,072 thousand) and ¥13 million for the years ended March 31, 2019 and 2018, respectively.

#### 15. Selling, general and administrative expenses

Selling, general and administrative expenses for the years ended March 31, 2019 and 2018 consisted of the following:

	Million	U.S. dollars (Note 1)	
	2019	2018	2019
Salaries and allowances	¥22,245	¥20,610	\$200,405
Provision for employees' bonuses	1,587	1,411	14,297
Retirement benefit expenses	1,231	1,343	11,090
Travel expenses	2,845	2,906	25,630
Research and development expenses	5,490	5,258	49,459
Other	25,019	22,333	225,396
Total	¥58,420	¥53,863	\$526,306

#### 16. Impairment losses

For the purpose of impairment testing, assets of the Group are generally grouped based on business, however, idle assets and investment properties are grouped by individual property.

#### For the year ended March 31, 2019

For the year ended March 31, 2019, the Group recognized impairment losses of ¥1,097 million (US\$9,882 thousand) on the following assets.

To reduce constraints on production associated with tighter regulations on companies that produces hazardous chemicals in densely populated districts in China, the Group has decided to transfer the production function of water treatment chemicals of Kurita Water Industries (Jiangyin) Co., Ltd. to the plant (due to begin operating in the second half of fiscal year ending March 31, 2020) of the newly established Kurita Water Industries (Taixing) Co., Ltd. and recognized an impairment loss because recoverability is no longer recognized.

Thousands of

The details of impairment losses recognized for the year ended March 31, 2019 are as follows:

Year ended March 31, 2019		Millions of yen	U.S. dollars (Note 1)
Goodwill	Jiangyin, China	¥1,097	\$9,882

For the goodwill for which an impairment loss has come to be recognized, the Group recorded the full amount of the unamortized balance as an extraordinary loss because the Group has decided to transfer the production function of water treatment chemicals of Kurita Water Industries (Jiangyin) Co., Ltd. to the plant of the newly established Kurita Water Industries (Taixing) Co., Ltd. and recoverability is no longer recognized.

#### For the year ended March 31, 2018

For the year ended March 31, 2018, the Group recognized impairment losses of ¥413 million on the following assets.

The Group has decided to begin demolishing the buildings and structures of the former aging Corporate Research & Development Center (Atsugi-shi, Kanagawa) starting in June 2018, and the recoverability is now no longer recognized. Therefore, the Group has recognized an impairment loss

Part of the land of Yamaguchi Plant (Yamaguchi-shi, Yamaguchi) is not expected to be used for business, and the Group has made it land to be sold. Therefore, the Group has recognized an impairment loss up to the recoverable amount.

Manufacturing facilities for a certain customer in Ludwigshafen, Germany became idle, and the recoverability is now no longer recognized because the commissioned manufacturing contract with the customer was terminated at the end of January 2018. Therefore, the Group have recognized an impairment loss.

The details of impairment losses recognized for the year ended March 31, 2018 are as follows:

Year ended March 31, 2018		Millions of yen
Idle assets:		
Buildings and structures, etc.	Atsugi-shi, Kanagawa	¥214
Land	Yamaguchi-shi, Yamaguchi	113
Machinery and equipment	Ludwigshafen, Germany	85

The carrying value of these assets is written down to their fair value less costs to sell, of which buildings and structures, etc. and machine and equipment is estimated memorandum value of ¥1 because the carrying value of these assets may not be recoverable, and of which land is based on the public land prices.

# 17. Other income (expenses)

# Gain on sales of properties

Gain on sales of properties for years ended March 31, 2019 and 2018 consisted of the following:

Thousands of

 Millions of yen
 U.S. dollars (Note 1)

 2019
 2018
 2019

 Land
 ¥456
 ¥—
 \$4,108

 Other (Buildings and structures, etc.)
 123
 —
 1,108

# Loss on liquidation of business

For the year ended March 31, 2019, loss on liquidation of business of ¥519 million (US\$4,675 thousand) consists mainly of special retirement benefits that were generated associated with the restructuring of manufacturing, sales and research and development bases of Kurita Europe GmbH.

#### Loss on transfer of business

For the year ended March 31, 2019, loss on transfer of business of \$2,867 million (US\$25,828 thousand) comprises mainly of a loss on transfer pertaining to the sale of the aluminum compound business of Kurita Europe GmbH, its non-core business, and compensation money for the business continuation.

# Provision for building demolition expenses

For the year ended March 31, 2018, the Company decided to demolish the buildings and structures of the former Corporate Research & Development Center (Atsugi-shi, Kanagawa) and posted a reasonably estimated amount for expenses to be incurred in the future as provision of allowance for building demolition expenses of ¥320 million in other income (expenses).

