KURITA WATER INDUSTRIES LTD.
MD&A and Consolidated Financial Statements

For the year ended March 31, 2022

Contents

Management’s Discussion and Analysis

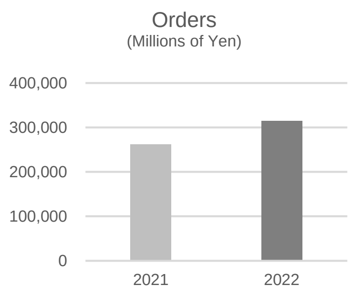
Kurita Water Industries Ltd. and Consolidated Subsidiaries

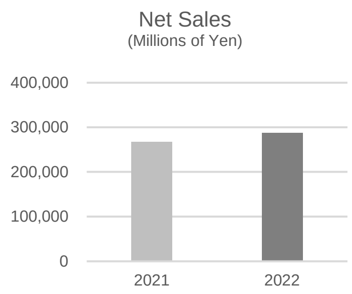
1. Business Results

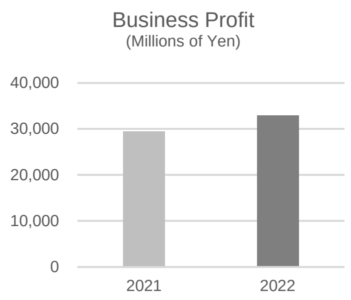
During the fiscal year ended March 31, 2022, economies worldwide showed signs of recovery as economic activity began to normalize, backed by stimulus measures and wider uptake of vaccinations. However, the recovery lost momentum at times due to mobility restrictions and supply-chain disruption caused by COVID-19 variants.
Looking at the market environment surrounding the Kurita Group, in Japan, production slowed in some parts of the manufacturing sector owing to supply constraints for materials, including shortages of semiconductors. However, the recovery trend continued and capital investment also picked up. Overseas, in Europe, the U.S., and China, economies continued to recover at a moderate pace, but a resurgence in COVID-19 infections weighed on economic recovery in certain Asian countries.

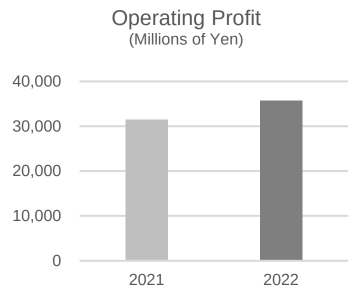
In this environment, the Kurita Group used the fiscal year under review, which is the fourth year of the medium-term management plan Maximize Value Proposition 2022 (MVP-22), to become an indispensable long-term partner for customers. Specifically, the Group worked to expand its range of total solutions and Creating Shared Value (CSV) business, which help to solve customer problems based on in-depth understanding of society and challenges faced by customers, such as minimizing water consumption, CO_2 emissions, waste, and other environmental loads, as well as the need to improve productivity. Also, targeting improved profitability, the Group made tangible progress in the high-margin ultrapure water supply business and tool cleaning business by responding to increased production capacity at customers and deploying new projects. In the design and construction process for water treatment facilities, the Group minimized cost overruns by utilizing a model to prevent the recurrence of non-compliance issues. Overseas, the Group overhauled its business portfolio and production and sales structures in each region, leading to growth in high-margin businesses. The Group also built a business structure that is highly resilient to changes in the operating environment. Furthermore, the operating results of Kurita AquaChemie Limited in the Middle East and its two subsidiaries, as well as Keytech Water Management, a Canadian company, have been included in the scope of consolidation from the fiscal year under review after they became consolidated subsidiaries.

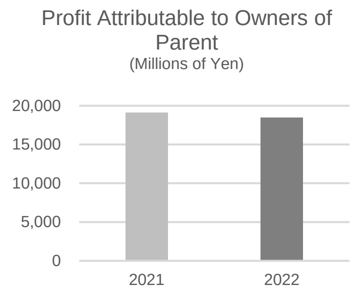
As a result, total consolidated orders for the Kurita Group in the fiscal year ended March 31, 2022 amounted to ¥315,240 million (up 20.2% year on year), and net sales totaled ¥288,207 million (up 7.6% year on year). Business profit was ¥32,944 million (up 11.8% year on year), operating profit was ¥35,734 million (up 13.3% year on year), and profit before tax was ¥30,079 million (up 3.2% year on year). Profit attributable to owners of parent was ¥18,471 million (down 3.2% year on year), reflecting the booking of financial costs of ¥5,496 million due to the subsequent measurement of financial liabilities related to forward acquisition contracts concluded with non-controlling shareholders of Pentagon Technologies Group, Inc. in the U.S. Kurita also booked other income of ¥6,119 million and other expenses of ¥3,329 million. Other income includes gain on sale of fixed assets of ¥4,079 million, mainly from the sale of real estate related to the former Head Office (Shinjuku) and the Osaka Office. Other expenses included impairment loss on fixed assets of ¥1,028 million, which mainly reflected the closure of the Yamaguchi Plant as part of a reorganization of manufacturing bases in the domestic Water Treatment Facilities business, and the decision to suspend operations at a plant owned by Kurita Water Industries (Jiangyin) Co. (Water Treatment Chemicals business) after a review of the production framework for water treatment chemicals in China.

