



METAWATER REPORT 2021

The Fiscal Year Ended March 2020

METAWATER Co., Ltd.

We will continue to contribute to local communities, society, and conservation of the global environment by solving water and environmental issues.

The METAWATER Group's Corporate Philosophy

Continue,
to make it sustainable.

We continue to be sincere in what we do.
We work on problems earnestly and
strive to provide solutions.

We continue to collaborate with our partners.
We respect our partners and work to achieve with
diverse knowledges, technologies and cultures.

We continue to innovate for the future.
We experiment in new ideas and take challenges.

To make sustainable what is truly important.



Issuing the “METAWATER REPORT 2021”

As a company engaged in water and environmental infrastructure, the METAWATER Group will actively engage in environmental conservation and other social contribution activities in cooperation with local communities as a corporate citizen, thereby contributing to the realization of a sustainable society and the global environment. We have issued this report to communicate the entire picture of our group in an easy-to-understand manner. Besides our corporate philosophy and main business activities, it offers comprehensive and concise information about our activities including the following: Financial information such as changes in performance and our Midterm Business Plan as we look to achieve our long-term vision; and CSR activities not listed in the financial statements and non-financial information such as social contribution activities as a part of CSR activities.

■ Period in the scope of reporting

The performance for FY2019 (fiscal year ending March 2020) is the main scope for this report. However, some events in this report may have occurred before or after this period.

■ Reference guidelines

- ISO26000 (International Standard of Social Responsibility issued in November 2010)
- Ministry of Environment: Environmental Reporting Guidelines (Version 2018)
- International Integrated Reporting Council (IIRC): International Integrated Reporting Frameworks
- GRI Sustainability Reporting Guideline
- United Nations Global Compact
- Guidance for Collaborative Value Creation, Ministry of Economy, Trade and Industry



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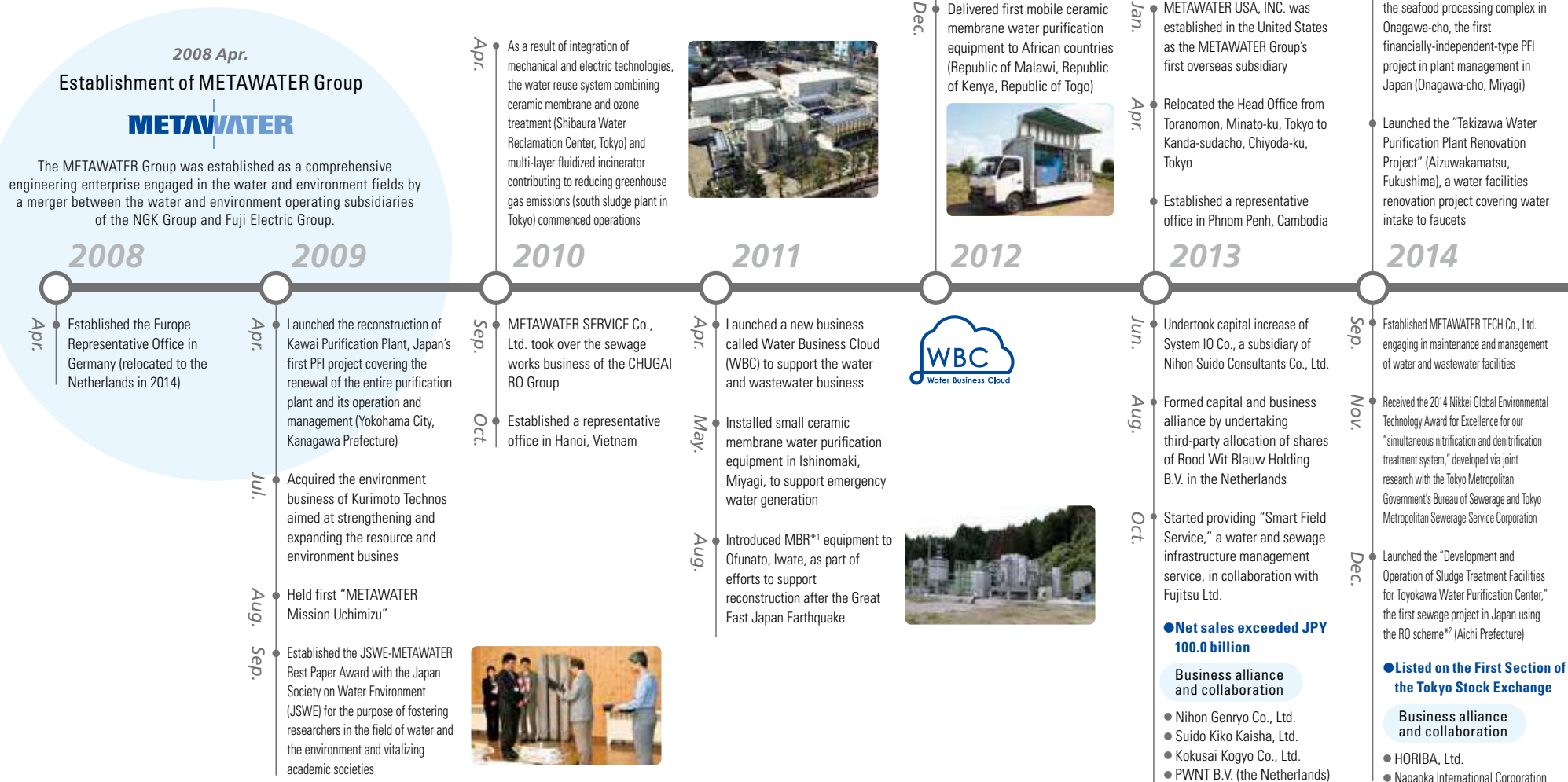
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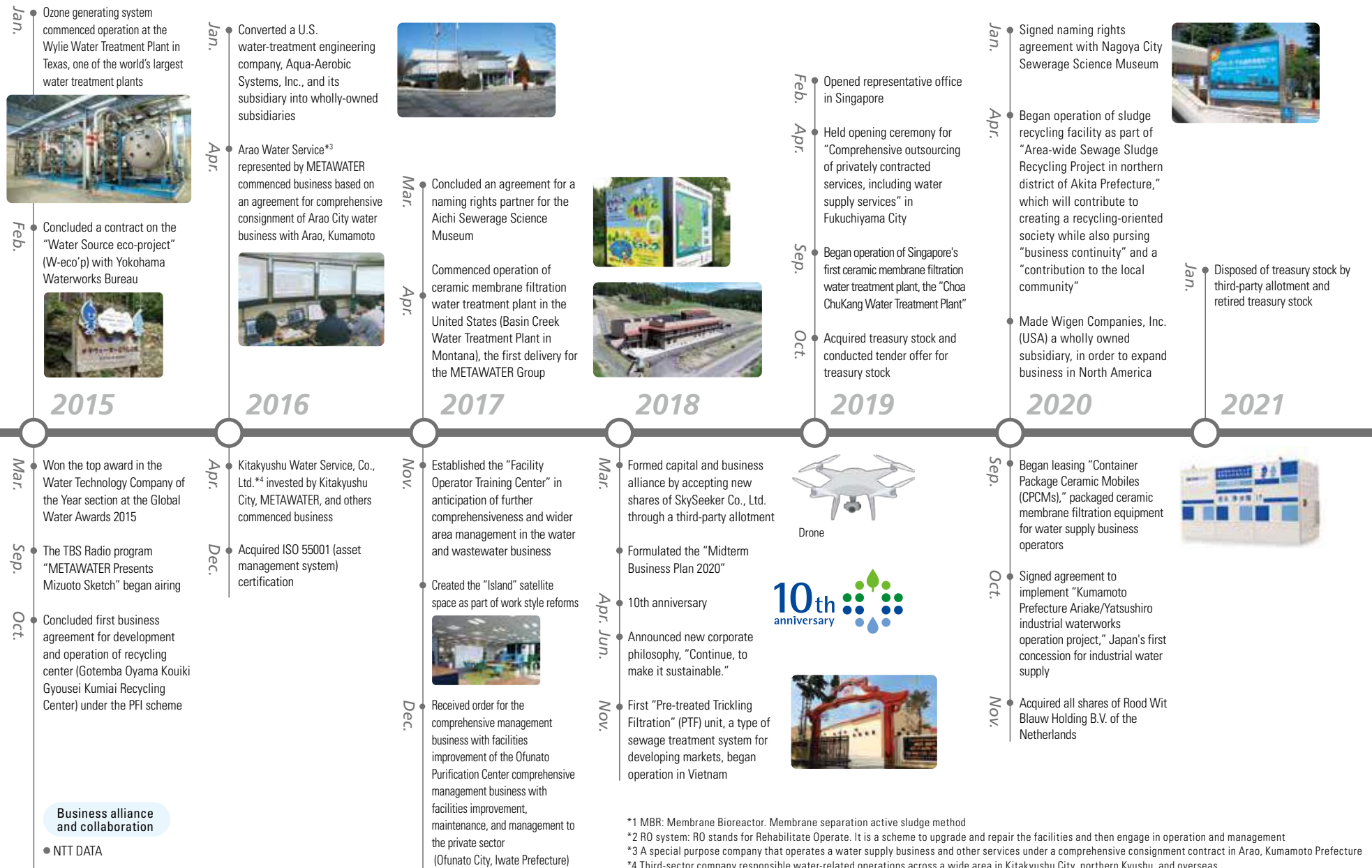
Glossary

EPC	Design and construction of facilities and equipment
O&M	Operation and maintenance of facilities and equipment
PPP	A concept referring to an approach allowing the private sector to participate in projects related to public services offering in a wider sense. Improvement of efficiency and quality of services are sought by making positive use of private funds, technologies, know-how and management skills.
PFI	Comprehensive implementation of facility design, construction, maintenance, repair, etc., utilizing the capital and know-how of private businesses.
DBO	An approach using the know-how of private businesses to comprehensively implement facility design, construction, maintenance, repair, etc
DB	An approach using the know-how of private businesses to comprehensively implement facility design and construction.

SPC	Companies whose purpose is to run specific business operations
PFI Act	An act related to the promotion of public facility improvement, etc. by making positive use of funding from the private sector and so forth.
Concession	An approach granting operating rights of public facilities that collect usage fees to a private business while the public entity maintains ownership.
WOODAP	Concepts for design, construction, operation, and maintenance centered around quick recovery in the event of a disaster
ABW	ABW (Activity Based Working): A work style in which workers can freely choose the time and place where they work according to the content of their job.
WBC	Water Business Cloud (WBC) :METAWATER's unique information and communications platform for real-time sharing of information and the analysis and utilization of collected information

Contributing to solutions for various social issues in the water and environmental fields

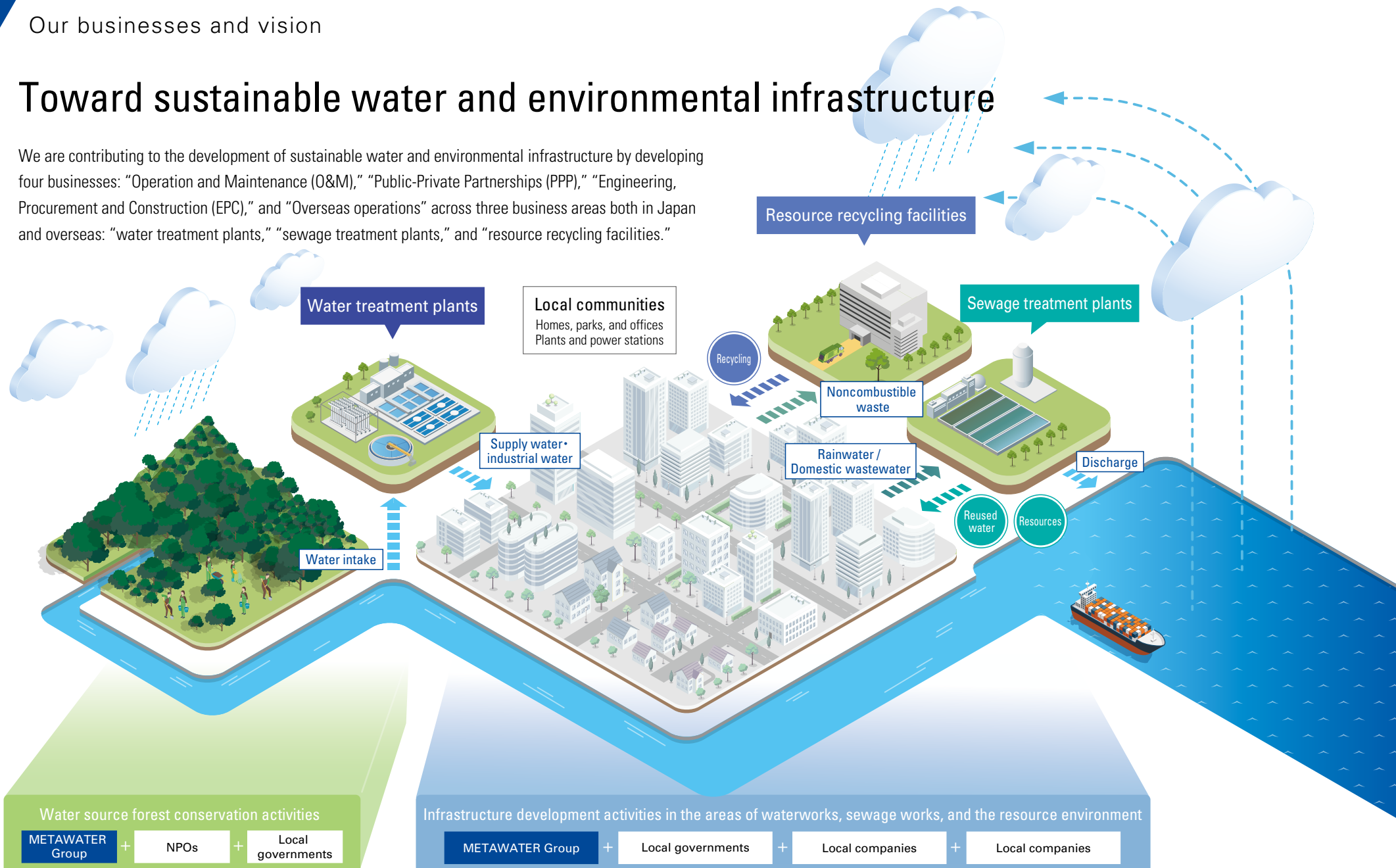




Our businesses and vision

Toward sustainable water and environmental infrastructure

We are contributing to the development of sustainable water and environmental infrastructure by developing four businesses: "Operation and Maintenance (O&M)," "Public-Private Partnerships (PPP)," "Engineering, Procurement and Construction (EPC)," and "Overseas operations" across three business areas both in Japan and overseas: "water treatment plants," "sewage treatment plants," and "resource recycling facilities."



In addition to business activities aimed at the development, rehabilitation, and maintenance of water and environmental infrastructure, through CSR activities such as water and environmental conservation, awareness-raising, and disaster recovery support, we aim to continue contributing to the conservation of local communities, society and the global environment while increasing corporate value.

Business Environment and Social Issues

Domestic	<ul style="list-style-type: none"> Financial difficulties at local governments and shortages of engineers as a result of population decline Decrease in the number of local government employees and aging of existing facilities and equipment Measures to protect against natural disasters such as major earthquakes, typhoons, and torrential rains Advancement of public-private partnerships (including concessions) 	Overseas	<p>【North America】 Use of reclaimed wastewater to secure water resources, aging facilities, and rising population</p> <p>【Europe】 Stricter environmental regulations and aging facilities</p> <p>【Asia】 Increasing the coverage of water and sewerage facilities</p>

Contributing to society and the global environment and to SDGs



Through our business and CSR activities, the METAWATER Group will not only improve corporate value, but also contribute to the sustainable development of local communities and society as well as the preservation of the global environment. Additionally, by taking the business characteristics and social responsibilities of the Group into consideration, we will contribute to the achievement of the following three of the 17 SDGs.

Our business model

Management resources

As of March 31, 2021

Financial capital

Total assets **131.2** billion yen
Equity ratio **40.6%**

Human capital

Consolidated number of employees **3,340** people

Intellectual capital

Number of patents held Approx. **760** in Japan

Social and related capital

Group companies **Seven** companies in Japan
Six companies overseas

Number of facilities whose operation and maintenance are consigned to us*1

Approx. **100** facilities in Japan

*1 Number of waterworks facilities (including PFI and DBO), wastewater treatment facilities, and resource environment facilities being operated and maintained

Number of public-private partnership (PPP) projects consigned*2

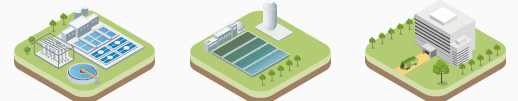
34 projects / **72** projects in total in Japan

*2 Based on the Company's data of March 31, 2021

Number of facilities and equipment designed/constructed

More than **2,000** locations in Japan

Business platform supporting water and environmental infrastructure



Water treatment plants Sewage treatment plants Resource recycling facilities

METAWATER's strengths

Mechanical technologies	Electrical technologies	O&M know-how + ICT
<ul style="list-style-type: none"> Ceramic Membrane Filtration System High-speed filtration system Ozone treatment system 	<ul style="list-style-type: none"> Power receiving and transforming equipment Monitoring and control equipment Fuel cells 	<ul style="list-style-type: none"> Introduction of AI and ICT technologies Efficient O&M

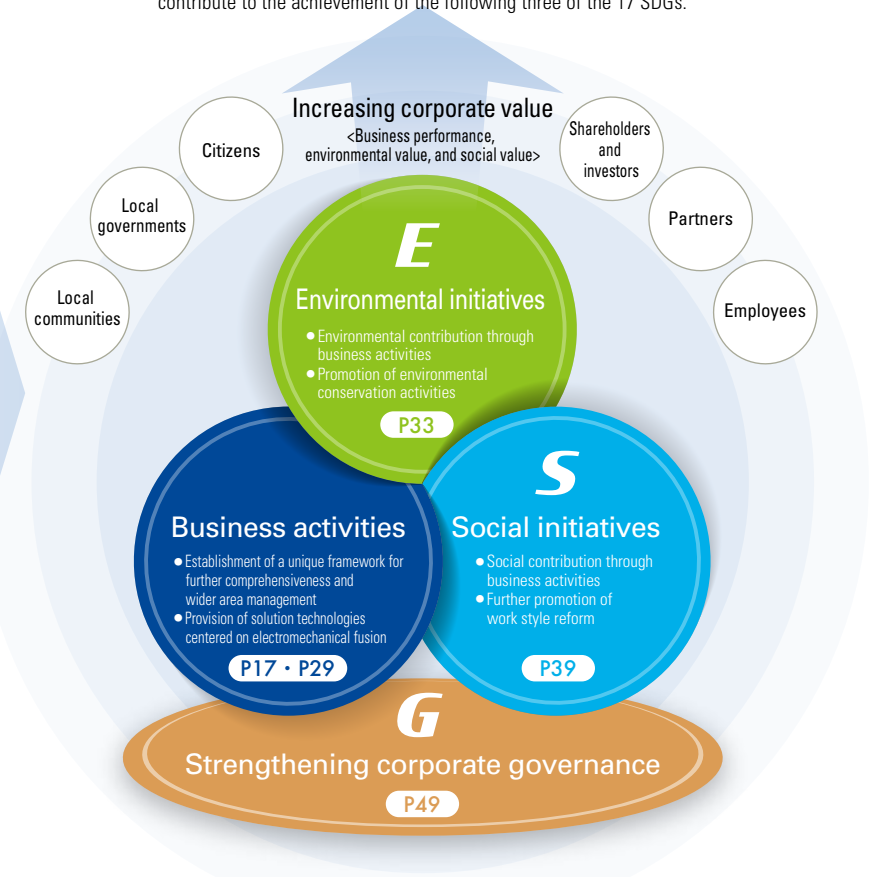
Business Structure P21

Engineering, procurement, and construction (EPC) business	Operation and maintenance (O&M) business
Overseas business	Public-private partnership (PPP) business

Management vision **Midterm Business Plan 2023 / Long-term vision** P11

Corporate philosophy **Continue, to make it sustainable.**

We will continue to contribute to local communities, society, and conservation of the global environment by solving water and environmental issues.



COVID-19 is wreaking havoc around the world.
The METAWATER Group will continue to
provide water supply and sewage works services,
which are a cornerstone of public health.

Kenji Yamaguchi

President and Representative Director

After starting his career in a sales department, he served in positions including Executive General Manager of the Business Strategy Division overseeing the business strategy and research and development divisions.
Appointed as President and Representative Director in June 2021

In the Japanese water and sewage market, the decrease in project income at local governments due to depopulation and other factors, a clear shortage of technicians, and the aging of facilities and equipment built during the period of rapid economic growth are pressing issues. These have been compounded by countermeasures against natural disasters such as major earthquakes, typhoons, and torrential rains.

On the other hand, in the overseas water supply and sewage market, in advanced countries such as Europe and the United States, the use of reclaimed wastewater to secure water resources in the United States, and measures to comply with stricter environmental regulations in Europe are among the priority issues in each region. Furthermore, in emerging markets in Asia and elsewhere, demand for water supply and sewage works infrastructure is increasing as a result of rising demand for water resulting from population growth.

Under these circumstances, in Japan, efforts are being made to expand the use of Public-Private Partnerships (PPPs) that utilize private sector funds, technologies and expertise, based partly on the enforcement of the PFI Act and revisions to the Water Supply Act, and to strengthen national land. It is expected that new business opportunities and business models will be created against a backdrop of technological innovation, including AI and the IoT. Overseas, too, the need for advanced filtration technology and energy-saving and energy-creating technology is expected to increase.

In addition, as COVID-19 continues to wreak havoc around the world, the role of water supply and sewage works, which are a cornerstone of public health, is becoming increasingly important. In anticipation of the age of “living with COVID-19” and the “post-COVID-19 age,” the METAWATER Group must continue taking measures to prevent the spread of infection and to maintain important water supply and sewage works infrastructure.

In April 2008, the METAWATER Group was established as the first comprehensive engineering enterprise in Japan engaged in the water and environmental fields. Since then, we have worked as a corporate group engaged in the social infrastructure indispensable to industries and people’s lives, promoting the fusion of mechanical technology, electrical technology, ICT, and operation and maintenance know-how, mainly to develop our water, sewage, and resource environment (waste recycling) businesses.

We will continue to make sincere efforts to become a corporate group that can be entrusted with social infrastructure with peace of mind, and contribute to the maintenance of water and environmental infrastructure, which is essential to people's lives, based on the track record that we have steadily accumulated, our expertise in operation and maintenance utilizing ICT, and our number one products and systems. We will also contribute to the United Nations’ “Sustainable Development Goals (SDGs)” through both business and CSR activities.

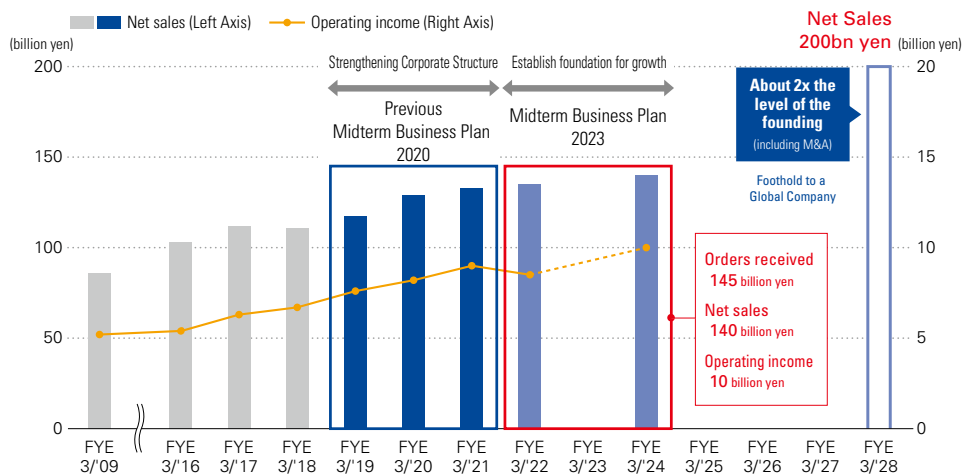
Top management's message

Establishing a foundation for growth to realize our long-term vision

The business environment surrounding the METAWATER Group is undergoing major changes, including the rehabilitation of aging facilities and equipment, countermeasures against frequent natural disasters, and the spread of COVID-19.

In order to respond to these changes and contribute to the maintenance of water and environmental infrastructure, the METAWATER Group has set forth its mid- to long-term vision as follows: “(1) No. 1 company to work with,” “(2) No. 1 for technology and service,” and “(3) No. 1 company to work for.” As a foothold toward becoming a renowned company around the world, in the fiscal year ending March 2028, which will mark the 20-year anniversary of our founding, we aim to achieve consolidated sales of 200 billion yen, approximately double those at the time of our establishment.

Achievement of the mid- to long-term vision and positioning of the “Midterm Business Plan 2020 and 2023”



* Non-consolidated net sales and operating income up to FYE 3/11; consolidated net sales and operating income from FYE3/12
 * For FYE 3/21, operating income is based on the Core Business, which excludes one-time factors such as one-time amortization of actuarial gains and losses due to the sale of shares in the retirement benefit trust.

Summary of “Midterm Business Plan 2020”

During the period of the “Midterm Business Plan 2020” (April 2018 to March 2021), the METAWATER Group worked to strengthen our corporate structure and bolster the Engineering, Procurement and Construction (EPC) and Operation and Maintenance (O&M) businesses, which are foundation fields, while also focusing on expanding the PPP and overseas businesses, which are growth fields.

In the fiscal year ended March 2021, the company recorded its highest ever orders received and order backlog, thanks partly to the strong performance of the EPC business and an increase in operation and maintenance (O&M) contracts over a period of several years. In terms of sales, the EPC and overseas businesses both performance well, and performance in the PPP business was also robust. As a result, the company successfully achieved its key numerical targets, even after excluding one-time factors such as the sale of shares contributed to a retirement benefit trust.

“Midterm Business Plan 2020” Results

(Consolidated)	FYE 3/19 Result	FYE 3/20 Result	FYE 3/21 Result	FYE 3/21 Forecast*1	Change
Orders Received	123.8 billion yen	125.0 billion yen	159.1 billion yen	140.0 billion yen	+ 19.1 billion yen
Net Sales	117.3 billion yen	128.7 billion yen	133.4 billion yen	130.0 billion yen	+ 3.4 billion yen
Operating Income (% of Sales)	7.6 billion yen (6.5 %)	8.2 billion yen (6.4 %)	Core Business base*2		
			9.1 billion yen (6.8 %)	9.1 billion yen (7.0 %)	+ 0 billion yen (−0.2 %)
			10.9 billion yen (8.1 %)	10.5 billion yen (8.1 %)	+ 4 billion yen (+0.0 %)
Net Income	5.2 billion yen	5.7 billion yen	6.5 billion yen	6.8 billion yen	− 3 billion yen
ROE	9.1 %	10.5 %	12.7 %	10.0 %	+ 2.7 %

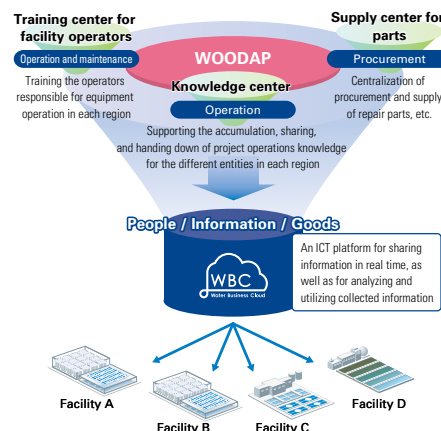
*1 Figures were revised in accordance with the October 2020 earnings forecast revision

*2 Core business basis: Operating income excluding one-time factors such as one-time amortization of actuarial gains and losses due to the sale of shares in the retirement benefit trust

The results of the main key measures are as follows.

Strategic development investments

- Established “Facility Operator Training Center,” “Knowledge Center,” and “Common Parts Center” = Created mass benefit management system corresponding to “wider area management + further comprehensiveness”
- Advocated METAWATER’s proprietary “WOODAP” as an approach for prioritizing tasks in the workplace in the event of disaster
- Completed development of development models (High flow rate of ceramic membranes, solid-liquid separation for final sedimentation, flow turbine power generation, etc.)



Concept image of mass benefit management system corresponding to “wider area management + further comprehensiveness”

Business strategy

PPP business

- Received commission for “Kumamoto Ariake/Yatsushiro industrial waterworks operation project,” Japan’s first concession project for industrial water supply
- Obtained preferential negotiation rights for the “Miyagi Prefecture public-private partnership for integrated operation of drinking, industrial and sewage water”

EPC business

Won commissions for large projects (eight incinerators)

Overseas business

Acquired all shares of FUCHS (Germany), Wigen (USA), and RWB (the Netherlands), creating foundations for businesses in Europe and the United States

O&M business

Maintained stable orders and sales and secured earnings

Promoted ESG as an infrastructure company

- Improved systems related to water quality improvement, such as wastewater treatment, and adopted energy-saving equipment
- Certified as a “Grade 3 Eruboshi company” by the Ministry of Health, Labour and Welfare as an initiative to promote the active participation of women
- Promoted work style reform
 - Established a satellite office
 - ABW introduced at Western Japan Office
 - Introduced job return system
 - Introduced four-day workweek system
 - Shortened prescribed working hours
 - Reviewed accumulated leave
- Addressed Corporate Governance Code (CG Code)
 - Established the Nomination and Compensation Advisory Committee
 - (Scheduled) introduction of performance-linked compensation system, etc.
- Stabilized pension assets through sales of shares in the retirement benefit trust
- Increased capital efficiency by acquiring 4.2 million shares of treasury stock
- Began leasing business for “Container Package Ceramic Mobiles (CPCMs)”
- Acquired credit rating of “A” from Rating and Investment Information, Inc. (R&I) as part of efforts to diversify funding



Western Japan Office

Midterm Business Plan

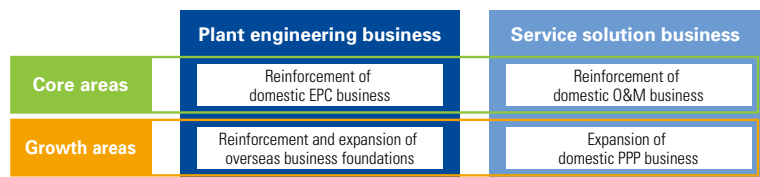
Outline of “Midterm Business Plan”

In April 2021, the METAWATER Group formulated the ““Midterm Business Plan 2023” (April 2021 to March 2024) in order to further promote initiatives to achieve its mid- to long-term vision. In the “Midterm Business Plan 2023,” we will focus on the three key issues of: “enhancement of foundation field and expansion of growth field,” “R&D investment expansion,” and “sustainable ESG initiatives,” with the aim of establishing a foundation for growth. In the final fiscal year ending March 2024, we will make company-wide efforts to achieve orders received of 145.0 billion yen, net sales of 140.0 billion yen, and operating income of 10.0 billion yen.

Key measures in the “Midterm Business Plan”

1 Enhancement of foundation fields and expansion of growth fields

The METAWATER Group will strengthen and expand its businesses, positioning the EPC and O&M businesses as foundation fields and the PPP and overseas businesses as growth fields.



① Enhance foundation fields

In the EPC business, we will work to further increase orders and improve profitability by establishing engineering methods that utilize IT and AI, improving design quality, and strengthening cost competitiveness to respond to future demand for rehabilitation and large-scale projects. In the O&M business, in addition to stable growth through continued orders from existing plants, we will strive to acquire new plants and new businesses by utilizing IT tools and strengthening sales expansion efforts for WBC (Water Business Cloud).^{*1}

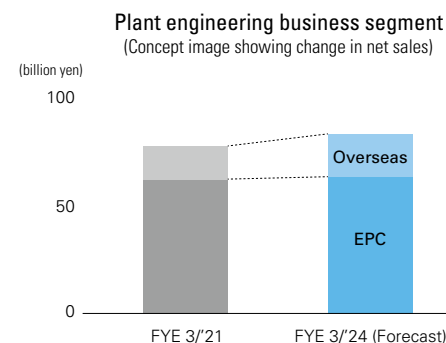
^{*1} Abbreviation for “Water Business Cloud.” METAWATER’s unique information and communications technology for real-time sharing of information and the analysis and utilization of collected information.

Goals of the “Midterm Business Plan 2023”

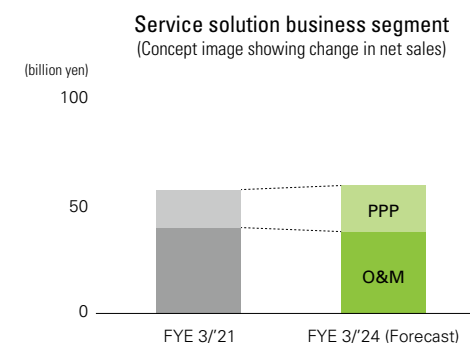
(Consolidated)	FYE 3/24 (Forecast)	FYE 3/24 (Targets)
Orders Received	135.0 billion yen	145.0 billion yen
Net Sales	135.0 billion yen	140.0 billion yen
Operating Income	8.5 billion yen	10.0 billion yen
Net Income	5.8 billion yen	7.0 billion yen
ROE	10.0% or more	10.0% or more

② Expansion of growth fields

In the PPP business, which is expected to see an increase in the number of large-scale projects that include design, construction, operation, maintenance and management, we will strengthen our regional strategies by leveraging our track record and know-how and create new business models in preparation for future progress in Public-Private Partnerships. Additionally, in overseas businesses, we will continue to position Europe and the United States as strategic areas and promote further business expansion by deepening cooperation among group companies in Europe and the United States.



Higher sales are expected in both the EPC and overseas businesses



Net sales are expected to increase in the PPP business and decline in the O&M business as a result of lower recycling sales

2 R&D investment expansion

The METAWATER Group will expand its investment in research and development in order to address needs in areas such as future demand for facility rehabilitation and the further development of Public-Private Partnerships.

① Further reinforcing strong fields

We will continue to invest aggressively in R&D in the fields of incineration, water treatment, and monitoring and control systems, which are strengths of the METAWATER Group, with the aim of capturing future rehabilitation demand.

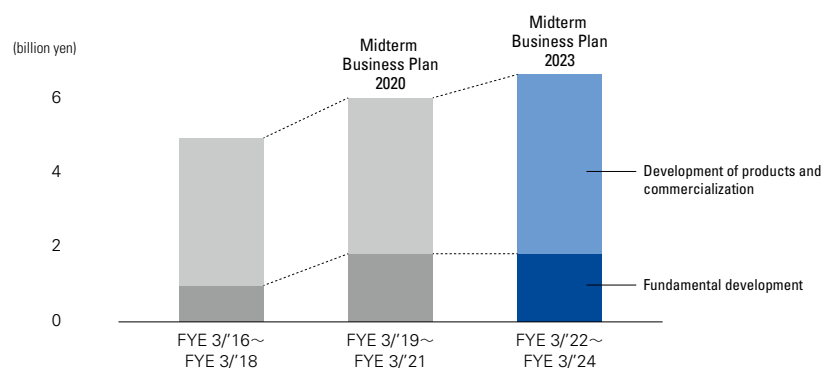
② Creating integrated mechanical and electric technologies

The METAWATER Group possesses both machinery and electrical technologies in the water and environmental businesses, and will strengthen its competitiveness by continuously creating products and systems that take advantage of its superiority.

③ Creating value by utilizing the information chain

The METAWATER Group will create new value by linking on-site operation and maintenance management information, plant monitoring and control systems, and the Water Business Cloud (WBC) to improve the efficiency of maintenance management, optimize management, and provide disaster-resistant systems and services.