# 18. Comprehensive income

The components of other comprehensive income for the years ended March 31, 2019 and 2018 are as follows:

	Millions	of yen	Thousands of U.S. dollars (Note 1)
	2019	2018	2019
Unrealized gains or losses on available-for-sale securities:			
Amount arising during the year	¥ (1,924)	¥ 4,322	\$(17,333)
Reclassification adjustments to profit or loss	(8,676)	(1,565)	(78,162)
Amount before income tax effect	(10,601)	2,756	(95,504)
Income tax effect	2,697	(1,018)	24,297
Subtotal	(7,904)	1,739	(71,207)
Deferred gains or losses on hedges:			
Amount arising during the year	453	(956)	4,081
Amount before income tax effect	453	(956)	4,081
Income tax effect	(138)	285	(1,243)
Subtotal	315	(671)	2,837
Revaluation reserve for land:			
Income tax effect	_	0	_
Foreign currency translation adjustments:			
Amount arising during the year	(2,208)	3,332	(19,891)
Reclassification adjustments to profit or loss		(113)	
Subtotal	(2,208)	3,219	(19,891)
Remeasurements of defined benefit plans:			
Amount arising during the year	0	5	0
Reclassification adjustments to profit or loss	(5)	5	(45)
Amount before income tax effect	(5)	11	(45)
Income tax effect	1	(3)	9
Subtotal	(3)	7	(27)
Share of other comprehensive income of entities accounted for using equity method:			
Amount arising during the year	(46)	93	(414)
Reclassification adjustments to profit or loss	_	0	_
Subtotal	(46)	93	(414)
Total	¥ (9,848)	¥ 4,389	\$(88,720)
		·	

#### 19. Business combinations

#### Acquisition of equity interests by consolidated subsidiaries

#### (1) Overview of business combination

1) Name and description of the business of the acquired companies

Name: Global Water Services Holding Company, Inc.

Description of the business: Company holding equity interests in U.S. Water Services, Inc.

The Company also acquired U.S. Water Services, Inc., a wholly owned subsidiary of Global Water Services Holding Company, Inc., through an investment in Global Water Services Holding Company,

Inc.

Name: U.S. Water Services, Inc. and two other companies

Description of the business: Manufacture and sale of water treatment chemicals and water

treatment facilities

#### 2) Main reasons for the business combination

The Group aims to significantly expand its overseas businesses by establishing platforms in four regions around the world – Japan, Asia, Europe and the Americas. This investment is made as a part of its strategy of strengthening business in the United States, a strategic market. The Group will also accelerate business development in the United States by establishing even closer relationships with customers through the development of the service contract business model making full use of IT and sensing by combining the Group's products, with their competitive advantage and highly unique services such as pure water supply and wastewater reclamation, into the solid customer base and sales channels of U.S. Water Services, Inc.

- 3) Date of the business combination March 25, 2019
- 4) Legal form of the business combination Acquisition of shares with cash as consideration
- 5) Company name after the business combination The name will not change.
- 6) Ratio of voting rights acquired 100%
- 7) Main grounds to determine the acquirer Because Kurita America Holdings Inc., a subsidiary of the Company, acquired shares using cash as consideration.

# (2) The period of business results of the acquired companies included in the consolidated financial statements

Only the opening balance sheets as of March 26, 2019 were consolidated for the year ended March 31, 2019.

# (3) Acquisition cost of the business acquired

	Millions of yen	Thousands of U.S. dollars (Note 1)
Cash and deposits	¥30,369	\$273,594
Acquisition cost	¥30,369	\$273,594

#### (4) Major acquisition-related cost

Advisory fees, etc.

Thousands of U.S. dollars (Note 1)

\*\*#717\*\*\*

\*\*#6,459\*\*

#### (5) Amount, cause, amortization method and amortization period of goodwill recognized

#### 1) Amount

¥1,148 million (US\$10,342 thousand)

The amount of goodwill is an amount provisionally reported because the allocation of the acquisition cost has yet to be completed.

#### 2) Cause

Due to an excess earnings capability expected in the future

3) Amortization method and amortization period Goodwill will be amortized over the effective period by the straight-line method. The amortization period will be fixed based on the result of the allocation of the acquisition cost.

# (6) Major components of assets acquired and liabilities assumed on the business combination date

	Millions of yen	Thousands of U.S. dollars (Note 1)
Current assets	¥ 4,899	\$ 44,135
Non-current assets	26,337	237,270
Total assets	¥31,237	\$281,414
Current liabilities	¥ 1,737	\$ 15,648
Non-current liabilities	279	2,513
Total liabilities	¥ 2,016	\$ 18,162

# (7) Allocation of the acquisition cost

As of March 31, 2019, the allocation of the acquisition cost has yet to be completed because the identification of recognizable assets and liabilities on the date of business combination and the calculation of market values are incomplete.

# (8) Estimated amount and method of calculation of the impact of the business combination on the consolidated statement of income for the year ended March 31, 2019 on the assumption that the business combination had been completed on April 1, 2018

Not stated as it is difficult to calculate the estimated amount.

#### Business combination through acquisition

# (1) Overview of business combination

1) Name and description of the business of the acquired companies

Name: Fracta, Inc.

Description of the business: Company holding equity interests in Fracta

The Company also acquired Fracta, a wholly owned subsidiary of

Fracta, Inc., through an investment in Fracta, Inc.