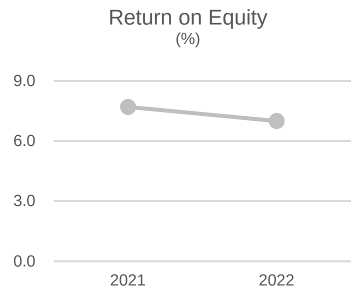










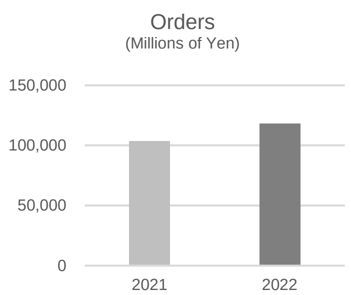


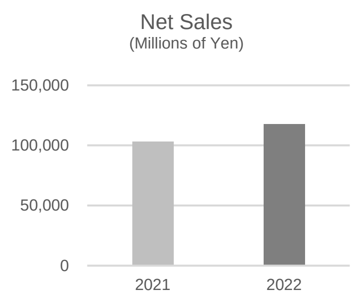
2. Business Segment Information

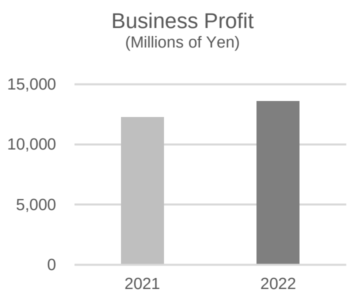
(1) Water Treatment Chemicals

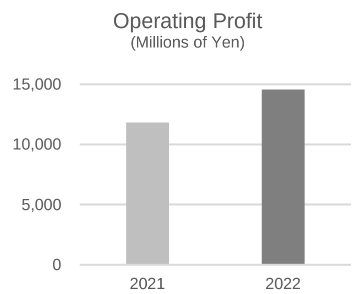
With respect to orders and sales in Japan, capacity utilization at customers' plants increased as production activity in the manufacturing sector began to recover. Overseas, both orders and sales increased on the back of a rebound in demand from the previous fiscal year, when the COVID-19 pandemic led to a slump in economic activity. Overseas sales and orders were also boosted by earnings from newly consolidated subsidiaries in the Middle East and Canada acquired in the first quarter of the fiscal year, and by an increase in foreign exchange differences on translation of overseas earnings due to the yen's depreciation.

As a result, total Group orders for the Water Treatment Chemicals business amounted to ¥118,401 million (up 14.3% year on year) and sales totaled ¥117,672 million (up 14.0% year on year). Business profit was ¥13,589 million (up 10.6% year on year), supported by an increase in sales, which outweighed higher expenses resulting from an ongoing normalization in sales activities and the impact of soaring raw material prices. Operating profit totaled ¥14,560 million (up 23.2% year on year) partly due to foreign exchange gains at overseas subsidiaries.