Changes in amount of R&D investment

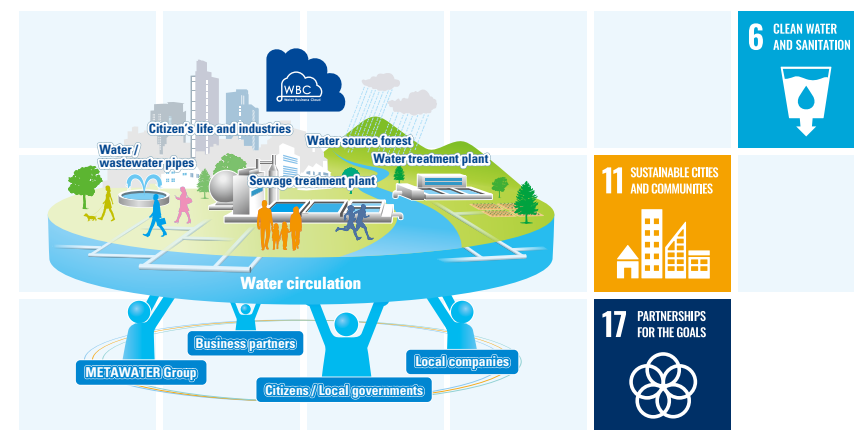


3 Sustainable ESG initiatives

In addition to making social contributions through its business activities as a company providing social infrastructure, the METAWATER Group, as a corporate citizen, will aggressively reduce its environmental impact and engage in community contribution activities, thereby contributing to the United Nations' "Sustainable Development Goals (SDGs)."^{**2} Furthermore, in response to the work style reforms promoted by the government, we will proactively work to create opportunities for women to play an active role in the company, and to realize work styles that are not restricted by age or location, and thus realize a variety of work styles for our employees.

On the other hand, in terms of corporate governance, we aim to earn the trust of and achieve highly transparent management through active dialogue with our stakeholders to achieve sustainable growth and enhance corporate value over the medium to long term.

SDGs the METAWATER Group is focusing on



^{**2} Sustainable Development Goals (SDGs)

Adopted by the United Nations in 2015 with the aim of achieving a better and sustainable world by 2030. The SDGs consist of 17 Goals and 169 Targets to achieve those goals.

Message from the CFO

The METAWATER Group aims to increase corporate value while maintaining financial soundness and pursuing an optimal balance between capital efficiency and shareholder returns.

Masayuki Nakagawa

Executive Officer
Executive General Manager,
Financial Planning Office,
Corporate Strategy Planning Division



Funding position that fluctuates significantly during the fiscal year

As the METAWATER Group's main customers are local governments in Japan, approximately 60% of annual sales are concentrated in the fourth quarter, with accounts receivable - trade in excess of 70.0 billion yen recorded on the balance sheet at the end of the year.

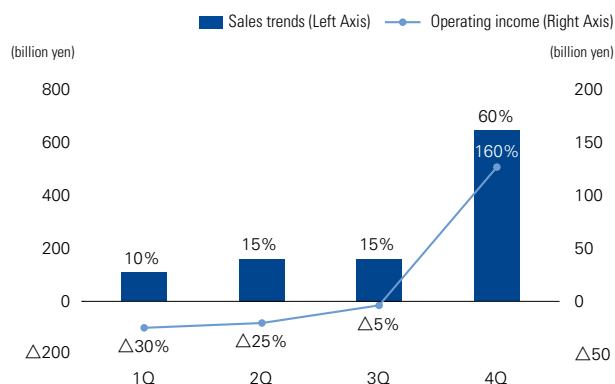
The balance of cash and deposits peaks between April and May, as these accounts receivable - trade are collected. Subsequently, we make monthly payments required for our business activities, including payments for parts and materials as construction progresses. In other words, the idea is that we

earn the funds necessary for our annual business activities from April to May and fully spend them over the course of a year. Therefore, looking at daily cash flows from February to March, there are some difficult spots in which short-term spot borrowing is used to cover payments to suppliers that have accumulated toward the end of the fiscal year in March. This situation is not apparent from our balance sheet, which shows the financial position of the company at the end of each quarter, nor on the statement of cash flows, which shows the flow of funds during the business period. It can be considered a unique feature of the company, with sales to local governments making up a large portion of the whole.

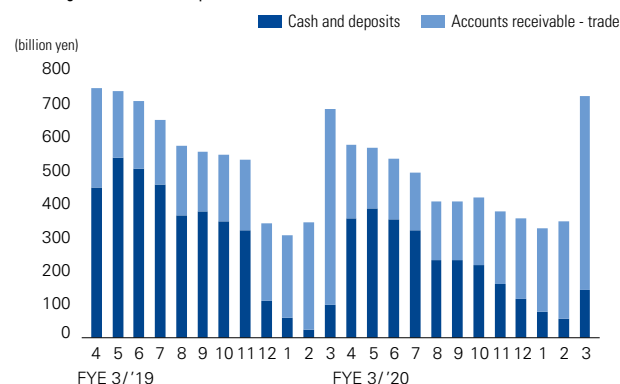
Initiatives to diversify funding

Given factors such as the expansion of the PPP business, an increase in long-term projects, and our continued R&D investment to further strengthen the company's businesses, I am keenly aware of the need for stable funding in future. As part of our efforts to diversify and stabilize our funding in response to the expansion of our business platform, and to improve our creditworthiness to external parties, the METAWATER Group acquired an issuer credit rating from Rating and Investment Information, Inc. (R&I) in December 2020. We received a high rating, thanks to the positive evaluation of the stability of our businesses and our solid financial base.

Trends in quarterly sales and operating income



Changes in cash and deposits, and accounts receivable - trade (non-consolidated)



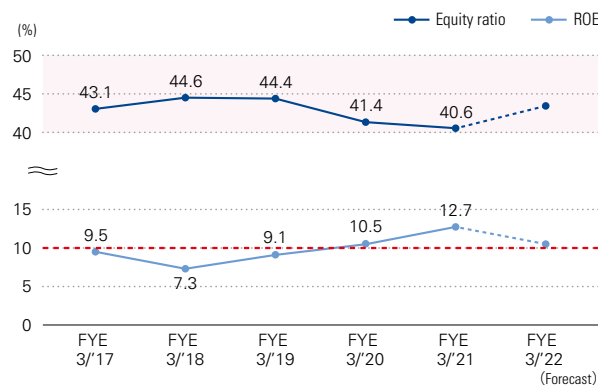
Type of rating	Rating	Rating outlook
Issuer rating	A	Stable



Financial soundness is essential for transactions with local governments.

In Japan, construction companies that undertake public works projects for local governments are required to pass a “business evaluation,” in which the company’s “business conditions,” “business size,” “technical capabilities,” and other “review items (social qualities, etc.)” are scored, evaluated, and graded. For this reason, it is important for that the METAWATER Group, whose customers include local governments throughout Japan, maintain financial soundness while also pursuing the optimal balance between capital efficiency and shareholder returns. I believe it is important that we continuously aim to improve corporate value, with an target of an equity ratio of at least 40% and ROE of at least 10% as management indicators.

Balance between ROE and equity ratio (forecast for FY ending March 2022)



Purchase of treasury stock and sale of shares in the retirement benefit trust

In December 2019, the company repurchased 4.2 million shares of its own stock held by NGK INSULATORS, LTD. and Fuji Electric Co., Ltd., which I believe contributed to returning profits to shareholders and enhancing capital efficiency, while also further strengthening corporate governance. In October 2020, the company also sold shares in the retirement benefit trust and transferred them to stable assets such as cash. As a result, we stabilized pension assets that had been affected by fluctuations in the prices of specific shares, and carried out one-time amortization of “unrecognized actuarial gains and losses,” which had been deferred annually and amortized over multiple years.

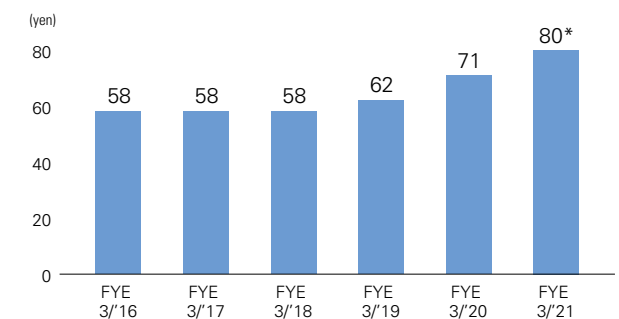
Key financial strategies

Details of implementation	Remarks
1 Repurchase of own shares	December 2019 / Acquired 4.2 million of own shares from two major shareholders
2 Stock split	October 2020 / 2-for-1 stock split (issued shares following stock split: 51,847,000 shares)
3 Sale of deemed strategically held shares held in the retirement benefit trust	October 2020 / Increased operating income due to one-time amortization of unrecognized gains and losses
4 Disposal of treasury stock by third-party allotment	January 2021 / Allocated 88,500 shares of treasury stock to the Employee Shareholding Association
5 Cancellation of treasury stock	January 2021 / Canceled 88,500 shares of treasury stock
6 Credit rating obtained	December 2020 / Issuer rating of “A” assigned by R&I

Views on shareholder returns

The METAWATER Group’s basic policy is to continue to return profits to shareholders in line with business conditions while securing internal reserves for future growth investments, stable growth, and responses to changes in the business environment, and to pay dividends twice a year, as an interim and year-end dividend. Dividends are determined after taking into consideration factors such as changes in stock prices, dividend yields, and dividend payout ratios (around 30%). We sincerely hope we can continue to enjoy the support of our shareholders and investors.

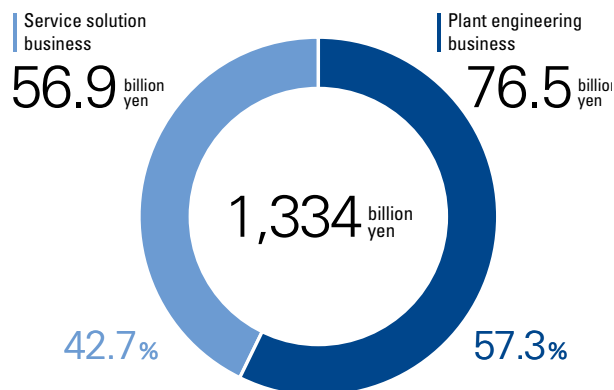
Dividends per share



* Does not take into account the stock split on October 1, 2020 (2-for-1 split)

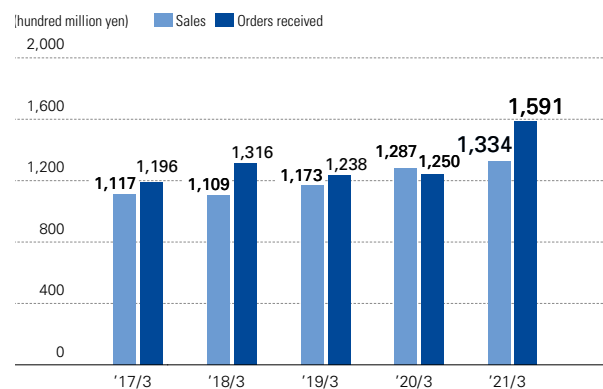
Highlights of consolidated financial results

Sales composition (FY ended March 2020)



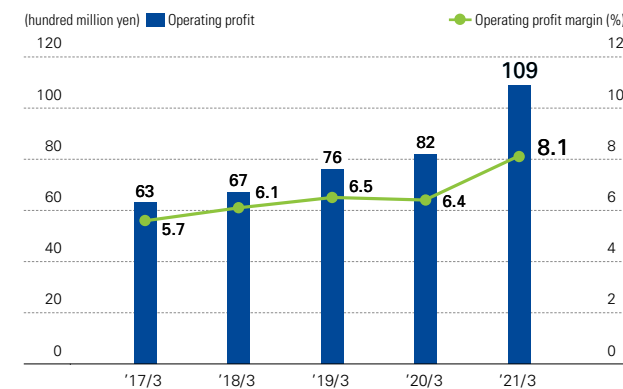
Sales / Orders received

Sales **133.4** billion yen



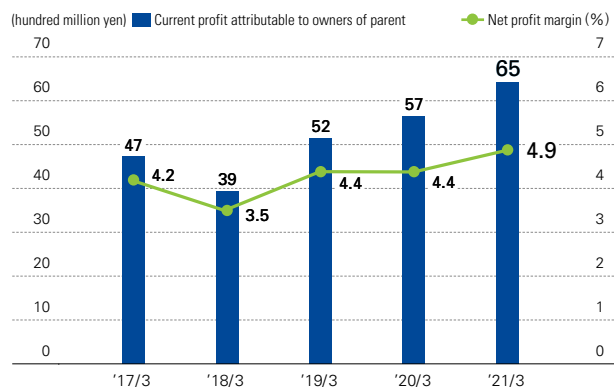
Operating profit
Operating profit margin

Operating profit **10.9** billion yen



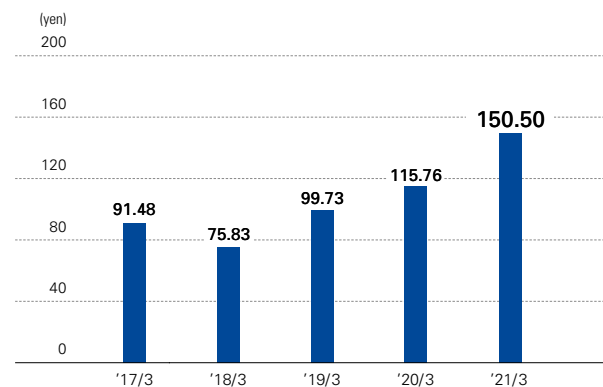
Current profit attributable to owners of parent /
Net profit margin

Current profit attributable to owners of parent **6.5** billion yen



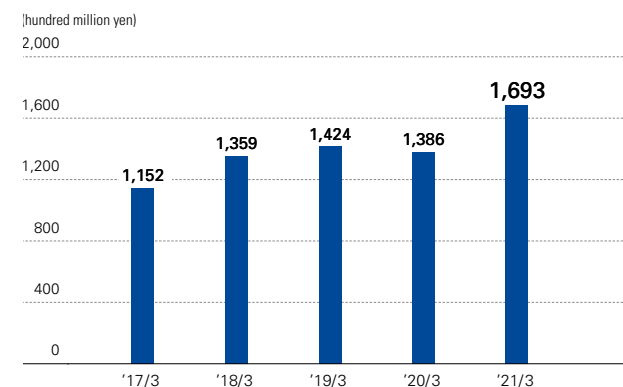
Current earnings per share*

150.50 yen



Order backlog

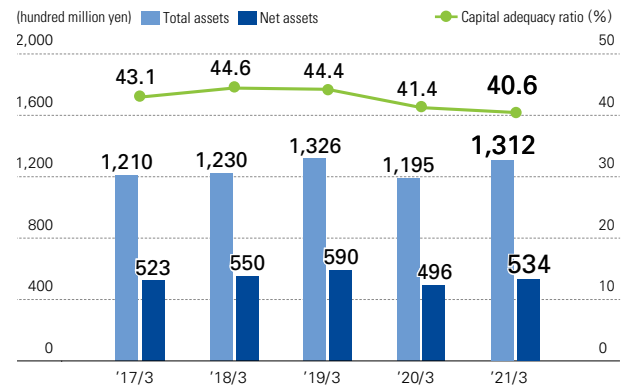
169.3 billion yen



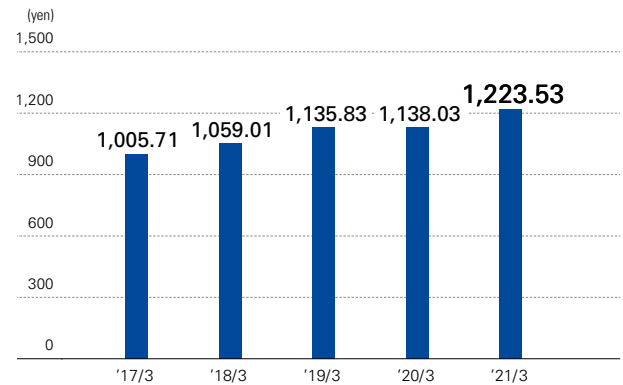
* The company carried out a 2-for-1 stock split of its common stock on October 1, 2020. Accordingly, the calculation of net assets per share and net income per share is based on the assumption that the stock split was carried out at the beginning of the previous fiscal year.

Consolidated non-financial highlights

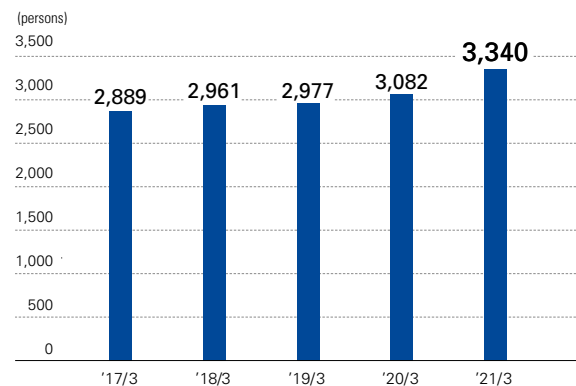
Total assets / Net assets / Capital adequacy ratio



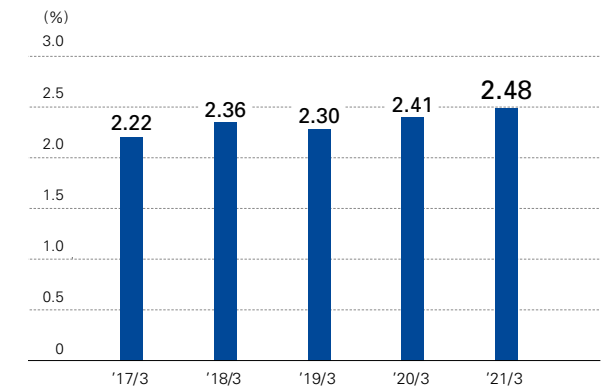
Book value per share*



Number of employees

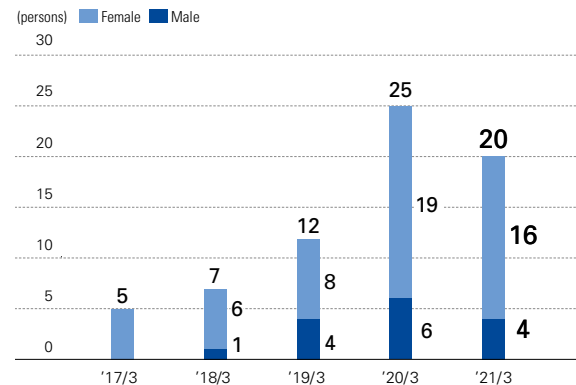


Percentage of employees with disabilities

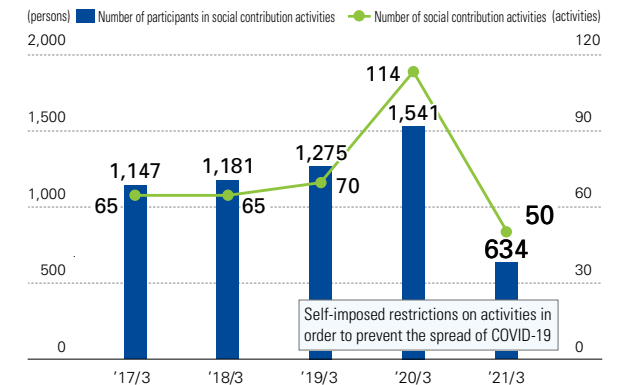


Number of employees taking childcare leave

*100% rate of returning to work after taking childcare leave



Number of participants in social contribution activities



Promoting development of products, technologies, and solutions for medium- to long-term growth

The METAWATER Group is working on solutions for a new generation, integrating our Group's strengths in mechanical and electrical technologies, joint research, open innovation with partners, etc., with the goal of more advanced technological development that will help sustain infrastructure and improve operational efficiency.

Water

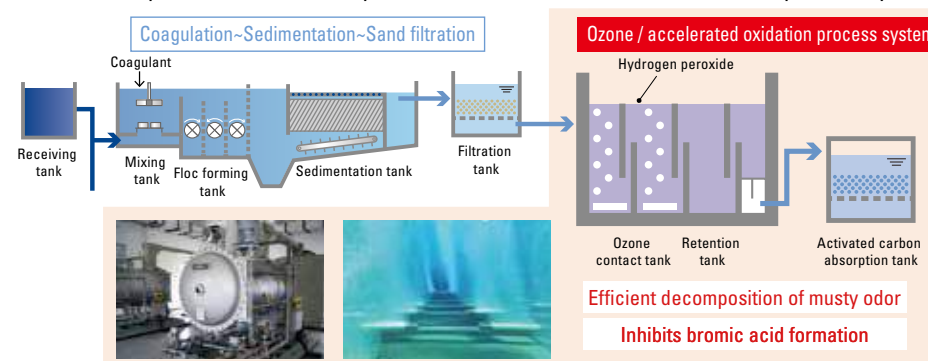
Solving the problem of musty odor at waterworks

Ozone / accelerated oxidation process (AOP) system

As a result of the effects of climate change in recent years, highly concentrated musty odors occurring over a longer period of time have been reported at water resources for waterworks, and they have also been reported as occurring during periods when water temperatures are low.

The ozone / accelerated oxidation process (AOP) system is a treatment technology that combines ozone treatment with hydrogen peroxide, and has been attracting attention as a new solution to musty odors. By properly controlling the injection of ozone and hydrogen peroxide, we have succeeded in decomposing highly concentrated musty odor, maintaining treatment efficiency at low water temperatures, suppressing the production of bromic acid as a by-product, and reducing the load on the activated carbon in the later part of the system.

General water purification treatment process with ozone / accelerated oxidation process system



Water

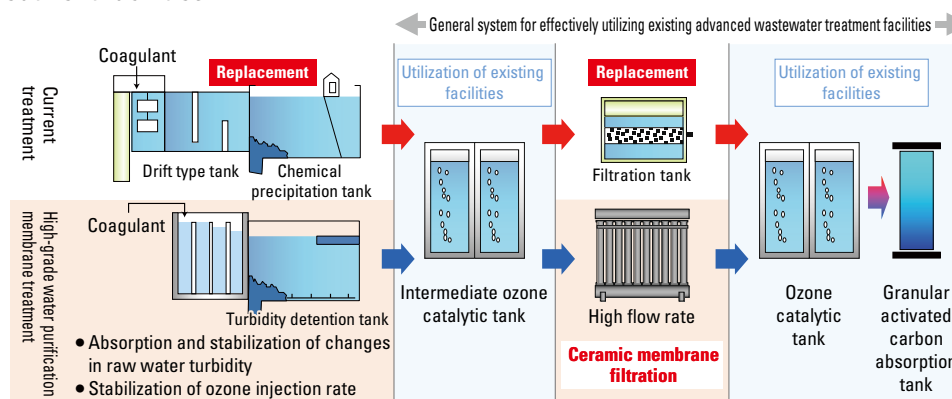
Rebuilding water purification facilities using advanced wastewater treatment facilities

High-grade water purification ceramic membrane system

As the time approaches for the rehabilitation of solid-liquid separation facilities in water purification facilities with sophisticated water treatment capabilities, there is a need for water purification technology that can effectively use the advanced wastewater treatment facilities owned.

The Ceramic Membrane Filtration System is excellent in terms of its low membrane rupture risk, low power usage, long life, chemical resistance, etc. It is a technology that responds suitably to water demand via the operation or stopping of each membrane filtration unit.

By combining this system with existing advanced wastewater treatment facilities, it is possible to save space and rebuild water purification facilities while utilizing existing facilities.



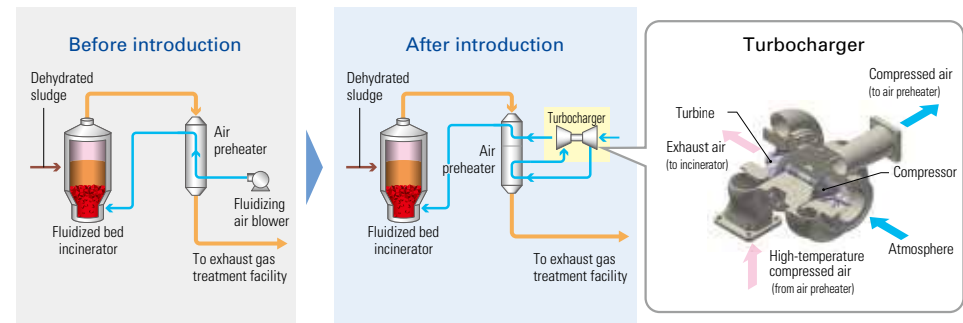
Sewage

Achieved power savings of approximately 40% while maintaining the safety of fluidized bed incinerators

Flow turbine system

The flow turbine system supplies air for combustion to the incinerator by rotating a turbocharger using heat from waste incineration heat instead of a fluidizing air blower. When biosolids are incinerated, the fluidizing air blower, which feeds air into the furnace, consumes a lot of electric power, but the introduction of this system will reduce the power consumption of the entire incinerator facility by approximately 40%, even if the fluidizing air blower is stopped.

In addition, since the only change from conventional incinerators is the method of supplying air for combustion, the pressure of the incinerator remains the same and power can be saved while maintaining the safety of the fluidized bed incinerator.



AI · ICT

Improve occupational safety with cutting-edge technology

Hazard alarm system

In the construction industry, safety is always taken into consideration to prevent accidents during field work. Sometimes, even if we are careful during field work, there is a risk that we find ourselves near dangerous places such as openings and charging parts without noticing, which may lead to unexpected accidents. To prevent such unexpected events, we have developed and put into operation a "hazard alarm system." Beacons are installed in advance in places where workers must be aware of danger. If a worker approaches a dangerous place while working, he or she is alerted by a warning and vibration on his or her smartphone. In addition, identifying dangerous places in advance has a deterrent effect by increasing awareness.



Beacons



Image of work on site

Business highlights

ICT technology

Implementing physical asset management based on operation and maintenance amid the ever-increasing number of aging facilities

Demonstration project for continued physical asset management realization system technology in a cloud environment

(FY2018 B-DASH Project)

We will achieve efficient and continuous physical asset management by efficiently collecting, organizing, storing, and leveraging operation and maintenance data from daily operations using ICT (cloud systems), including data from inspections of facilities and equipment in sewage works facilities.

Outline of demonstration

Amid the ever-increasing number of aging facilities, the METAWATER Group must effectively manage its physical assets. Therefore, we have demonstrated that efficient and continuous physical asset management can be realized by efficiently collecting, organizing, storing, and leverage operation and maintenance data in daily operations at sewage works facilities using ICT (cloud systems).

Characteristics of this technology

With our three component technologies (see below) formed in a cloud environment, operation and maintenance data generated through day-to-day operations are used to prepare various plans, thereby achieving efficient and continued physical asset management. Guidelines were formulated in March 2021 by the National Institute for Land and Infrastructure Management.

1 Source data collection and organization

Efficiently collect and organize (store) operations and maintenance data centrally in the cloud, regardless of location constraints

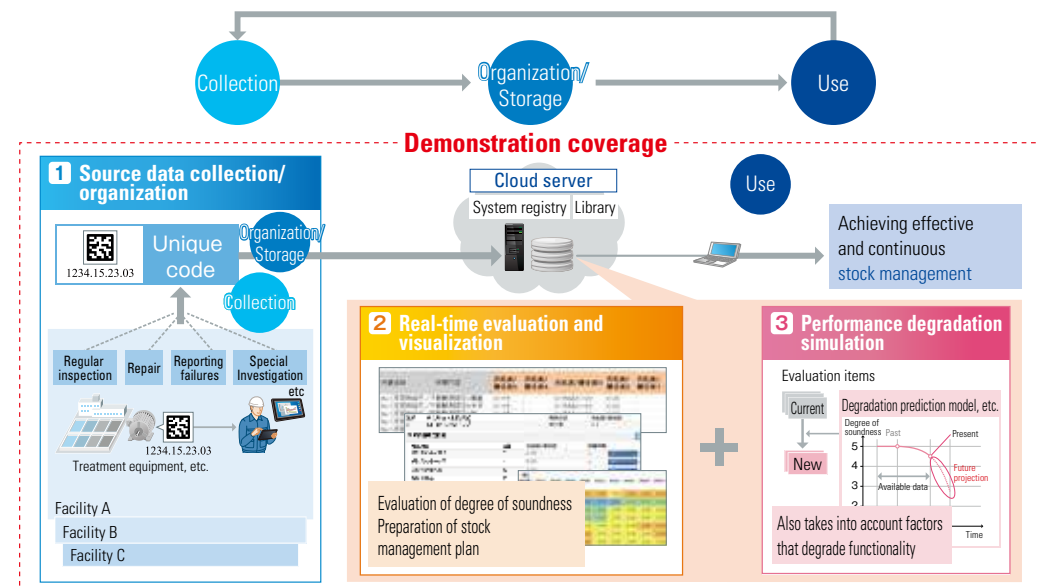
2 Real-time evaluation and visualization

Using the collected and organized operations and maintenance data, automatically calculate the degree of soundness and visualize necessary information for physical asset management

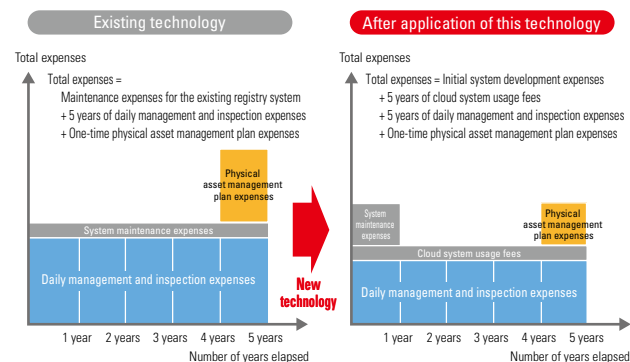
3 Performance degradation simulation

Create models predicting long-term changes in equipment operating performance and introduce a probabilistic distribution for future equipment performance to help determine optimal timing of measures

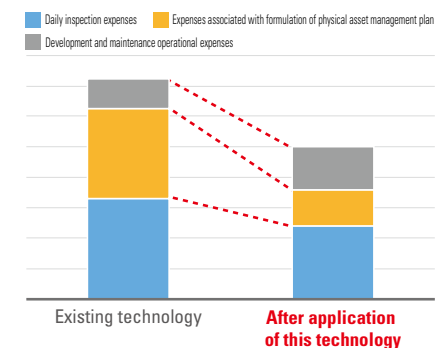
- **Demonstrators** Joint research group organized by METAWATER Co., Ltd., Ikeda municipal government, Ena municipal government
- **Demonstration areas** Sewage Treatment Plant in Ikeda City, Osaka, Water Purification Center in Ena City, Gifu, and five other facilities
- **Demonstration years** FY2018 - FY2019



Effects of introduction



Cost reduction effect from introduction of this technology



COVID-19 countermeasures at operation and maintenance sites (Example from METAWATER SERVICE Co., Ltd.)

METAWATER SERVICE Co., Ltd. has implemented a variety of measures to prevent infection under an overarching policy as follows: “Water supply and sewage works systems are essential for public health to prevent the spread of COVID-19, and we will work to maintain ‘water and environmental infrastructure,’ which is essential for people’s lives.”

Going forward, METAWATER SERVICE Co., Ltd. will maintain the optimal measures according to the situation, taking into account government policies trends in new infections, and other factors.



1 Establishment of response division for on-site response

METAWATER SERVICE has established a COVID-19 emergency response division (the “Head Office response division”) within its Head Office, as well as a separate response division (the “site response division”) for contracted business sites, in order to respond appropriately to the needs of each site. An Executive General Manager of a business division at METAWATER SERVICE is in charge of the site response division, and instructions are communicated to each business site through the General Managers of the administrative departments for three areas nationwide. The site response division also has a secretariat, through which it cooperates with the Head Office response division..

2 Role of site response division

The site response division has three roles. One is to provide instructions to contracted business sites on measures to prevent infection and to monitor their situation. Its other two roles are to engage in deliberations concerning a response and provide directions in the event that infections arise. These roles are classified into two cases: when one or more infections occur among the employees of the contracted business site, and when one or more infections occur among the customers or business personnel of the contracted business site.

3 Establishment of preliminary implementation policy to prevent infection at sites

In consideration of the spread of COVID-19 nationwide, we have established a policy of implementing measures in advance at contracted business sites, as part of efforts to prevent infections at sites. The provisions of this policy include: “operation reduction plans and team structures,” “entry controls/route isolation,” “3 conditions for preventing infection,” and “disinfection of protective equipment.”

Under “operation reduction plans and team structures,” the minimum operations required for the operation and maintenance of contracted business sites are identified, and operational systems are analyzed.

Under “entry controls/route isolation,” access to central monitoring rooms is restricted, operational routes are deployed in which monitors and other employees do not come into contact, the break room for monitors is isolated and its use is staggered, and the disinfection of numerous contact areas is strictly enforced. “3 conditions for preventing infection” prevents closed spaces, crowds, and close working conditions, while “disinfection of protective equipment” includes methods for disinfecting protective equipment after use.

4 Formulation of site response policies

In order to swiftly respond and give instructions to sites, and to prevent the spread of infection and maintain lifelines, we have established a basic policy for on-site responses and are spreading awareness of this policy among our customers and other external parties. The policy is mainly a summary of countermeasures related to “enhanced infection prevention,” “measures for responding to potential infections among employees,” and “site measures when infections occur.”

Under “enhanced infection prevention,” directions are provided for the strict observance of cough etiquette and handwashing, room ventilation, the prohibition of meetings for large numbers of people in principle, the cancellation of meetings that include food and drink, etc. In “measures for responding to potential infections among employees,” basic related information is summarized and a flow of criteria for taking action has been prepared. “Site measures when infections occur” stipulates that the continuation of operations at facilities will be prioritized, and that efforts will be made to create work systems that focus on priority operations.

5 Stipulation of measures to be taken after operation and maintenance work at contracted business sites

In operation and maintenance work at contracted business sites, measures for workers and protective equipment after work are stipulated in detail for each facility, in accordance with the type of operation and details of the work. Workers’ tasks include patrols and other daily inspections, periodic inspections and cleaning of the inside of tanks, etc., delivery of chemicals, removal of biosolids, and central monitoring. Measures specified and implemented after each type of task include washing the face, washing the hands, gargling, bathing, disinfecting hands and fingers, air showers, changing of clothes for each operation, etc.

In addition, workers wear various types of protective equipment when working. There is a wide variety of protective equipment, including helmets, safety shoes, raincoats, and safety glasses. We take measures appropriate for each type of protective equipment after tasks are completed, including cleaning and disposing of them.

Furthermore, each contracted business site has its own facilities as well as required operations and tasks. Therefore, the post-operation measures are also regulated according to their respective contracted business sites.

We will pursue the further optimization of design, procurement, and construction.

“ METAWATER is a unique corporation with expertise in both mechanical and electric technologies. We design and construct eco-friendly plants incorporating energy-saving, energy-creation technologies, etc. using electric technologies that maximize our unique mechanical technologies and capabilities. Combining mechanical and electric technologies and product development expertise, we are working to realize a decarbonized society and contribute to the SDGs.

Currently, the water supply and sewerage industry faces serious issues related to a shortage of engineers and aging facilities. In the future, the business environment appears likely to undergo more significant changes, including the expansion of Public-Private Partnership (PPP) projects, the evolution and expansion of the IoT and AI, and progress in work style reform.

In order to respond to the needs of society and customers in accordance with such changes, it will be essential that we transform engineering and rationalize and streamline operations. By pursuing the optimal design, procurement, and construction, the Plant Engineering Division will bring about new value and thus contribute to achieving a sustainable society.