Name: Fracta

Description of the business: Software services to predict the deterioration of water pipes

utilizing artificial intelligence (AI) and machine learning (ML)

#### 2) Main reasons for the business combination

Fracta, Inc. develops software services to predict the deterioration of water pipes utilizing AI and ML at Fracta, a wholly owned subsidiary. The Group will create and expand new digital businesses utilizing IoT and AI in the fields of water and the environment by acquiring the advanced technologies and know-how in AI and ML of Fracta, Inc. and applying them to the water treatment technologies and services of the Company.

# 3) Date of the business combination May 31, 2018

- 4) Legal form of the business combination Acquisition of shares with cash as consideration
- 5) Company name after the business combination The name will not change.
- 6) Ratio of voting rights acquired 60.63% (fully diluted basis: 50.1%)
- 7) Main grounds to determine the acquirer
  Because the Company acquired shares with cash as consideration.

# (2) The period of business results of the acquired companies included in the consolidated financial statements

From June 1, 2018 to March 31, 2019

# (3) Acquisition cost of the business acquired

	Millions of yen	Thousands of U.S. dollars (Note 1)
Cash and deposits	¥3,968	\$35,747
Acquisition cost	¥3,968	\$35,747
(4) Major acquisition-related cost	Millions of yen	Thousands of U.S. dollars (Note 1)
Advisory fees etc	¥177	\$1 594

#### (5) Amount, cause, amortization method and amortization period of goodwill recognized

1) Amount

¥2,941 million (US\$26,495 thousand)

The amount above is provisionally reported because the allocation of the acquisition cost has yet to be completed, given that the identification of recognizable assets and liabilities and the estimation of the market values are incomplete as of the business combination because the period from the business combination to the fiscal year-end is short.

2) Cause

Due to an excess earnings capability expected in the future

3) Amortization method and amortization period Straight-line method over 15 years

(6) Put options granted to non-controlling shareholders and call options held by the Company The Company plans to make Fracta, Inc. a wholly owned subsidiary within four years from 2020. In order to make Fracta, Inc. a wholly owned subsidiary in the future, the Company has granted written put options over the shares of Fracta, Inc. to its non-controlling shareholders and holds purchased call options over the shares of Fracta, Inc.

# (7) Major components of assets acquired and liabilities assumed on the business combination date

	Millions of yen	Thousands of U.S. dollars (Note 1)
Current assets	¥1,793	\$16,153
Non-current assets	43	387
Total assets	¥1,836	\$16,540
Current liabilities	¥ 142	\$ 1,279
Total liabilities	¥ 142	\$ 1,279

(8) Estimated amount and method of calculation of the impact of the business combination on the consolidated statement of income for the year ended March 31, 2019 on the assumption that the business combination had been completed on April 1, 2018

Not stated as it is difficult to calculate the estimated amount.

#### 20. Segment information

#### (1) Overview of reportable segments

The Company's reportable segments are components of the Group about which separate financial information is available. These segments are subject to periodic examinations to enable the Company's Board of Directors to decide how to allocate resources and assess performance.

The Company's business divisions are based on product and service categories. Each of the divisions conducts business based on comprehensive strategies formulated for the products and services that they handle in Japan and overseas. The Company's consolidated subsidiaries conduct business under the supervision of the relevant business divisions.

The Group's operations are therefore classified into two reportable segments, the Water Treatment Chemicals segment and the Water Treatment Facilities segment, based on the products and services handled by each of the divisions.

The Water Treatment Chemicals segment manufactures and sells water treatment chemicals and equipment and provides maintenance services. The Water Treatment Facilities segment manufactures and sells water treatment equipment and facilities, provides ultrapure water, chemical cleaning, tool cleaning, soil and groundwater remediation services, and provides maintenance services that encompass operation, maintenance and management of water treatment facilities.

# (2) Methods for calculating sales, income and loss, assets and liabilities, and other amounts by reportable segment

Accounting methods applied in the reportable segments are consistent with the methods applied in preparation of the accompanied consolidated financial statements. Segment income represents operating income. Intersegment sales and transfers between the Group reflect values based on market price. Intersegment sales and transfers between the Company's divisions are based primarily on book values.

# (3) Sales, income and loss, assets and liabilities, and other amounts by reportable segment

	Millions of yen				
Year ended March 31, 2019	Water Treatment Chemicals	Water Treatment Facilities	Total	Adjustments	Consolidated
Sales					
1) Sales to outside customers	¥102,088	¥157,321	¥259,409	¥ —	¥259,409
2) Intersegment sales	779	1,532	2,311	(2,311)	_
Total	¥102,867	¥158,854	¥261,721	¥ (2,311)	¥259,409
Segment income	¥ 8,327	¥ 15,932	¥ 24,260	¥ 65	¥ 24,326
Segment assets	111,580	196,152	307,733	42,152	349,885
Segment liabilities	34,105	76,660	110,765	(353)	110,412
Other items					
Depreciation and amortization	4,117	12,001	16,118	_	16,118
Impairment loss	1,097	_	1,097	_	1,097
Increase in property, plant and equipment and intangible assets	3,502	34,668	38,170	_	38,170