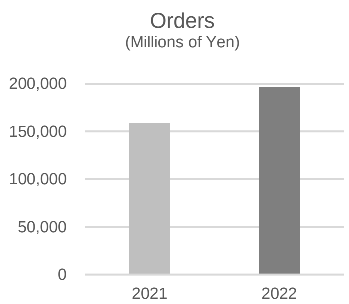


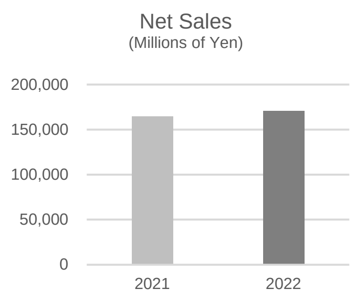


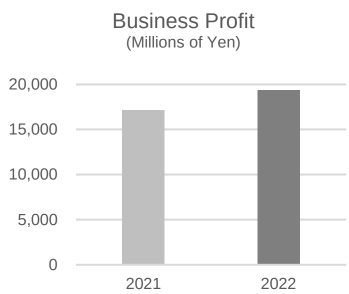
(2) Water Treatment Facilities

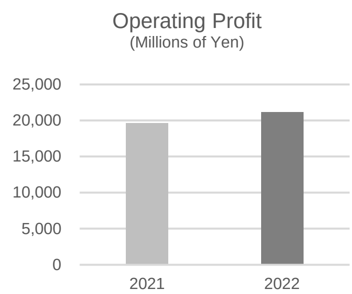
In Japan, orders for water treatment facilities from the electronics industry increased sharply on the back of orders for large projects, while sales also increased due to progress with the construction of large projects. Orders and sales for maintenance services from the electronics industry increased due to upgrade projects such as the installation of additional equipment and the replacement of consumables, supported by a steady rise in capacity utilization at customers’ plants. Orders for water treatment facilities from general industry decreased significantly due to the cancellation of large projects, with sales also contracting as sales booked from large projects ran their course. Orders for maintenance services from the general industry declined due to a focus on profitability in sales activities, but sales increased as demand grew on the back of a recovery in capacity utilization at customers’ plants. Orders and sales for water treatment facilities from the electric power industry decreased, with orders for large projects declining and sales from the backlog of orders dropped off. Orders for soil remediation rose, but sales declined as orders and sales from large projects ran their course. Overseas, both orders and sales increased due to the booking of orders and sales from large projects for water treatment equipment for the electronics industry in East Asia, as well as increased demand in the tool cleaning business. Total sales in the ultrapure water supply business in Japan and overseas increased, reflecting a contract that began in the previous fiscal year and a contribution from projects recently put into operation.

As a result, total Group orders in the Water Treatment Facilities business amounted to ¥196,839 million (up 24.0% year on year), while sales totaled ¥170,534 million (up 3.7% year on year). Business profit was ¥19,391 million (up 13.2% year on year), mainly reflecting cost reduction and other efforts to improve profitability. Operating profit was ¥21,169 million (up 7.8% year on year), despite the absence of a liquidation gain of ¥2,066 million from the termination of contracts with certain customers in the ultrapure water supply business booked in other income in the previous fiscal year.

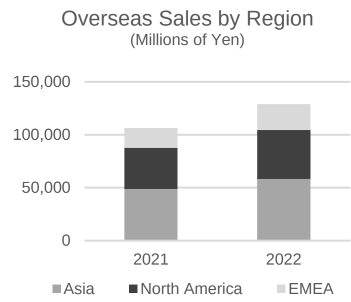








3. Regional Segment Information



In the fiscal year under review, overseas sales increased 21.1% year on year to ¥128,840 million, supported by growth in both the Water Treatment Chemicals business and the Water Treatment Facilities business. Overseas sales accounted for 44.7% of consolidated net sales, up from 39.7% in the previous fiscal year.

By region, sales increased 18.3% to ¥46,351 million in the Americas, 19.5% to ¥58,032 million in Asia, and 30.9% to ¥24,457 million in EMEA.

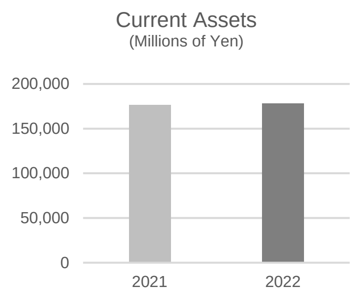
4. Financial Position

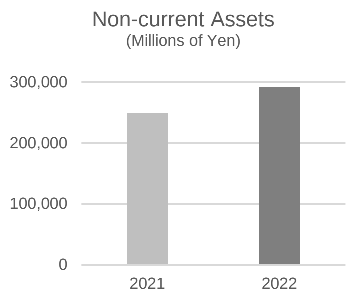
(1) Assets

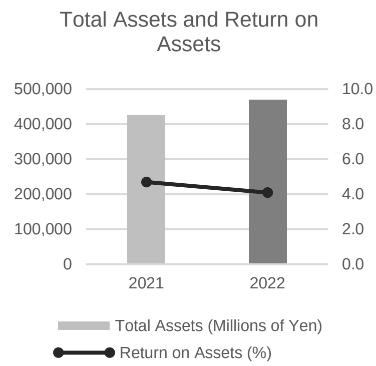
Current assets were ¥178,396 million, an increase of ¥1,914 million from the end of the previous fiscal year. This mainly reflected an increase of ¥11,147 million for trade and other receivables due to a rise in net sales, as well as increases of ¥3,784 million and ¥3,221 million for other current assets and inventories, respectively, outweighing a decline of ¥16,498 million for cash and cash equivalents, which mainly reflected the purchase of property, plant and equipment and income taxes paid.

Non-current assets as of March 31, 2022 were ¥291,585 million, an increase of ¥43,140 million from the end of the previous fiscal year. Property, plant and equipment increased ¥43,431 million, largely due to the opening of Kurita Innovation Hub, a new research and development base in Akishima-shi, Tokyo, in April 2022, and the purchase of new facilities for the ultrapure water supply business (Water Treatment Facilities business). Goodwill increased ¥7,396 million, reflecting a rise in the amount of goodwill recorded at overseas subsidiaries on a yen basis as a result of the weaker yen, the acquisition of a 51% stake in Kurita AquaChemie Ltd. in the Middle East (Water Treatment Chemicals business) in the first quarter of the fiscal year, resulting in the consolidation of the company and its two wholly owned subsidiaries, and the acquisition of Canada-based Keytech Water Management (Water Treatment Chemicals business), which also became a consolidated subsidiary. Other financial assets declined ¥10,552 million and deferred tax assets increased ¥2,872 million, mainly due to the partial sale of holdings of shares in other companies.