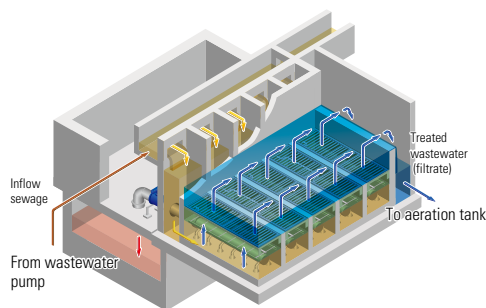


Director, Senior Executive Officer
Executive General Manager,
Plant Engineering Division

Noboru Okuda

Midterm Business Plan 2020

Under the “Midterm Business Plan 2020,” as part of the development of No. 1 products (water droplet products), we have promoted the development of products with excellent features, such as products with advanced environmental performance and products with extremely low costs over their lifecycle. In the drinking water field, METAWATER has developed a high-grade water purification ceramic membrane system, which is the number one system in Japan among ozone and coagulation pretreatment membrane systems in terms of treatment capacity, and an ozone / accelerated oxidation process (AOP) system, which is the number one system for controlling ozone injection and is capable of suppressing by-products (bromic acid). Additionally, in the sewage field, in response to the trend toward a decarbonized society, METAWATER has actively developed various power generation technologies that recover and utilize waste heat from sludge incineration and digestion gas generated in the sewage treatment process, and introduced high-speed filtration systems and final filters in wastewater treatment. Through these methods, we have constructed sustainable plants that make use of downsizing technologies to meet the needs of a social environment with a falling population and super-aging society.



High-speed filtration system



Installation into existing final sedimentation tank
(concept image)

Final filter

SDGs being promoted



Implementing leading-edge technologies, including advanced water-quality improvement technologies, energy-saving technologies, and clean energy power generation for degraded water purification plants and sewage treatment plants enables stable supplies of safe and clean water of sufficient quality and capacity through plant construction.



Constructing sustainable plants with downsized technologies in response to a social environment with falling populations and super-aging societies



Constructing sustainable plants with downsized technologies in response to a social environment with falling populations and super-aging societies



Engaging in disaster rehabilitation work centered on the coast of the Tohoku Region and contributing to building sustainable local communities by improving the water environment



Challenges and Initiatives for “Midterm Business Plan 2023”

The Plant Engineering Division will strengthen and enhance the efficiency of the domestic EPC business, in a continuation of measures implemented under the “Midterm Business Plan 2020,” as an organization that plays a key role in a fundamental part of the company's businesses.

[Future Initiatives]

- We aim to improve the efficiency of engineering by centralizing various types of information and data used in the EPC business value chain through the use of IT and AI.
- By actively introducing and utilizing cutting-edge engineering methods, we will further promote more rational, more sophisticated, and higher quality operations.

Our strengths and challenges in expanding plant engineering

Strengths

- Engineering capabilities utilizing differentiated products and technologies in the fields of machinery, electricity, and electromechanical fusion
 - Machinery: Ceramic Membrane Filtration Systems, ozone treatment systems, high-speed filtration, flow turbines, etc.
 - Electricity: Monitoring and control systems from small to large scale, environmentally friendly electrical equipment, etc.
 - Electromechanical fusion: Multi-layer fluidized incinerators, advanced wastewater treatment systems for sewage aeration tanks utilizing AI and ICT, etc.
- Ability to offer technologies that have solved customer challenges and diverse needs
 - Ability to propose efficient and effective technologies that integrate machinery and electric equipment, etc.
 - Ability to make proposals related to the integration and abolition of sewage treatment plants and treatment processes in accordance with regional characteristics, such as changes in water volume due to aging and population decline, etc.
- Extensive experience and track record in supplying machinery and electric equipment to many water treatment plants and sewage treatment plants

Challenges

- Promoting development in order to create value in a way that utilizes the information chain
- We will further strengthen our ability to offer solutions for a decarbonized society by strengthening our disaster response capabilities and developing energy-saving and energy-creating technologies.

Project Topics

Proposing a new system for the sustainable provision of safe and secure water

Development and launch of “CPCM,” compact and mobile water purification equipment

At domestic water utilities, issues such as aging facilities, lack of financial resources, and shortages of engineers are expected to become more apparent in the future. As they look to resolve these issues, the needs of water utilities are also diversifying, including promoting wider area management, downsizing, and disaster response measures.

In order to meet these needs and to provide safe and secure water in future, we have developed the “Container Package Ceramic Mobile (CPCM),” a compact packaged version of a Ceramic Membrane Filtration System, and have begun providing it on a lease basis.

Expected use cases for leased CPCM

- Rehabilitation of small-scale water treatment plants
- Temporary facilities when rehabilitating water treatment plants
- Downsizing of water treatment plants
- Extending service life at the time of consolidation and closure of water treatment plants and responding to changes in water volume
- Emergency water purification equipment for use in the event of a disaster

The Ceramic Membrane Filtration System is the company's proprietary technology that uses a unique ceramic membrane to remove turbidity, bacteria, cryptosporidium, and other protozoa from raw tap water, such as river water and well water. This purification equipment thus produces clear and safe water for tap water. CPCM is more compact and easier to move, relocate, and install, while retaining the characteristic ability of ceramic membrane to track fluctuations in water volume in a manner resistant to changes in turbidity. This service is provided on a lease basis, and we will offer it as a new system for enabling the sustainable use of safe water.

Water utilities formerly purchased water purification facilities, but by leasing them, they can use them when necessary and flatten out their budgets, while also enjoying such benefits as peace of mind because maintenance services are included in contracts.



Container Package Ceramic Membrane Filtration System



Operation is easy as it is fully automated

Possibility of increased use

METAWATER ceramic membranes are highly durable and can be used for 20 years or more. After delivery to a domestic water utility, the ceramic membrane itself can still be used even when the equipment is due for rehabilitation.

The METAWATER Group believes that the ability to move and relocate water purification facilities, which are part of the social infrastructure, by packaging them has the potential to act as a new scheme that contributes to achieving sustainable social infrastructure that transcends municipal and national boundaries, through the provision of this equipment at low prices to small-scale water utilities and emerging markets that are struggling with financial shortages after its use by water utilities for a certain period of time.

The METAWATER Group aims to continue to sustainably provide safe and secure water to all people through this service.

We will continue to offer reliable technologies and services that contribute to the stability and sustainability of water and environmental infrastructure.

“ The Service Solution Division is engaged in business activities that include inspection, repair, operation, and maintenance of mechanical and electric equipment of domestic water supply and sewage works facilities, as well as design, construction, operation, and maintenance of waste treatment facilities (bulk waste, incombustible waste, and recyclable waste). Given a domestic water and wastewater business facing degradation of facilities and equipment, high expectations are placed upon the utilization of the expertise and utilization of private companies as local governments are facing issues including financial squeezes and shortages of engineers and staff to operate and maintain facilities.

The Service Solution Division provides services through networks run by 34 operating bases across the country. As a company that is always stays close to our customers, we provide support in areas such as responding to emergencies, including breakdowns and other problems, and for consultation services related to the operation and maintenance of facilities and equipment.



Executive Officer
Executive General Manager,
Service Solution Division

Hiroyuki Nakano

Midterm Business Plan 2020

During the “Midterm Business Plan 2020,” the Service Solution Division performed well in terms of sales. Both machinery and electrical equipment achieved results in line with targets. In particular, the Resource & Environment Business Division posted record performance in FY2020 thanks to strong EPC volumes. In addition, we are developing a system for comprehensive operation management at the Head Office in response to the rapid increase in the number of facilities under operation and maintenance in recent years. We are also building a stable supply system for specialists capable of handling projects nationwide. Through these efforts, we will continue to operate our division as a stable foundational business of the company. The company has been promoting work style reforms in order to achieve a “safe and comfortable working environment” for all employees. However, if we look particularly at the way employees work on sites, we can see that there are still many challenges ahead. Going forward, we will continue to work on work style reforms at sites aimed at quality improvement, such as creating a system for constant communication within the division using ICT tools, and incorporating remote support for ensuring workers’ safety and from a technical perspective.



On-site inspection

SDGs being promoted



Contributing to generating and supplying safe and clean water by maintaining the functions of clean water treatment equipment and devices



Contributing to stable operations by maintaining the functions of sewage treatment equipment and devices (maintenance of discharged water quality)



Supporting innovations and energy-saving maintenance operations by offering new technologies and new services, such as automated unmanned operation



Services for WBC-based and SaaS-type operations (providing software and software operating system environment through a network)



Design and operation of waste treatment facilities with functions attached which enable local residents to address the importance of reducing and recycling waste, and supporting their education and encouragement



Reinforcing the service solution business through partnerships with local companies



Challenges and Initiatives for “Midterm Business Plan 2023”

Under the “Midterm Business Plan 2023,” we will aim to further expand new businesses through methods including utilizing ICT tools and expanding Water Business Cloud (WBC) sales, in addition to stable growth through continued orders for existing facilities.

In addition, we will continue to actively promote the strengthening of partnerships with local governments and regional companies through proposals for projects aimed at improving core facilities by extending the life of aging waste treatment facilities instead of closing them, etc.

In addition, even under the influence of COVID-19, which has been ongoing since FY2020, it is important that we maintain water supply and sewage facilities, waste treatment facilities, and other infrastructure, and we must continue to implement maintenance inspections and repairs to ensure the stable operation and maintenance of facilities. From the viewpoint of measures to prevent the spread of COVID-19, even as compliance with various regulations and restrictions is required, the METAWATER Group will make efforts to play an important role in maintaining social infrastructure by taking advantage of its strengths, such as community-based services centered on business sites and the WBC.

Our strengths and challenges in expanding service solution

Strengths

- Utilizing our expertise and experience in maintenance and inspection, repair, and fault handling of machinery and electrical equipment that we have cultivated over many years in the water and wastewater sector, we will respond to a variety of issues by providing community-based services tailored to our customers.

Challenges

- Recruitment of business-ready human resources and strengthening the development of young human resources
- Utilization of ICT tools to ensure workers' safety and provide remote technical support, promotion of work style reform for employees working in the field, and achievement of a balance between working conditions and motivation
- Further strengthening support and recovery between local communities and branch operators in the event of disasters, weather fluctuations, and other emergencies in recent years

Project Topics

Emergency restoration and repair of Taira Water Treatment Plant related to disaster recovery

Resumption of water supply within nine days of disaster and full-scale restoration in about three months

On October 12, 2019, heavy rain caused by Typhoon Hagibis flooded the Taira Water Treatment Plant (treatment capacity: 62,340 m³/day; water supply population: approximately 100,000), a core water treatment plant in Iwaki City, Fukushima Prefecture, causing approximately 45,000 households in Iwaki City to lose their water supply.

On the day after the disaster, METAWATER employees went to the site and started an investigation aimed at restoration. At the same time, we established an in-house backup system on a company-wide scale and resumed water supply nine days after the disaster as a primary response. We achieved full recovery in a short period of about three months.

Outline of emergency restoration and repair of Taira Water Treatment Plant related to disaster recovery

Project name : Emergency restoration and repair of the Taira Water Treatment Plant related to disaster recovery (power receiving and transforming, and instrumentation equipment)
Project period : October 2019 to March 2020
Address : 53 Teramae, Taira Shimohirakubo, Iwaki City, Fukushima

On the day after the disaster, employees went to the site and started the primary response

There were two steps to restore water supply as quickly as possible. The primary response was to determine which equipment in the water treatment plant was submerged and which was not, and to restart the water supply using the equipment available. Team members who arrived at the site from the second day after the disaster checked more than 250 items of equipment and performed repairs by combining the available equipment. As a result of the primary response that enabled us to quickly and accurately assess the situation at the site, we were able to supply tap water in nine days, which was originally expected to take one month.

The entire company worked together to achieve early and complete recovery

After our primary response, we proceeded with full-scale restoration as the next step. It was necessary to combine old and new equipment with different specifications, such as the manufacturer, size, and connection method, and trial and error was required. Amid the complicated mix of construction workers and machinery from different manufacturers, our comprehensive capabilities proved essential for identifying both machinery and electric equipment, and quickly carrying out all restoration work, from plant engineering to after-sales services. In response to this difficult work, METAWATER made concerted efforts throughout the company as a whole, ranging from sales to procurement, engineering, design, and services. As a result, on January 24, 2020, approximately three months after the disaster, we completed the replacement of all submerged devices, and the Taira Water Treatment Plant was quickly and completely restored.



Submerged Taira Water Treatment Plant immediately after the disaster



Inside of submerged dry well

Restoration work



Inspecting all switchboards and checking available equipment



Restoration work while drying a submerged electric room with fans

METAWATER will accelerate the localization of our business and contribute to solving the world's water environment problems.

“ The International Business Division will expand its business by focusing on North America and Europe, where environmental regulations are becoming stricter, and Asia and other countries around the world, where market expansion is expected due to the increasing penetration of water and sewage systems. We will also accelerate the localization of our business in each region. The environment surrounding the global water business is changing at a remarkable pace, and as customer demand becomes increasingly diverse, locally produced water resources for local consumption are becoming more important than ever. METAWATER Group will continue to strengthen cooperation with partner companies and deliver products and technologies optimized to meet local demand and environmental changes, aiming to become a dependable presence in each region.



Executive Officer
Executive General Manager of
International Business Division
Ken Akikawa

Midterm Business Plan 2020

- In North America, Aqua Aerobic Systems, Inc. (AAS) had a strong presence with its differentiated technologies, cross-media filters, aerobic granule sewage treatment technology (AquaNereda®), etc., and secured stable revenue. In addition, we have been progressively promoting our proprietary water treatment technologies, such as ozone generation systems and ceramic membrane filtration systems, through AAS. Furthermore, Wigen Companies, Inc., which joined our group in April 2020, enables us to handle more advanced water treatment processes using membrane filtration technologies such as reverse osmosis and ion exchange technologies. We will continue to strengthen our presence in the potable water reuse market, particularly in the southwestern United States, and expand our activities in prospective markets such as new demand in the water and wastewater sector and private sector.
- In Europe, we strengthened our business foundation by acquiring all shares of Rood Wit Blauw Holding B.V. in the Netherlands in November 2020. Together with group companies Mecana in Switzerland, FUCHS in Germany, and

PWNT in the Netherlands, with which we have a strategic alliance, we will promote business expansion in the European region by fully utilizing the resources of each company.

- In Asia, we delivered the first unit of a new sewage treatment system for developing countries, the Pre-treated Trickling filter system (PTF system), to Hoi An City in Vietnam. And we will continue to focus on developing our proprietary technologies suited to local needs. In addition, we will utilize our representative offices in Hanoi, Phnom Penh, and Singapore to enhance the efficiency of our market analysis from a local viewpoint in order to steadily expand water environment business in the growing market of Asia.
- In addition, we sold a total of 25 units of mobile ceramic membrane filtration equipment to countries in Africa and Southeast Asia to improve access to safe water and to provide emergency measures in the event of natural disasters such as floods and droughts.

SDGs being promoted



Sale of sewage treatment systems, potable water reuse systems, and water purification systems in North America



Development of ceramic membrane filtration technology in cooperation with overseas companies



Implementing Advanced Energy Saving Wastewater Treatment Systems in Asia



Expanding sales of Mobile Ceramic Membrane Filtration Equipment



Creating jobs and providing education through local companies, representative offices, and projects in local areas



Challenges and Initiatives for “Midterm Business Plan 2023”

With the threat of the spread of the new coronavirus still unsettled, it is more important than ever to accelerate localization in order to strengthen and expand our international business. We will continue to seek new partners in various regions, engage in dialogues with customers around the world, and create new value by sincerely addressing new water environment issues faced by each region, utilizing the collective strengths of the METAWATER Group. METAWATER will continue to contribute to the realization of a sustainable society by quickly detecting changes in the world's ever-changing water environment and continuing to provide solutions.

Our strengths and challenges in expanding international business

Strengths

- Experience and achievements in the Japanese water and wastewater treatment market over many years, as well as proprietary technologies such as ceramic membrane filtration and ozone generation system developed and sophisticated in Japan
- The ability to make proposals and develop products based on the proprietary technologies in response to changes in laws and regulations and the external environment in each country.
- Localized group subsidiaries with a proven performance and a high level of trust from the business sector in their respective countries.

Challenges

- In addition to the current business areas centered on Europe, North America, and Asia, expanding into other areas will further contribute to global environmental conservation.
- In the ever-changing global water environment market, consider participation in the running of water and wastewater management businesses outside Japan from a medium- to long-term perspective.

Project Topics

Accelerating Localization of Businesses with M&A Activities

Rood Wit Blauw Holding B.V.



Rood Wit Blauw Holding B.V. (RWB) provides various types of water treatment systems throughout Europe, including the Netherlands, Germany, Belgium, Norway, Sweden, the United Kingdom, and Spain. RWB is an engineering company that is particularly well experienced in METAWATER's technologies, having delivered ceramic membrane filtration systems to more than 10 locations.

Rood Wit Blauw Holding B.V.

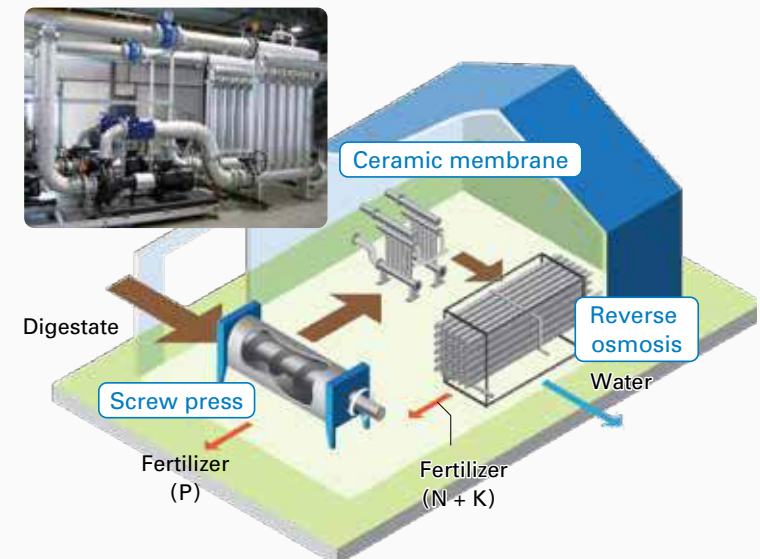
Location : Almelo, the Netherlands
(near the German border at the eastern end of the Netherlands)
Establishment : November 2001
Director and Chairman : Ken Akikawa
President and CEO : André Reigersman
Main Business Activities :
Engineering, services, etc. related to water and wastewater treatment



New Applications of Ceramic Membrane engineered by RWB

Digestate treatment

Biomass plants use livestock manure and organic waste to generate electricity. During this process a waste stream, called digestate, is produced. To reduce the environmental impact, RWB engineered a solution to treat this digested stream. The treatment process does contain 3 major steps: separating the digestate with a screw press, removing solids out of the liquid fraction via ceramic membrane filtration and extract all valuable fertilizers (N and K) through reverse osmosis.



We will address issues related to the sustainability of water and wastewater businesses and contribute to solutions.

“ It is becoming increasingly important to prepare for and respond to the increase in localized rainfall and other natural disasters, as well as any accompanying damage. In addition, the environment surrounding water has been changing rapidly in recent years, including the roles of self-help, mutual assistance, and public assistance being reconsidered owing to a shortage of public funds caused by population decline. Many private companies have been involved in the development of domestic water and wastewater businesses, but now private companies must also address the difficult circumstances directly faced by the industry. In order to overcome this situation, the government has made it clear that it will promote Public-Private Partnership (PPP) projects through various legislative measures. PPP projects are widely used across Japan, not just in the water sector. Additionally, opportunities for collaboration, such as joint projects with companies in other industries, are also increasing.



Senior Executive Officer
Executive General Manager,
Public Private Partnership Division

Masashi Sakai

Midterm Business Plan 2020

In the “Midterm Business Plan 2020,” the Public Private Partnership Division achieved results generally in line with targets.

In terms of expanding the scope of our business, in 2020, METAWATER received a new commission in the Kyushu area for the “Kumamoto Ariake/Yatsushiro industrial waterworks operation project,” Japan’s first concession project for industrial water supply. In the same Kumamoto Prefecture area, we succeeded in maintaining a commission for the “Arao City waterworks business (Stage 2).” Our aim is to create economies of scale by winning contracts for management and operation from water intake to faucets over a wide area, and combining this with the development and operation of the “Ariake Water Treatment Plant” (Omura (Fukuoka) and Arao (Kumamoto) Joint Water Treatment Plant), which we received a commission for as a Design, Build and Operate (DBO) project.

In terms of existing projects, we are participating in seven DBO projects, as well as comprehensive consignment operations for water supply businesses in Nakatsugawa City and Gero City, both in Gifu Prefecture. METAWATER is evolving into a company that offers total solutions, as the scope of operations that we

manage expands, including our support for business operations such as management and planning, which were overseen by local governments and businesses, as well as our involvement in managing the collection systems of water and sewage works. As the scope of our operations expands, we are accelerating efforts to deepen asset management and develop business continuity methods for use in the event of disaster. These efforts will contribute to the expansion of our businesses.



Disaster response training
conducted in the Kyushu region



Implemented by combining
online and real participation

SDGs being promoted



Activities ranging from design and construction to operation and maintenance of water treatment plants, including mechanical and electric equipment.



We propose appropriate solutions tailored to local government issues, such as the transfer of technology and financial deterioration in the water and sewage business. A number of our unique value-added services for PPP projects are also proposed.



Execution of a Business Continuity Plan (BCP) in the event of a natural disaster such as water supply activities following the Kumamoto Earthquakes in April 2016.



Challenges and Initiatives for “Midterm Business Plan 2023”

By monitoring and supporting commissioned projects remotely while taking a broad view of the entire project, we will identify common issues for each project and achieve savings in labor and streamlined operations, as well as greater management efficiency. In addition, we will optimize life-cycle costs by establishing methods for physical asset management and promote innovation in operational management, while also generating the benefit of ensuring business sustainability for customers and simultaneously improving the profitability of the company's businesses. We also utilize operational expertise we have accumulated in previous projects when forming business proposals (planning work) for other projects, enabling us to strengthen competitiveness, secure appropriate gross profit, and ensure stable operation after receiving commissions. METAWATER will actively work to meet the increasingly diversified needs of customers through in-house development and alliances, including responding to collection system operations that go beyond the scope of the company's existing operations, as well as wider area management and joint projects, streamlining through integrated management with other businesses, and collaboration with local companies.

Our strengths and challenges in expanding PPP business

Strengths

- Industry leader in terms of number of PPP projects participated in and track record of long-term operation (continued for approximately 20 years)
- Identification of risks in detail and establishment of risk hedging techniques
- Establishment of a high-speed recovery system using WOODAP
- Progress made in establishing a PDCA cycle in which expertise on matters such as the “planning of improvement measures,” based on consultations with customers after “identifying areas for improvement” in commissioned projects, is reflected in “project proposals” for other projects

Challenges

- Continual development of human resources for PPP projects, which require different skills to other fields
- Securing local human resources and the building of networks to expand businesses rooted in local communities
- Strengthening of systems to provide smooth support to sites in the event of emergency
- Establishment of on-site systems that are sustainable even during the COVID-19 pandemic

Project Topics

Japan's first concession project for industrial water supply

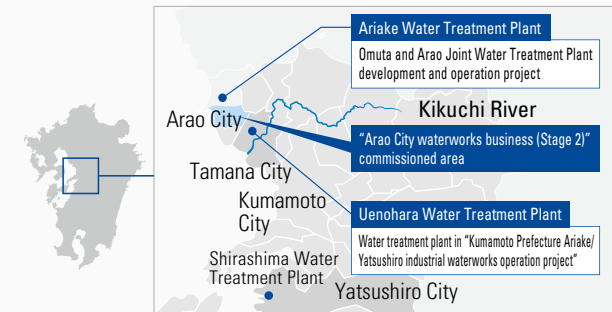
Launched “Kumamoto Prefecture Ariake/Yatsushiro industrial waterworks operation project”

We began this project in April 2021 as the first industrial waterworks business in Japan to be operated under the public facility management concession system.

Business operations from water intake to water supply for the Ariake Industrial Water Supply Service and the Yatsushiro Industrial Water Supply Service operated by the Kumamoto Prefectural Government's Public Enterprises Bureau are to be implemented collectively as a concession by a special purpose company (SPC) represented by METAWATER.

Outline of Kumamoto Prefecture Ariake/Yatsushiro industrial waterworks operation project

Project method: Public facility management concession system
Projects covered: Ariake Industrial Water Supply Service and Yatsushiro Industrial Water Supply Service
Project period: April 1, 2021 to March 31, 2041 (20-year period)
Project operator: Water Circle Kumamoto Corporation



Commencement ceremony

We aim to stabilize the quality of service and create economies of scale through collaboration among commissioned projects, including producing tap water (Ariake Water Treatment Plant) using industrial water (Uenohara Water Treatment Plant) as the raw water.

Comprehensive outsourcing to the private sector in order to maintain and improve water services

“Arao City waterworks business (Stage 2)”

The METAWATER Group has been entrusted with “Stage 1” of this project since 2016, and has engaged in operations including customer support, the operation and maintenance (O&M) of waterworks facilities, waterworks facility construction, and crisis management based on BCM.*1 In Stage 2, the scope of performance standardization*2 was expanded compared with Stage 1. We will utilize the main initiatives and results of Stage 1 to continue contributing to the operation of waterworks in Arao City as a business with roots in the local community.

Overview of Arao City waterworks business (Stage 2)

Project period: April 1, 2021 to March 31, 2026
Business operations covered:
(1) Administrative and planning support; (2) Management support; (3) Sales;
(4) Design and construction; (5) Maintenance and inspection; (6) Crisis management



Counter services in Arao City

*1 BCM: BCM (Business Continuity Management) refers to management aimed at ensuring comprehensive business continuity, including continuous improvement activities such as the formulation, introduction, operation, and review of BCPs (Business Continuity Plans) related to the continuity of corporate businesses in the event of emergency.

*2 Performance standardization: A shift from conventional “specification orders” (a system in which the contractee clearly specifies the details of the order, the implementation method, etc.) to a system in which the required standards to be achieved are clarified while the processes and methods are left to operators.

Sustainable business model

As the number of comprehensive and wide-ranging business projects increases, METAWATER is implementing its own measures to build sustainable business models in various regions

1 To stably supply safer and better quality water. Completed water treatment plant that reflects METAWATER's original concept of "WOODAP"

Aoki Water Treatment Plant/DBO Project, Mitsuke City, Niigata Prefecture

A new water treatment plant in Mitsuke City, Niigata, for which a group of companies represented by METAWATER was commissioned under the "Aoki Water Treatment Plant Rehabilitation Project," was completed and started operation in March 2021. In this project, the METAWATER Group has been comprehensively entrusted with the full rehabilitation of the Aoki Water Treatment Plant, which is a core water treatment plant in Mitsuke City, and with its operation and maintenance after completion. When rehabilitating the Aoki Water Treatment Plant, we launched a full-scale rehabilitation project in response to the aging of the old facility and the recent rise in raw water turbidity. It was also necessary to construct a new water treatment plant in a limited space adjacent to the old one. The ceramic membrane filtration method was adopted as the optimum treatment method for the conditions, because it has excellent space-saving qualities, is easy to manage and operate, and allows for stable operation even when the turbidity of raw water fluctuates. "Mitsuke Water Frontier Co., Ltd.," a special-purpose company



Ceramic Membrane Filtration System



Approximately half the number of filtrate tank sampling pumps installed compared with traditional methods, thanks to WOODAP

represented by METAWATER, is in charge of the operation and maintenance of the new water treatment plant. Because the METAWATER Group is involved in a comprehensive range of activities from design and construction to management and operation, we have also introduced METAWATER's unique "WOODAP" philosophy.

Advantages of Aoki Water Treatment Plant

At the Aoki Water Treatment Plant, we aimed to construct a facility that is easy to manage for on-site operation and maintenance personnel and easy to restore in the event of an unforeseen situation.

- The water treatment plant uses a large number of pumps, but by arranging the different types of pump as much as possible, we have improved the efficiency of operation and maintenance, and made quick restoration possible by swapping parts between pumps in the event of an emergency. This also helped to limit construction costs by reducing the number of spare machines installed.
- Introduction of Water Business Cloud (WBC) offered by METAWATER. We have created a system that enables on-site operation and maintenance staff and those involved in design and construction to identify the status of equipment, and share information and respond immediately in the event of an emergency.
- Designed based on the concept of WOODAP, a unique METAWATER method. By collecting the wisdom of many people involved in operation and maintenance, including people from local companies, we were able to reduce the amount of equipment and materials used, making this facility even more conducive to reducing environmental impact.

Exterior of Aoki Water Treatment Plant



Outline of Aoki Water Treatment Plant Rehabilitation Project

Operator: METAWATER Group

Participating companies:

METAWATER Co., Ltd. (representative company)
Chuo Sekkei Engineering Co., Ltd. (design)
KAJIMA CORPORATION (civil engineering and construction)
METAWATER SERVICE Co., Ltd. (operation and maintenance)
Ryokusui-Kogyo Corporation (operation and maintenance)
JESK HORIUCHI CO., LTD. (operation and maintenance)

Project period:

[Design and construction period]
September 9, 2016 - March 31, 2021 (4 years and 8 months)

[Operation and maintenance period]
April 1, 2021 - March 31, 2041 (20 years)

Project method: DBO method (Design, Build and Operate)

Facility outline: [Planned maximum daily water supply] 23,000m³/day
[Water treatment method] ceramic membrane filtration method



The METAWATER Group, local companies, etc. will perform operation and maintenance.

A large variety of different types of knowledge was successfully reflected in the design of the facility thanks to the "circle of wisdom" created by the related parties.

2 Expanding the introduction of systems for preventing the spread of fires at recycling facilities

Tobu Clean Center large waste treatment facility in Gifu City, Gifu Prefecture

There is no end to fires and explosions caused by collected garbage at domestic solid waste recycling and treatment facilities. However, the main cause of fires is believed to have changed from spray cans and lighters, as was once the case, to lithium-ion batteries (LIBs). LIBs are small in size and come in a wide variety of different types, and are also contained in various products. For these reasons, there is a limit to how much they can be sorted and removed through collection, manual sorting, etc. In addition, LIBs that remains among waste during the treatment process may become hot or ignite as a result of impact from high-speed rotary crushers and other equipment. In this way, LIBs have become a source of fire, and there are an increasing number of cases of fires spreading to surrounding combustible waste, and resulting in damage to equipment and fires at facilities. In addition, the most important measures to prevent the spread of fire are the early detection of fire sources by fire and heat detectors, and the sprinkling of water to extinguish fires. However, there are cases where LIB fires cannot be extinguished effectively even if the source of the fire is detected.

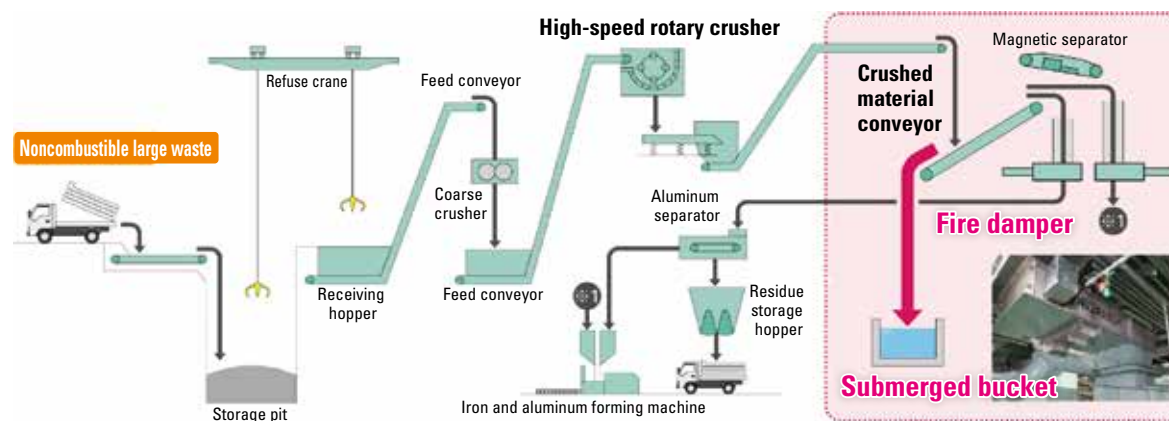
In response, the company acquired a patented technology (Patent No. 6148910) that, upon discovery of a fire, closes the fire damper immediately after the conveyor and securely extinguishes the fire within a submerged chute. Four facilities utilizing this technology are already operating. We have also newly introduced a system that utilizes this technology at the "Gifu City Tobu Clean Center large waste treatment facility," which began service on March 28, 2021. A significant theme of this facility was the effective recovery of resources and the prevention of fires in the facility and the spread

of fires. As such, METAWATER planned fire dampers and submerged buckets (see diagram). In this system, fire dampers are installed in the chute section immediately after the crush conveyor in the rear stage of the high-speed rotary crusher to extinguish the fire by submergence. At the same time as the fire dampers and fire extinguishing sprinklers are activated, the crushed material conveyor is operated in reverse, and the crushed material, which may contain fire sources, is guided to a special submerged bucket, thereby ensuring fires are reliably extinguished. The fire damper is driven by an air cylinder and closes instantly to prevent fire from being

transported. Therefore, operation can be resumed in a short time after confirmation that the fire has been extinguished. The company also plans to introduce this technology at three projects currently under construction. In future, we will also propose this technology at planned facilities to ensure that recycling and treatment facilities are operated in a way that is safe, secure, and stable.



External view of
Gifu City Tobu Clean Center
large waste treatment facility



Flow diagram for Tobu Clean Center large waste treatment facility in Gifu City



METAWATER Group's ESG

Aiming at sustainable growth of corporate value

Major activities

Based on a vibrant corporate culture, the METAWATER Group believes that its responsibility is to remain a fair and sincere company as a good corporate citizen, contributing to the sustainable development of society and the global environment through its business activities.

To that end, we are working to solve social issues related to ESG (Environment/Social/Governance) by identifying the important issues from the perspective of the SDGs based on the expectations of our stakeholders and changes in social and business environments. In particular, we will reaffirm the importance of our mission as a water and environmental infrastructure company, and we will aim not just to reduce our environmental impact, but also set environmental KPIs in our businesses and visualize the results. We will strive to ensure that we earnestly do what is needed in order to contribute to the sustainable growth of society.

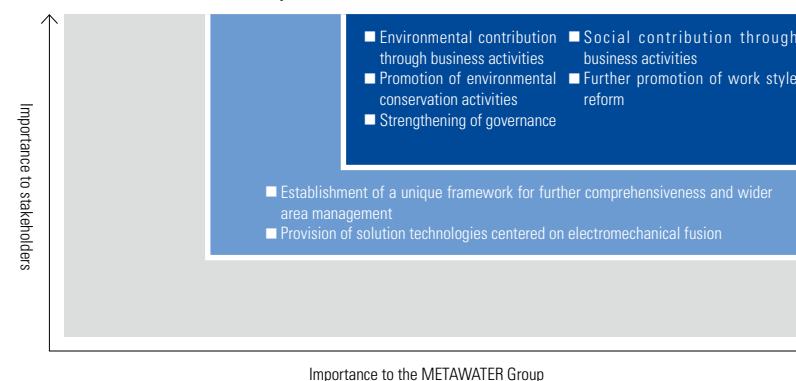


Identifying important issues (materialities) from the perspective of SDGs

We have positioned Goal 6 of the SDGs as our top-priority materiality, while also aiming to achieve Goal 11 through strategic promotion of Goal 17. Goal 6 of the SDGs is an essential materiality to maintain social activities, and for humans to live safely and with dignity. The METAWATER Group believes that achieving Goal 6 can lead to other issues being solved as well.