	Thousands of U.S. dollars (Note 1)				
Year ended March 31, 2019	Water Treatment Chemicals	Water Treatment Facilities	Total	Adjustments	Consolidated
Sales					
1) Sales to outside customers	\$ 919,711	\$1,417,306	\$2,337,018	<b>\$</b> —	\$2,337,018
2) Intersegment sales	7,018	13,801	20,819	(20,819)	_
Total	\$ 926,729	\$1,431,117	\$2,357,846	\$ (20,819)	\$2,337,018
Segment income	\$ 75,018	\$ 143,531	\$ 218,558	\$ 585	\$ 219,153
Segment assets	1,005,225	1,767,135	2,772,369	379,747	3,152,117
Segment liabilities	307,252	690,630	997,882	(3,180)	994,702
Other items					
Depreciation and amortization	37,090	108,117	145,207	_	145,207
Impairment loss	9,882	_	9,882	_	9,882
Increase in property, plant and equipment and intangible assets	31,549	312,324	343,873	_	343,873

	Millions of yen					
Year ended March 31, 2018	Water Treatment Chemicals	Water Treatment Facilities	Total	Adjustm	nents	Consolidated
Sales						
1) Sales to outside customers	¥90,361	¥146,453	¥236,815	¥	_	¥236,815
2) Intersegment sales	431	298	729	(	(729)	_
Total	¥90,792	¥146,751	¥237,544	¥ (	(729)	¥236,815
Segment income	¥ 7,180	¥ 15,312	¥ 22,493	¥	(18)	¥ 22,475
Segment assets	95,589	158,631	254,220	68,	,826	323,046
Segment liabilities	29,198	53,167	82,366	(	(172)	82,193
Other items						
Depreciation and amortization	3,593	12,083	15,677		_	15,677
Impairment loss	85	_	85		327	413
Increase in property, plant and equipment and intangible assets	3,162	19,805	22,967		_	22,967

#### Notes:

"Adjustments" represents the following:

- 1. Sales: Elimination of intersegment transactions
- 2. Segment income: Amount resulting from eliminations of intersegment transactions
- 3. Segment assets: Mainly corporate assets of ¥42,205 million (US\$380,225 thousand) and ¥68,890 million as of March 31, 2019 and 2018, respectively, unallocated to reportable segment assets (cash deposits, securities in trust and long-term investments)
- 4. Segment liabilities: Amount resulting from eliminations of intersegment claims and liabilities
- 5. Details and information of impairment losses for the year ended March 31, 2019 and 2018 are discussed in Note 16.

#### **Related Information**

(Information by geographic region)

# (1) Net sales

	Millions of yen						
Year ended March 31, 2019	Japan	Asia	North America	EMEA	Other	Total	
Sales	¥163,297	¥66,513	¥5,589	¥21,297	¥2,711	¥259,409	
	Thousands of U.S. dollars (Note 1)						
Year ended March 31, 2019	Japan	Asia	North America	EMEA	Other	Total	
Sales	\$1,471,144	\$599,216	\$50,351	\$191,864	\$24,423	\$2,337,018	
			Millions	of yen			
Year ended March 31, 2018	Japan	Asia	North America	EMEA	Other	Total	
Sales	¥158,232	¥48,911	¥5,178	¥21,350	¥3,142	¥236,815	

Note: Sales are allocated to regions based on the location of the customer to which the products or services are delivered or provided. EMEA includes Europe, the Middle East and Africa.

# (2) Property, plant and equipment

1 271							
	Millions of yen						
Year ended March 31, 2019	Japan	Asia	North America	EMEA	Other	Total	
Property, plant and equipment	¥91,321	¥12,786	¥2,328	¥2,671	¥561	¥109,669	
			Thousands of U.S.	dollars (Note 1)			
Year ended March 31, 2019	Japan	Asia	North America	EMEA	Other	Total	
Property, plant and equipment	\$822,711	\$115,189	\$20,972	\$24,063	\$5,054	\$988,009	
			Millions	of yen			
Year ended March 31, 2018	Japan	Asia	North America	EMEA	Other	Total	
Property, plant and equipment	¥68,671	¥14,275	¥182	¥2,212	¥686	¥86,028	
1 3:1							

# (Information by major customer)

For the year ended March 31, 2019 and 2018, information by major customer is omitted because there are no outside customers individually accounting for 10% or more of net sales reported on the consolidated statements of income.

# Information about amortization and unamortized balance of goodwill

	Millions of yen					
Year ended March 31, 2019	Water Treatment Chemicals	Water Treatment Facilities	Total	Corporate/ Elimination	Total	
Amortization	¥ 1,530	¥ 113	¥ 1,643	¥—	¥ 1,643	
Unamortized balance	28,886	7,415	36,301	_	36,301	

	Thousands of U.S. dollars (Note 1)					
Year ended March 31, 2019	Water Treatment Chemicals	Water Treatment Facilities	Total	Corporate/ Elimination	Total	
Amortization	\$ 13,783	\$ 1,018	\$ 14,801	\$—	\$ 14,801	
Unamortized balance	260,234	66,801	327,036	_	327,036	
	·					
			Millions of yen			
Year ended March 31, 2018	Water Treatment Chemicals	Water Treatment Facilities	Total	Corporate/ Elimination	Total	
Amortization	¥ 1,184	¥—	¥ 1,184	¥—	¥ 1,184	
Unamortized balance	20,362	_	20,362	_	20,362	

#### 21. Subsequent events

#### **Appropriation of retained earnings**

The following appropriation of retained earnings for the year ended March 31, 2019 was approved at the ordinary general meeting of shareholders of the Company held on June 27, 2019.