As a result, total assets were ¥469,981 million, an increase of ¥45,053 million from the end of the previous fiscal year.







(2) Liabilities

Current liabilities were ¥113,927 million, an increase of ¥38,975 million from the end of the previous fiscal year. This was mainly due to increases of ¥19,613 million, ¥11,461 million, and ¥7,735 million for other financial liabilities, trade and other payables, and bonds and borrowings, respectively. The increase for other financial liabilities reflected the subsequent measurement of financial liabilities related to forward acquisition contracts concluded with non-controlling shareholders of Pentagon Technologies Group, Inc. in the U.S. (Water Treatment Facilities business), and the reclassification of the financial liabilities from non-current liabilities.

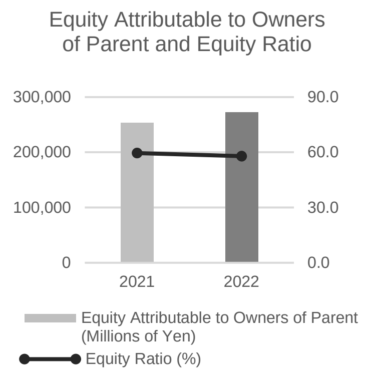
Non-current liabilities were ¥78,191 million, a decrease of ¥13,946 million from the end of the previous fiscal year. This chiefly reflected a decline of ¥11,946 million in other financial liabilities due to the above reclassification of financial liabilities related to forward contracts from non-current to current liabilities.

As a result, total liabilities were ¥192,119 million, an increase of ¥25,029 million from the end of the previous fiscal year.

(3) Shareholders' Equity

Total equity stood at ¥277,862 million, an increase of ¥20,025 million from the end of the previous fiscal year.

The main factors were an increase in retained earnings of ¥15,935 million, largely due to the booking of equity attributable to owners of parent, and an increase in other components of equity of ¥3,661 million, reflecting exchange differences on translation of foreign operations resulting from the yen's depreciation against overseas currencies.



5. Cash Flows

Cash and cash equivalents at the end of the fiscal year totaled ¥45,730 million, a decrease of ¥16,497 million from the end of the previous fiscal year.

(1) Cash Flows from Operating Activities

Net cash provided by operating activities was ¥28,737 million, a decrease of ¥11,265 million year on year, mainly reflecting cash provided from profit before tax of ¥30,079 million and depreciation and amortization of ¥23,412 million, outweighing cash used for income tax paid of ¥13,308 million and increase in trade and other receivables of ¥6,713 million.

(2) Cash Flows from Investing Activities

Net cash used in investing activities was ¥39,929 million, an increase of ¥29,158 million year on year. This mainly reflected cash used for the purchase of property, plant and equipment of ¥55,096 million, outweighing proceeds from sale of investment securities of ¥9,197 million and proceeds from sale of property, plant and equipment of ¥8,743 million.

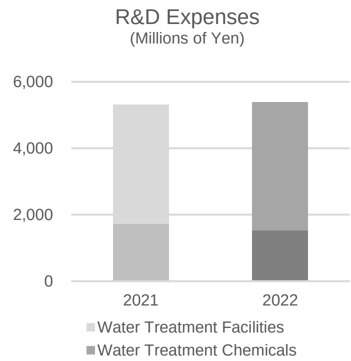
(3) Cash Flows from Financing Activities

Net cash used in financing activities was ¥7,927 million, a decrease of ¥10,925 million year on year. This was largely due to dividends paid of ¥8,797 million and repayments of lease liabilities of ¥5,005 million, outweighing proceeds from a net increase in short-term borrowings and commercial papers of ¥7,577 million.

6. Commitment Line

The Group's basic policy is to secure the liquidity needed for business operations and maintain a stable financing structure. In general, the Group uses its own funds to meet short-term working capital needs and for capital investments and other investments in growth fields, while also procuring funds through bond markets or bank loans as required. At the end of the fiscal year, the Group had concluded a commitment line agreement with one financial institution, with no executed borrowings and an unused available balance of ¥20,000 million.

7. Research and Development



The Group is prioritizing the development of new products and technologies to support the provision of innovative solutions that help resolve issues faced by society and increase the corporate value and competitiveness of customers. The Group is also focusing on developing sensing technology, data analytics technology, and optimization & control technology needed for business model digital transformation (DX), while also conducting research into understanding water treatment process mechanisms and limitations to support product development and the development of mathematical modeling for water treatment technology to underpin DX.

The Group will continue to refine the water-related technology it has developed over many years, aiming to realize its corporate vision of being "A Creator of unique value to the solution of water and environment," contributing to the realization of a sustainable society. The Group's main development centers in Japan, Germany, Singapore, and North America are working together to proactively develop products and technologies that meet the wide-ranging needs of society and industry.