Prioritization of important issues



METAWATER Group's ESG activities

	Important themes	METAWATER's major initiatives
E Environment → P.33	Natural resources	<div>Water-supply area</div> <ul style="list-style-type: none"> Ceramic Membrane Filtration System reduces waste and saves energy
	Climate change	<div>Sewage area</div> <ul style="list-style-type: none"> Water treatment systems reduce river and sea pollution in wet weather No. 1 market share for diffuser equipment, with significantly reduced power consumption <div>Waste recycling facility</div> <ul style="list-style-type: none"> Wastewater sludge fuel system that converts waste into fuel Recycling and treatment systems that contribute to highly efficient and safe recycling <div>Our offices</div> <ul style="list-style-type: none"> Promoting the reduction of paper use and office power consumption
S Social → P.39	"People are our greatest asset"	<ul style="list-style-type: none"> Expanding and promoting the use of satellite offices and promoting teleworking from the perspective of preventing the spread of COVID-19 Promoting work-style reforms, developing abilities to support individual employees, and promoting diversity
	Quality	<ul style="list-style-type: none"> Health and safety management from both a face-to-face and remote aspect, so that employees can work happily and enthusiastically
	Partnerships	<ul style="list-style-type: none"> Ensuring the quality of products and services provided Strengthening relationships with partner companies and promoting CSR procurement
	Social contribution	<ul style="list-style-type: none"> Community contribution and environmental conservation activities in cooperation with local governments, environmental awareness activities for the next generation of children, international support, and disaster recovery and reconstruction support Water source forest preservation and environmental conservation efforts
G Governance → P.49	Corporate Governance	<ul style="list-style-type: none"> Assuring management transparency
	Risk management	<ul style="list-style-type: none"> Forming Compliance Working Group and implementing compliance education Improving information security measures Strengthening Business Continuity Management (BCM) activities
	Compliance	<ul style="list-style-type: none"> Implementation of internal controls

ESG Topics

Round-table discussion on SDGs

Held an event to discuss SDGs with general participants

As a company with a key responsibility in terms of social infrastructure, the METAWATER Group aims to contribute to the sustainable development (sustainability) of society and the global environment.

As part of these efforts, in October 2020 (29th), we held an event at the Manseibashi Head Office in cooperation with "Newswitch" by the Nikkan Kogyo Shimbun (The Daily Industrial News), in which CSR and sustainability consultant Naomi Inoue was invited as a guest to discuss SDGs initiatives and ideas with ordinary business people and students.

The event centered mainly around dialogue, and the venue and remote sites received questions from approximately 60 participants in real time and saw an exchange of frank opinions. Although there were some harsh opinions such as "No one is left behind" is a challenging goal," based on the current situation in Sierra Leone (West Africa), many discussions were held, which in turn empowered the METAWATER Group to continue its activities focusing on SDGs.

In the future, we intend to continue to actively establish opportunities for exchanging opinions and SDG-related initiatives.



Contributing to the maintenance of water and environmental infrastructure through our businesses

The environment surrounding water changes day by day, and issues vary by country and region. In recent years, plastic waste has also become a major environmental problem.

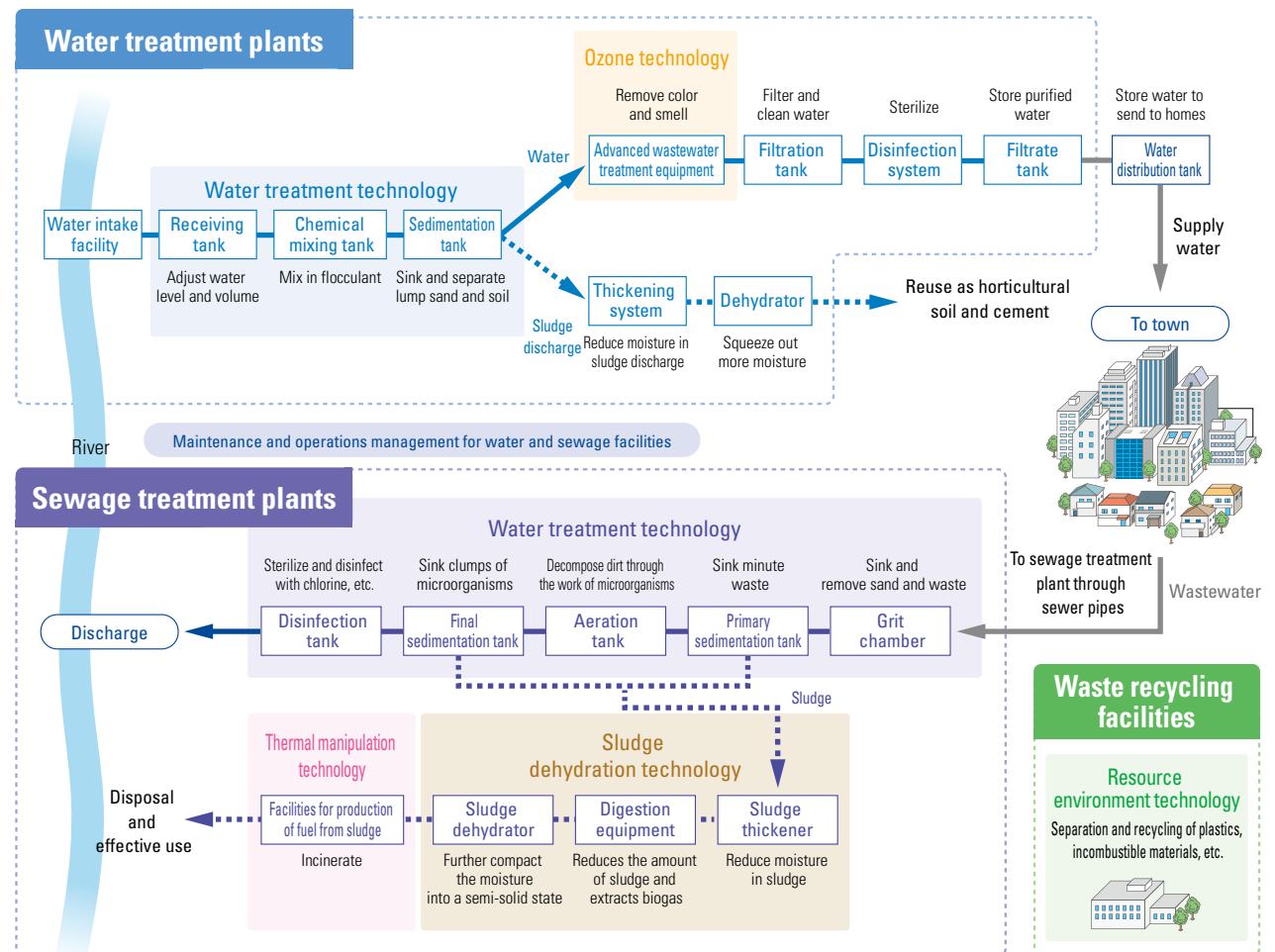
Since our founding by NGK INSULATORS, LTD. and Fuji Electric Co., Ltd., METAWATER has been involved in a variety of technological development activities as a company supporting water and environmental infrastructure for over 50 years. After the company was founded in 2008, inheriting the DNA of our two predecessors, changes in the natural environment, such as accelerated global warming, intensified climate change, and frequent storms and floods, have also continued to grow at an accelerated pace.

As a company that supports the sustainability of water and environmental infrastructure, METAWATER will continue to develop technologies that meet the demands of the times.

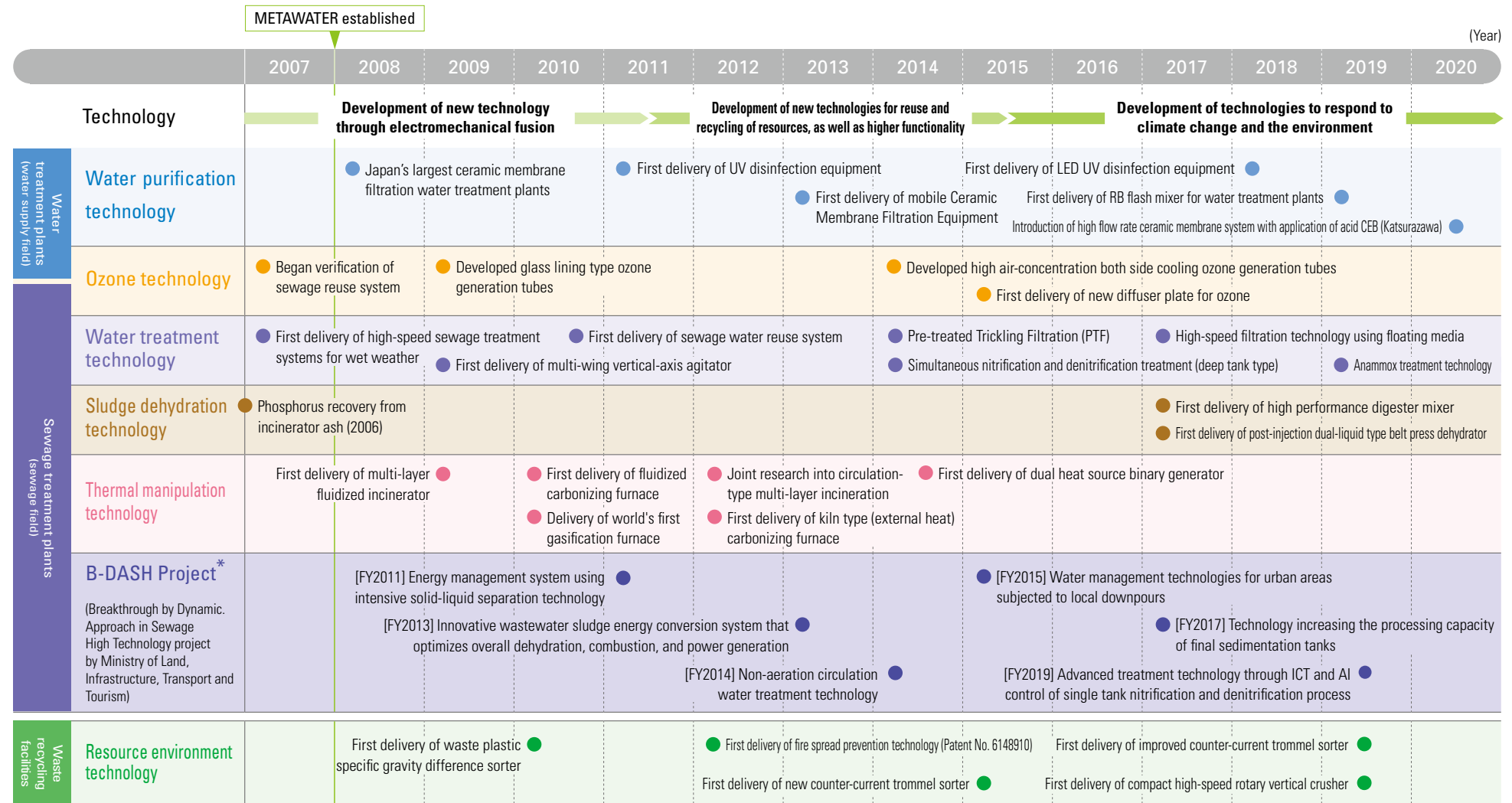


Experimental plant

Treatment processes and technologies for water treatment plants, sewage treatment plants, and waste recycling facilities



Changes in the development of new technology (2007 to 2020)



* B-DASH Project Abbreviation of Breakthrough by Dynamic Approach in Sewage High Technology Project. By accelerating research, development and commercialization of new technologies, efficiency of energy use and reduction of life cycle costs in the wastewater business are promoted. It is a demonstration project that has been implemented by MLIT since FY2011 to support overseas development of the water business. Consignees installed a full-scale plant in their sewage treatment plants and demonstrated cost reductions, reductions in greenhouse gas emissions, etc.

Main environmental technology

Water purification technology Safe water purification system effective even in the face of climate change

Ceramic Membrane Filtration System

Our Ceramic Membrane Filtration System boasts the No. 1 market share in Japan for water treatment plants utilizing membrane filtration systems. The risk of membrane breakage is extremely low, it can be installed in small spaces, and it can also remove protozoa, allowing for safe filtered water.

Thanks to its exceptionally long life, there is a minimal frequency of membrane replacement. In fact, the first unit of this system was delivered over 20 years ago, and it continues to operate to this day without having had the ceramic membrane replaced yet. Additionally, it is expected to be used as ceramic materials after use, leading to a significant reduction in waste.

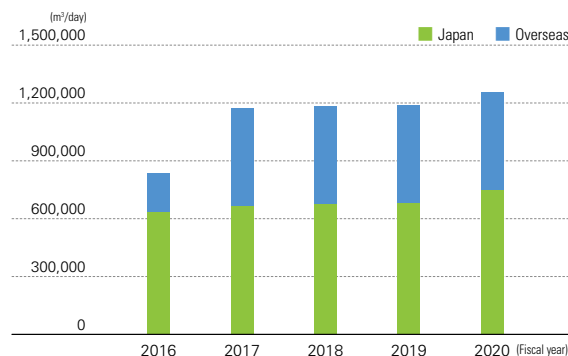
Finally, only a low amount of pressure is required to filter raw water, and filtration using differences in water level is possible as well, reducing the power needed by pumps, etc., and saving energy.



Ceramic membrane



<Delivery results> Volume of water processed (cumulative)



A mobile water treatment plant that is also active in times of disaster

Mobile Ceramic Membrane Filtration Equipment

This simplified Ceramic Membrane Filtration System, mounted on a truck, is easy to operate and maintain. Since it is mobile, it can be operated even in areas where there are no skilled engineers. In areas that do not yet have water piping laid, the truck can be moved to various water sources, such as lakes, rivers, and wells, allowing that water to be processed and used as safe drinking water.

Water transferred using piping requires a lot of energy, but since this system can move on its own, it contributes to a reduction in transportation energy.

The system can also be used in the event of a disaster such as an earthquake or heavy rain, thanks to the features of the ceramic membrane that enables stable filtration of even high turbidity raw water.



Mobile Ceramic Membrane Filtration Equipment

Water treatment technology

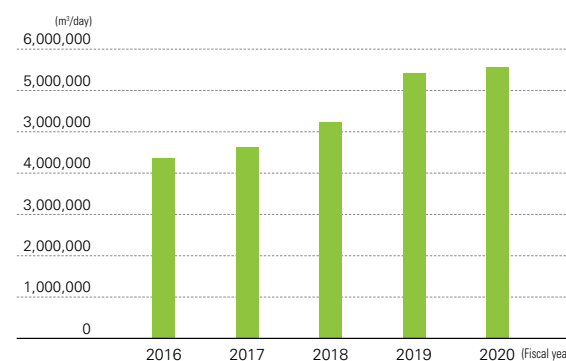
Water treatment systems that reduce river and sea pollution in wet weather

High speed CSO filtration system

Combined sewer systems discharge simply treated wastewater and untreated sewage into public waters such as rivers when it rains, which adversely affects the quality of water and public health. As such, with the 2004 amendment of the Sewerage Act enforcement order, measures to improve combined overflows are being promoted throughout the country. This includes the start of the "combined sewer system urgent improvement project", which has the aims of (1) reducing pollutant loads, (2) ensuring public health and safety, and (3) reducing refuse.

This system filters simply treated water and untreated sewage at high speeds using our uniquely developed special small filter, which is only about 7.5 mm. By installing it in the primary sedimentation tank of a sewage treatment plant or relay lift station, it can filter out floatable solids and pollutants such as oil balls and plastics at a rate of up to 1,000 m/day. Additionally, existing primary sedimentation tanks can be remodeled and set. Since it is easy to operate and maintain, it has been adopted as one measure for improving combined overflow in Japan, contributing to environmental conservation measures regarding public water areas.

<Delivery results> Design treated water volum (cumulative)



Water treatment technology

System with the No. 1 market share, featuring significantly reduced power consumption

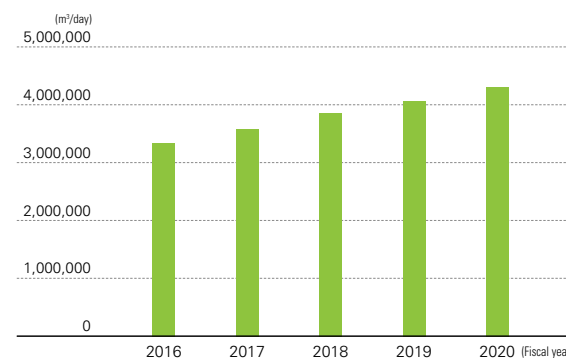
High integration configuration air diffusion system

The sewer system collecting and treating domestic wastewater uses 0.7% of Japan's total electricity consumption (equivalent to the annual electricity consumption of 2.11 million households). Approximately 50% of this is electricity used to treat sewage inside wastewater treatment plants. When treating wastewater, microorganisms decompose the pollutants in the sewage, and the microorganisms then sink together with the fine impurities to remove the pollutants. A large amount of air needs to be blown (diffused) into the wastewater in order to activate the microorganisms.

METAWATER has developed a system capable of diffusing ultra-fine air by applying ceramic technology, achieving a high oxygen transfer efficiency. In addition, by reducing the pressure loss when air is blown, the amount of power required can be reduced by about 30% compared to the conventional system.

The system is maintenance-free and has long-lasting performance, earning it the No. 1 market share in Japan.

<Delivery results> Target water volume (cumulative)



Main environmental technology

Thermal manipulation technology

Thermal manipulation technology that converts waste into fuel

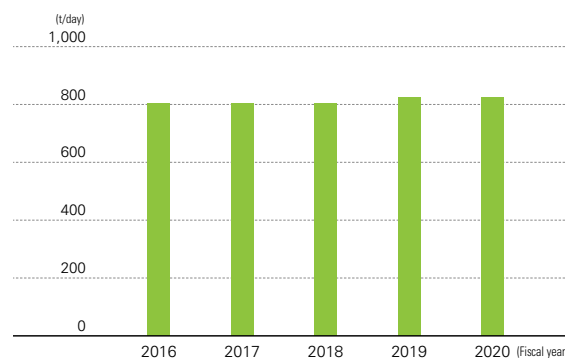
Wastewater sludge fuel system

As a general rule, sewage sludge in urban areas is dehydrated to reduce the amount of moisture present and then incinerated. The ash generated from the incineration is effectively used as a raw material for cement, etc.

METAWATER's "wastewater sludge fuel system" is a technology that produces fuel (carbon) by steaming and incinerating sewage sludge. The fuel produced is valuable and can be sold, and is effectively used as an alternative fuel source to coal in thermal power plants, etc.

There are high expectations for wastewater sludge fuel to be a new effective use of sewage sludge.

<Delivery results> Treated capacity (cumulative)



Wastewater sludge fuel

Resource environment technology

Improved plastic sorting efficiency and accuracy

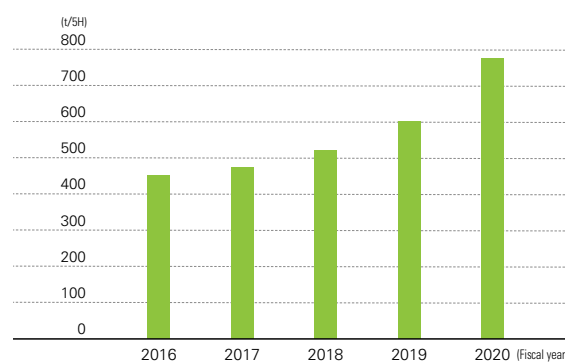
Domestic waste recycling system

The amount of waste plastics generated in Japan is said to be over 9 million tons a year, accounting for approx. 2% of all waste. Waste plastics are subject to import restrictions by countries such as China, and marine pollution, etc., caused by microplastics has attracted attention as a major social and environmental problem. In addition to reducing emissions, the importance of recycling resources is also becoming more important. However, in order to recycle waste plastics, in addition to the manual removal of refuse required, lightweight items such as plastic bags, and heavy items such as detergent bottles, need to be separated.

For many years, the METAWATER Group has been developing equipment that improves efficiency and accuracy in manual sorting work by utilizing differences in specific gravity in order to improve the recycling rate of plastics.

Since the risk of explosions or fires caused by contamination of items such as spray cans and lithium batteries is increasing at crushing and sorting facilities, we are also contributing to facility safety through the development of a system that prevents the spread of fires (Patent No. 6148910 obtained June 2017), detecting and extinguishing them quickly in the event of an accident. As of FY2020, approximately 300 of our domestic waste recycling systems have been delivered.

<Delivery results> Treated capacity (cumulative)



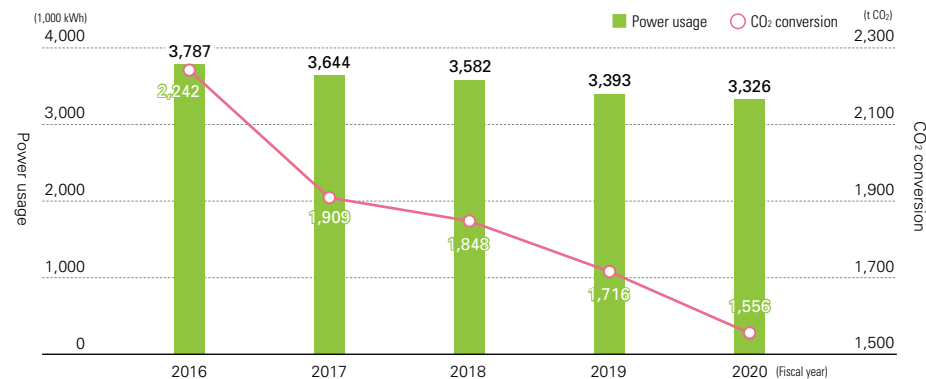
Activities for reducing environmental burdens

Promoting energy-saving measures

METAWATER has set a goal of “a 1% reduction compared to the previous year” with regard to office power consumption and is actively implementing office lighting reduction activities, etc. In particular, the Head Office and Western Japan Office have adopted “ABW (Activity-Based Working)”* to ensure efficient operations, thus contributing to power savings. In addition, we are implementing various initiatives to reduce electricity consumption, such as encouraging employees to leave work on time in conjunction with work style reforms (introduction of telecommuting, four-day workweek, etc.) and turning off PC monitors when employees step away from their desk in conjunction with information security measures. As a result, our electricity usage in FY2020 decreased by 2.0% compared to the previous year, and greenhouse gas emissions were also reduced by 9.3%.

* ABW(Activity Based Working): work styles that enable workers to freely choose the time and place they work according to job contents

Power usage (office)



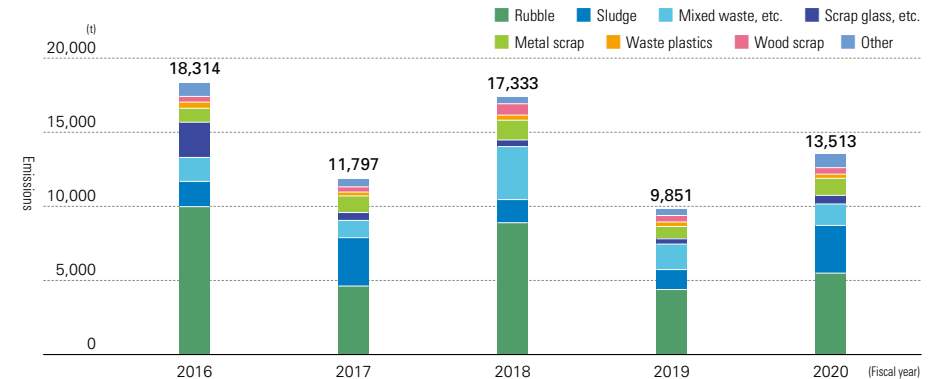
Promoting paperless work environment and purchasing eco-friendly items

Since FY2013, METAWATER has abolished the paper-based distribution of meeting materials at executive meetings, instead shifting to the use of tablets to view materials. This meeting format has already been adopted by other general meetings, and the entire company is promoting paperless meetings. Additionally, with regard to office supplies, we specified 12 items for green purchasing, and successfully increased the rate of green purchasing of those items to 94%. Nearly 100% of the paper we use internally is also certified by the Forest Stewardship Council.

Initiatives regarding industrial waste

Although the amount of industrial waste generated by our business activities (office and domestic construction work) varies each fiscal year depending on the type of construction work and the number of projects undertaken, a certain amount of waste is generated due to the nature of the business. To fulfill our responsibilities as a producer of waste, we are strengthening our management of industrial waste processing through ongoing departmental education, working to ensure that industrial waste is properly disposed of. In addition, in order to promote the reuse of the industrial waste that has been created, we outsource the disposal to industrial waste treatment companies that have recycling facilities. The recycling rate of the industrial waste that we primarily create, such as debris, sludge, and mixed waste, is 94.2%.

Changes in industrial waste emissions (by type <within Japan>)



Promoting the adoption of electronic manifests

By selecting companies that support electronic manifests, we are, as a producer of waste, making the status of industrial waste processing visible, and continually strengthening monitoring through an advance application for the use of a paper-based manifest. Depending on local conditions, in some cases we had to use a company only handling paper manifests. However, in FY2020, the adoption rate was 98.9%, a 1.6% increase from the previous year (nationwide adoption rate of electronic manifests: 65%). We will continue working to increase the adoption rate of electronic manifests while paying attention to local conditions.



Aiming to become the best company at which to work

“Work style reform” promoted by the METAWATER Group

Aiming to be the No. 1 company to work for, the METAWATER Group’s “work style reform” is an initiative that enables both the company and individuals to grow while responding to changes in social values and diversifying work styles. The METAWATER Group is developing a variety of work environments in order to enable a variety of work styles, as we move away from the traditional custom of working in the same place at the same time.

Continuous promotion of “work style reform” key to becoming the No. 1 company to work for

As a result of our efforts to date, our employees’ working attitudes and work styles have changed greatly, including the way they approach their work, communication, meeting styles, and how they use their time.

The spread of COVID-19 has dramatically changed the working environment in society at large, but the basic policy of our company’s work style reform remains unchanged. In fact, we believe that this situation has led us to move in the direction targeted by our work style reforms at a faster pace than expected.

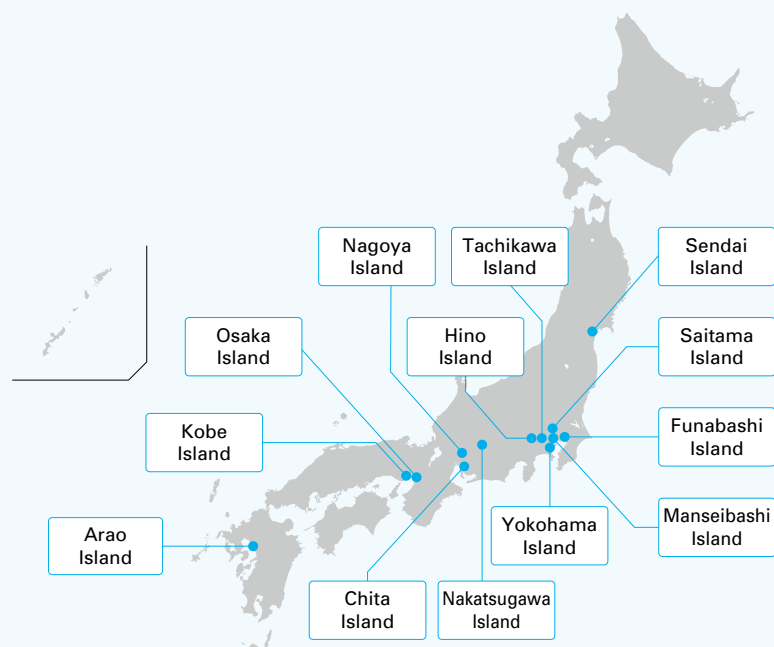
Even after COVID-19 recedes, we will not revert to old work styles, but will further accelerate this initiative in order to achieve a variety of work styles.

Work style reform is the cornerstone of corporate competitiveness

As a water and environmental infrastructure company, it is our belief that work style reform is indispensable for the sustainable growth of the Group, as we position human resources as the key to corporate competitiveness. In order to become a company full of active, diverse human resources, we are creating an environment and culture that enables more diverse work, and where each employee can find what work style reforms work best for them. In recognizing these various work styles, we are also working to reform awareness of mutual respect.

Reforming work styles and creating opportunities for a diverse range of human resources

The METAWATER Group has promoted a variety of measures to improve the working environment, including the “introduction of a telework system,” “establishment of a satellite office,” “introduction of four-day workweeks,” “revised office layouts based on ABW methods,” and “reduction prescribed working hours by 30 minutes,” as concrete measures to reform the way people work. Through these measures, the METAWATER Group is fostering a corporate culture that recognizes the increasing diversity of work styles. As a next step, in order to actually achieve the idea of “work styles not tied to any location” from the viewpoint of diversifying where our employees work, we began “enhancing our satellite offices in the Greater Tokyo Area” and “ending assignments away from family” in FY2020.



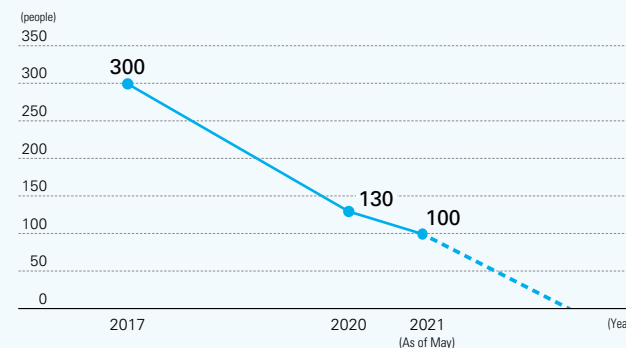
Establishment of teleworking

The METAWATER Group introduced a “teleworking system” in 2019. Since then, we have been developing the internal infrastructure for remote work, such as an online conferencing system and cloud computing, and distributing mobile tools to facilitate smooth remote access to the corporate network. As a result, almost all employees working at Head Office, sales offices, business sites, and other offices can use teleworking. This initiative has generated results, including telework utilization rates that exceed 70% in some divisions, as of June 2021.

Ending assignments away from family

The METAWATER Group has strongly promoted the use of teleworking as we aim to promote work styles that are not restricted by time and place, and from the perspective of preventing the spread of COVID-19. At the same time, we ended assignments away from the family, mainly among senior employees. As a result, by 2020, there were 130 people on assignments away from their families, compared with 300 in 2017. Additionally, in response to changes in people’s sense of values toward work, such as the increasing popularity of the idea of “work-life balance,” the METAWATER Group has been working to create a workplace environment where people can continue to work energetically while also spending more time with their families. As such, as of May 2021, we decreased the number of employees on assignments away from their families even further, to 100 people. Ultimately, we aim to have “zero employees on assignments away from their families,” and will continue to phase out assignments away from employees’ families.

Number of employees on assignments away from family



Initiatives for supporting individual achievement

People are the greatest asset of the METAWATER Group, and so the development of their skills is positioned as one of our most important management themes. This is because they are the greatest source of management resources and corporate value. In accordance with the HR philosophy of "supporting personnel who desire to develop themselves, providing them with opportunities to develop competency", we are creating a culture of self-learning, building an environment that respects employee individuality and allows them to effectively develop their abilities and potential autonomously.

Ability development system diagram

A variety of training programs are held with the aim of identifying roles and developing skills in accordance with employees' growth stages.

In addition to training by rank and nomination, we support the growth of each employee through elective training focused around the idea of autonomous and voluntary learning.

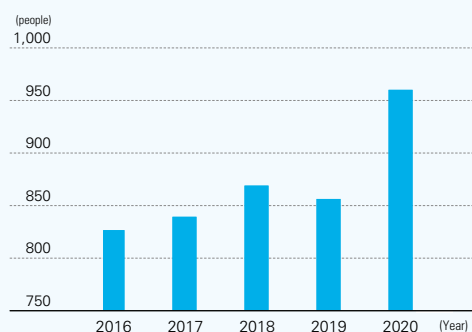
	By rank	Nomination	Optional	Specialized by job type	Workplace	By specialty
Officers	Officer training	Elective training	Internal/external group training / correspondence course	Individual WGs of Ability Development Committee	Implementation at each workplace / dispatch to external seminars	Various courses based on specialty
General Managers	General Manager training					
Managers	Manager training Promotional training					
Mid- to senior-level	BP/SP Promotional training					
Junior employees (2 to 3 years with the company)	Follow-up training					
New employees	New employee training					

Encouraging employees to participate in a wide range of training programs

METAWATER provides group training and online training, and is working to create an environment where employees actively participate in training, including providing a wide range of training programs.

For example, our "elective training" covers over 200 programs that employees can freely choose from and participate in. In FY2020, a total of approximately 960 employees participated across all training programs.

Number of employees receiving elective training



Enhancement of employee education and training expenses

Annual training expenses per METAWATER Group employee are approximately 60,000 yen, which is higher than the average among listed companies. We also offer multiple training programs for a wide range of employees, from new employees to managers. We will continue to provide training programs that contribute to the improvement of employees' abilities while further enhancing employee education and training expenses.

Budget for training expenses per employee
**Approx.
60,000 yen**

Follow-up training for mid-career employees

To ensure that mid-career employees firmly take root, we help them confirm and understand workplace conditions (individual counseling) and conduct compliance-related education necessary for our company employees (internal control, human rights awareness, information security, etc.). Individual counseling helps with mental care for mid-career employees, who can be prone to stress due to environmental changes.

Example follow-up training curriculum for mid-career employees

Content	Instructor
Orientation	Secretariat
Self-introduction	Individuals
Breaking the ice	Secretariat
Mental health courses and individual counseling	Counselor
Outline of employee invention regulations	Intellectual Property Department
CSR Course I (Internal Control, Social Contribution, ESG)	CSR Promotion Department
CSR Course II (Antimonopoly Act, National Public Service Ethics Act, Unfair Competition Prevention Act, Anti-gang Act, Political Funds Control Act)	Legal Department
Compliance Course I (Human Rights Awareness)	Personnel and Labor Department
Compliance Course II (Act on the Protection of Personal Information, Information Security)	IT Planning Department
Basics of our accounting system	Financial Planning Office

To be a company where everyone can work enthusiastically

We promote diversity based on the belief that the abilities of various employees with diverse personalities will lead to the growth of the Group. In addition to expanding the system to accommodate a variety of human resources, we are implementing measures such as creating rewarding environments where employees can improve their careers.

Promoting diverse work styles

The METAWATER Group is implementing a variety of measures to enable a variety of work styles.

In FY2020, we relaxed leave requirements, such as shortening prescribed working hours by 30 minutes (from 7 hours and 45 minutes to 7 hours and 15 minutes), granting annual paid leave by the hour, and raising the limit on accumulated leave (from 35 days to 100 days). In addition, we were an industry pioneer in introducing a four-day workweek. Along with the spread of COVID-19, we are also encouraging the active use of teleworking and satellite offices, and the frequency of use by employees has increased dramatically.

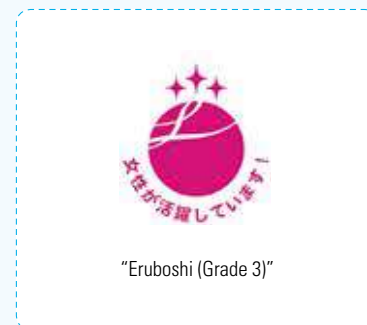
In addition, we have established systems to improve employees' life-work balance,* such as our childcare leave system and shortened working hours for employees raising children. Furthermore, we believe it is important to create an environment where all employees can work comfortably regardless of gender. As such, we are working to improve work clothes for women at work sites and develop dressing rooms and washrooms exclusively for women.