	Millions of yen	Thousands of U.S. dollars (Note 1)
Cash dividends (year-end dividends)	¥3,040	\$27,387

Note: The total amount of dividend approved at the ordinary general meeting of shareholders of the Company held on June 27, 2019 includes dividends of ¥8 million (US\$72 thousand) to treasury stock of 327 thousand shares (for performance-linked stock compensation trust for directors) held by the trust account of Japan Trustee Services Bank, Ltd.

# Equity-method affiliates through the acquisition of shares (Pentagon Technologies Group, Inc.)

On October 5, 2018, the Company entered into an agreement to acquire 25.0% of shares of Pentagon Technologies Group, Inc. (hereinafter "Pentagon Technologies"), a tool cleaning company in the United States, through Kurita America Holdings, Inc., a wholly owned subsidiary of the Company. Based on the agreement, the acquisition of shares was completed on April 1, 2019, and the Company made Pentagon Technologies an affiliate applying the equity method.

#### (1) Overview of the acquired companies

Name: Pentagon Technologies Group, Inc.

Location: 21031 Alexander Ct. Hayward, California, U.S.A.

Name of representative: Irwin H. Pfister, Chairman

Capital stock: US\$2,000

Description of the business: Tool cleaning business, the development of surface particle detectors

of semiconductor manufacturing equipment and the provision of

clean room-related services

# (2) Main reasons for the acquisition of shares

The Group aims to significantly expand its overseas businesses by establishing platforms in four regions around the world – Japan, Asia, Europe and the Americas. This investment is made as a part of its strategy of strengthening business in the United States, a strategic market. The Group also aims to further strengthen its market competitiveness in the electronics industry, which the Group positions as one of its priority business domains, by acquiring a base for the service business overseas and further accelerating business growth and the provision of new value by acquiring the advanced technologies and know-how of Pentagon Technologies and creating synergies with the tool cleaning services in Japan developed by the Group.

# (3) Equity acquisition date

April 1, 2019

#### (4) Number of shares acquired, acquisition cost and ratio of shareholding after acquisition

Number of shares acquired: 728,724 shares
Acquisition cost: US\$50,000 thousand

Ratio of shareholding after acquisition: 25.0%

### (5) Procurement method and payment method of funds to be paid

Provided from own funds

#### (APANA, Inc.)

On March 29, 2019, the Company entered into an agreement to underwrite a private placement of new shares with APANA, Inc. (hereinafter "APANA"), a venture company in the United States that develops the IoT water saving solution business. Based on the agreement, the payment was completed on April 5, 2019. On the same day, the Company also exercised the share acquisition rights it held with respect to APANA, and the payment of the exercise price was completed. As a result, the Company made APANA an affiliate applying the equity method.

#### (1) Overview of the acquired companies

Name: APANA, Inc.

Location: 4290 Pacific Highway, Suite A, Bellingham, Washington 98229, U.S.A.

Name of representative: Matt Rose, CEO Capital stock: US\$4,424,805

Description of the business: Development of technologies related to the real-time monitoring of

water consumption and big data analysis, utilizing IoT and wireless communication technology, and service business that contributes to

water saving in commercial and industrial facilities

# (2) Main reasons for underwriting a private placement of new shares and exercising the share acquisition rights

The Company will accelerate its efforts to introduce and utilize advanced technologies and services of APANA by further strengthening the collaborative structure with APANA through this investment. The Company aims to create new value in the fields of water and the environment by creating innovations through the provision of the highly unique digital service business of APANA to more customers.

# (3) Date of payment and exercise of share acquisition rights

April 5, 2019

# (4) Acquisition price and the percentage of voting rights acquired

Acquisition price: US\$10,005,301 (¥1,116 million)

Percentage of voting rights held immediately before the underwriting of private placement of new shares and the exercise of share acquisition rights:

19.88%

Percentage of voting rights acquired by the underwriting of private placement of new shares and the exercise of share acquisition rights:

22.85%

Percentage of voting rights held after the underwriting of private placement of

new shares and the exercise of share acquisition rights:

42.73%

(fully diluted basis: 36.64%)

#### (5) Procurement method and payment method of funds to be paid

Provided from own funds

#### Acquisition of equity interests by consolidated subsidiaries

On May 13, 2019, the Company entered into an agreement to acquire all shares outstanding of Avista Technologies, Inc. (hereinafter "Avista Technologies"), a manufacturing and sales company of water treatment chemicals in the United States, through Kurita America Holdings Inc., a wholly owned subsidiary of the Company. On the same day, the Company also entered into an agreement to acquire all shares outstanding of Avista Technologies (UK) Ltd. (hereinafter "Avista Technologies (UK)"), a manufacturing and sales company of water treatment chemicals in the United Kingdom, through Kurita Europe GmbH, a wholly owned subsidiary of the Company.