R&D activities are performed mainly by the Research and Development Division of Kurita Water Industries Ltd. There are approximately 170 R&D staff across the Group, representing 2.2% of all employees. Total R&D expenses in the fiscal year under review were ¥5,386 million, equivalent to 1.9% of net sales.

(1) Water Treatment Chemicals

The Group is pushing ahead with the development of water treatment chemicals that help customers save water, reduce CO_2 emissions, cut waste, improve productivity and mitigate environmental impact. The Group is also developing technology to analyze the effectiveness of water treatment chemicals and automatically control optimal dosing with sensing technology. Total R&D expenses related to this segment were ¥1,531 million in the fiscal year under review.

<Major Accomplishments for the Fiscal Year>

- To achieve stable and energy-efficient operation of membrane-based water treatment systems in water treatment facilities and wastewater reclamation facilities, the Group expanded its lineup of high-performance cleaning agents that can treat various types of membrane fouling without the need for phosphorous-based additives, which can cause eutrophication. The business also developed a multifunctional water treatment agent that is effective against mixed fouling caused by inorganic and microorganism-derived organic matter.
- The Group developed a steel raw material yard monitoring system for steel plants to limit stoppages on raw material conveying lines and to prevent higher fuel usage due to increased moisture in raw materials caused by rainfall during storage. The system consists of moisture content detection technology for raw material stockpiles, an algorithm to predict moisture fluctuations in raw materials, and a highly impermeable dust suppressant that prevents moisture from increasing due to rainfall.
- The Group improved its proprietary sensing technology for optimizing the automated operation of sludge dewatering systems in wastewater treatment processes and developed a new dewatering treatment support system compatible with various sludge characteristics and dewatering equipment.

(2) Water Treatment Facilities

The Group is developing technologies that meet the needs of recycling-oriented societies, such as technology for wastewater reclamation and reuse, waste reduction, and generating renewable energy through recycling. The Group is also working to improve the energy efficiency of wastewater treatment systems and ultrapure water production systems to increase productivity in the manufacture of semiconductors and other products in the electronics industry. It is also developing soil remediation technology that anticipates future environmental regulations. Key outcomes in the fiscal year under review are described below. Total R&D expenses for the segment in the fiscal year under review were ¥3,855 million.

<Major Accomplishments for the Fiscal Year>

- The Group has developed a high-density wastewater concentration system that accumulates tin and nickel from metal plating wastewater discharged from metallic processing, electronic component manufacturing and other processes. The system helps to reduce industrial waste disposal costs and recover valuable resources, as metal plating wastewater has typically been treated as industrial waste.

- Adult disposable diapers are being used in greater numbers as populations age. To establish recycling technology for used diapers, the Group has developed processing equipment that is compatible with various types of recycling methods. The equipment breaks down, crushes and sterilizes collected used diapers, and dehydrates and separates the resulting material into waste plastic, pulp and superabsorbent polymers.
- To reduce waste from semiconductor facilities, the Group has developed technology to precisely separate and recycle high-performance ion-exchange resin used to produce ultrapure water for wafer cleaning in customers' manufacturing processes. The Group also created technology to evaluate the performance of the recycled resins. The aim is to develop the technology into a business that recycles and reuses resin.

8. Capital Expenditures

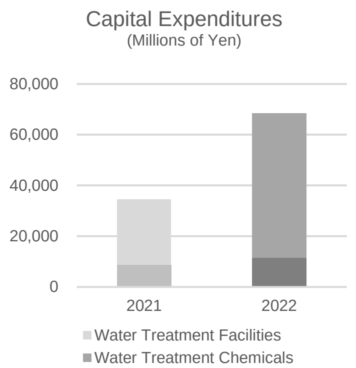
The Group is committed to making the necessary investments to pursue technological innovation, expand production capacity, and address intensifying competition. In the fiscal year under review, capital expenditures totaled ¥66,394 million, an increase of ¥33,747 million year on year, including the amount recorded for right-of-use assets.

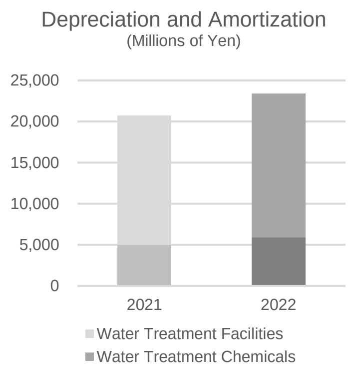
The Water Treatment Chemicals business carried out capital expenditures totaling ¥10,843 million, up ¥2,729 million year on year, mainly reflecting the construction of a new plant in China and the expansion and upgrade of existing facilities.

The Water Treatment Facilities business undertook capital expenditures totaling ¥55,551 million, up ¥31,018 million year on year, primarily for the installation and expansion of facilities in the ultrapure water supply business and for the establishment of new resin and membrane processing facilities as part of a reorganization of domestic manufacturing bases.