* We use the unique term "life-work balance" based on the belief that "having a fulfilling life leads to better work performance."

Supporting the active participation of female employees

The METAWATER Group has actively engaged in the recruitment of women, whether they are new graduates or mid-career employees. As a result, the percentage of women among new hires has more than doubled over the past five years and is steadily increasing.

Furthermore, in March 2020, the company was certified as a Grade 3 "Eruboshi company," the highest rank, in the Minister of Health, Labour and Welfare's certification system, which is given to companies undertaking outstanding efforts to promote women's participation. We will continue our efforts to create an environment in which female employees can play active roles.



Increasing the rate at which employees take maternity and childcare leave and the rate of returning to work

One of the results of our efforts to create a pleasant workplace for our employees is that the rate of employees taking maternity and childcare leave has been increasing year by year, and the rate of employees returning to work has reached 100%.

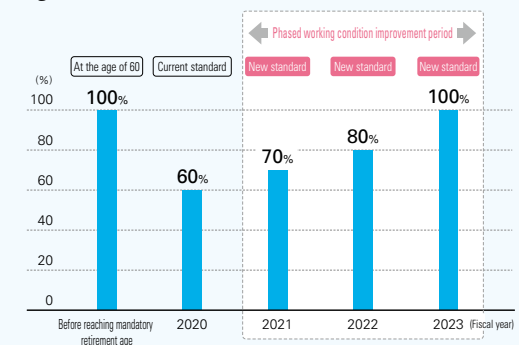
Many employees use the leave system multiple times, taking leave not once, but two or three times.

In addition, the number of male employees taking childcare is also increasing. By 2020, 17 male employees had taken childcare leave, with an average of 41.5 days taken and a maximum of 336 days taken.

Creating opportunities for senior employees to play an active role

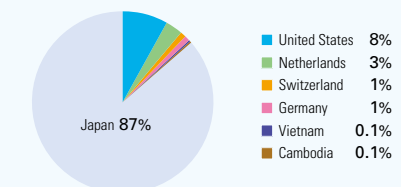
We will improve working conditions for employees aged 60 and older in a phased process over a three-year period beginning in FY2021, in order to create more opportunities for senior human resources, who will make up a significant proportion of our workforce in future. As one specific measure in this area, we have introduced a "super field supervisor system" with the aim of securing excellent on-site representatives, in the face of a shortage of supervising engineers, an issue that even the METAWATER Group is facing. We have also begun an initiative to provide General Manager-level working conditions for persons tasked with on-site supervision under this system.

Review of the working conditions for those aged 60 and older



Breakdown of increasingly diversified workforce

The METAWATER Group's ratio of employees by region is shown on the right. The results are due to an increase in the number of overseas group companies through M&A and other means.



Becoming a company where employees with disabilities can play an active role

One of our efforts to promote diversity is to create an environment where people with disabilities can play an active role. At the METAWATER Group, employees with disabilities are engaged in a wide range of activities, taking up responsibility for various tasks in numerous departments. Every morning, instructors (vocational life instructors for persons with disabilities) check the health of each member at the morning meeting and during exercise periods, and deciding upon their work assignments for the day while taking their condition into consideration.

The recent work converting internal documents to PDFs has contributed to the promotion of telecommuting, one of our work style reforms. Positive feedback results in expanded requests for work and more opportunities for active participation in the company.

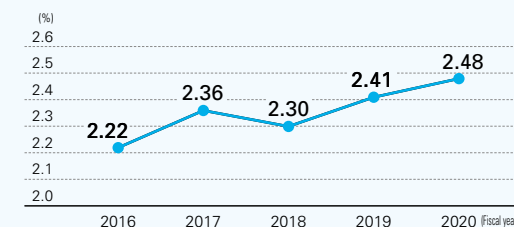
Common internal work

Creating business cards for employees; sorting, collecting, and distributing internal mail; preparing meeting and training rooms; lending out projectors and other equipment; managing and sending out company-wide catalogs; etc.

Department work

Converting internal documents to PDFs; organizing and filing expense slips; aggregating and digitizing handwritten questionnaires; creating various materials; sending out purchase orders; etc.

Ratio of employees with disabilities



Initiatives for promoting better health

We believe that people are our greatest asset, and as such the METAWATER Group has established various support systems for the mental and physical health of employees and their families. It is our belief that promoting the good health of each employee leads to improvements in corporate vitality, and so we will continue promoting health management.

Health management system

The METAWATER Group has established health management centers at our head office, as well as in Nagoya, Osaka, and other offices. This allows professional physicians, psychological counselors, and dedicated health management staff to follow up with employees promptly and whenever it is needed. We conduct individual interviews and give health-related guidance throughout the year so that employees themselves can maintain and improve their health.

Mental health care

In order to prevent mental health issues from arising, we have e-learning classes such as “line care education” for employees in management positions and “self-care education” for all employees. Our work-style reforms also include working to reduce commuting stress and improve “life-work balance”*. We will continue to promote various mental health care initiatives in conjunction with our work-style reforms.

* We use the unique term “life-work balance” based on the belief that “having a fulfilling life leads to better work performance.”

Improving health awareness

With the declining birthrate, aging population, and a shortage of labor, it will become more common in society to continue working regardless of age if there is an opportunity to play an active role, and health management from an early age will become more important than ever. The METAWATER Group carries out “health-care activities” and gives “health advice” with the aim of ensuring that employees can continue to work healthily and enthusiastically. In “health-care activities,” we planned and implemented various activities tailored to each employee’s job characteristics and situation, such as holding walking events in which individuals can participate, providing effective training information in a teleworking environment, and providing health education by age and job type. In addition, in normal years, “health advice” is provided by health management traveling around the country and talking one-on-one with employees. However, taking into consideration the spread of COVID-19 and associated behavioral restrictions, health management staff actively utilized remote consultations in FY2020 to promote health management and prevent physical and mental health problems. As a result, 600 employees used this service, approximately four times the number that use it in a normal year.



Safety and hygiene initiatives

The METAWATER Group strives to create a workplace environment where employees and all related parties can work safely, based on the philosophy, “No one will get injured or injure others.”

Promotion of safety at construction sites

The METAWATER Group is implementing a variety of initiatives with safety as the top priority.

■ Site operation based on coordination between the METAWATER Group and subcontractors

At construction sites, a construction policy meeting and construction review meeting are held to thoroughly examine safety measures and conduct risk assessment at the planning stage. In addition, when new workers enter the site, an awareness meeting is held, where actual workers take steps to ensure complete awareness of such measures. On the day before work starts, a pre-work foremen meeting is held, and on the day work starts, a morning meeting, lunch meeting, and danger prediction training are held. The work is broken down into a series of procedures, and the execution of the plan is confirmed, thereby ensuring that sites are safe.

METAWATER construction site occurrence of industrial accidents

	Frequency rate	Severity rate
Average for all industries (FY2019 actual)	1.95	0.09
METAWATER (FY2020 actual)	1.18	0.01

Frequency rate: Represents the frequency of accidents (Number of deaths and injuries per million hours worked)
Severity rate: Represents the severity of accidents (Number of working days lost per million hours worked)

*Ministry of Health, Labour and Welfare figures

■ Establishment and operation of “Local occupational health and safety guidelines”

In addition to related laws and regulations, etc., we have also established original “Local occupational health and safety guidelines,” which fully incorporate the experience of the METAWATER Group. It is revised every year as a key safety resource for the METAWATER Group, and is used at sites.

■ Online participation in local safety management

From the viewpoint of preventing the spread of COVID-19, opportunities to visit sites are decreasing. The METAWATER Group promotes online inspections and conferences, and has put in place a system that enables business sites to participate in various on-site meetings, training sessions, etc. We have also begun providing video training on “Field health and safety guidelines.” As a result of these efforts, we have achieved even greater results than before, even amid the continued spread of COVID-19.



Local occupational health and safety guidelines (video version)

■ Evaluation and reconstruction of safety management systems by safety consultants

The METAWATER Group engages the services of external safety consultants. In addition to participating in site patrols and safety training, by having external safety consultants participate in the evaluation and reconstruction of safety systems from a third-party perspective, METAWATER is establishing and implementing cutting-edge safety systems as a facility management company.

■ Operation of licensing system

The METAWATER Group encourages the managers of subcontractors involved in construction to attend lectures held by the METAWATER Group and issues licenses to those who complete the lectures. In these courses, participants learn about the “local occupational health and safety guidelines,” as well as the content and method of preparation of relevant documents, etc., at METAWATER. Furthermore, this license must be renewed every three years and thus contributes to creating a safe workplace environment at sites by ensuring that participants always learn and practice the latest safety systems.



Number of “seminars for subcontractor construction supervisors” in 2020

Held at five venues in Tokyo, Osaka, Nagoya, Sendai, and Fukuoka
 54 participating companies, 147 participants, and 647 participants in total since 2018

Promoting safe driving management of vehicles for commercial use

Awarded a “Silver Prize” as an excellent safe driving business entity from the Japan Safe Driving Center

■ Operation of in-house driver’s license system

The METAWATER Group has established its own in-house driver’s license system for commercial vehicle drivers. This certification is based on the results of safe driving. In FY2020, 1,200 employees obtained the certification, which has helped promote safe driving.



Awarded a “Silver Prize” from the Japan Safe Driving Center for our excellent safe driving record

■ Implementation of special training from the driver’s perspective

At the METAWATER Group, detailed driving training is provided for driving managers (managers of divisions with drivers) as a form of specialized training. Furthermore, based on the content of this education, a system has been established in which the driving manager gives guidance to each driver in accordance with the actual conditions of various driving environments, such as day and night, urban areas, mountain roads, and highways.

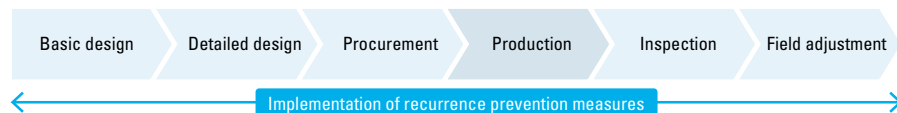
Quality initiatives

The METAWATER Group's basic quality policy is to ensure the optimal level of quality for customer satisfaction in all of its products and services, and we aim to continue to provide not only customer satisfaction but also inspiration.

Prevention of equipment accidents through "skill improvement activities to prevent equipment accidents"

In order to prevent and even eliminate serious accidents, the METAWATER Group implements (recurrence prevention measures), learning from past accidents at each stage of its business processes, and strives for continuous improvement.

■ Operation processes for plant construction



In the service department, we implement "skill improvement activities to prevent equipment accidents." These are voluntary bottom-up activities carried out by site staff. This helps to ensure that workers absorb practical skills based on a sense of conditions at sites that is unique to these voluntary activities.

Specifically, we are implementing unique activities such as "Campaign to look closely at work sites," "Sharing of failures and near-miss incidents," "Video case studies," and "Plant hazard prediction activities."*

All service personnel across a broad range of ages, from young employees to veterans, participate in these activities to share skills across divisions and boundaries within the METAWATER Group. By working as a team with members from different sites that we do not normally have contact with, we can not only understand the necessity of preventing equipment accidents, but also have the opportunity to become aware of the skills and knowledge that we lack, for example by discovering that the perception of risks and countermeasures is different. As a result, there has been a decrease in the number of equipment accidents in the departments concerned.

Since 2020, we have continued our activities while making effective use of online meetings, etc. We will continue these skill improvement activities as we aim to maintain and improve quality in future.

* Plant hazard prediction activities: Activities to learn about past accidents and "near-miss incidents" in the form of questions and answers about "Where in the plant is the risk of equipment accidents and how should we respond?"

— Quality targets —

Zero serious accidents

Continual quality improvement

In order to achieve these quality targets, it is important that we prevent quality accidents in advance. To this end, the METAWATER Group is promoting "skill improvement activities to prevent equipment accidents."

Poster to raise internal awareness of the "Campaign to look closely at work sites"

We aim to enhance our on-site capabilities by ensuring that workers check these posters each time they work.



From the department in charge

In addition to safety rules, the fostering of "people who think before acting" through voluntary activities is essential for the METAWATER Group as we monitors water and environmental infrastructure over the long term. It is important for each and every employee responsible for safety to take the initiative in making steady efforts to reduce risks and carry out field work based on a common understanding.

We will continue our efforts to understand the feasibility of the work, pause for a moment if there is any doubt, share ideas, and observe facilities with a safety-first approach based on our technical capabilities and flexible thinking.

Poster to raise internal awareness of the "Campaign to look closely at work sites"

CSR procurement

The METAWATER Group promotes procurement operations based on three basic policies: promoting transparent procurement, strengthening partner relationships with suppliers, and promoting CSR procurement.

Promotion of transparent procurement – 98 new suppliers

The "Inquiries about purchasing and dealings" form is posted on our corporate website, and we provide fair and equitable entry opportunities to all business partners. We launch new transactions with around 100 companies every year. The number of new corporate business partners in FY2020 was 98.



Business negotiations

Enhancing paperless operations through EDI*

The METAWATER Group promotes the implementation of EDI. In addition to improving the accuracy and efficiency of procurement operations, we are promoting implementation of EDI with the understanding and cooperation of business partners to work on becoming paperless, reducing our impact on the environment. Introduction of EDI began with development-related and in-house equipment orders, and as of FY2020 approximately 53% of orders were through EDI. This made the paper used traditionally in order forms, invoices, etc., unnecessary, leading to a reduction of approximately 30,000 sheets. Like us, our suppliers have also eliminated invoices and envelopes, leading to a paperless environment. We will continue expanding the scope of transactions and applications for EDI, aiming to further improve operating efficiency and reduce our environmental burden.

*EDI: Electronic Data Interchange, a framework supporting electronic business transactions

Promotion of green procurement

The METAWATER Group is promoting the procurement of eco-friendly office supplies (products with socially recognized eco-friendly marks such as the Eco Mark and Green Mark). Efforts were strengthened for 12 frequently used items in particular, including copy paper, business cards, and highlighters, which were designated as green procurement promotion items. In FY2020, the green procurement rate for these items reached approximately 94%. We will continue efforts to improve the green procurement rate throughout the entire company.

Legal compliance

We actively promote participation in social insurance for construction work, etc. Enrollment in insurance, etc., is thoroughly enforced by ensuring notifications are sent to suppliers, providing instructions for clarifying statutory welfare expenses in estimates, exchanging opinions with individual visits, and more and more.

Thorough enforcement of internal education

We hold study sessions on the "Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors" for all employees in charge of purchasing, ensuring thorough compliance and promoting understanding.

We also offer e-learning courses for other employees to strengthen compliance throughout the company.

Social contribution

The METAWATER Group handles "water", a natural resource indispensable for life. As a water and environmental infrastructure company, protecting the water cycle is our mission. We are promoting social contribution activities so that people from all walks of life can gain an understanding of the importance of water and the environment.

We aim to contribute to society and the global environment through both business activities related to "water" and the "environment" and our activities to contribute to society.

— METAWATER's policy on social contribution activities —

The METAWATER Group's social contribution activities contribute to the realization of a sustainable society by solving social issues through water and the environment.

METAWATER's guidelines on social contribution activities

- We will improve water-related environmental improvement activities and water and environmental awareness activities
- We will value cooperation and collaborations with various stakeholders.
- We will foster awareness for voluntary employee participation.

Education / Public education

We are making use of technologies, knowledge, and other qualities related to "water" and the "environment" that we have cultivated through our businesses to provide children, who will lead the next generation, with opportunities to learn about environmental conservation, etc. In FY2020, in order to prevent the spread of COVID-19, original video teaching materials were introduced, and school visits were conducted after thorough infection control measures were taken.

■ Original video teaching material Created "Mae-chan and Tah-kun Classroom"

- Water recirculation lesson
- Sand filtration experiment lesson
- Ceramic filtration experiment lesson
- Water treatment plant lesson



Original video "water treatment plant lesson"



Showing the "sand filtration experiment lesson" and "ceramic filtration experiment lesson" videos at a school visit to an elementary school

* "Mae-chan and Tah-kun Classroom"
URL https://www.metawater.co.jp/movie_class/

Contribution to local community

■ Held "Mission Uchimizu 2020" online

The annual "Mission Uchimizu" has previously been held in front of the Head Office building in Chiyoda-ku, Tokyo, along with local residents. In 2020, the event was held online to prevent the spread of COVID-19. Each participant performed uchimizu (water sprinkling), and photos of the event were shared on the METAWATER website. As in other years, we urged participants to use recycled water for uchimizu, and people were in good spirits as they took part.



Poster announcing "Mission Uchimizu"



Uchimizu opening ceremony (in front of Head Office)



Participation by families and other individuals

■ Conducted company-wide blood donation activities

Every year, the METAWATER Group partners with the Japanese Red Cross Society to conduct blood donation activities at Head Office and each business site. We are also expanding these activities, including encouraging all employees to donate blood at the nearest blood donation center or blood donation bus.



Poster calling for company-wide blood donation



Blood donation site at Head Office

SDG initiatives

As an international goal for a sustainable and better world by 2030, the METAWATER Group aims to contribute to the Sustainable Development Goals (SDGs) adopted at the United Nations (UN) summit in September 2015. The SDGs consist of 17 Goals and 169 Targets (criteria for success) to achieve those goals. The METAWATER Group has positioned Goal 6 “Clean Water and Sanitation,” Goal 11 “Sustainable Cities and Communities,” and Goal 17 “Partnerships for the Goals” as its three most important challenges and is working on a variety of related measures.

— METAWATER Group's top-priority materiality —



Launch of SAT

The “SDGs Ambassador Team (SAT)” was formed by young employees for the purpose of planning, drafting, and implementing various measures related to the promotion of SDGs, increasing awareness of the SDGs internally, and disseminating relevant information both internally and externally. The activities of the SAT are planned out for the next three years. In the first year, the SAT plans to increase awareness of the SDGs within the company. In the second year, the SAT will further increase awareness of the SDGs within the company while also preparing for external public relations activities. In the third year, the SAT plans to implement various internal and external measures as a collection of its achievements. Through these three years of activities, we will raise the recognition of companies that are actively working on SDGs outside the company, and will make this a pillar that establishes our position as a leading company in the SDGs.

SAT measures to increase internal awareness

Soon after the SAT was launched, we held study sessions based on workshops held by the media at schools and other locations. In addition to regular meetings held once a month, the SAT also held presentations on SDGs within members' respective departments from November to January, and from February to March, we created posters to raise awareness of SDGs within the company and created a special website for the SDGs. Posters have been put up in noticeable locations at METAWATER Group offices, sales offices, and worksites, in an effort to increase awareness throughout the company. The special website for the SDGs provides an overview of the SDGs, as well as information on SAT activities, the

METAWATER Group's efforts, and other information. In March 2021, the SAT participated in an in-house round-table discussion on CSR and the SDGs, discussing the current situation in the METAWATER Group, future initiatives, and the future activities of the SAT. We also conducted a quiz and survey on SDGs in order to identify the degree to which awareness of the SDGs has spread within the company as a result of past activities. In future, the SAT will continue to hold regular monthly meetings, as well as acting as ambassadors to offer presentations on the SDGs, events, etc., with the aim of further promoting awareness of the SDGs within the company.



Posters to raise awareness of SDGs within the company displayed at each office, sales office, and worksite



SDGs special website



Toward '27, 6th round-table discussion: “What is CSR?”

Corporate governance

Basic concept of corporate governance

So that we can grow sustainably with society, we are committed to improving our internal control based on our corporate mission. We are aiming to be a group trusted by society through our continuous contribution to it while meeting the expectations of our stakeholders including customers, local communities, shareholders and investors. To realize this aim, we are engaged in improving the following aspects of corporate governance.

1. The Board of Directors and the Board of Auditors are arranged and independent directors are designated to reinforce the organization for supervising our business with the purpose of creating corporate management with excellent reliability and transparency.
2. Promotion of compliance and reinforcement of internal control functions are realized to establish an organization that can sustainably enhance corporate value.
3. We disclose information in a fair, objective and appropriate manner and at an appropriate timing. Further, we communicate proactively with our stakeholders.

As a basic policy of the METAWATER Group based on the rules of the "Corporate Governance Code" (hereinafter "CG Code") stipulated by the Tokyo Stock Exchange, the Group established the "Basic Policy on Corporate Governance" (hereinafter "CG Basic Policy"), and disclosed the policy on the corporate website.
<https://www.metawater.co.jp/csr/responsibility/pdf/governance.pdf>

Approaches to improve corporate governance

1 Response to Corporate Governance Code

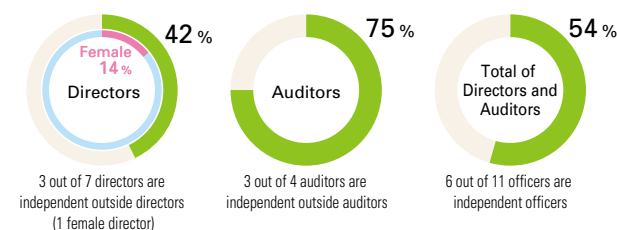
METAWATER was listed on the First Section of the Tokyo Stock Exchange Market in December 2014. As the CG Code was established in June 1, 2015, the group implemented the measures stated on the right. We are committed to moving forward with corporate governance also in future.

November 2015	<ul style="list-style-type: none"> Established "Basic Policy on Corporate Governance"
June 2016	<ul style="list-style-type: none"> Added one independent director (outside director) *in compliance with CG Code (Rule 4-8) Disclosed evaluation on effectiveness of the Board of Directors *in compliance with CG Code (Rule 4-11-3)
June 2017	<ul style="list-style-type: none"> One independent director (outside director) was added Held a meeting by independent outside director
November 2018	<ul style="list-style-type: none"> "Basic Policy on Corporate Governance" revised in accordance with partial revision of CG code
November 2018	<ul style="list-style-type: none"> Established Nomination and Remuneration Advisory Committee
April 2021	<ul style="list-style-type: none"> Amended the "Policies Concerning Decisions on the Content of Compensation, etc. for Individual Directors"
June 2021	<ul style="list-style-type: none"> Introduced share remuneration plan with restriction on transfer for directors and executive officers * Complies with CG Code (Supplementary Principle 4.2.1)

All principles of CG Code revised in June 2018 are implemented.

2 Composition of directors and auditors

Ratio of independent outside officers



The METAWATER Group has established criteria for the independence of outside officers in the CG Basic Policy, and has designated three outside directors and three outside auditors who meet these standards as independent officers and submitted notification of their appointment to the Tokyo Stock Exchange.



48th ordinary general meeting of shareholders

Corporate governance organization

METAWATER Group opts for an arrangement of a Board of Auditors as an organization design based on the Companies Act. The Board of Directors makes important decisions related to management and supervises business execution. At the same time, auditors and the Board of Auditors independent from the Board of Directors audit the status of directors' execution of their duties and the like. For the purpose of strengthening independence, objectivity, and accountability for the function of the Board of Directors related to the nomination of candidates for directors and auditors, determining remuneration for executive officers and directors, etc., a Nomination and Remuneration Advisory Committee has been established under the Board of Directors. Furthermore, METAWATER Group has introduced the Executive Officers System to accelerate management-related decision-making, reinforce functions to monitor business execution, and clarify responsibility. Additionally, a CSR Committee has been arranged as an organization to determine the important activities, systems, organizations, and the like of the Group to ensure compliance with regulatory requirements and corporate ethics. The position and role of each function are mentioned below.

Board of Directors Meeting

The Board of Directors meetings, held on a monthly basis and also as needed, function to supervise management and decision-making. The Board of Directors is comprised of seven members including three outside directors. The status of business execution by directors, including the representative director, is monitored by auditors, where, as a basic rule, four auditors attend the Board of Directors meeting and express their opinions whenever necessary.

Board of Auditors Meeting

The Board of Auditors meetings are held on a monthly basis and function to monitor management. The Board of Auditors is comprised of four members including four outside auditors. Auditors are selected from those with expertise and experience regarding our business as well as in legal and financial affairs. The Board of Auditors determines the audit policies and scope of work for each auditor, as well as specific action plans and schedules, and monitors the status of business execution by directors.

Nomination and Remuneration Advisory Committee Meeting

The Nomination and Remuneration Advisory Committee was established under the Board of Directors as a voluntary advisory body that functions

as both a nomination committee and remuneration committee. These meetings are held as necessary, deliberating on matters related to the appointment and dismissal of directors, auditors, and executive officers, as well as remuneration for directors, executive officers, etc., in consultation with the Board of Directors, and also providing advice and proposals to the Board of Directors. The committee is comprised of seven members total, including the Director and President, three independent outside directors, and three independent outside auditors, with an independent outside director selected as the chairperson.

Executive Officers System

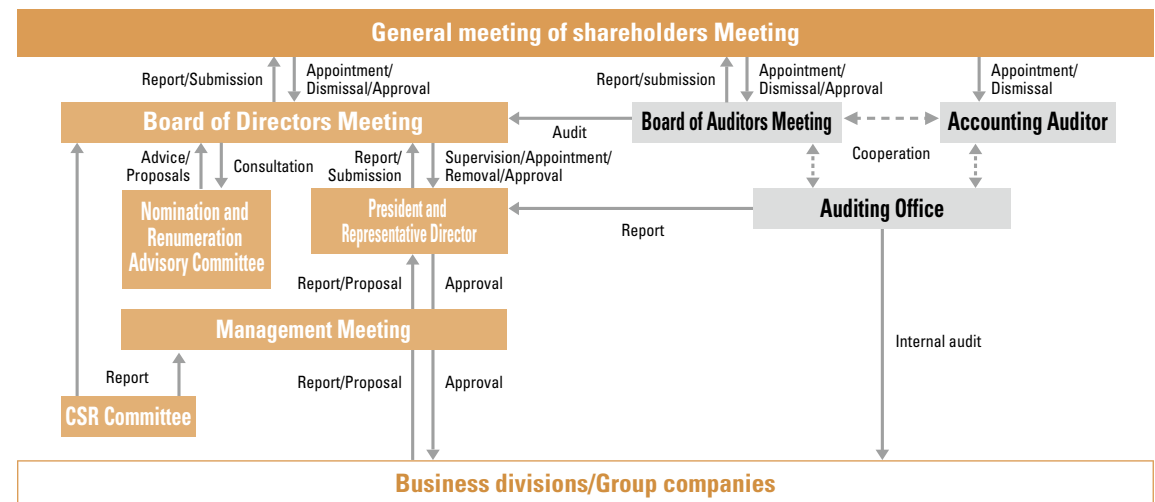
The Executive Officers System has been introduced to accelerate management-related decision-making, reinforce functions to monitor business execution, and clarify responsibility. The executive officers are comprised of fifteen members including four directors and executive officers. Their term of office is one year and their appointment, reappointment, and dismissal are determined at Board of Directors meetings.

Management Meeting

The Management meetings consist of fifteen executive officers and, as a general rule, are held twice a month. In these meetings, reports are given and discussions are held regarding important management-related matters stipulated in our official competence rules. Standing auditors attend the meeting and express opinions as necessary, monitoring the status of business execution by the President & Chief Executive Officer as well as those executive officers below him.

CSR Committee Meeting

CSR Committee meetings are held twice a year, with a function of promoting compliance and reinforcing internal control. The CSR Committee has seven subordinate working groups under it. The committee is comprised of fifteen members, including the chairperson and fourteen committee members. Details of the CSR Committee's activities are reported to the Management Meeting and Board of Directors Meeting as needed.



Corporate governance

Outside Director's roles

- 1 Provide advice to promote the Company's sustainable growth and improve medium- and long-term corporate value based on own knowledge and insights, and supervise the execution of business by the Company
- 2 As a position that is independent from the management, receive opinions from stakeholders including minority shareholders, and appropriately reflect those opinions at Board of Directors Meetings
- 3 Appropriately manage risks including conflicts of interest arising from the execution of business by leveraging internal and external knowledge and insights, as well as experience

Reasons for selection by individual

	Name	Attendance (attendance rate)		Reasons for selection
		Board of Directors Meeting	Board of Auditors Meeting	
Outside Director	Kaoru Aizawa	19/20 meetings (95%)	—	Mr. Aizawa held important positions, including Representative Director of Nitto Denko Corporation, and has a wealth of management experience gained through his position as an outside officer of another company, as well as balanced and broad perspectives of industries related to the company. It is expected that he will leverage his experience and extensive knowledge to provide advice and recommendations, mainly on the company's management plans and corporate governance, based on his own knowledge. Based on the above, the company has judged that he has the required skill set to supervise the execution of the business of the company. Accordingly, we appointed him as an outside director of the company.
	Fumiko Kosao	20/20 meetings (100%)	—	Ms. Kosao is well versed in corporate accounting with expertise in the area of taxation and has broad perspectives gained through her position as an outside officer of another company. Although she has no direct management experience in a company, except as an outside officer, it is expected that she will leverage her experience and expertise to provide advice and recommendations, mainly in relation to the company's finance, accounting, and taxation, based on her own knowledge. Based on the above, the company has judged that she has the required skill set to supervise the execution of the business of the company. Accordingly, we appointed her as an outside director of the company.
	Tsuneo Tanai	—	—	Mr. Tanai held important positions, including Director of Honda Motor Co., Ltd. and Keihin Corporation, and has a wealth of management experience gained through his position as an outside officer of another company, as well as balanced and broad perspectives of industries related to the company. It is expected that he will leverage his experience and extensive knowledge to provide advice and recommendations, mainly on the company's management plans and overseas strategy, based on his own knowledge. Based on the above, the company has judged that he has the required skill set to supervise the execution of the business of the company. Accordingly, we appointed him as an outside director of the company.
Outside Auditor	Kimihiko Uemura	20/20 meetings (100%)	13/13 meetings (100%)	As a lawyer, Mr. Uemura is well versed in corporate legal affairs including the Companies Act, and has a wealth of experience gained through his position as an outside officer of another corporation, as well as balanced and broad perspectives of industries related to the company. We consider him to have the required skill set to supervise the execution of the business of the company by leveraging his experience and high level of independence, and accordingly appointed him as an outside auditor of the company.
	Kazuo Takimoto	20/20 meetings (100%)	13/13 meetings (100%)	As a certified public accountant and tax accountant, Mr. Takimoto is well versed in corporate accounting and taxation, and has a wealth of experience gained through his position as an outside officer of another corporation, as well as balanced and broad perspectives of industries related to the company. We consider him to have the required skill set to supervise the execution of the business of the company by leveraging his wealth of experience related to finance and accounting and high level of independence, and accordingly appointed him as an outside auditor of the company.
	Taku Fukui	—	—	As a lawyer, Mr. Fukui is well versed in corporate legal affairs including the Companies Act, and has a wealth of experience gained through his position as an outside officer of another corporation, as well as balanced and broad perspectives of industries related to the company. Although he has no direct management experience in a company, except as an outside officer, we consider him to have the required skill set to supervise the execution of the business of the company by leveraging his experience and high level of independence, and accordingly appointed him as an outside auditor of the company.

The above six persons have been designated as independent officers based on the judgment that there is no risk of conflicts of interest with general shareholders since they satisfy the "Criteria for Independence of Outside Officers" stipulated by the company, as well as the requirements for Independent Officers stipulated by the Tokyo Stock Exchange.

* Messrs. Tsuneo Tanai and Taku Fukui were newly elected at the 48th ordinary general meeting of shareholders held on June 22, 2021.

Interview with Independent officer

To improve management transparency and increase the trust of stakeholders.

Outside Auditor Kimihiko Uemura



—— What are your overall impressions regarding the management of the Board of Directors, state of discussions, etc.?

Both the Board of Directors and the Board of Auditors make concerted efforts to communicate internal information to outside officers. I can clearly feel that management is open and willing to listen to the opinions of outside officers and utilize those views when managing the company. In this context, free and frank discussions take place, and I feel I can say that both boards are truly open. I think one of the company's strengths is its highly open management where there are no reservations among employees, in a good way. In the past year or so, we were forced to hold meetings remotely as a result of the COVID-19 pandemic, but I don't think there has been any change to the operational situation for the two boards.

—— What are your thoughts on the role expected of you as an outside auditor?

I am aware that, as is often the case, outside auditors with expertise and objective independence are expected to provide advice and monitoring related to the management of the company and its business operations to the management team of the company from an objective point of view, through audits of the execution of duties by directors from a neutral and third-party standpoint. I am aware that I must execute the roles expected of an outside auditor

with a qualification as an attorney, while exchanging information with standing auditors in the company, and I intend to do so in an appropriate manner. To avoid misunderstanding, I would also like to point out that we, as auditors, must have the courage to support an acceptable level of risk-taking.

—— How do you evaluate the METAWATER Group's governance from the perspective of an outside auditor?

The enhancement and strengthening of corporate governance systems may have some elements that contradict the need to improve management efficiency. However, they are the foundation and basis for corporate our development as a company, so we cannot afford to neglect them. The governance systems that must be prepared are, so to speak, constantly advancing, and if we are careless, they may become obsolete.

I am aware that the METAWATER Group has established governance systems that are sufficient and necessary. However, considering the expansion of the scale of the company's businesses and its further expansion into overseas markets, we must constantly ask whether this is sufficient and whether further improvements are necessary. I would like to offer a small amount of advice and suggestions to improve the transparency of the METAWATER Group's management and increase the trust of our stakeholders.

—— What is necessary for the sustainable improvement of corporate value?

First, I think that the most important thing is to continue to maintain the ambitious target of improving the METAWATER Group through the combined efforts of our senior management team and all officers and employees working together in solidarity. The moment when we think that this is enough and that we are satisfied is the moment when growth will stop. A company is made by its people, and when its people combine their abilities to achieve the same goal, I think 1 + 1 can become 3, 4, and even 5. In order to do so, it is essential that we share the same mission.

In addition to future market trends, it is important to accurately grasp the needs of society. It is now essential for the enhancement of our corporate value that we contribute to society and that our efforts are recognized by society, including ESG initiatives, which are often seen in newspapers, magazines, and on the Internet, as well as measures to deal with conduct risks, which have recently attracted attention. The company's business activities are indispensable to society, and I intend for this to be a source of pride for me as I carry out my duties.

—— What are your future aspirations as outside auditor?

I intend to make sure that I fulfill the role expected of me as outside auditor, as described, and exert every effort to further invigorate and strengthen the functions of the Board of Auditors. In addition, as a member of the METAWATER Group, I hope to contribute to the development of the company's businesses.

Management organization (As of end of June 2021)

Outside Outside Director Independent Independent officer

Directors



Yasushi Nakamura

Chairman and Representative Director

April 1981 Joined Fuji Electric Co., Ltd.
April 2008 Director at METAWATER
April 2014 Executive General Manager, Corporate Strategy Planning Division at METAWATER
June 2015 Senior Executive Officer at METAWATER
June 2016 President and Representative Director at METAWATER
June 2020 Outside Director, NTT Data Intramart Corporation (current)
June 2021 Chairman and Representative Director at METAWATER (current)
Chairman and Executive Officer at METAWATER (current)



Kenji Yamaguchi

President and Representative Director

April 1987 Joined NGK Insulators, Ltd.
April 2013 Deputy Executive General Manager, Business Strategy Division at METAWATER
April 2015 Executive General Manager, Business Strategy Division (current)
June 2015 Executive Officer at METAWATER (current)
June 2019 Director at METAWATER (current)
June 2021 President and Representative Director at METAWATER (current)
Vice President and Executive Officer at METAWATER (current)



Akira Kato

Assistance to the Chief Executive Officer
Executive General Manager, Corporate Strategy Planning Division

March 1980 Joined NGK Insulators, Ltd.
June 2013 Director at METAWATER (current)
June 2015 Senior Executive Officer at METAWATER
June 2016 Executive General Manager, Corporate Strategy Planning Division at METAWATER (current)
Chief of Export Management Office at METAWATER
April 2017 Senior Executive Officer at METAWATER
April 2019 Vice President and Executive Officer at METAWATER (current)



Noboru Okuda

Executive General Manager, Plant Engineering Division

April 1982 Joined Fuji Electric Co., Ltd.
April 2013 Deputy Executive General Manager, Plant Engineering Division at METAWATER
April 2014 Executive General Manager, Service Solution Division at METAWATER
June 2015 Executive Officer at METAWATER
April 2016 Senior Executive Officer at METAWATER (current)
Executive General Manager, Plant Engineering Division (current)
June 2019 Director at METAWATER (current)



Kaoru Aizawa

Outside Independent

Independent Director of Nicca Chemical Co., Ltd.