Based on the agreement, the acquisition of shares of both companies was completed on May 15, 2019, and the Company made Avista Technologies, Inc. and Avista Technologies (UK) Ltd. consolidated subsidiaries of the Company.

# (1) Overview of the acquired companies

Name: Avista Technologies, Inc.

Location: 140 Bosstick Blvd. San Marcos, California 92069, U.S.A.

Name of representative: Dave Walker, CEO

Capital stock: US\$3,719

Description of the business: Manufacture and sale of reverse osmosis (RO) chemicals and the

provision of RO membrane-related services

Name: Avista Technologies (UK) Ltd.

Location: 13 Nasmyth Square, Houstoun Industrial Estate Livingston, EH54 5GG,

Name of representative: Michael Jefferies, Managing Director

Capital stock: 65 British pounds

Description of the business: Manufacture and sale of reverse osmosis (RO) chemicals and the

provision of RO membrane-related services

#### (2) Main reasons for the business combination

Avista Technologies specializes in RO chemicals that are applied to RO membrane, one of the components of water treatment facilities, among water treatment chemicals. It manufactures and sells a wide variety of RO chemicals. Avista Technologies also develops services including RO membrane cleaning and has many customers in a broad range of industrial fields including mining, chemical, oil, marine oilfields, food, beverages and local governments, mainly in the United States. Avista Technologies (UK) develops similar businesses in EMEA (Europe, the Middle East and Africa) through licensing from Avista Technologies. The Group will bolster the product lineup of RO chemicals by combining RO chemicals of Avista Technologies and distinctive RO chemicals of the Company and will seek to expand sales of RO chemicals by proposing a wider range of products to all customers. The Group will also strengthen its RO membrane-related services by sharing the technologies and know-how of the both companies.

# (3) Equity acquisition date

May 15, 2019

#### (4) Number of shares acquired, acquisition cost and ratio of shareholding after acquisition

1) Number of shares acquired:

Avista Technologies, Inc.: 800,000 shares Avista Technologies (UK) Ltd.: 65 shares

2) Acquisition cost of Avista Technologies, Inc. and Avista Technologies (UK) Ltd. US\$81,800 thousand

The final acquisition cost will reflect the adjustment of any excess and deficiency in working capital and net interest-bearing debt of Avista Technologies, Inc. and Avista Technologies (UK) Ltd. on the date of acquisition of equity interests.

3) Ownership ratio after acquisition

Avista Technologies, Inc.: 100.0% Avista Technologies (UK) Ltd.: 100.0%

# (5) Procurement method and payment method of funds to be paid

Provided from loans

#### 22. Per share information

	Ye	(Note 1)	
	<b>2019</b> 2018		2019
Net assets per share	¥2,116.19	¥2,126.96	\$19.06
Net income per share (EPS)	154.29	159.37	1.39

The basis of calculation for net assets per share is as follows:

	Million	Millions of yen		
	2019	2018	2019	
Net assets	¥239,473	¥240,853	\$2,157,414	
Amounts excluded from net assets	1,868	2,049	16,828	
(Non-controlling interests on the above)	(1,868)	(2,049)	(16,828)	
Net assets attributable to common shareholders of parent	237,604	228,803	2,140,576	
Number of common stock at the year-end used for the calculation of net assets per share	112,279,619	112,274,296		

The basis of calculation for EPS is as follows:

	Million	U.S. dollars (Note 1)	
	2019	<b>2019</b> 2018	
Net income attributable to owners of parent	¥17,323	¥17,897	\$156,063
Net income attributable to common shareholders of parent	17,323	17,897	156,063
Average number of shares outstanding	112,278,133	112,303,666	

Note: The average number of treasury stock, which is deducted from the average number of shares outstanding for calculation for EPS, includes common stock of 329 thousand shares and 335 thousand shares held by the Trust for the year ended March 31, 2019 and 2018, respectively.

IIS dollars

Thousands of

Thousands of

# **Report of Independent Certified Public Accountants**



#### INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of Kurita Water Industries Ltd.

We have audited the accompanying consolidated financial statements of Kurita Water Industries Ltd. and its consolidated subsidiaries, which comprise the consolidated balance sheet as at March 31, 2019, and the consolidated statements of income, comprehensive income, changes in net assets, and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

#### Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, while the objective of the financial statement audit is not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Kurita Water Industries Ltd. and its consolidated subsidiaries as at March 31, 2019, and their consolidated financial performance and their cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