Capital expenditure includes expenses related to the construction of the Group's research and development facility, Kurita Innovation Hub, which opened on April 1, 2022.

In the one-year period following the fiscal year under review, the Group plans to undertake a total of ¥53.7 billion in capital expenditures for new construction, expansion, and renovation. Significant fluctuations in the economy and in customers' capital investment trends tend to have an especially large impact on the purchase of equipment for the ultrapure water supply business. As such, the Group may adjust its capital expenditure plan if conditions deviate from current assumptions.





9. Dividend Policy

Kurita's basic policy is to continue paying stable dividends to shareholders.

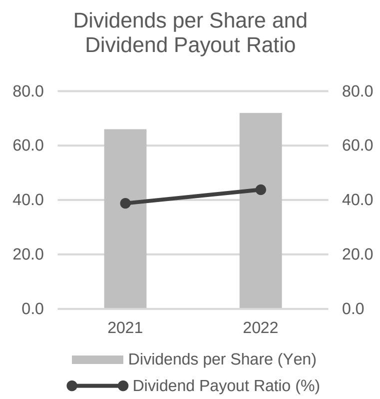
Specifically, Kurita has set a consolidated dividend payout ratio target of 30%-50%. Kurita will work to continue raising the dividend, making decisions based on payout ratios for the most recent five years to respond flexibly to yearly fluctuations in business performance.

Kurita's basic policy is to pay dividends from surplus twice a year, an interim and a year-end dividend.

The decision-making body for paying dividends from surplus is the General Meeting of Shareholders for year-end dividends and the Board of Directors for interim dividends.

Regarding dividends paid from surplus for the fiscal year under review, in consideration of future business growth and with shareholder support, it was decided to pay a total dividend of ¥72 per share, including an interim dividend of ¥36 per share. As a result, the dividend payout ratio was 33.3% (43.8% on a consolidated basis) for the fiscal year.

Regarding retained earnings, Kurita will prioritize the use of retained earnings for businesses with prospects for growth while maintaining rigorous investment discipline. If Kurita determines that a surplus has accumulated, it will consider the repurchase of shares, taking the share price level into account, as well as seek to improve capital efficiency and increase returns to shareholders.



Business Risks

Kurita Water Industries Ltd. and Consolidated Subsidiaries

The Executive General Manager of the Corporate Planning and Management Office is designated as the officer in charge of monitoring risks and promoting risk management for the Kurita Group (the Group). The officer seeks to regularly analyze and assess risks facing Kurita Water Industries and Kurita Group companies, and to continue monitoring risks to prevent problems from materializing. The officer is also responsible for comprehensively managing risks related to climate change.

The following are summaries of major foreseeable risks present in the business environments in which the Group operates.
Forward-looking statements herein are based on judgments made by management as of March 31, 2022.

1. Impact of the COVID-19 Pandemic

Countries worldwide continue to roll out vaccination programs, but the global COVID-19 pandemic has shown no signs of subsiding, with the number of new infections continuing to fluctuate as new COVID-19 variants emerge. Against this backdrop, countries and regions worldwide are likely to periodically implement various measures to prevent the spread of infection and the collapse of healthcare systems, including calls to stay at home and requests for businesses to close temporarily or reduce operating hours, mainly in the food service sector. Due to uncertainties regarding the duration of the pandemic and the outlook for the global economy, lower capacity utilization at customer plants, decisions by customers to postpone capital expenditure plans and delays to the Group's business activities could impact the Group's financial results. Instead of requiring employees to physically attend business offices, customers' plants or other worksites, the Group is using digital technologies to add remote capabilities to business-critical processes and constructing backup systems at manufacturing sites to support business continuity. The Group has also formulated COVID-19 response guidelines and implemented measures to prevent the spread of infection, contributing to the continued operation of customer businesses and the maintenance of social and industrial infrastructure.

2. Overseas Business Development

The Group is working to expand its business outside Japan. In contrast to the Japanese market, conducting business in overseas markets involves a number of inherent risks, including the risk of unexpected changes to local laws and regulations, the risk of political and economic instability, and the risk of conflict or terrorist incidents. If such risks materialized, the Group's financial results could be affected. In regions where the Group operates, the Group obtains information about the local security situation and other conditions from the Ministry of Foreign Affairs or consultants, and uses local legal counsel, accountants and other experts to verify the legal and regulatory framework in local markets. The Group also uses a guidebook for overseas deployments to provide safety training and advice to employees being sent overseas, provides medical and emergency support services to employees based overseas and publishes safety information as part of efforts to ensure the safety of all officers and employees. In addition, the Group is potentially exposed to an impact from US-China trade friction and tighter regulations and sanctions related to Russia's invasion of Ukraine, as well as any associated deterioration in the economy.