April 1977 Joined Nitto Denko Corporation
April 2003 Executive Officer at the company
June 2007 Board Member & Executive Vice President at the company
June 2010 Board Member & Senior Executive Vice President at the company
June 2011 Representative Director & Senior Executive Vice President at the company
September 2014 Advisor at NICCA CHEMICAL CO., LTD.
March 2016 Outside Director at the company (current)
June 2016 Outside Director for METAWATER (current)



Fumiko Kosao

Outside Independent

Licensed tax accountant, Kosao Fumiko Accountant Office
Outside Director of CTI Engineering Co., Ltd.
Outside Director and Audit and Supervisory Committee Member at TOELL CO., LTD.

April 1973 Jointed the National Tax Agency
July 2014 Director, Nihonbashi Tax Office, Tokyo Regional Taxation Bureau
August 2015 Tax accountant, Fumiko Kosao Certified Tax Accountant Office (current)
June 2016 Outside Auditor for TOBISHIMA CORPORATION
March 2017 Outside Director for CTI Engineering Co., Ltd. (current)
June 2017 Outside Director for METAWATER (current)
July 2021 Outside Director and Audit and Supervisory Committee Member at TOELL CO., LTD. (current)



Tsuneo Tanai

Outside Independent

Fellow at Honda Motor Co., Ltd.
Outside Director at IWASAKI ELECTRIC CO., LTD.

April 1981 Joined Honda Motor Co., Ltd.
June 2009 Director at Honda Motor Co., Ltd.
April 2011 Managing Officer and Director at Honda Motor Co., Ltd.
June 2011 President & CEO and Representative Director at Keihin Corporation
June 2016 Fellow at Honda Motor Co., Ltd. (current)
June 2019 Outside Director at IWASAKI ELECTRIC CO., LTD. (current)
June 2021 Outside Director at METAWATER (current)

Auditors



Shigeru Hatsumata

Audit and Supervisory Board Member

April 1982 Joined Fuji Electric Co., Ltd.
 April 2008 Deputy Executive General Manager,
 Business Development Division at METAWATER
 April 2014 Deputy Executive General Manager, CSR Division at METAWATER
 April 2015 Executive General Manager, CSR Promotion Office at METAWATER
 June 2015 Executive Officer at METAWATER
 June 2019 Audit and Supervisory Board Member at METAWATER (current)



Kazuo Takimoto

Outside Independent

CPA and Tax Accountant of Tokyo Kudan Accounting Office

November 1978 Joined Asahi Accounting Co., Ltd.
 October 1988 Opened Takimoto Accounting Office
 (currently Tokyo Kudan Accounting Office) (current)
 June 2007 Outside Director for Vitec Co., Ltd.
 June 2014 Outside Auditor at METAWATER (current)



Kimihiko Uemura

Outside Independent

Partner of Midosuji Legal Profession Corporation

April 1987 Registered as an attorney (Osaka Bar Association)
 Joined Midosuji Law Firm
 (currently Midosuji Legal Profession Corporation) (current)
 June 2007 Outside Auditor for Fudo Tetra Corporation
 June 2013 Outside Auditor at METAWATER (current)



Taku Fukui

Outside Independent

Managing Partner at Kashiwagi Sogo Law Offices

April 1987 Registered as an attorney (Daini Tokyo Bar Association)
 Joined Kashiwagi Sogo Law Offices
 April 2004 Professor at Keio University Law School (Graduate School of Law) (current)
 June 2005 Outside Audit & Supervisory Board Member at
 Shin-Etsu Chemical Co., Ltd.
 January 2009 Managing Partner at Kashiwagi Sogo Law Offices (current)
 June 2017 Outside Director at Yamaha Corporation (current)
 June 2021 Outside Auditor at METAWATER (current)

Executive Officers

Chairman and Executive Officer

Yasushi Nakamura Public Relations

President and Chief Executive Officer

Kenji Yamaguchi Responsible for Business Execution

Vice President and Executive Officer

Akira Kato Assistant to Person Responsible for Business Execution / Executive General Manager, Corporate Strategy Planning Division / Responsible for Corporate Administration Department, Affiliates Coordination Department, and Legal Department, Corporate Strategy Planning Division

Senior Executive Officer

Noboru Okuda Executive General Manager, Plant Engineering Division / Responsible for Product Center Responsible for Quality Assurance Office

Masashi Sakai Executive General Manager, Public Private Partnership Division

Executive Officer

Eiji Nakamura President and Representative Director, METAWATER SERVICE Co., Ltd.

Michio Fujii Deputy Executive General Manager, Corporate Strategy Planning Division / Executive General Manager, HR & General Affairs Planning Office, Corporate Strategy Planning Division / Responsible for CSR Promotion Office, Corporate Strategy Planning Division / Executive General Manager, Export Control Office / Responsible for Risk Management

Masahiro Takagi Executive General Manager, Business Strategy Division / Responsible for WBC Center

Masayuki Nakagawa Executive General Manager, Financial Planning Office, Corporate Strategy Planning Division / Responsible for Information Technology Planning Department, Corporate Strategy Planning Division

Yoshito Ezure Deputy Executive General Manager, International Business Division

Tsugio Kusano Executive General Manager, Plant Construction Division / Responsible for Safety and Health Management Office

Susumu Kadowaki Executive General Manager, Sales & Marketing Division

Koichi Yamaguchi Deputy Executive General Manager, Plant Construction Division / Responsible for Cost Engineering Center

Ken Akikawa Executive General Manager, International Business Division

Tatsuo Kato Deputy Executive General Manager, Plant Engineering Division

Hiroyuki Nakano Executive General Manager, Service Solution Division

Hajime Ito Deputy Executive General Manager, Plant Engineering Division

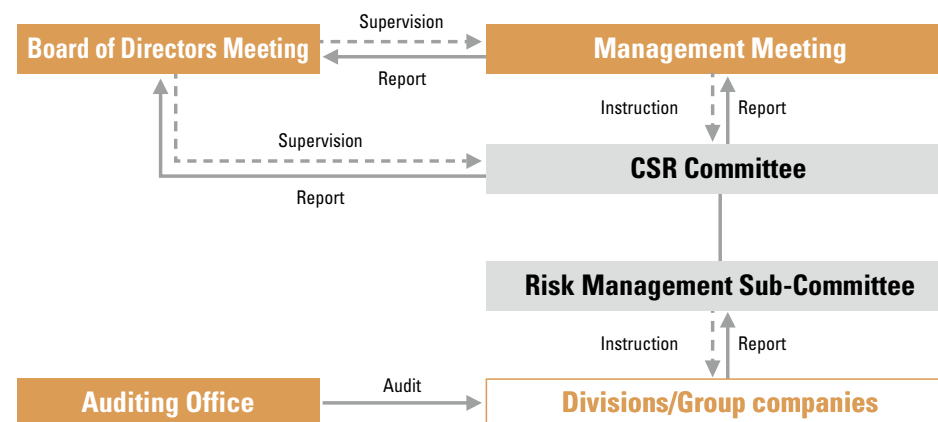
Risk management and compliance

Basic concept of corporate governance

With the “METAWATER Group Risk Management Rules” in place, the METAWATER Group has a systematic awareness of various risks that can affect the Group’s operations, evaluates and manages those risks appropriately, and thereby seeks to prevent their occurrence or to reduce losses associated with them, while striving to improve and expand the corporate value of the Group.

Furthermore, the Risk Management Working Group has been established within the CSR Committee in an effort to improve and reinforce the corporate framework so that the Group can appropriately address individual risks in order to meet stakeholders’ expectations.

Furthermore, in order to respond to individual risks, in addition to establishing the “METAWATER Business Continuity Plan (BCP)”, “Compliance Rules”, and “Information Security Policies”, we have also established regulations, standards, and manuals for responding to accidents, the environment, and safety and health, so that we can respond quickly and accurately to various events that may occur.



BCM activities

With a commitment to strengthening Business Continuation Management (BCM), the METAWATER Group has developed the Business Continuation Plan (BCP), which is suitable for its business characteristics.

In FY2020, on the assumption of business continuity under the impact of COVID-19, CMT (Crisis Management Team) members provided initial response training, held briefings, mainly remotely, for the Executive General Managers of local emergency response divisions, and incorporated a response to COVID-19 into the BCP procedures.

From FY2021 onward, in response to variations in damage estimates, we will promote further awareness of and familiarization with BCP and improve its effectiveness with measures including various types of training, expanding the range of persons eligible for training, and education that utilizes video materials.

In addition, from the viewpoint of preventing the spread of COVID-19, we have established an emergency response division headed by the President, and are implementing various measures in a flexible and ongoing manner.

In light of our social mission to provide water and environmental infrastructure, all of the METAWATER Group is working to prevent the spread of infection in order to ensure business continuity and the safety of employees.



Initial response training

Assistant to Person Responsible for Business Execution

Executive General Manager, Corporate Strategy Planning Division

Responsible for Corporate Administration Department, Affiliates Coordination Department, and Legal Department,
Corporate Strategy Planning Division

Upgrading security countermeasures at construction and plant operation sites

The METAWATER Group is enhancing information security not only at offices, but also at construction sites and the operation and maintenance sites of water treatment plants and sewage treatment plants. We also conduct internal IT audits to identify issues and implement countermeasures. In FY2020, from the viewpoint of preventing the spread of COVID-19, we decided not to conduct the internal IT audit at sites, as we had done in past years, and instead collected information from discussions with each site, extracted and corrected items that needed improvement, and made continuous improvements. We have also created educational videos that can be viewed remotely to deepen employees' understanding of security, including those at remote locations.



Information security is imperative at construction sites

Information security training for all employees

Collective education and e-learning training is being carried out for all employees to improve their information security knowledge. For new employees in particular, all group companies are holding individual workshops. We use videos and easy-to-understand examples to raise awareness of the importance of strengthening information security.

Compliance

We believe that ensuring proper compliance and being widely trusted by society leads to sustainable growth of the METAWATER Group, as well as fosters a healthy corporate culture. Based on this understanding, we have established Compliance Rules that serve as guidelines for the Corporate Charter of Conduct, the Employees' Code of Conduct, and the compliance issues that the Group could implement and realize. In order to link these to specific action, various internal regulations have been established, ensuring thorough compliance with laws and internal rules.

Compliance Working Group

As a specialized working group under the CSR Committee, we have established the Compliance Working Group, which is comprised of five chief department managers and the Legal Division as the secretariat. They are engaged in activities that include checking on and improving implementation of compliance programs, studying and developing company-wide compliance education and measures, and offering consultation on issues received from the compliance helpline. In response to these matters, we hold emergency and temporary meetings in addition to regular quarterly meetings.

Compliance Education

The METAWATER Group provides compliance education in the form of classroom lectures, including company-wide e-learning, education for officers, and education for employees at different levels. Furthermore, in previous years, lecturers visited each METAWATER office across Japan to provide company-wide education in the form of group training sessions. In FY2020, however, from the viewpoint of preventing the spread of COVID-19, company-wide education was discontinued, and company-wide e-learning and themed training videos were created and developed, etc.

FY2020 e-learning and company-wide education results

e-learning education	Total of 25,331 people across 10 sessions
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Financial Information

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Financial Highlights

Analysis on Operating Results

Descriptions and statements in relation to forward-looking projections disclosed in this document reflect the judgment of the Group as of March 31, 2021.

Operating Results Review for the Current Fiscal Year

During the fiscal year ended March 31, 2021, the Japanese economy was in a severe situation due to the effect of COVID-19 outbreak. The global economy was also in a severe situation due to the effect of global pandemic of COVID-19. While preventive measures against the spread of COVID-19 continued, there were signs of recovery with the increased level of social and economic activities. However, there was a concern about the effect the re-spread of COVID-19 might have on the economic activities.

Under such circumstances, in order to achieve the Midterm Business Plan 2020, covering the period up to FY2020 (fiscal year ended March 31, 2021), the Group has been trying its best to implement the priority measures: i) strategic development investment, ii) business strategy (enhancement of foundation field and expansion of growth field) and iii) efforts of sustainable ESG.

The domestic business environment in which the Group operates has continued to face challenges including a downward trend in the level of public spending, a sharp increase in labor costs arising from shortage of human resources, and some delays in civil engineering projects and construction work.

In the overseas businesses, the Group has sought to accelerate business developments centered around Europe and the United States, where stable market growth is expected, and achieve further business expansion.

The operating results of the Group for the fiscal year ended March 31, 2021 are as presented in the table below. As part of the lump-sum amortization of unrecognized actuarial gains/losses (credit) due to the sale of shares contributed to the retirement benefit trust, reversal was recognized in cost of sales as well as in selling, general and administrative expenses. Further, the special service bonus was provided to employees. The effect of those on operating income was ¥1,735 million.

	Fiscal year ended March 31, 2020 (Millions of yen)	Fiscal year ended March 31, 2021 (Millions of yen)	Increase/ (decrease) (Millions of yen)	Increase/ (decrease) (%)
Net sales	128,723	133,355	4,631	3.6
Operating income	8,223	10,863	2,639	32.1
Ordinary income	8,132	11,053	2,920	35.9
Profit attributable to owners of parent	5,677	6,542	864	15.2
Sales orders	125,011	159,124	34,112	27.3
Outstanding orders	138,639	169,307	30,667	22.1

(Note) Wigen Companies, Inc. and Rood Wit Blauw Holding B.V. have been included in the scope of consolidation from the fiscal year ended March 31, 2021.

The Group's business consists of two segments: Plant Engineering Business Segment including EPC as foundation field and foreign business as growth field and Service Solutions Business Segment including O&M as foundation field and PPP as growth field.

Operating results by segment are as follows:

(Plant Engineering Business)

The operating results of the Plant Engineering Business are as presented in the table below. The effect on operating income of the lump-sum amortization of unrecognized actuarial gains/losses (credit) due to the sale of shares contributed to the retirement benefit trust and of the special service bonus provided to employees was ¥980 million. Excluding above effect, both net sales and operating income in the EPC business showed a steady growth, increasing year on year. In the international business, net sales increased while operating income decreased year on year.

	Fiscal year ended March 31, 2020 (Millions of yen)	Fiscal year ended March 31, 2021 (Millions of yen)	Increase/ (decrease) (Millions of yen)	Increase/ (decrease) (%)
Net sales	72,366	76,462	4,095	5.7
Operating income	3,188	5,538	2,349	73.7
Operating income (Note)	3,188	4,557	1,369	42.9
Sales orders	67,861	92,047	24,185	35.6
Outstanding orders	78,542	99,025	20,483	26.1

(Note) Operating income excluding the effect of lump-sum amortization of unrecognized actuarial gains/losses (credit) due to the sale of shares contributed to the retirement benefit trust and the effect of the special service bonus provided to employees.

(Service Solutions Business)

The operating results of the Service Solutions Business are as presented in the table below. The effect on operating income of the lump-sum amortization of unrecognized actuarial gains/losses (credit) due to the sale of shares contributed to the retirement benefit trust and of the special service bonus provided to employees was ¥754 million. Excluding above effect, both net sales and operating income in the O&M business decreased year on year. In the PPP business, net sales showed a steady growth, increasing year on year, while operating income decreased year on year.

	Fiscal year ended March 31, 2020 (Millions of yen)	Fiscal year ended March 31, 2021 (Millions of yen)	Increase/ (decrease) (Millions of yen)	Increase/ (decrease) (%)
Net sales	56,356	56,893	536	1.0
Operating income	5,035	5,325	290	5.8
Operating income (Note)	5,035	4,570	(464)	(9.2)
Sales orders	57,150	67,077	9,927	17.4
Outstanding orders	60,097	70,281	10,184	16.9

(Note) Operating income excluding the effect of lump-sum amortization of unrecognized actuarial gains/losses (credit) due to the sale of shares contributed to the retirement benefit trust and the effect of the special service bonus provided to employees.

Financial Position Review for the Current Fiscal Year

Total assets as of March 31, 2021 increased by ¥11,725 million compared to March 31, 2020 to ¥131,194 million.

Current assets increased by ¥7,308 million compared to March 31, 2020 to ¥109,250 million due to an increase in cash and deposits. Non-current assets increased by ¥4,416 million compared to March 31, 2020 to ¥21,944 million due to an increase in assets for retirement benefits, goodwill and customer-related assets.

Current liabilities increased by ¥8,256 million compared to March 31, 2020 to ¥62,590 million due to an increase in accounts payable - trade and advances received. Non-current liabilities decreased by ¥371 million compared to March 31, 2020 to ¥15,170 million due to a decrease in PFI and other project finance loans.

Total net assets increased by ¥3,840 million compared to March 31, 2020 to ¥53,432 million due to the recognition of profit attributable to owners of parent.

Cash Flow Review

The balance of cash and cash equivalents (hereinafter the "funds") as of March 31, 2021 increased by ¥5,168 million compared to March 31, 2020 to ¥18,044 million. An analysis of the cash flows for the fiscal year ended March 31, 2021 and related commentary thereon is presented below:

(Cash flows from operating activities)

The funds generated by operating activities was ¥10,404 million (¥6,883 million increase year to year): ¥11,053 million of income before income taxes and ¥1,247 million of depreciation, offsetting with ¥821 million decrease in notes and accounts payable - trade and ¥2,527 million used for payment of income taxes.

(Cash flows from investing activities)

The funds used for investing activities was ¥3,252 million (¥1,872 million increase year to year): ¥735 million used for purchase of property, plant and equipment and ¥2,564 million used for acquisition of newly consolidated subsidiaries.

(Cash flows from financing activities)

The funds used for financing activities was ¥2,103 million (¥14,969 million decrease year to year): ¥1,737 million used for payment of dividends and ¥855 million used for repayments of PFI and other project finance loans.

Issues to be Addressed

In the Group's main business in the domestic water and sewage treatment market, the financial difficulties of local governments and shortage of engineers have become evident, which are attributable to the population decline. In addition, measures for facilities and equipment developed during a period of high economic growth, which are aging, as well as natural disasters such as large earthquakes, typhoons, and torrential rains are urgent issues. Under these circumstances, the implementation of the PFI Act and the revision of the Water Supply Act are steadily encouraging public-private partnerships using private funds, technology and know-how as well as efforts based on the national resilience plan. In addition, the creation of new business opportunities and business models backed by technological innovations such as AI and IoT is expected in the future.

On the other hand, in the overseas water and sewage market, developed countries mainly in Europe and the United States are faced with issues of aging facilities and equipment. In addition, other priority issues are the utilization of reused water in an effort to secure water resources in the United States and countermeasures against the tightening of environmental regulations in Europe. While in areas including emerging Asian countries, demand is growing for the development of a water and sewage infrastructure in conjunction with an increase in demand for water due to the increasing population. Going forward, the emergence of business opportunities in line with these issues and needs of the water and sewage market of each country is expected.

In light of this business environment, the Group has developed the Midterm Business Plan 2023, covering the period up to FY2023 (fiscal year ending March 31, 2024), as the next stage in achieving its long-term vision.

i) Strengthen core areas and expand growth areas

The Group will strengthen and expand businesses, with the EPC and O&M businesses positioned as core areas and the PPP and overseas businesses as growth areas.

(Strengthen core areas)

In the EPC business, in preparation for the future demand for renewal and large-scale projects, we will strive to further increase orders received and enhancing profitability by improving design quality and strengthening cost competitiveness through the establishment of engineering methods utilizing IT, AI, and others. In the O&M business, moreover, in addition to stable growth through the continued orders received for the existing stations, we will strive to acquire new stations and businesses by utilizing IT tools and expanding sales of WBC (Water Business Cloud).

(Expand growth areas)

In the PPP business, in which large-scale projects, including design, construction, operation, and maintenance and inspection, are expected to increase, we will strengthen regional strategies utilizing past achievements and know-how as well as create new business models in order to advance public-private partnerships in the future. In the overseas businesses, moreover, we will continue positioning Europe and the United States as strategic areas, deepen cooperation among Group companies in there, and promote further business expansion.

ii) Expand R&D investment

The Group will expand its investment in R&D to meet the future demand for renewals and further development of public-private partnerships.

(Strengthen strong areas further)

For its strengths of the incineration, water treatment, and monitoring and control system areas, the Group will continue to invest aggressively in R&D in an effort to capture the future demand for renewal.

(Create combined mechanical and electric technologies)

The Group possesses both machinery and electric technologies in the water environment business, and will strengthen its competitiveness by continuously creating products and systems that utilize such advantages.

(Create value through the information chain)

The Group will create new value by linking WBC, etc. with on-site operation, maintenance and inspection information, and plant monitoring and control systems, to provide systems and services that have strengths in improving the efficiency of maintenance and inspection, optimizing management, and withstanding disasters.

iii) Sustainable ESG initiatives

In addition to making social contributions through its business activities as a company providing public infrastructure, the Group, as a corporate citizen, will aggressively reduce

its environmental impact and engage in community contribution activities, thereby contributing to the United Nations' "Sustainable Development Goals (SDGs)." In response to the work style reform promoted by the government, moreover, we will actively work to realize a variety of work styles for our employees by creating opportunities for women to play an active role and promoting work styles that are not bound by age or location. On the other hand, for corporate governance, we will actively engage in dialogue with stakeholders to earn their trust and achieve highly transparent management, aiming for sustainable growth and increases in corporate value over the medium- to long-term.

Consolidated Balance Sheets

	Millions of yen		Thousands of U.S. dollars
	As of March 31, 2020	As of March 31, 2021	As of March 31, 2021
Assets			
Current assets			
Cash and deposits	^{※3} 13,645	^{※3} 18,777	169,605
Notes and accounts receivable - trade	^{※3} 78,109	^{※3} 78,398	708,138
Work in process	3,357	3,209	28,985
Supplies	4,711	5,750	51,937
Other current assets	^{※4} 2,118	^{※4} 3,114	28,127
Total current assets	101,941	109,250	986,812
Non-current assets			
Property, plant and equipment			
Buildings and structures, net	1,222	1,616	14,596
Machinery and equipment, net	1,172	1,259	11,372
Tools, furniture and fixtures, net	391	776	7,009
Construction in progress	117	81	731
Other property, plant and equipment, net	280	568	5,130
Total property, plant and equipment	^{※2} 3,184	^{※2} 4,302	38,858
Intangible assets			
Software	445	499	4,507
Software in progress	144	302	2,727
Goodwill	1,671	2,421	21,867
Customer-related assets	2,506	4,125	37,259
Other intangible assets	1,240	1,032	9,321
Total intangible assets	6,008	8,380	75,693
Investments and other assets			
Investment securities	^{※1, ※4} 1,568	^{※1, ※4} 1,550	14,000
Long-term loans receivable	^{※4} 173	^{※4} 163	1,472
Guarantee deposits	1,561	1,577	14,244
Assets for retirement benefits	2,172	3,185	28,768
Deferred tax assets - non-current	2,783	2,708	24,460
Other non-current assets	74	75	677
Total investments and other assets	8,333	9,260	83,641
Total non-current assets	17,527	21,944	198,211
Total assets	119,469	131,194	1,185,023

	Millions of yen		Thousands of U.S. dollars
	As of March 31, 2020	As of March 31, 2021	As of March 31, 2021
Liabilities			
Current liabilities			
Accounts payable - trade	19,801	20,585	185,936
Electronically recorded obligations	11,603	10,903	98,482
Short-term loans payable	276	540	4,877
Current portion of PFI and other projects finance loans	^{※3} 855	^{※3} 863	7,795
Income taxes payable	2,206	3,959	35,760
Advances received	9,011	12,664	114,388
Provision for warranties for completed construction	1,340	1,588	14,343
Provision for loss on construction contracts	579	871	7,867
Other current liabilities	8,658	10,613	95,863
Total current liabilities	54,333	62,590	565,350
Non-current liabilities			
Long-term loans payable	1,539	1,287	11,624
PFI and other projects finance loans	^{※3} 9,849	^{※3} 8,986	81,167
Liability for retirement benefit	4,025	3,819	34,495
Other non-current liabilities	128	1,077	9,728
Total non-current liabilities	15,542	15,170	137,024
Total liabilities	69,876	77,761	702,384
Net assets			
Shareholders' equity			
Capital stock	11,946	11,946	107,903
Capital surplus	15,080	14,999	135,480
Retained earnings	37,900	42,725	385,918
Treasury stock	(14,289)	(13,988)	(126,348)
Total shareholders' equity	50,638	55,683	502,962
Accumulated other comprehensive income			
Valuation difference on available-for-sale securities	54	70	632
Foreign currency translation adjustment	(366)	(1,160)	(10,477)
Remeasurements of defined benefit plans	(882)	(1,327)	(11,986)
Total accumulated other comprehensive income	(1,194)	(2,417)	(21,831)
Non-controlling interests	148	166	1,499
Total net assets	49,592	53,432	482,630
Total liabilities and net assets	119,469	131,194	1,185,023

Consolidated Statement of Income and Statement of Comprehensive Income

[Consolidated Statement of Income]

	Millions of yen		Thousands of U.S. dollars
	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021	Fiscal year ended March 31, 2021
Net sales	128,723	133,355	1,204,543
Cost of sales	*1 101,846	*1 103,736	937,006
Gross profit	26,877	29,619	267,536
Selling, general and administrative expenses	*2, *4 18,653	*2, *4 18,755	169,406
Operating income	8,223	10,863	98,121
Non-operating income:			
Interest income	175	154	1,391
Dividends income	52	48	433
Foreign exchange gain	—	56	505
Gain on step acquisition	—	82	740
Gain on liquidation of subsidiaries and affiliates	—	174	1,571
Miscellaneous income	25	36	325
Total non-operating income	253	552	4,985
Non-operating expenses:			
Interest expenses	190	153	1,381
Loss on valuation of investment securities	—	104	939
Loss on disposal of non-current assets	*3 68	*3 76	686
Foreign exchange loss	59	—	—
Miscellaneous loss	25	26	234
Total non-operating expenses	344	362	3,269
Ordinary income	8,132	11,053	99,837
Income before income taxes	8,132	11,053	99,837
Income taxes - current	2,355	4,228	38,189
Income taxes - deferred	91	264	2,384
Total income taxes	2,446	4,492	40,574
Net income	5,686	6,560	59,253
Profit attributable to non-controlling interests	8	18	162
Profit attributable to owners of parent	5,677	6,542	59,091

[Consolidated Statement of Comprehensive Income]

	Millions of yen		Thousands of U.S. dollars
	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021	Fiscal year ended March 31, 2021
Net income	5,686	6,560	59,253
Other comprehensive income			
Valuation difference on available-for-sale securities	4	16	144
Foreign currency translation adjustment	4	(793)	(7,162)
Remeasurements of defined benefit plans	763	(445)	(4,019)
Total other comprehensive income	*1 772	*1 (1,222)	(11,037)
Comprehensive income	6,458	5,338	48,216
(Details)			
Comprehensive income attributable to owners of parent	6,450	5,320	48,053
Comprehensive income attributable to non-controlling interests	8	18	162

Consolidated Statement of Changes in Shareholders' Equity

Fiscal year ended March 31, 2020

(Millions of yen)

	Shareholders' equity					
	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity	
Balance at April 1, 2019	11,946	15,080	33,830	(0)	60,856	
Changes during the year						
Dividends from surplus			(1,607)		(1,607)	
Profit attributable to owners of parent			5,677		5,677	
Purchase of treasury stock				(14,288)	(14,288)	
Changes in other equity, net						
Total changes during the year	—	—	4,070	(14,288)	(10,218)	
Balance at March 31, 2020	11,946	15,080	37,900	(14,289)	50,638	
	Accumulated other comprehensive income					Total net assets
	Valuation difference on available-for-sale securities	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Non-controlling interests	
Balance at April 1, 2019	49	(371)	(1,645)	(1,967)	142	59,031
Changes during the year						
Dividends from surplus						(1,607)
Profit attributable to owners of parent						5,677
Purchase of treasury stock						(14,288)
Changes in other equity, net	4	4	763	772	6	779
Total changes during the year	4	4	763	772	6	(9,438)
Balance at March 31, 2020	54	(366)	(882)	(1,194)	148	49,592

Fiscal year ended March 31, 2021

(Millions of yen)

	Shareholders' equity					
	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity	
Balance at April 1, 2020	11,946	15,080	37,900	(14,289)	50,638	
Changes during the year						
Dividends from surplus			(1,737)		(1,737)	
Profit attributable to owners of parent			6,542		6,542	
Purchase of treasury stock				(0)	(0)	
Disposal of treasury stock		69		150	219	
Cancellation of treasury stock		(150)		150	—	
Increase in retained earnings due to change in the scope of consolidation			20		20	
Changes in other equity, net						
Total changes during the year	—	(81)	4,825	300	5,044	
Balance at March 31, 2021	11,946	14,999	42,725	(13,988)	55,683	
	Accumulated other comprehensive income					Total net assets
	Valuation difference on available-for-sale securities	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Non-controlling interests	
Balance at April 1, 2020	54	(366)	(882)	(1,194)	148	49,592
Changes during the year						
Dividends from surplus						(1,737)
Profit attributable to owners of parent						6,542
Purchase of treasury stock						(0)
Disposal of treasury stock						219
Cancellation of treasury stock						—
Increase in retained earnings due to change in the scope of consolidation						20
Changes in other equity, net	16	(793)	(445)	(1,222)	17	(1,204)
Total changes during the year	16	(793)	(445)	(1,222)	17	3,840
Balance at March 31, 2021	70	(1,160)	(1,327)	(2,417)	166	53,432

(Thousands of U.S. dollars)

	Shareholders' equity				
	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Balance at April 1, 2020	107,903	136,211	342,335	(129,066)	457,393
Changes during the year					
Dividends from surplus			(15,689)		(15,689)
Profit attributable to owners of parent			59,091		59,091
Purchase of treasury stock				(0)	(0)
Disposal of treasury stock		623		1,354	1,978
Cancellation of treasury stock		(1,354)		1,354	—
Increase in retained earnings due to change in the scope of consolidation			180		180
Changes in other equity, net					
Total changes during the year	—	(731)	43,582	2,709	45,560
Balance at March 31, 2021	107,903	135,480	385,918	(126,348)	502,962

	Accumulated other comprehensive income					Total net assets
	Valuation difference on available-for-sale securities	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Non-controlling interests	
Balance at April 1, 2020	487	(3,305)	(7,966)	(10,784)	1,336	447,945
Changes during the year						
Dividends from surplus						(15,689)
Profit attributable to owners of parent						59,091
Purchase of treasury stock						(0)
Disposal of treasury stock						1,978
Cancellation of treasury stock						—
Increase in retained earnings due to change in the scope of consolidation						180
Changes in other equity, net	144	(7,162)	(4,019)	(11,037)	153	(10,875)
Total changes during the year	144	(7,162)	(4,019)	(11,037)	153	34,685
Balance at March 31, 2021	632	(10,477)	(11,986)	(21,831)	1,499	482,630

Consolidated Statement of Cash Flows

	Millions of yen		Thousands of U.S. dollars
	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021	Fiscal year ended March 31, 2021
Cash flows from operating activities			
Income before income taxes	8,132	11,053	99,837
Depreciation	1,098	1,247	11,263
Amortization of goodwill	148	193	1,743
Increase/(decrease) in liabilities for retirement benefits	(196)	(2)	(18)
(Increase)/decrease in assets for retirement benefits	(631)	79	713
Increase/(decrease) in provision for warranties for completed construction	(19)	274	2,474
Increase/(decrease) in provision for loss on construction contracts	61	291	2,628
Interest income and dividends income	(228)	(203)	(1,833)
Interest expenses	190	153	1,381
Foreign exchange (gain)/loss	59	(56)	(505)
(Gain)/loss on step acquisition	—	(82)	(740)
(Gain)/loss on liquidation of subsidiaries and affiliates	—	(174)	(1,571)
Loss on disposal of property, plant and equipment	68	76	686
Loss/(gain) on valuation of investment securities	—	109	984
(Increase)/decrease in notes and accounts receivable	(1,859)	111	1,002
(Increase)/decrease in inventory	605	(717)	(6,476)
Increase/(decrease) in notes and accounts payable - trade	5,169	(821)	(7,415)
Increase/(decrease) in advances received	(7,073)	3,597	32,490
Other cash flows from operating activities	501	(2,240)	(20,233)
Subtotal	6,027	12,890	116,430
Interest and dividends income received	228	203	1,833
Interest expenses paid	(196)	(161)	(1,454)
Income taxes paid	(2,537)	(2,527)	(22,825)
Net cash provided by operating activities	3,521	10,404	93,975
Cash flows from investing activities			
Net (increase)/decrease in time deposits	23	36	325
Purchase of property, plant and equipment	(600)	(735)	(6,638)
Purchase of intangible assets	(179)	30	270
Purchase of investment securities	(223)	(293)	(2,646)
Acquisition of newly consolidated subsidiaries	(426)	*2 (2,564)	(23,159)
Liquidation of subsidiaries and affiliates	—	330	2,980
Payments of loans receivable	(2)	(9)	(81)
Collection of loans receivable	27	24	216
Other cash flows from investing activities	0	(72)	(650)
Net cash used in investing activities	(1,380)	(3,252)	(29,374)

	Millions of yen		Thousands of U.S. dollars
	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021	Fiscal year ended March 31, 2021
Cash flows from financing activities			
Proceeds from short-term loans payable	—	258	2,330
Repayments of short-term loans payable	(330)	(283)	(2,556)
Repayments of PFI and other projects finance loans	(844)	(855)	(7,722)
Disposal of treasury stock	—	219	1,978
Purchase of treasury stock	(14,288)	(0)	(0)
Cash dividends paid	(1,607)	(1,737)	(15,689)
Cash dividends paid to non-controlling interests	(1)	(1)	(9)
Other cash flows from financing activities	—	295	2,664
Net cash used in financing activities	(17,072)	(2,103)	(18,995)
Effect of exchange rate change on cash and cash equivalents	11	119	1,074
Net increase/(decrease) in cash and cash equivalents	(14,920)	5,168	46,680
Cash and cash equivalents at April 1	27,796	12,876	116,303
Cash and cash equivalents at March 31	*1 12,876	*1 18,044	162,984

[Notes to Consolidated Financial Statements]

(Basis of Presentation)

The accompanying consolidated financial statements of METAWATER Co., Ltd. (the "Company") and consolidated subsidiaries are prepared on the basis of accounting principles generally accepted in Japan, which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards, and are compiled from the consolidated financial statements prepared by the Company as required by the Financial Instruments and Exchange Act of Japan.

Certain amounts in the prior year's financial statements have been reclassified to conform to the current year's presentation.

(Presentation of Amounts in the Consolidated Financial Statements)

The yen amounts are truncated at millions and U.S. dollar amounts are rounded off in thousands. The total Japanese yen and U.S. dollar amounts shown in the financial statements do not necessarily agree with the sum of the individual amounts. U.S. dollar amounts presented in the financial statements are included solely for convenience. The rate of ¥110.71 to US\$1.00, prevailing on March 31, 2021, has been used for translation into U.S. dollar amounts in the financial statements. The inclusion of such amounts should not be construed as a representation that Japanese yen amounts have been or could in the future be converted into U.S. dollars at that or any other rate.