### Emphasis of Matter in the Financial Statements

- We draw attention to Note 2, (15) of the financial statements, which Kurita Water Industries Ltd. (the "Company")
  has expanded the applicable scope of the percentage-of-completion method from the fiscal year under review.
- 2. We draw attention to Note 21 of the financial statements, which the Company entered into an agreement to acquire 25.0% shares of Pentagon Technologies Group, Inc. (hereinafter "Pentagon Technologies") through Kurita America Holdings, Inc., a wholly owned subsidiary of the Company. Based on the agreement, the acquisition of shares was completed on April 1, 2019, and the Company made Pentagon Technologies an affiliate applying the equity method.
- 3. We draw attention to Note 21 of the financial statements, which the Company entered into an agreement to underwrite a private placement of new shares with APANA, Inc. (hereinafter "APANA"). Based on the agreement, the payment was completed on April 5, 2019. On the same day, the Company also exercised the share acquisition rights it held with respect to APANA, and the payment of the exercise price was completed. As a result, the Company made APANA an affiliate applying the equity method.
- 4. We draw attention to Note 21 of the financial statements, which the Company entered into an agreement to acquire all shares outstanding of Avista Technologies, Inc. (hereinafter "Avista Technologies") through Kurita America Holdings Inc., a wholly owned subsidiary of the Company. On the same day, the Company also entered into an agreement to acquire all shares outstanding of Avista Technologies (UK) Ltd. (hereinafter "Avista Technologies (UK)") through Kurita Europe GmbH, a wholly owned subsidiary of the Company. Based on the agreement, the acquisition of shares of both companies was completed on May 15, 2019, and the Company made Avista Technologies, Inc. and Avista Technologies (UK) Ltd. consolidated subsidiaries of the Company.

Our opinion is not qualified in respect of these matters.

#### Convenience Translation

The United States dollar amounts in the accompanying consolidated financial statements with respect to the year ended March 31, 2019 are presented solely for the convenience. Our audit also included the translation of Japanese yen amounts into United States dollar amounts and, in our opinion, such translation has been made on the basis described in Note 1 to the consolidated financial statements.

Cirant Thornton Jayo LLC

August 22, 2019 Tokyo, Japan

# **Corporate Information**

# Stock Information (As of March 31, 2019)

Stock Exchange Listing: Tokyo Stock Exchange, First Section

Number of Authorized Shares: 531,000,000

Number of Shares Outstanding: 116,200,694 (Including 3,593,706 shares of treasury stock)

Number of Shares Per Lot: 100 Number of Shareholders: 23,476

Independent Accounting Auditor: Grant Thornton Taiyo LLC

Akasaka K-tower 22F, 1-2-7, Motoakasaka, Minato-ku, Tokyo 107-0051, Japan

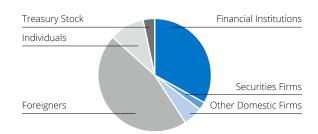
Transfer Agent: Sumitomo Mitsui Trust Bank, Ltd.

1-4-1, Marunouchi, Chiyoda-ku, Tokyo 100-8233, Japan

# **Major Shareholders**

	Shareholdings (Number of shares)	Percentage of total shares issued (%)
Japan Trustee Services Bank, Ltd. (Trust Account)	7,748,069	6.66
The Master Trust Bank of Japan, Ltd. (Trust Account)	6,422,400	5.52
Nippon Life Insurance Company	5,979,883	5.14
Kurita Water Industries Ltd.	3,593,706	3.09
Japan Trustee Services Bank, Ltd. (Trust Account 9)	2,323,600	1.99
BNYMSANV AS AGENT/CLIENTS LUX UCITS NON TREATY 1	2,182,700	1.87
Tokio Marine & Nichido Fire Insurance Co., Ltd.	2,155,826	1.85
Japan Trustee Services Bank, Ltd. (Trust Account 5)	2,121,900	1.82
MUFG Bank, Ltd.	2,056,131	1.76
JP Morgan Chase Bank 385151	1,733,688	1.49

# Distribution of Shares by Shareholder Type



	Shareholdings (Number of shares)	(%)
Financial Institutions	38,640,749	33.3
Securities Firms	2,517,510	2.2
Other Domestic Firms	6,383,287	5.5
Foreigners	53,369,855	45.9
■ Individuals	11,695,587	10.1
■ Treasury Stock	3,593,706	3.1
Total	116,200,694	100.0

# **Stock Price Range and Trading Volume**



# **Corporate Information**

# **Corporate Data**

Company Name Kurita Water Industries Ltd.

Address 10-1. Nakano 4-chome.

Nakano-ku, Tokyo 164-0001, Japan

Date of Establishment July 13, 1949

Paid-in Capital ¥13,450,751,434

Number of Employees 6,613 (on a consolidated basis);

1,549 (parent company) (As of March 31, 2019)

Major Domestic Offices Head Office:

10-1, Nakano 4-chome, Nakano-ku,

Tokyo 164-0001, Japan Tel: 81 (3) 6743-5000

Osaka Office:

2-22, Kitahama 2-chome, Chuo-ku, Osaka-shi, Osaka 541-0041, Japan Tel: 81 (6) 6228-4800

#### Kurita Global Technology Center:

1-1, Kawada, Nogi-machi, Shimotsuga-gun,

Tochigi 329-0105, Japan Tel: 81 (280) 54-1511

**Engineering Center:** 

MCC Mitaka Building, 8-7-2, Shimorenjaku, Mitaka-shi, Tokyo 181-0013, Japan

Tel: 81 (422) 29-6200

Other Offices:

Shizuoka Plant, Tohoku Office, Nagoya Office, Hiroshima Office, Kyushu Office, etc.