3. Large-Scale Natural Disasters

A large-scale natural disaster or other similar event that directly or indirectly disrupts the Group's business execution could affect the Group's business activities, financial results and financial condition. The Group has established the Kurita Group Business Continuity Management (BCM) Policy to prepare for earthquakes, typhoons, severe rainstorms or other large-scale natural disasters. In line with the policy, the Group develops business continuity plans, conducts water damage risk assessments of Group facilities, offices and officer and employee residences and implements response measures, establishes safety verification systems, reinforces buildings against earthquakes, builds stockpiles of disaster prevention supplies and conducts disaster response drills for officers and employees.

4. Economic and Market Conditions

The Group's businesses are affected by economic conditions in Japan and in other countries and regions where it operates. Demand in the Water Treatment Chemicals business fluctuates in response to factory capacity utilization rates in industries such as steel, petroleum refining and petrochemicals, and pulp and paper – the main areas of demand for the business. Such demand fluctuations may affect the Group's financial results. Demand in the Water Treatment Facilities business fluctuates in response to trends in capital expenditure in the manufacturing sector – the main area of demand for the business – and also due to changes in business conditions at customers with which the Group has long-term ultrapure water supply contracts. Such fluctuations in demand could affect the Group's financial results. Furthermore, rising US-China trade friction may lead to stricter customs tariffs or restrictions on the activities of overseas companies in domestic markets, which could impact the business operations of the Group's customers, leading to an indirect impact on the Group's financial results. The Group's financial results may also be affected by the response to climate change, including moves by customers to shrink or exit from fossil fuel-related businesses, a shift to alternative fuels and water resources, and the introduction of or an increase in carbon taxes on CO_2 emissions generated by the Group's facilities or products. The Group provides solutions for issues related to water and the environment, so its customers are spread across a wide range of industries. In addition, the Group is working to generate stable earnings by developing business models such as the ultrapure water supply business, which minimize the earnings impact of fluctuations in investment activity at customers. The Group also manages the operations of affiliated companies. Specifically, the Group verifies earnings and progress with the implementation of strategies and measures at affiliated companies on a monthly and quarterly basis, monitors internal audits, financial reporting and other matters related to internal controls, and makes decisions on important matters at affiliated companies, in line with the Group's Internal Decision Approval and Review Rules. In addition, increasing competition with rivals in the Group's business domains could lead to declines in the price of products and services, which could lower the Group's profitability. However, as noted in 7., the Group is working to secure competitive advantages.

5. Exchange Rate Fluctuations

The ratio of overseas sales to total consolidated sales in the Group is 44.7%, reflecting overseas acquisitions and other factors. The local currency-denominated financial statements of each overseas subsidiary are reflected in the consolidated financial statements after conversion to Japanese yen. Therefore, exchange rate fluctuations may affect the Group's business results and financial condition. To hedge against exchange rate risk, the Group may use forward exchange contracts, currency swap contracts and other types of derivatives.

6. Impact on Materials and Parts Procurement from Soaring Prices for Raw Materials, Parts and Materials and Energy, and Supply Chain Disruption

The Group procures raw materials and parts from outside the Group for the manufacture of products and the construction of facilities. The Group also procures external services to support various business processes. The Group conducts these procurement activities with respect for human rights, in accordance with the Kurita Group Code of Conduct, and also complies with laws and regulations and takes into account economic, social and environmental factors, as set out in the Kurita Group Procurement Policy. The prices of raw materials, parts and services fluctuate based on changes in market conditions, and this may affect the Group's financial results. Meanwhile, the COVID-19 pandemic and Russia's invasion of Ukraine have led to soaring prices for raw materials for water treatment chemicals and for parts and materials used in water treatment facilities, as well as higher logistics costs amid surging energy prices and supply chain disruption. In response, the Group is raising prices to pass on higher costs and working to secure inventories.

7. Development of New Technologies, Products and Services and Transformation of Business Processes

The Group operates CSV businesses that help to significantly cut CO_2 emissions, save water and reduce industrial waste compared with previous approaches and also develops new technologies, products and services to improve and expand its range of total solutions, which leverage chemicals, facilities and maintenance technologies, products and services. In addition, the Group has established a Digital Strategy Division to actively drive the Group's digital transformation (DX) by introducing IoT and AI into new products and services and by digitizing business processes. However, the success of new technology and product development efforts and business transformation cannot be guaranteed. The Group may not be able to offer new technologies or superior products, services, or solution models that meet the needs of its customers in a timely fashion. The Group may also fail to keep pace with rapid technological innovation, changing customer needs and advances in digital technologies. Failure to develop superior new products, services or solution models, delays to DX initiatives, or slow progress with measures to reduce greenhouse gas emissions from customers' operations could limit future growth and profitability or otherwise affect the Group's financial results.