(Principles of Consolidation)

The accompanying consolidated financial statements include the accounts of the Company and any significant companies controlled directly or indirectly by the Company.

Investments in companies over which the Company exercises significant influence in terms of their operating and financial policies have been accounted for by the equity method.

As of March 31, 2021, the numbers of consolidated subsidiaries were 16 (10 in 2020). Wigen Companies, Inc. and Rood Wit Blauw Holding B.V. are among those newly added to the scope of consolidation from the fiscal year ended March 31, 2021 following the acquisition of shares in them. In addition, the number of affiliated companies which have been accounted for by the equity method as of March 31, 2021 was two. Non-consolidated subsidiaries whose combined assets, net sales, profit and retained earnings are not significant in the related consolidated totals, have not been consolidated with the Company. Investments in non-consolidated subsidiaries and affiliated companies which have immaterial effect on the consolidated financial statements are accounted for at cost without applying the equity method of accounting. METAWATER USA, INC. and 12 other subsidiaries are consolidated using their financial statements as of their fiscal year end, which falls on December 31 and necessary adjustments are made to their financial statements to reflect any significant transactions from January 1 to March 31. All significant intercompany balances and transactions have been eliminated in consolidation.

(Summary of Significant Accounting Policies)

1. Valuation standard and methods for significant assets

(1) Securities

1) Available-for-sale securities

Available-for-sale securities with market value

Available-for-sale securities with market value are stated at fair value based on the market price as of the end of the accounting period. Any unrealized gain or loss, net of applicable taxes is

reported as a component of accumulated other comprehensive income. The cost of securities sold is calculated using the moving average method.

Available-for-sale securities without market value

Available-for-sale securities without market value are stated at cost using the moving average method.

(2) Inventory

1) Supplies

Supplies are stated at cost using the weighted average method. (Balance sheet amounts are written down on the basis of any decreased profitability.)

2) Work in process

Work in process is stated at cost using the individual identification method.

(3) Derivatives

Derivatives are stated at fair value.

2. Method of depreciation and amortization

(1) Property, plant and equipment

Depreciation of property, plant and equipment is mainly computed by the declining-balance method over the applicable useful lives. However, the buildings acquired on and after April 1, 1998 (excluding accompanying facilities) and the accompanying facilities and structures acquired on and after April 1, 2016 are depreciated by the straight-line method.

Useful lives of assets are principally as follows:

Buildings and structures:	2 to 50 years
Machinery and equipment:	2 to 17 years

(2) Intangible assets

Intangible assets are amortized by the straight-line method. Computer software for internal use is amortized by the straight-line method over the estimated useful life of 5 years. Customer-related assets are amortized by the straight-line method over the estimated useful life of 17 to 19 years.

3. Accounting standard for significant allowances and provisions

(1) Allowance for doubtful accounts

To provide for potential loss on receivables, the Company provides an allowance for the expected amount of irrecoverable receivables. Allowances for ordinary debt are computed based on the historical rate of default. For certain debts, such as those where recovery is doubtful, the Company considers the likelihood of recovery on an individual basis and records an allowance for the amount of debt expected to be unrecoverable. Allowance for doubtful accounts was not recorded at the end of the fiscal year ended March 31, 2021.

(2) Provision for warranties for completed construction

The Company records provision for warranties for completed construction based on the estimated amount of future warranties for construction revenue in order to provide for costs of free-of-charge repair under defect liability for contract construction.

- (3) Provision for loss on construction contracts
In order to provide for potential loss on construction contracts, the Company records provision for loss on construction contracts at an estimated amount of loss on contracts undelivered at the end of the fiscal year, loss of which are expected to be incurred and such expected amount of loss can be reasonably estimated.
4. Accounting method for retirement benefits
- (1) Method of allocating projected retirement benefit obligation
In calculating the retirement benefit obligation, the benefit formula basis is used to allocate the projected retirement benefit obligation to the estimated periods of service of the eligible employees until the end of the fiscal year.
- (2) Method for amortizing actuarial gain or loss and prior service cost
Prior service cost is amortized as incurred by the straight-line method over a period not exceeding the estimated average remaining service period of employees (10 to 14 years) at the time of occurrence.
Actuarial gain or loss is amortized from the fiscal year following the year in which the gain or loss is recognized, amortized by the straight-line method over a period not exceeding the average remaining service period of the employees (10 to 14 years) at the time of occurrence.
5. Recognition for revenue and cost
For long-term construction contracts whose outcome can be estimated reliably, the percentage-of-completion method is adopted. The stage of completion of a contract is determined by the percentage of the cost incurred to date to the estimated total cost. When the outcome of the construction contracts cannot be estimated reliably, the completed-contract method is adopted.
6. Foreign currency translation
Monetary receivables and payables in foreign currencies are translated into yen using the spot exchange rates on the consolidated balance sheet date, and translation adjustments are recorded as gains or losses. For foreign subsidiaries assets and liabilities are translated into yen using the spot exchange rates on the consolidated balance sheet date; revenues and expenses are translated into yen using the average exchange rates during the period; and translation adjustments are included in foreign currency translation adjustment under net assets.
7. Hedge accounting
- (1) Hedge accounting method
As interest rate swaps meet the requirements for short-cut method, the accounting is applied to them.
- (2) Hedging instruments and hedged items
Hedging instruments: Interest rate swaps
Hedged items: Interest on loans payable
- (3) Hedging policy
Interest rate swaps are used on some of loans payable from financial institutions to avoid risks resulting from interest rate fluctuation.
- (4) Method for evaluating hedging effectiveness
The evaluation of hedging effectiveness is omitted for interest rate swaps as the requirements for short-cut method are met.
8. The amortization method and amortization period of goodwill
Goodwill is amortized by the straight-line method over a period of 10 or 15 years.
9. Cash and cash equivalents in the consolidated statement of cash flows
Cash and cash equivalents consist of cash at hand, demand deposits at banks, and highly liquid short-term investments with negligible risk of fluctuation in value and maturities of three months or less.
10. Consumption tax
Consumption tax and local consumption tax are excluded from respective transaction amounts.
- (Significant Accounting Estimates)
Recognition of construction revenue by applying the percentage-of-completion method
1. Amounts recorded on the consolidated financial statements for the fiscal year ended March 31, 2021
Net sales (construction revenue): ¥33,448 million (US\$302,122 thousand)
Balance in accounts receivable (balance in accounts receivable from construction contracts): ¥18,453 million (US\$166,678 thousand)
(Note) Among the construction contracts accounted for by the percentage-of-completion method, the above amounts represent construction contracts that are incomplete and/or undelivered as of the end of the fiscal year ended March 31, 2021. (Completed and delivered construction contracts are not included.)
2. Other information that contributes to the understanding of users of consolidated financial statements
- (1) Calculation method
The Group adopts the percentage-of-completion method as the accounting standard for revenue of construction contracts whose outcome can be estimated reliably. The stage of completion of a contract is determined by the percentage of the cost incurred to date to the estimated total cost. Revenue in accordance with the percentage-of-completion method is measured based on the stage of completion of construction contracts. The stage of completion is determined based on the proportion of the cost incurred by the end of the fiscal year against the estimated total cost of construction.
- (2) Key assumptions
The total cost of construction is estimated by accumulating objective prices in detail, such as estimates obtained from external parties and internally approved standard unit prices. The estimated total cost of construction is a key assumption, because the estimation involves certain assumptions based on the professional knowledge and experience of construction work.

(3) Impact on the consolidated financial statements for the following fiscal year

Since construction work generally continues for a long-term period, a construction contract may change during the course of construction, and material costs and labor costs may fluctuate. In such cases, changes in the percentage of completion of construction associated with changes in the estimated total cost of construction may have an impact on the revenue to be recognized on the consolidated financial statements for the following fiscal year.

(Unapplied Accounting Standards, etc.)

- Accounting Standards Board of Japan (ASBJ) Statement No. 29 "Accounting Standard for Revenue Recognition" (March 31, 2020)

- ASBJ Guidance No. 30 "Implementation Guidance on Accounting Standard for Revenue Recognition" (March 26, 2021)

(1) Outline

A comprehensive accounting standard on revenue recognition. Revenue is recognized by applying the following five steps.

Step 1: Identify the contract with a customer

Step 2: Identify performance obligations in the contract

Step 3: Determine the transaction price

Step 4: Allocate the transaction price to the performance obligations in the contract

Step 5: Recognize revenue when (or as) the performance obligations are satisfied

(2) Scheduled date of application

They are scheduled to be applied from the beginning of the fiscal year ending March 31, 2022.

(3) Impact of application of the accounting standard, etc.

The impact of application is under evaluation at the time of preparing the consolidated financial statements.

-ASBJ Statement No. 30 "Accounting Standard for Fair Value Measurement" (July 4, 2019)

-ASBJ Statement No. 9 "Accounting Standard for Measurement of Inventories" (July 4, 2019)

-ASBJ Statement No. 10 "Accounting Standard for Financial Instruments" (July 4, 2019)

-ASBJ Guidance No. 31 "Implementation Guidance on Accounting Standard for Fair Value Measurement" (July 4, 2019)

-ASBJ Guidance No. 19 "Implementation Guidance on Disclosures about Fair Value of Financial Instruments" (March 31, 2020)

(1) Outline

The International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) of the United States have provided almost identical, detailed guidance on fair value measurement (for the International Financial Reporting Standards (IFRS), IFRS 13 "Fair Value Measurement," and for U.S. GAAP, the Accounting Standards Codification Topic 820 "Fair Value Measurement"). In light of these circumstances, the ASBJ has taken initiatives to ensure consistency of Japanese accounting standards with international accounting standards regarding principally the guidance and disclosure of the fair

value of financial instruments, and released the "Accounting Standard for Fair Value Measurement," etc. The ASBJ's basic policy of developing accounting standards for fair value measurement is to basically adopt all provisions of IFRS 13 in order to improve comparability of financial statements between Japanese companies and foreign companies by using a uniform calculation method. The policy also provides that alternative accounting treatments may be additionally adopted for individual items in consideration of the current Japanese practices, to the extent that such alternative treatments do not significantly impair comparability of financial statements.

(2) Scheduled date of application

They are scheduled to be applied from the beginning of the fiscal year ending March 31, 2022.

(3) Impact of application of the accounting standards, etc.

The impact of application of the "Accounting Standard for Fair Value Measurement," etc., on the consolidated financial statements has not currently been determined.

(Changes in Presentation)

Application of the "Accounting Standard for Disclosure of Accounting Estimates"

The Company has applied the ASBJ Statement No. 31 "Accounting Standard for Disclosure of Accounting Estimates" (March 31, 2020) from the fiscal year ended March 31, 2021, and stated notes on significant accounting estimates in the consolidated financial statements.

However, these notes do not provide matters regarding the previous fiscal year in accordance with the transitional treatment provided for in the proviso of Paragraph 11 of this Accounting Standard.

(Notes to Consolidated Balance Sheets)

*1. Investments in non-consolidated subsidiaries and affiliated companies are as follows:

	As of March 31, 2020 (Millions of yen)	As of March 31, 2021 (Millions of yen)	As of March 31, 2021 (Thousands of U.S. dollars)
Investment securities	1,167	921	8,319

*2. Accumulated depreciation of property, plant and equipment

	As of March 31, 2020 (Millions of yen)	As of March 31, 2021 (Millions of yen)	As of March 31, 2021 (Thousands of U.S. dollars)
Accumulated depreciation of property, plant and equipment	4,287	4,655	42,046

*3. "Current portion of PFI and other project finance loans" and "PFI and other project finance loans" are loans payable secured by the PFI business from financial institutions to WATER NEXT YOKOHAMA Co., Ltd., which is a special purpose company established for the PFI business and the Company's consolidated subsidiary, and other consolidated subsidiaries.

The amounts of assets including accounts receivable of the special purpose company corresponding to the above PFI and other project finance loans are as follows:

	As of March 31, 2020 (Millions of yen)	As of March 31, 2021 (Millions of yen)	As of March 31, 2021 (Thousands of U.S. dollars)
Cash and deposits	1,598	1,612	14,560
Notes and accounts receivable - trade	11,437	10,883	98,301
Total	13,035	12,496	112,871

The following assets eliminated in the consolidation procedures are pledged as security.

	As of March 31, 2020 (Millions of yen)	As of March 31, 2021 (Millions of yen)	As of March 31, 2021 (Thousands of U.S. dollars)
Investments in subsidiaries	152	152	1,372
Long-term loans receivable	448	409	3,694
Total	601	561	5,067

*4. The following assets are pledged as security for PFI and other project finance loans to subsidiaries and affiliated companies operating the PFI business (non-consolidated).

	As of March 31, 2020 (Millions of yen)	As of March 31, 2021 (Millions of yen)	As of March 31, 2021 (Thousands of U.S. dollars)
Investment securities	431	280	2,529
Long-term loans receivable	169	147	1,327
Total	601	428	3,865

*5. Guarantees of indebtedness

The Company provides guarantees to the following companies for their loans payable from financial institutions.

(1) Guarantee for loans payable

	As of March 31, 2020 (Millions of yen)	As of March 31, 2021 (Millions of yen)	As of March 31, 2021 (Thousands of U.S. dollars)
Osaka Bioenergy Co., Ltd.	126	108	975

(2) Performance guarantee

	As of March 31, 2020 (Millions of yen)	As of March 31, 2021 (Millions of yen)	As of March 31, 2021 (Thousands of U.S. dollars)
Ariake Water Management Co., Ltd.	27	38	343
Aizuwakamatsu Aqua Partner Co., Ltd.	523	483	4,362
Sasebo Aqua Solution Co., Ltd.	226	214	1,932
Sorami Bio Partners Co., Ltd.	63	63	569
Northern Akita Eco-resource Management Co., Ltd.	17	17	153
Ofunato Sewer Management Co., Ltd.	14	14	126
Gotemba Oyama Eco Partners Co., Ltd.	14	14	126
WATER CIRCLE KUMAMOTO K.K.	—	270	2,438
Total	887	1,116	10,080

(Notes to Consolidated Statement of Income)

- *1. Provision for loss on construction contracts included in cost of sales are as follows:

Fiscal year ended March 31, 2020 (Millions of yen)	Fiscal year ended March 31, 2021 (Millions of yen)	Fiscal year ended March 31, 2021 (Thousands of U.S. dollars)
(74)	203	1,833

- *2. The major items and their amounts of selling, general and administrative expenses are as follows:

	Fiscal year ended March 31, 2020 (Millions of yen)	Fiscal year ended March 31, 2021 (Millions of yen)	Fiscal year ended March 31, 2021 (Thousands of U.S. dollars)
Salaries and allowances	4,284	4,917	44,413
Bonuses	1,484	1,797	16,231
Retirement benefit expenses	424	(289)	(2,610)
Provision for warranties for completed construction	(16)	254	2,294
Research and development expenses	2,374	2,100	18,968

- *3. The details of loss on disposal of non-current assets are as follows:

Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Loss on sales and retirement of machinery and equipment	Loss on sales and retirement of machinery and equipment

- *4. Total amount of research and development expenses included in general and administrative expenses and in production cost in the fiscal year are as follows:

Fiscal year ended March 31, 2020 (Millions of yen)	Fiscal year ended March 31, 2021 (Millions of yen)	Fiscal year ended March 31, 2021 (Thousands of U.S. dollars)
2,374	2,100	18,968

(Notes to Consolidated Statement of Comprehensive Income)

- *1. The following table presents reclassification adjustments and tax effects allocated to each component of other comprehensive income for the years ended March 31, 2021 and 2020

	Fiscal year ended March 31, 2020 (Millions of yen)	Fiscal year ended March 31, 2021 (Millions of yen)	Fiscal year ended March 31, 2021 (Thousands of U.S. dollars)
Valuation difference on available-for-sale securities			
Amount arising during the year	6	25	225
Reclassification adjustments	—	—	—
Amount before tax effect	6	25	225
Tax effect	(1)	(8)	(72)
Valuation difference on available-for-sale securities	4	16	144
Foreign currency translation adjustment			
Amount recognized during the year	4	(793)	(7,162)
Remeasurements of defined benefit plans			
Amount recognized during the year	546	1,205	10,884
Reclassification adjustments	553	(1,846)	(16,674)
Before tax effect adjustment	1,100	(641)	(5,789)
Tax effects	(336)	196	1,770
Remeasurements of defined benefit plans	763	(445)	(4,019)
Total other comprehensive income	772	(1,222)	(11,037)

(Notes to Consolidated Statement of Changes in Shareholders' Equity)

Fiscal year ended March 31, 2020

1. Shares issued

Type of shares	Number of shares as of April 1, 2019	Increase	Decrease	Number of shares as of March 31, 2020
Common stock (shares)	25,923,500	—	—	25,923,500

2. Treasury stock

Type of shares	Number of shares as of April 1, 2019	Increase	Decrease	Number of shares as of March 31, 2020
Common stock (shares)	150	4,200,036	—	4,200,186

(Details of the changes)

Increase resulting from purchase of shares less than one unit: 36 shares

Purchase of treasury stock in accordance with the resolution of the Board of Directors' meeting held on October 29, 2019: 4,200,000 shares

3. Dividends
(1) Dividends paid

Resolution	Type of shares	Total amount of dividends (Millions of yen)	Dividend per share (Yen)	Cut-off date	Effective date
Board of Directors' meeting held on May 22, 2019	Common stock	803	31.00	March 31, 2019	June 6, 2019
Board of Directors' meeting held on November 12, 2019	Common stock	803	31.00	September 30, 2019	December 3, 2019

(2) Dividends whose record date falls in the fiscal year ended March 31, 2020, but whose effective date is in the following fiscal year

Resolution	Type of shares	Source of dividends	Total amount of dividends (Millions of yen)	Dividend per share (Yen)	Cut-off date	Effective date
Board of Directors' meeting held on May 21, 2020	Common stock	Retained earnings	868	40.00	March 31, 2020	June 5, 2020

Fiscal year ended March 31, 2021

1. Shares issued

Type of shares	Number of shares as of April 1, 2020	Increase	Decrease	Number of shares as of March 31, 2021
Common stock (shares)	25,923,500	25,923,500	88,500	51,758,500

(Details of the changes)

Increase resulting from a 2-for-1 split for each share of common stock conducted on October 1, 2020: 25,923,500 shares

Decrease resulting from the cancellation of treasury stock conducted on January 29, 2021: 88,500 shares

2. Treasury stock

Type of shares	Number of shares as of April 1, 2020	Increase	Decrease	Number of shares as of March 31, 2021
Common stock (shares)	4,200,186	4,200,246	177,000	8,223,432

(Details of the changes)

Increase resulting from purchase of shares less than one unit: 30 shares

Increase resulting from a 2-for-1 split for each share of common stock conducted on October 1, 2020: 4,200,216 shares

Decrease resulting from the disposal of treasury stock conducted on January 15, 2021: 88,500 shares

Decrease resulting from the cancellation of treasury stock conducted on January 29, 2021: 88,500 shares

3. Dividends
(1) Dividends paid

Resolution	Type of shares	Total amount of dividends (Millions of yen)	Dividend per share (Yen)	Cut-off date	Effective date
Board of Directors' meeting held on May 21, 2020	Common stock	868	40.00	March 31, 2020	June 5, 2020
Board of Directors' meeting held on November 11, 2020	Common stock	868	40.00	September 30, 2020	December 2, 2020

Resolution	Type of shares	Total amount of dividends (Thousands of U.S. dollars)	Dividend per share (U.S. dollars)	Cut-off date	Effective date
Board of Directors' meeting held on May 21, 2020	Common stock	7,840	0.36	March 31, 2020	June 5, 2020
Board of Directors' meeting held on November 11, 2020	Common stock	7,840	0.36	September 30, 2020	December 2, 2020

(Note) The Company conducted a 2-for-1 split for each share of common stock on October 1, 2020. The amounts of dividend per share in accordance with resolutions made at the Board of Directors' meetings held on May 21, 2020 and November 11, 2020 represent the amounts before the stock split.

(2) Dividends whose record date falls in the fiscal year ended March 31, 2021, but whose effective date is in the following fiscal year

Resolution	Type of shares	Source of dividends	Total amount of dividends (Millions of yen)	Dividend per share (Yen)	Cut-off date	Effective date
Board of Directors' meeting held on May 20, 2021	Common stock	Retained earnings	870	20.00	March 31, 2021	June 4, 2021

Resolution	Type of shares	Source of dividends	Total amount of dividends (Thousands of U.S. dollars)	Dividend per share (U.S. dollars)	Cut-off date	Effective date
Board of Directors' meeting held on May 20, 2021	Common stock	Retained earnings	7,858	0.18	March 31, 2021	June 4, 2021

(Note) The Company conducted a 2-for-1 split for each share of common stock on October 1, 2020. The amount of dividend per share in accordance with the resolution made at the Board of Directors' meeting held on May 20, 2021 represents the amount after the stock split.

(Notes to Consolidated Statement of Cash Flows)

- *1. Cash and cash equivalents in the consolidated statement of cash flows are reconciled to cash and deposits in the consolidated balance sheets as follows:

	Fiscal year ended March 31, 2020 (Millions of yen)	Fiscal year ended March 31, 2021 (Millions of yen)	Fiscal year ended March 31, 2021 (Thousands of U.S. dollars)
Cash and deposits	13,645	18,777	169,605
Time deposits with maturities of over three months	(769)	(733)	(6,620)
Cash and cash equivalents	12,876	18,044	162,984

- *2. The breakdown of major assets and liabilities of a company that newly became a consolidated subsidiary through acquisition of shares
The breakdown of assets and liabilities at the beginning of consolidation associated with the consolidation of Wigen Companies, Inc. through the acquisition of shares, and the reconciliation of the acquisition cost of shares to expenditure (net increase) for acquisition of Wigen Companies, Inc. are as follows:

	(Millions of yen)	(Thousands of U.S. dollars)
Current assets	798	7,208
Non-current assets	2,194	19,817
Goodwill	664	5,997
Current liabilities	(784)	(7,081)
Non-current liabilities	(487)	(4,398)
Acquisition cost of shares	2,386	21,551
Cash and cash equivalents	(132)	(1,192)
Balance: Expenditure for acquisition	2,253	20,350

(Financial Instruments)

1. Overview

(1) Group policy for financial instruments

The Group restricts its fund management to short-term deposits and raises funds through loans from financial institutions including banks. Derivatives are used for receivables and payables arising from transactions associated with the actual demand, and the Group does not intend to make speculative transactions.

(2) Type of financial instruments, related risk and risk management system

Although notes and accounts receivable - trade are exposed to customer credit risk, the Group works to reduce such risk in accordance with credit management rules. Although trade receivables in foreign currencies arising from overseas operations are exposed to currency fluctuation risk, they are hedged

with forward foreign currency contracts where necessary.

Investment securities are mainly limited to shares of companies with which the Group has built a business relationship. Listed stocks are exposed to risk of fluctuation in the market value, while they are marked to market on a quarterly basis.

The payment terms of notes and accounts payable - trade are mostly one year or less than one year.

Although some of trade payables are denominated in foreign currencies and are exposed to currency fluctuation risk, they are hedged with forward foreign currency contracts where necessary.

Loans payable are mainly used for the acquisition of shares of subsidiaries, with the maximum maturity period of 7 years after the balance sheet date. PFI and other project finance loans are intended to raise funds for specific businesses such as the PFI business, with the maximum maturity period of 15 years and 8 months after the accounting period. Although some of PFI and other project finance loans are exposed to risk of interest rate fluctuation, while they are hedged with derivatives (interest rate swaps).

Derivatives include forward foreign currency contracts which are used to hedge currency fluctuation risk associated with trade receivables and payables, and interest rate swaps which are used to hedge risk of fluctuation in interest on loans payable. The evaluation of hedging effectiveness is omitted based on the judgment that interest rate swaps meet the requirements for short-cut method.

2. Fair value of financial instruments

The carrying value of financial instruments on the consolidated balance sheets as of March 31, 2021 and 2020 and estimated fair value are shown in the following table. The financial instruments whose fair value is deemed extremely difficult to determine are not included in the table below (please see Note 2).

As of March 31, 2020

	Carrying value (Millions of yen)	Fair value (Millions of yen)	Difference (Millions of yen)
(1) Cash and deposits	13,645	13,645	—
(2) Notes and accounts receivable - trade	78,109	78,088	(20)
(3) Investment securities Available-for-sale securities	110	110	—
Total assets	91,865	91,844	(20)
(1) Accounts payable - trade	19,801	19,801	—
(2) Electronically recorded obligations	11,603	11,603	—
(3) Short-term loans payable	276	276	—
(4) Current portion of PFI and other projects finance loans	855	855	—
(5) Long-term loans payable	1,539	1,560	21
(6) PFI and other projects finance loans	9,849	10,060	211
(7) Derivatives	—	—	—
Total liabilities	43,925	44,158	233

As of March 31, 2021

	Carrying value (Millions of yen)	Fair value (Millions of yen)	Difference (Millions of yen)
(1) Cash and deposits	18,777	18,777	—
(2) Notes and accounts receivable - trade	78,398	78,354	(43)
(3) Investment securities Available-for-sale securities	135	135	—
Total assets	97,311	97,268	(43)
(1) Accounts payable - trade	20,585	20,585	—
(2) Electronically recorded obligations	10,903	10,903	—
(3) Short-term loans payable	540	540	—
(4) Current portion of PFI and other projects finance loans	863	863	—
(5) Long-term loans payable	1,287	1,321	34
(6) PFI and other projects finance loans	8,986	9,181	195
(7) Derivatives	—	—	—
Total liabilities	43,166	43,396	229

	Carrying value (Thousands of U.S. dollars)	Fair value (Thousands of U.S. dollars)	Difference (Thousands of U.S. dollars)
(1) Cash and deposits	169,605	169,605	—
(2) Notes and accounts receivable - trade	708,138	707,740	(388)
(3) Investment securities Available-for-sale securities	1,219	1,219	—
Total assets	878,972	878,583	(388)
(1) Accounts payable - trade	185,936	185,936	—
(2) Electronically recorded obligations	98,482	98,482	—
(3) Short-term loans payable	4,877	4,877	—
(4) Current portion of PFI and other projects finance loans	7,795	7,795	—
(5) Long-term loans payable	11,624	11,932	307
(6) PFI and other projects finance loans	81,167	82,928	1,761
(7) Derivatives	—	—	—
Total liabilities	389,901	391,979	2,068

(Note 1) Computation method of fair values of financial instruments and other matters concerning securities and derivatives

Assets

(1) Cash and deposits

The fair value of cash and deposits is based on their carrying amount, since the fair value approximates their carrying amount due to the short maturity period of the instrument.

(2) Notes and accounts receivable - trade

The fair value of notes and accounts receivable - trade is based on their present value calculated by discounting the amount of each receivable classified by a certain period using a discount rate that reflects the credit risk and the period until the maturity.

(3) Investment securities

The fair value of stocks is based on their prices quoted on the concerned stock exchanges.

Liabilities

(1) Accounts payable - trade, (2) Electronically recorded obligations, (3) Short-term loans payable and (4) Current portion of PFI and other project finance loans

The fair value of accounts payable - trade, electronically recorded obligations, short-term loans payable and current portion of PFI and other project finance loans is based on their carrying amounts, since the fair value approximates their carrying amounts due to the short maturity period of the instruments.

(5) Long-term loans payable and (6) PFI and other project finance loans

The fair value of long-term loans payable and PFI and other project finance loans is computed based on their present value calculated by discounting the aggregate value of principal and interest using the discount rate at which a similar and new borrowing is assumed to be made.

(7) Derivatives

The fair value of interest rate swaps is based on the quoted price obtained from the counterparty financial institution.

Since interest rate swaps under short-cut method are treated together with long-term loans payable and PFI and other project finance loans that are subject to hedging, their fair value is included in the fair value of PFI and other project finance loans.

(Note 2) The amount of financial instruments recorded in the consolidated balance sheets, of which it is deemed extremely difficult to determine the fair value.

Category	As of March 31, 2020 (Millions of yen)	As of March 31, 2021 (Millions of yen)	As of March 31, 2021 (Thousands of U.S. dollars)
Unlisted stocks (including shares of non-consolidated subsidiaries and affiliated companies)	1,457	1,414	12,772

Since there is no quoted market price for the above item and it is deemed extremely difficult to determine its fair value, the item is not included in “(3) Investment securities”.

(Note 3) The redemption schedule for monetary receivables subsequent to the consolidated closing date

As of March 31, 2020

	Due in one year or less (Millions of yen)	Due after one year through five years (Millions of yen)	Due after five years through ten years (Millions of yen)	Due after ten years (Millions of yen)
Cash and deposits	13,645	—	—	—
Notes and accounts receivable - trade	66,676	3,857	3,802	3,773
Total	80,322	3,857	3,802	7,546

As of March 31, 2021

	Due in one year or less (Millions of yen)	Due after one year through five years (Millions of yen)	Due after five years through ten years (Millions of yen)	Due after ten years (Millions of yen)
Cash and deposits	18,777	—	—	—
Notes and accounts receivable - trade	67,518	4,121	3,755	3,002
Total	86,296	4,121	3,755	3,002

	Due in one year or less (Thousands of U.S. dollars)	Due after one year through five years (Thousands of U.S. dollars)	Due after five years through ten years (Thousands of U.S. dollars)	Due after ten years (Thousands of U.S. dollars)
Cash and deposits	169,605	—	—	—
Notes and accounts receivable - trade	609,863	37,223	33,917	27,115
Total	779,477	37,223	33,917	27,115

(Note 4) The repayment schedule for loans payable and PFI and other project finance loans subsequent to the consolidated closing date

As of March 31, 2020

	Due in one year or less (Millions of yen)	Due after one year through five years (Millions of yen)	Due after five years through ten years (Millions of yen)	Due after ten years through fifteen years (Millions of yen)	Due after fifteen years (Millions of yen)
Loans payable	276	1,266	272	—	—
PFI and other projects finance loans	855	3,320	3,735	2,794	—
Total	1,131	4,587	4,007	2,794	—

As of March 31, 2021

	Due in one year or less (Millions of yen)	Due after one year through five years (Millions of yen)	Due after five years through ten years (Millions of yen)	Due after ten years through fifteen years (Millions of yen)	Due after fifteen years (Millions of yen)
Loans payable	540	1,287	—	—	—
PFI and other projects finance loans	863	3,265	3,675	2,045	—
Total	1,403	4,552	3,675	2,045	—

	Due in one year or less (Thousands of U.S. dollars)	Due after one year through five years (Thousands of U.S. dollars)	Due after five years through ten years (Thousands of U.S. dollars)	Due after ten years through fifteen years (Thousands of U.S. dollars)	Due after fifteen years (Thousands of U.S. dollars)
Loans payable	4,877	11,624	—	—	—
PFI and other projects finance loans	7,795	29,491	33,194	18,471	—
Total	12,672	41,116	33,194	18,471	—

(Securities)

Available-for-sale securities

As of March 31, 2020

Category	Carrying value (Millions of yen)	Acquisition cost (Millions of yen)	Unrealized gain (loss) (Millions of yen)
Amounts in the consolidated balance sheets exceeding acquisition cost:			
Stocks	110	33	76
Total	110	33	76

As of March 31, 2021

Category	Carrying value (Millions of yen)	Acquisition cost (Millions of yen)	Unrealized gain (loss) (Millions of yen)
Amounts in the consolidated balance sheets exceeding acquisition cost:			
Stocks	135	33	102
Total	135	33	102

Category	Carrying value (Thousands of U.S. dollars)	Acquisition cost (Thousands of U.S. dollars)	Unrealized gain (loss) (Thousands of U.S. dollars)
Amounts in the consolidated balance sheets exceeding acquisition cost:			
Stocks	1,219	298	921
Total	1,219	298	921

(Derivatives)

1. Derivative transactions to which hedge accounting is not applied

No items to report.

2. Derivative transactions to which hedge accounting is applied

Interest rate-related derivatives

As of March 31, 2020

Hedge accounting method	Type of derivative transaction	Main hedged items	Contract amount (Millions of yen)	Contract amount due after one year (Millions of yen)	Fair value (Millions of yen)
Short-cut method for interest rate swaps	Interest rate swaps: Payment on a floating interest rate/Receiving on a fixed interest rate	Long-term loans payable	816	680	(Note)
	Interest rate swaps: Payment on a floating interest rate/Receiving on a fixed interest rate	PFI and other projects finance loans	9,806	9,029	(Note)
Total			10,622	9,709	

(Note) Since interest rate swaps to which short-cut method is applied are accounted together with long-term loans payable and PFI and other project finance loans that are subject to hedging, their fair value is included in the fair value of such long-term loans payable and PFI and other project finance loans.

As of March 31, 2021

Hedge accounting method	Type of derivative transaction	Main hedged items	Contract amount (Millions of yen)	Contract amount due after one year (Millions of yen)	Fair value (Millions of yen)
Short-cut method for interest rate swaps	Interest rate swaps: Payment on a floating interest rate/Receiving on a fixed interest rate	Long-term loans payable	691	553	(Note)
	Interest rate swaps: Payment on a floating interest rate/Receiving on a fixed interest rate	PFI and other projects finance loans	9,029	8,244	(Note)
Total			9,721	8,798	

Hedge accounting method	Type of derivative transaction	Main hedged items	Contract amount (Thousands of U.S. dollars)	Contract amount due after one year (Thousands of U.S. dollars)	Fair value (Thousands of U.S. dollars)
Short-cut method for interest rate swaps	Interest rate swaps: Payment on a floating interest rate/Receiving on a fixed interest rate	Long-term loans payable	6,241	4,995	(Note)
	Interest rate swaps: Payment on a floating interest rate/Receiving on a fixed interest rate	PFI and other projects finance loans	81,555	74,464	(Note)
Total			87,805	79,468	

(Note) Since interest rate swaps to which short-cut method is applied are accounted together with long-term loans payable and PFI and other project finance loans that are subject to hedging, their fair value is included in the fair value of such long-term loans payable and PFI and other project finance loans.

(Retirement Benefits)

1. Overview of retirement benefit plans

The Company has lump-sum payment plans and a contract-type corporate pension plan as its defined benefit plan. In addition, the Company has a defined contribution pension plan. The Company has established a retirement benefit trust.

Certain overseas consolidated subsidiaries have a defined benefit or defined contribution plan.

Certain domestic consolidated subsidiary has The Smaller Enterprise Retirement Allowance Mutual Aid Scheme. In addition to such scheme, certain domestic consolidated subsidiary has a retirement benefit plan under which such subsidiary pays additional retirement benefits to employees who meet the prescribed requirements upon their retirement.

In certain cases, the Group may also pay additional retirement benefits that are not subject to any actuarial calculations.