# Main Domestic Consolidated Group Companies (As of July 1, 2019)

# Water Treatment Chemicals

#### ■ Sale of water treatment chemicals

Kurita Buil-Tech Co., Ltd.

Kurita BMS Co., Ltd.

Kurita Chemicals Hokkaido Ltd.

Kurita Chemicals Kantou Co., Ltd.

Kurita Chemicals Tokai Ltd.

Kurita Chemicals Hokuriku Ltd.

Kurita Chemicals Kansai Ltd.

Kurita Chemicals Sanyo Ltd.

Kurita Chemicals West Japan Ltd.

### Manufacture of water treatment chemicals

Kurita Chemical Manufacturing Ltd.

Other

Kurita Analysis Service Co. Ltd.

#### **Water Treatment Facilities**

Operation & maintenance of systems and facilities

Kuritaz Co., Ltd.

Soil remediation services

Land Solution Inc.

Chemical cleaning services

Kurita Engineering Co., Ltd.

Miyoshi Industries Co., Ltd.

■ Tool cleaning services

Kuritec Service Co. Ltd.

San-ei Industries Co., Ltd.

Nippon Fine Co., Ltd.

Aoi Industries Co., Ltd.

Other

Kurita Meiki Ltd.

Kurita Creation Co., Ltd.

Kurita Analysis Service Co. Ltd.

# Main Overseas Group Companies (As of July 31, 2019)

Overseas Consolidated Subsidiaries and Affiliated Companies	Year of Establishment	Paid-in Capital (Millions)	Equity Ownership (%)
Water Treatment Chemicals			
1 Kurita Water Industries (Dalian) Co., Ltd.	1995	¥550	90.1
4 Kurita Water Industries (Jiangyin) Co., Ltd.	2015	US\$16	100.0
5 Hansu Co., Ltd.	1974	W2,500	100.0
7 Kurita (Taiwan) Co., Ltd.	1987	NT\$20	100.0
9 Kurita (Singapore) Pte. Ltd.	1978	S\$11	100.0
11 Kurita-GK Chemical Co., Ltd.	1989	BAHT204	85.0
12 Kurita-GK Vietnam Co., Ltd.	2016	US\$0.5	85.0
13 P.T. Kurita Indonesia	1986	US\$2	92.5
14 Kurita Water (Malaysia) Sdn. Bhd.	1994	RM\$0.6	100.0
15 Kurita Europe GmbH	2014	EUR20	100.0
16 Kurita France S.A.S.	2015	EUR5	100.0
17 Kurita Iberica SL	2015	EUR0.003	100.0
18 Kurita Turkey Kimya A.S.	2015	TRY5.7	100.0
19 Kurita Sverige AB	2015	SEK0.1	100.0
20 Kurita Polska SP.z.o.o.	2016	PLN14	100.0
21 Kurita Middle East FZE	2016	AED2	100.0
22 Avista Technologies (UK) Ltd.	2001	GBP0.00007	100.0
23 Kurita America, Inc.	1996	US\$3	100.0
24 Fremont Industries, LLC	2017	US\$0.01	100.0
25 Kurita do Brasil LTDA.	1975	R\$6.9	100.0
27 U.S. Water Services, Inc.	1997	US\$193	100.0
29 Avista Technologies, Inc.	1999	US\$0.004	100.0
-	1999	03\$0.004	100.0
Water Treatment Facilities			
2 Kuritec (Shanghai) Co., Ltd.	2001	¥30	100.0
3 Kurita Water Industries (Suzhou) Ltd.	2004	¥530	100.0
6 Hansu Technical Service Ltd.	1988	W26,400	100.0
8 Kurita Water Technology (Taiwan) Ltd.	2017	NT\$134	100.0
9 Kurita (Singapore) Pte. Ltd.	1978	S\$11	100.0
13 P.T. Kurita Indonesia	1986	US\$2	92.5
14 Kurita Water (Malaysia) Sdn. Bhd.	1994	RM\$0.6	100.0
23 Kurita America, Inc.	1996	US\$3	100.0
27 U.S. Water Services, Inc.	1997	US\$193	100.0
28 Pentagon Technologies Group, Inc.	1998	US\$0.002	25.0
Others			
10 Kurita R&D Asia Pte. Ltd.	2017	S\$3	100.0
26 Kurita Fracta Holdings, Inc.	2017	US\$22	50.1
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15 19			
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17 18 1 6 4 5 3 1 2 1 3 1 4 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		□26 28■ ■29	
21 3■ 2 12 7 ■ 8			
11	***		
14 9 <b>■</b> □10	■ Water Treatment Chemicals	5	
	■ Water Treatment Facilities □ Others		
13	2,000.03		
			25
			25



# **KURITA WATER INDUSTRIES LTD.**

Nakano Central Park East, 4-10-1 Nakano Nakano-ku, Tokyo 164-0001, Japan Tel: +81-3-6743-5000

https://www.kurita.co.jp/english/