2. Defined benefit plans

(1) The changes in the retirement benefit obligation are as follows:

	Fiscal year ended March 31, 2020 (Millions of yen)	Fiscal year ended March 31, 2021 (Millions of yen)	Fiscal year ended March 31, 2021 (Thousands of U.S. dollars)
Retirement benefit obligation at the beginning of the year	17,163	17,396	157,131
Service cost	697	695	6,277
Interest cost	157	154	1,391
Actuarial gain and loss	195	289	2,610
Retirement benefits paid	(807)	(603)	(5,446)
Other	(10)	(50)	(451)
Retirement benefit obligation at the end of the year	17,396	17,881	161,512

(2) The changes in plan assets are as follows:

	Fiscal year ended March 31, 2020 (Millions of yen)	Fiscal year ended March 31, 2021 (Millions of yen)	Fiscal year ended March 31, 2021 (Thousands of U.S. dollars)
Plan assets at fair value at the beginning of the year	13,935	15,544	140,402
Expected return on plan assets	161	171	1,544
Actuarial gain and loss	673	1,412	12,754
Contribution by the companies	1,082	665	6,006
Retirement benefits paid	(353)	(538)	(4,859)
Other	44	(8)	(72)
Plan assets at fair value at the end of the year	15,544	17,247	155,785

(3) The following table sets forth the funded status of the plans and the amounts recognized in the consolidated balance sheets as of March 31, 2020 and 2021 for the Company's and the consolidated subsidiaries' defined benefit plans:

	As of March 31, 2020 (Millions of yen)	As of March 31, 2021 (Millions of yen)	As of March 31, 2021 (Thousands of U.S. dollars)
Funded retirement benefit obligation	14,944	15,361	138,749
Plan assets at fair value	(15,544)	(17,247)	(155,785)
	(599)	(1,885)	(17,026)
Unfunded retirement benefit obligation	2,452	2,519	22,753
Net amount of liabilities and assets recognized in the consolidated balance sheet	1,852	634	5,726
Liability for retirement benefit	4,025	3,819	34,495
Assets for retirement benefits	2,172	3,185	28,768
Net amount of liabilities and assets recognized in the consolidated balance sheet	1,852	634	5,726

(4) The components of retirement benefit expenses are as follows:

	Fiscal year ended March 31, 2020 (Millions of yen)	Fiscal year ended March 31, 2021 (Millions of yen)	Fiscal year ended March 31, 2021 (Thousands of U.S. dollars)
Service cost	697	695	6,277
Interest cost	157	154	1,391
Expected return on plan assets	(161)	(171)	(1,544)
Amortization of actuarial gain or loss	613	(1,772)	(16,005)
Amortization of prior service cost	8	7	63
Other	(53)	(33)	(298)
Retirement benefit expenses	1,263	(1,120)	(10,116)

(5) The components of remeasurements of defined benefit plans included in other comprehensive income (before tax effect) are as follows:

	Fiscal year ended March 31, 2020 (Millions of yen)	Fiscal year ended March 31, 2021 (Millions of yen)	Fiscal year ended March 31, 2021 (Thousands of U.S. dollars)
Prior service cost	8	7	63
Actuarial gain and loss	1,091	(649)	(5,862)
Total	1,100	(641)	(5,789)

(6) The components of remeasurements of defined benefit plans included in accumulated other comprehensive income (before tax effect) are as follows:

	As of March 31, 2020 (Millions of yen)	As of March 31, 2021 (Millions of yen)	As of March 31, 2021 (Thousands of U.S. dollars)
Unrecognized prior service cost	7	—	—
Unrecognized actuarial gain and loss	1,264	1,913	17,279
Total	1,272	1,913	17,279

(7) The fair value of plan assets, by major category as a percentage of total plan assets are as follows:

	As of March 31, 2019	As of March 31, 2020
Stocks	31%	16%
Bonds	33	29
General accounts	19	17
Cash and deposits	—	25
Other	17	10
Total	100	100

(Note) Retirement benefit trust established for the corporate pension plans is included and equivalent to 10.5% of total amount of plan assets as of March 31, 2020 and 9.4% as of March 31, 2021.

The long-term expected rate of return on plan assets have been determined as a result of consideration of both the portfolio allocation at present and in the future, and long-term rates of return from multiple plan assets at present and in the future.

(8) The assumptions used in accounting for the defined benefit plans are as follows:

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Discount rates	0.05–1.2%	0.2–1.2%
Long-term expected rates of return on plan assets	Mainly 1.5	Mainly 1.5
Expected rates of salary increase	1.2–8.5	1.2–8.5

3. Defined contribution plans

Contributions of defined contribution plans for the fiscal years ended March 31, 2020 and 2021 were ¥151 million and ¥279 million (US\$2,520 thousand), respectively.

(Income Taxes)

1. The significant components of deferred tax assets and deferred tax liabilities

	As of March 31, 2020 (Millions of yen)	As of March 31, 2021 (Millions of yen)	As of March 31, 2021 (Thousands of U.S. dollars)
Deferred tax assets:			
Enterprise tax payable	189	275	2,483
Accrued bonuses	872	968	8,743
Provision for loss on construction contracts	182	275	2,483
Provision for warranties for completed construction	359	434	3,920
Excess of depreciation	330	287	2,592
Liability for retirement benefit	1,425	189	1,707
Unused tax losses (Note 2)	165	178	1,607
Other	753	914	8,255
Subtotal	4,278	3,524	31,830
Valuation allowance for unused tax losses (Note 2)	(160)	(319)	(2,881)
Valuation allowance for the total amount of deductible temporary differences	(233)	(177)	(1,598)
Valuation allowance subtotal (Note 1)	(394)	(497)	(4,489)
Total deferred tax assets	3,884	3,027	27,341
Deferred tax liabilities:			
Gain on contribution of securities to retirement benefit trust	(858)	—	—
Customer-related assets	—	(451)	(4,073)
Other	(362)	(438)	(3,956)
Total deferred tax liabilities	(1,221)	(890)	(8,039)
Net deferred tax assets (liabilities)	2,662	2,137	19,302

(Notes)1. The valuation allowance has increased by ¥102 million (US\$921 thousand). This increase mainly consists of the additional recognition of the valuation allowance relating to the adjustment of the carrying amount of shares of subsidiaries based on the group taxation regime in the amount of ¥52 million (US\$469 thousand), the valuation allowance for loss on valuation of investment securities in the amount of ¥32 million (US\$289 thousand), and the valuation allowance for unused tax losses in the amount of ¥16 million (US\$144 thousand) at a consolidated subsidiary, METAWATER USA, INC.

2. Amounts of unused tax losses and deferred tax assets by carryforward period

As of March 31, 2020

	One year or less (Millions of yen)	After one year through two years (Millions of yen)	After two years through three years (Millions of yen)	After three years through four years (Millions of yen)	After four years through five years (Millions of yen)	After five years (Millions of yen)	Total (Millions of yen)
Unused tax losses (a)	—	—	—	2	3	159	165
Valuation allowance	—	—	—	(2)	(0)	(158)	(160)
Deferred tax assets	—	—	—	—	3	1	4

(a) Unused tax losses are multiplied by the effective statutory tax rate.

As of March 31, 2021

	One year or less (Millions of yen)	After one year through two years (Millions of yen)	After two years through three years (Millions of yen)	After three years through four years (Millions of yen)	After four years through five years (Millions of yen)	After five years (Millions of yen)	Total (Millions of yen)
Unused tax losses (a)	—	—	2	0	0	176	178
Valuation allowance	—	—	(2)	(0)	(0)	(175)	(177)
Deferred tax assets	—	—	—	—	—	1	1

	One year or less (Thousands of U.S. dollars)	After one year through two years (Thousands of U.S. dollars)	After two years through three years (Thousands of U.S. dollars)	After three years through four years (Thousands of U.S. dollars)	After four years through five years (Thousands of U.S. dollars)	After five years (Thousands of U.S. dollars)	Total (Thousands of U.S. dollars)
Unused tax losses (a)	—	—	18	0	0	1,589	1,607
Valuation allowance	—	—	(18)	(0)	(0)	(1,580)	(1,598)
Deferred tax assets	—	—	—	—	—	9	9

(a) Unused tax losses are multiplied by the effective statutory tax rate.

2. The breakdown of major items that caused differences between the effective statutory tax rate and the effective income tax rate

	As of March 31, 2020	As of March 31, 2021
Effective statutory tax rate	30.6%	30.6%
(Adjustment)		
Permanently non-deductible items such as entertainment expenses	1.9	14.1
Permanently non-taxable items such as dividends income	(0.2)	(0.9)
Per capita inhabitants' tax	0.8	0.6
Tax credit for experiment and research expenses	(2.1)	(4.0)
Changes in valuation allowance	(0.3)	1.0
Difference in tax rates of overseas consolidated subsidiaries	(0.4)	(0.2)
Other	(0.2)	(0.5)
Effective income tax rate	30.1	40.6

(Business Combination)

Business combination by acquisitions

1. Overview

(1) Name and business of the acquiree

Name: Wigen Companies, Inc.

Business: Development, designing and manufacturing of water treatment equipment for membrane treatment and ion-exchange

(2) Major purpose of business combination

The purpose is to acquire technology, experience and basis for distribution network in the U.S. market for recycled drinking water, as well as to expand the Group's business in North America by utilizing the experience related to water supply in the private sector market.

(3) Date of business combination

April 1, 2020

(4) Legal form of business combination

Stock acquisition in exchange for cash

(5) Company name after business combination

Wigen Companies, Inc.

(6) Ratio of voting rights acquired

100%

(7) Background of selecting the acquiree

METAWATER USA, INC., the Company's consolidated subsidiary, acquired all shares of Wigen Companies, Inc. in exchange for cash.

2. Period of the acquiree's business results included in the consolidated financial statements for the fiscal year ended March 31, 2021

The fiscal year-end of the acquiree is December 31, which is three months different from the consolidated fiscal year-end. The consolidated financial statements for the fiscal year ended March 31, 2021 include the results of the acquiree from April 1, 2020 to December 31, 2020.

3. Acquisition costs and the details

	(Millions of yen)	(Thousands of U.S. dollars)
Consideration paid: cash	2,386	21,551
Acquisition costs	2,386	21,551

4. Details and amount of major acquisition-related costs

Advisory expenses and others: ¥176 million (US\$1,589 thousand)

5. Amount of goodwill incurred, source, and method and period of amortization

(1) Amount of goodwill incurred

¥664 million (US\$5,997 thousand)

Subsequent to the provisional accounting applied for the three months ended June 30, 2020, the allocation of acquisition costs has been completed as of March 31, 2021, and the amount of goodwill has been determined.

(2) Source

The acquisition cost is accounted for as goodwill to the extent it exceeds the amount allocated to the assets acquired and liabilities assumed, net.

(3) Method and period of amortization

The straight-line method over 15 years

6. Amounts and details of assets acquired and liabilities assumed on the business combination date

	(Millions of yen)	(Thousands of U.S. dollars)
Current assets	798	7,208
Property, plant and equipment	75	677
Intangible assets	2,119	19,140
Total assets	2,992	27,025
Current liabilities	784	7,081
Non-current liabilities	487	4,398
Total liabilities	1,271	11,480

(Note) The amounts of assets and liabilities do not include the amount of goodwill in 5. above.

7. Amount allocated to intangible assets other than goodwill, as well as its details and amortization period by major type

Details by major type	Amount	Amortization period
Customer-related assets	¥2,092 million (US\$18,896 thousand)	19 years

8. Estimated impact on the consolidated statement of income for the fiscal year ended March 31, 2021, assuming that business combination was completed as of April 1, 2020 and the calculation methods thereof

This information is not provided because the effect on the consolidated statement of income for the fiscal year ended March 31, 2021 is immaterial.

(Asset Retirement Obligations)

The Group recognizes asset retirement obligations to restore corporate offices to their original condition upon termination of their lease contracts. However, the statement is omitted because the total amount of the asset retirement obligations is immaterial.

Regarding some of the obligation to restore corporate offices to their original condition, the Group estimate nonrecoverable amounts of deposits for those premises and record the portion attributable to the current year as expenses, instead of recording asset retirement obligations.

(Segment Information)

[Segment Information]

1. Outline of reportable segment

The Company's segments represent components of the Company for which separate financial information is available and that are subject to periodical review by the board of directors in determining how to allocate operating resources and evaluating performance.

The Company has established business divisions by its products and services at the corporate office, each of which operates under comprehensive domestic and overseas strategies developed for its products and services.

Therefore, the Group basically consists of two reportable segments: "Plant Engineering" and "Service Solutions", which are based on the Company's business divisions in consideration of similarities of types and natures of products and services. "Plant Engineering" segment is primarily involved in design and construction of water and sewage treatment plants. "Service Solutions" segment is primarily involved in operation, control and repair of water and sewage treatment plant facilities.

2. Determination of sales, income or loss, assets, liabilities and other items for each reportable segment

Accounting treatment applied to the business segment reported is generally consistent with accounting treatment stated in "Important Matters for Basis of Preparation of Consolidated Financial Statements".

In addition, segment income is determined based on operating income, which is consistent with operating income for the consolidated statement of income.

3. Sales, income or loss, assets, liabilities and other items by reportable segment

Fiscal year ended March 31, 2020

(Millions of yen)

	Reportable segments			Adjustments (Note)	Consolidated
	Plant Engineering Business	Service Solutions Business	Total		
Net sales					
Sales to third parties	72,366	56,356	128,723	—	128,723
Inter-segment sales and transfers	—	—	—	—	—
Net sales	72,366	56,356	128,723	—	128,723
Segment income	3,188	5,035	8,223	—	8,223
Segment assets	50,187	53,053	103,240	16,228	119,469
Other items					
Depreciation	630	467	1,098	—	1,098
Capital expenditures	526	267	794	—	794

(Note) The amount of corporate assets included in adjustments of segment assets is ¥16,228 million. The corporate assets mainly represent cash and deposits and investment securities.

Fiscal year ended March 31, 2021

(Millions of yen)

	Reportable segments			Adjustments (Note)	Consolidated
	Plant Engineering Business	Service Solutions Business	Total		
Net sales					
Sales to third parties	76,462	56,893	133,355	—	133,355
Inter-segment sales and transfers	—	—	—	—	—
Net sales	76,462	56,893	133,355	—	133,355
Segment income	5,538	5,325	10,863	—	10,863
Segment assets	56,295	54,527	110,822	20,371	131,194
Other items					
Depreciation	722	525	1,247	—	1,247
Capital expenditures	1,056	560	1,617	—	1,617

(Thousands of U.S. dollars)

	Reportable segments			Adjustments (Note)	Consolidated
	Plant Engineering Business	Service Solutions Business	Total		
Net sales					
Sales to third parties	690,651	513,892	1,204,543	—	1,204,543
Inter-segment sales and transfers	—	—	—	—	—
Net sales	690,651	513,892	1,204,543	—	1,204,543
Segment income	50,022	48,098	98,121	—	98,121
Segment assets	508,490	492,521	1,001,011	184,003	1,185,023
Other items					
Depreciation	6,521	4,742	11,263	—	11,263
Capital expenditures	9,538	5,058	14,605	—	14,605

(Note) The amount of corporate assets included in adjustments of segment assets is ¥20,371 million (US\$184,003 thousand). The corporate assets mainly represent cash and deposits and investment securities.

[Related Information]

Fiscal year ended March 31, 2020

1. Information by products and services

A description is omitted because similar information has been disclosed under segment information.

2. Information by region

(1) Net sales

A description is omitted because sales to third parties in Japan exceed 90% of net sales in the consolidated statement of income.

(2) Property, plant and equipment

(Millions of yen)

Japan	The United States	Switzerland	Other	Total
1,327	1,421	404	30	3,184

3. Information about major customers

(Millions of yen)

Name of customer	Net sales	Related business segment
TOKYO METROPOLITAN GOVERNMENT	17,267	Plant Engineering Business Service Solutions Business

Fiscal year ended March 31, 2021

1. Information by products and services

A description is omitted because similar information has been disclosed under segment information.

2. Information by region

(1) Net sales

(Millions of yen)

Japan	The United States	Other	Total
119,057	11,396	2,901	133,355

(Thousands of U.S. dollars)

Japan	The United States	Other	Total
1,075,395	102,935	26,203	1,204,543

(Note) Net sales are classified by country or region based on the customer's location.

(2) Property, plant and equipment

(Millions of yen)

Japan	The United States	Switzerland	Other	Total
1,780	1,756	448	316	4,302

(Thousands of U.S. dollars)

Japan	The United States	Switzerland	Other	Total
16,078	15,861	4,046	2,854	38,858

3. Information about major customers

(Millions of yen)

Name of customer	Net sales	Related business segment
TOKYO METROPOLITAN GOVERNMENT	19,655	Plant Engineering Business Service Solutions Business

(Thousands of U.S. dollars)

Name of customer	Net sales	Related business segment
TOKYO METROPOLITAN GOVERNMENT	177,535	Plant Engineering Business Service Solutions Business

[Information about Impairment Loss on Non-current Assets by Reportable Segment]

Fiscal year ended March 31, 2020

No items to report.

Fiscal year ended March 31, 2021

No items to report.

[Information about Amortization and Unamortized Balance of Goodwill by Reportable Segment]

Fiscal year ended March 31, 2020

(Millions of yen)

	Reportable segments			Corporate/ Eliminations	Total
	Plant Engineering Business	Service Solutions Business	Total		
Amortization	148	—	148	—	148
Unamortized balance	1,671	—	1,671	—	1,671

Fiscal year ended March 31, 2021

(Millions of yen)

	Reportable segments			Corporate/ Eliminations	Total
	Plant Engineering Business	Service Solutions Business	Total		
Amortization	193	—	193	—	193
Unamortized balance	2,421	—	2,421	—	2,421

(Thousands of U.S. dollars)

	Reportable segments			Corporate/ Eliminations	Total
	Plant Engineering Business	Service Solutions Business	Total		
Amortization	1,743	—	1,743	—	1,743
Unamortized balance	21,867	—	21,867	—	21,867

[Information about Gain on Bargain Purchase by Reportable Segment]

Fiscal year ended March 31, 2020

No items to report.

Fiscal year ended March 31, 2021

No items to report.

(Related Party Information)

Fiscal year ended March 31, 2020

1. Business transactions with related parties

(1)Business transactions between the company filing the consolidated financial statements and related parties

Unconsolidated subsidiaries and affiliated companies of the company filing the consolidated financial statements

Category	Related party	Address	Capital stock or contributions (Millions of yen)	Type of business	Percentage of voting rights holding (held) (%)	Relationship	Nature of transaction	Transaction amount (Millions of yen)	Account title	Balance at the end of year (Millions of yen)
Other affiliate	NGK INSULATORS, LTD.	Mizuho-ku, Nagoya-shi	69,849	Development, manufacture, and sale of products related to electric power, ceramics, electronics, and process technology, and provision of services related thereto	(Held) Direct 25.3	Purchase of products Concurrent holding of positions by officers	Purchase of products (Note 1, 2)	958	Accounts payable - trade	797
							Purchase of treasury stock (Note 3)	6,804	—	—
Other affiliate	FUJII ELECTRIC CO., LTD.	Kawasaki-ku, Kawasaki-shi	47,586	Development, manufacture, and sale of products related to power electronics systems, electronic devices, food distribution and power plant, and provision of services related thereto	(Held) Direct 24.4	Purchase of products	Purchase of products (Note 1, 2)	8,292	Accounts payable - trade	3,153
							Purchase of treasury stock (Note 3)	7,484	—	—
Subsidiary of other affiliate	FUJII FURUKAWA ENGINEERING & CONSTRUCTION CO. LTD.	Saiwai-ku, Kawasaki-shi	1,970	Design and execution of construction of plant facilities, air conditioning/ electricity/building/incidental facilities, and telecommunications	—	Entrustment of the Company's construction contracts	Entrustment of construction contracts (Note 1, 2)	4,706	Accounts payable - trade	1,485
Subsidiary of other affiliate	Hokkaido Fuji Electric Co., Ltd.	Chuo-ku, Sapporo-shi	100	Sale, installation, and repair of electrical machinery and apparatus/control systems and electronic components	—	Acceptance of construction contracts of said company	Acceptance of construction contracts (Note 1, 2)	764	Accounts receivable - trade	671

(Notes) 1. Of the amounts stated above, the transaction amount excludes consumption taxes, while the balance at end of the fiscal year includes consumption taxes.

2. Transaction terms and the policy to determine transaction terms

Transaction terms such as prices are determined through negotiation in each case based on a quotation as is the case with general transactions, as well as by reference to actual situation of the market.

3. The purchase of treasury stock was conducted through a tender offer with the purchase price of ¥3,402 per share of common stock in accordance with the resolution of the Board of Directors' meeting held on October 29, 2019.

(2)Business transactions between consolidated subsidiaries of the company filing the consolidated financial statements and related parties

No items to report.

2. Note concerning the parent company or significant affiliated companies

No items to report.

Fiscal year ended March 31, 2021

1. Business transactions with related parties

(1)Business transactions between the company filing the consolidated financial statements and related parties

Unconsolidated subsidiaries and affiliated companies of the company filing the consolidated financial statements

Category	Related party	Address	Capital stock or contributions (Millions of yen)	Type of business	Percentage of voting rights holding (held) (%)	Relationship	Nature of transaction	Transaction amount (Millions of yen)	Account title	Balance at the end of year (Millions of yen)
Other affiliate	NGK INSULATORS, LTD.	Mizuho-ku, Nagoya-shi	69,849 (US\$630,918 thousand)	Development, manufacture, and sale of products related to electric power, ceramics, electronics, and process technology, and provision of services related thereto	(Held) Direct 24.4	Purchase of products	Purchase of products (Note 1, 2)	1,053 (US\$9,511 thousand)	Accounts payable - trade	832 (US\$7,515 thousand)
Other affiliate	FUJII ELECTRIC CO., LTD.	Kawasaki -ku, Kawasaki -shi	47,586 (US\$429,825 thousand)	Development, production, and sale of products related to power electronics systems energy, power electronics systems industry, electronic devices, food distribution and power plant, and provision of services related thereto	(Held) Direct 24.4	Purchase of products	Purchase of products (Note 1, 2)	8,533 (US\$77,075 thousand)	Accounts payable - trade	2,984 (US\$26,953 thousand)
Subsidiary of other affiliate	FUJII FURUKAWA ENGINEERING & CONSTRUCTION CO. LTD.	Saiwai-ku, Kawasaki -shi	1,970 (US\$17,794 thousand)	Design and execution of construction of plant facilities, air conditioning/ electricity/building/incidental facilities, and telecommunications	—	Acceptance of construction contracts of said company	Acceptance of construction contracts (Note 1, 2)	1,521 (US\$13,738 thousand)	Accounts receivable - trade	1,120 (US\$10,116 thousand)
						Entrustment of the Company's construction contracts	Entrustment of construction contracts (Note 1, 2)	5,404 (US\$48,812 thousand)	Accounts payable - trade	1,646 (US\$14,867 thousand)
Subsidiary of other affiliate	Hokkaido Fuji Electric Co., Ltd.	Chuo-ku, Sapporo-shi	100 (US\$903 thousand)	Sale, installation, and repair of electrical machinery and apparatus/control systems and electronic components	—	Acceptance of construction contracts of said company	Acceptance of construction contracts (Note 1, 2)	685 (US\$6,187 thousand)	Accounts receivable - trade	641 (US\$5,789 thousand)

- (Notes)
- Of the amounts stated above, the transaction amount excludes consumption taxes, while the balance at end of the fiscal year includes consumption taxes.
 - Transaction terms and the policy to determine transaction terms
Transaction terms such as prices are determined through negotiation in each case based on a quotation as is the case with general transactions, as well as by reference to actual situation of the market.

(2)Business transactions between consolidated subsidiaries of the company filing the consolidated financial statements and related parties

No items to report.

2. Note concerning the parent company or significant affiliated companies

No items to report.

(Per Share Information)

	Fiscal year ended March 31, 2020 (Yen)	Fiscal year ended March 31, 2021 (Yen)	Fiscal year ended March 31, 2021 (U.S. dollars)
Net assets per share	1,138.03	1,223.53	11.05
Net income per share	115.76	150.50	1.35

- (Notes)
- Diluted net income per share is not presented as there are no diluted shares.
 - The Company conducted a 2-for-1 split for each share of common stock on October 1, 2020. Net assets per share and net income per share are calculated based on the assumption that the stock split was conducted at the beginning of the previous fiscal year.
 - Net income per share is calculated on the following basis.

	Fiscal year ended March 31, 2020 (Millions of yen)	Fiscal year ended March 31, 2021 (Millions of yen)	Fiscal year ended March 31, 2021 (Thousands of U.S. dollars)
Net income per share			
Profit attributable to owners of parent	5,677	6,542	59,091
Profit not attributable to common shareholders	—	—	—
Profit attributable to owners of parent related to common stock	5,677	6,542	59,091
Average number of shares outstanding during the period (number of shares)	49,046,652	43,468,404	43,468,404

4. Net assets per share are calculated on the following basis.

	Fiscal year ended March 31, 2020 (Millions of yen)	Fiscal year ended March 31, 2021 (Millions of yen)	Fiscal year ended March 31, 2021 (Thousands of U.S. dollars)
Total net assets	49,592	53,432	482,630
Deduction from total net assets	148	166	1,499
(Non-controlling interests included in the above)	(148)	(166)	(1,499)
Net assets attributable to shares of common stock	49,443	53,266	481,130
Number of common stock used for calculation of net assets per share (number of shares)	43,446,628	43,535,068	43,535,068

(Significant Subsequent Event)

No items to report.

5. [Supplementary Schedules]

[Schedule of Bonds]

No items to report.

[Schedule of Loans]

Category	Balance as of April 1, 2020 (Millions of yen)	Balance as of March 31, 2021 (Millions of yen)	Balance as of April 1, 2020 (Thousands of U.S. dollars)	Balance as of March 31, 2021 (Thousands of U.S. dollars)	Average interest rate (%)	Due date
Short-term loans payable	276	540	2,492	4,877	2.78	—
Current portion of PFI and other project finance loans	855	863	7,722	7,795	1.06	—
Long-term loans payable	1,539	1,287	13,901	11,624	3.18	April 25, 2023 to January 14, 2026
PFI and other projects finance loans	9,849	8,986	88,962	81,167	1.16	June 22, 2026 to November 30, 2033
Total	12,520	11,677	113,088	105,473	—	—

- (Notes)
1. "Average interest rate" is stated at weighted average interest rate on the balance of loans payable at the end of the fiscal year.
 2. Repayment schedule for long-term loans payable and PFI and other project finance loans (excluding current portion) per year for five years subsequent to the consolidated balance sheet date

Category	Due after one year through two years (Millions of yen)	Due after two years through three years (Millions of yen)	Due after three years through four years (Millions of yen)	Due after four years through five years (Millions of yen)
Long-term loans payable	457	276	276	276
PFI and other projects finance loans	873	885	698	807

Category	Due after one year through two years (Thousands of U.S. dollars)	Due after two years through three years (Thousands of U.S. dollars)	Due after three years through four years (Thousands of U.S. dollars)	Due after four years through five years (Thousands of U.S. dollars)
Long-term loans payable	4,127	2,492	2,492	2,492
PFI and other projects finance loans	7,885	7,993	6,304	7,289

[Schedule of Asset Retirement Obligations]

No items to report.

Corporate Information

Corporate Overview

Company Name	METAWATER Co., Ltd.
English Name	METAWATER Co., Ltd.
Main Business Activities	Design and construction of equipment for water treatment plants, sewage treatment plants, and waste treatment facilities; design, manufacture, and sale of various devices; implementation of repair work; provision of services including operation management.
Construction Industry Qualifications	Civil engineering work, building work, electrical work, plumbing work, tile, brick and block work, machine and equipment installation work, telecommunication work, water and sewage facilities work, sanitation facilities work.
Establishment	April 1, 2008
Chairman and Representative Director	Kenji Yamaguchi
Number of employee	3,340 <small>*As of March 31, 2020, consolidated</small>
List of bases	<p>Head Office JR Kanda Manseibashi Bldg., 1-25 Kandasuda-cho, Chiyoda-ku, Tokyo 101-0041 TEL:+81-(0)3-6853-7300</p> <p>Hino Branch 3-1-30 Asahigaoka, Hino, Tokyo 191-0065 TEL:+81-(0)42-589-6900</p> <p>Nagoya Branch Nagoya Prime Central Tower, 2-27-8 Meieki, Nishi-ku, Nagoya, Aichi 451-0045 TEL:+81-(0)52-884-6800</p> <p>Main sales bases Tokyo (Headquarters), Sapporo, Sendai, Yokohama, Nagoya, Osaka, Hiroshima, Takamatsu, Fukuoka</p>
R&D Centers	Handa (Aichi), Ichihara (Chiba), Chiyoda-ku (Tokyo)

Main group companies	<p>METAWATER SERVICES Co., Ltd.* METAWATER USA, INC.* Aqua-Aerobic Systems, Inc.* Wigen Companies, Inc.* Mecana Umwelttechnik GmbH* FUCHS Enprotec GmbH* Rood Wit Blauw Holding B.V.* METAWATER TECH Co., Ltd. Akebono Engineering Co. Techno Clean Hokuso Co.* SIC Co., Ltd. Water Next Yokohama Co., Ltd.* Aqua Service Aichi Co.*</p>
Overseas bases	<p>United States, Netherlands, Switzerland, Germany, Vietnam, Cambodia, Singapore</p>

*: Scope of consolidated statement

Organization

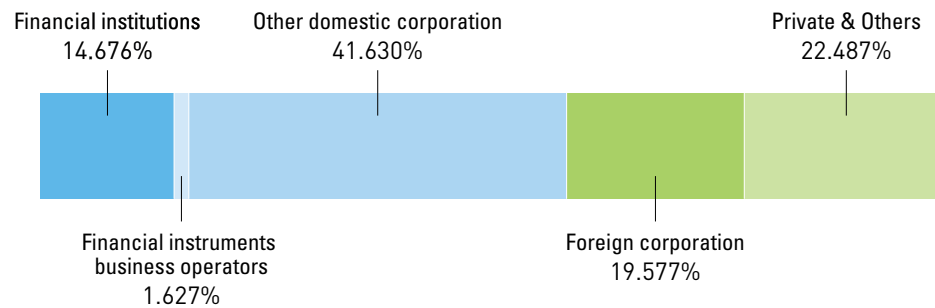


Corporate Information

Stock-related matters As of March 31, 2020

Stock Exchange listing	First section of the Tokyo Stock Exchange Industrial Classification Electric Power and Gas. (code: 9551)
Total number of authorized shares	140,000,000 shares
Total number of issued shares	51,758,500 shares (Including 8,223,432 shares of treasury stock)
Number of shareholders	6,043

Breakdown of shareholders



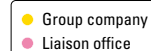
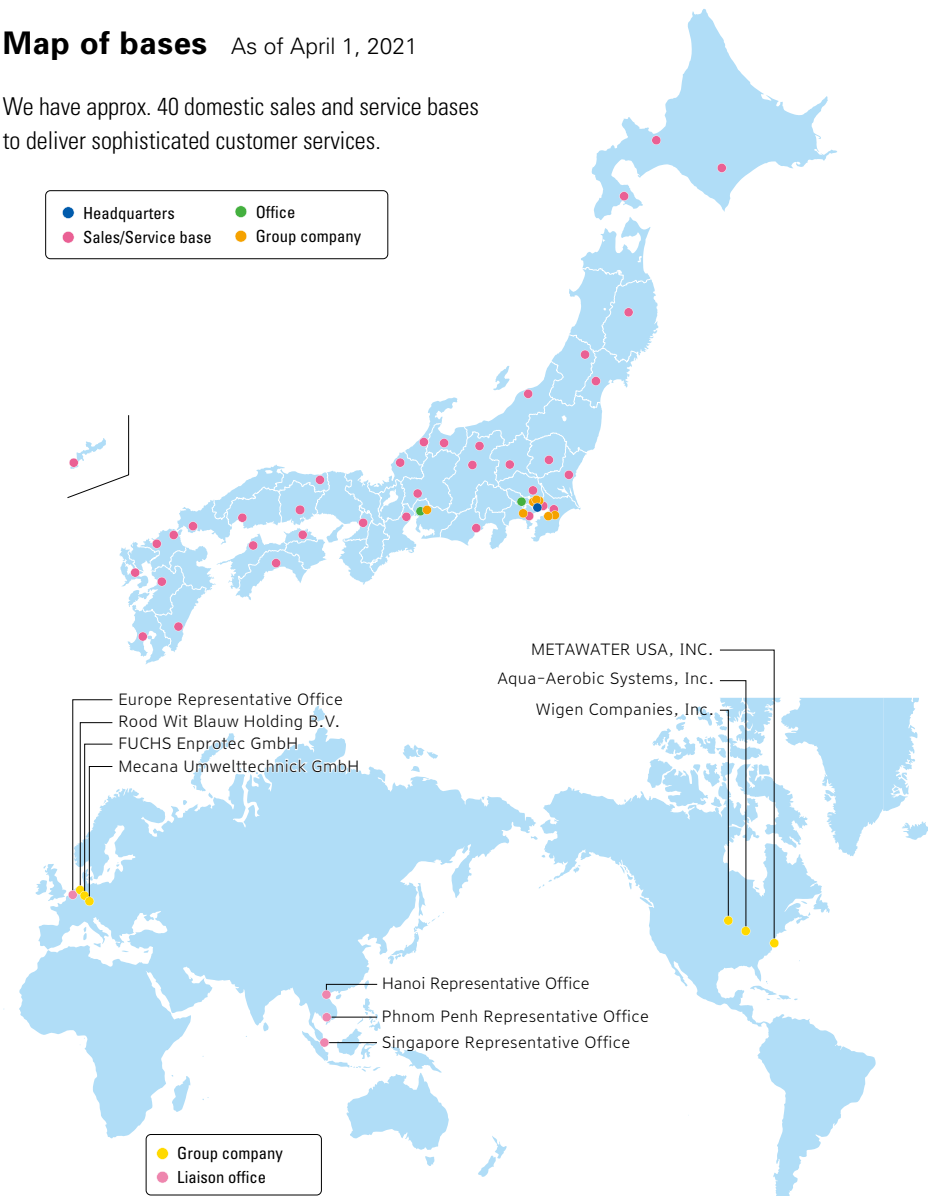
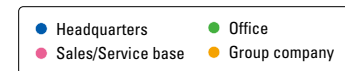
Status of dominant shareholders (Top 10)

Name of shareholder	Number of shares owned (1,000 shares)	Percentage of shares owned (%)
NGK INSULATORS, LTD.	10,629	24.42
Fuji Electric Co., Ltd.	10,600	24.35
The Master Trust Bank of Japan, Ltd. (Trust account)	2,557	5.87
JP MORGAN CHASE BANK 385632	2,061	4.74
Custody Bank of Japan, Ltd. (Trust Account)	1,857	4.27
GOVERNMENT OF NORWAY	990	2.28
The Nomura Trust and Banking Co., Ltd. (Trust account)	568	1.30
METAWATER Employee Shareholding Association	534	1.23
Custody Bank of Japan, Ltd. (Trust Account 9)	482	1.11
Custody Bank of Japan, Ltd. (Securities Investment Trust Account)	410	0.94

* The Company holds 8,223,432 shares of treasury stock, which have been excluded from the above list of dominant shareholders. Additionally, the percentage of shares owned is calculated excluding treasury stock.

Map of bases As of April 1, 2021

We have approx. 40 domestic sales and service bases to deliver sophisticated customer services.





“META” in the corporate name “METAWATER” is a prefix representing “transcendence” or “transformation.”

It symbolizes our desire to be a company that evolves continuously to hand down “WATER,” an indispensable resource, to people in the future generations.

The line vertically intersecting the logo in the center represents the role of METAWATER and its advanced technologies and products.

The deep blue on the left symbolizes “water before purification” and the clear blue on the right represents “water after purification and regeneration.”



Corporate Characters

To symbolize our corporate identities, we have mascot characters called “Mae-chan” and “Tah-kun.” The synergetic growth of “Mae-chan,” representing natural water, and “Tah-kun,” representing purified water, symbolizes the growth and symbiosis of METAWATER with the environment.



■ METAWATER Instagram official account

- Account name : metawater_official
- Name : metagram by METAWATER
- URL : https://www.instagram.com/metawater_official/?hl=ja





www.metawater.co.jp