8. Impairment Loss on Fixed Assets

(1) Impairment Loss on Goodwill and Intangible Assets

The Group has acquired companies to obtain a foundation for overseas business and to gain access to competitive technologies and business models. As a result, the current balance of goodwill is ¥62,992 million (13.4% of consolidated total assets). Goodwill is not amortized, and is tested for impairment annually, or whenever there are signs of possible impairment. If, because of changes in the business environment, an acquisition does not yield expected benefits, or if there is a difference between the estimated future cash flows obtained by the impairment test and actual cash flows, impairment losses on goodwill or other impairment losses may occur. Impairment tests estimate recoverable amounts based on value in use, and value in use is calculated using a discount rate for future cash flow referencing the weighted average cost of capital (WACC) for each cash-generating unit. Future cash flow forecasts have a five-year horizon and are formulated based on historical trends and external data. The forecasts form the basis of business plans approved by management. Forecasts for periods longer than five years are calculated based on average long-term growth rates, taking into account conditions in markets for each cash-generating unit. Five-year cash flow estimates, longer-term growth rates and discount rates are used by the Group as key assumptions, and any change in these assumptions could have an impact on the Group's financial results and financial condition. The Company has established an Investment Committee to strengthen the Group's investment and lending screening functions. The committee is chaired by the Deputy Executive General Manager of the Corporate Control and Administration Division. The committee conducts pre-screening of investment and lending projects to be discussed by the Board of Directors or the Executive Committee, focusing on business plans, investment amounts, adequacy of risk assessments, profitability, competitive advantages, legality and other criteria. The results of the screening and key points for discussion are presented to the Board of Directors and the Executive Committee, ensuring corporate acquisitions are only conducted after careful consideration and discussion by the Company. In addition, all acquired companies are subject to business management procedures for affiliated companies explained in 4. above.

(2) Impairment Loss on Property, Plant and Equipment

The Group's ultrapure water supply business and other businesses install equipment at customer plants. In cases where a customer withdraws from a business or suspends operations at a plant, impairment losses on fixed assets may occur, which may affect the Group's financial results and financial condition. When making investment decisions on installing equipment at customer plants, the Group carefully considers factors such as the customer's business conditions, customer contract terms and return on investment.

9. Risk of Unprofitable Projects

The installation of water treatment facilities may lead to additional costs if the Group fails to meet contractual obligations to customers for raw water and other criteria, or due to defects with products or services arising from faults with design or engineering work, or as a result of accidents. The Group may also face requests for compensation for damages incurred by customers as a result of these issues. The Group rigorously carries out design and engineering work in accordance with design and engineering procedures, and prior to the issue of project budget documents, establishes an engineering review meeting to verify various aspects of project design, including quality, cost, delivery, safety and environmental criteria. In addition, the Group holds monthly business process review meetings from when the order is received until the project is delivered to confirm engineering progress and manage the profitability of each project component, allowing total project costs to be estimated using the latest information. Overseas Group companies follow similar procedures, and the Company also provides them with design and engineering management support for large projects. In this way, the Group aims to prevent any problems before they occur by sharing information about project issues and other areas.

10. Laws and Compliance

In the event that the Group’s officers or employees fail to comply with laws or regulations or are responsible for conduct that contravenes social ethics, the Group may face restrictions on its business activities, fines, damage to public trust or other issues, which could affect the Group’s financial results and financial condition. The Group has established an Environmental & Social (E&S) Committee, chaired by a director, and a Group E&S Committee, made up of representatives from Group companies. These committees are tasked with rigorously ensuring all the Group’s activities are underpinned by socially ethical behavior, rather than conducting compliance activities simply to meet legal requirements.

11. Product and Service Quality and Water Treatment Facility Operational Errors

The supply or discharge of water that falls short of required standards due to human error or other operational issues at customer or Group water treatment facilities may lead to claims for damage compensation or a loss of public trust. The Group’s financial results may be affected if its obligations exceed the scope of liability insurance coverage, or if there is a loss of public trust. As explained in 9. above, the Group has created a quality management system and continuously implements improvements to increase customer satisfaction.

12. Intellectual Property

Given the wide scope of the Group’s business, there is potential for the Group’s intellectual property rights to be infringed and potential for the Group to infringe rights held by third parties. While such actions could affect the Group’s financial results, the Group recognizes the importance of intellectual property and continually seeks to register its own intellectual property while avoiding infringements of rights held by third parties, both in Japan and overseas.

13. Information System Security

The Group’s use of information systems is increasing, as is the importance of information systems to the Group’s business. If a computer virus or other factor were to obstruct the functions of the Group’s information systems, the Group’s business activities, financial results and financial condition could be negatively affected. In accordance with the Kurita Group Information System Management Policy, the Group is strengthening measures against computer viruses by installing antivirus software and providing information security education and awareness training to officers and employees, including training about targeted email attacks.

Consolidated Statement of Financial Position

Kurita Water Industries Ltd. and Consolidated Subsidiaries

		Millions of yen		Thousands of U.S. dollars
	Notes	2021	2022	2022
Assets				
Current assets				
Cash and cash equivalents	8	¥62,228	¥45,730	$374,836
Trade and other receivables	9, 25, 34	97,745	108,892	892,557
Other financial assets	10, 34	2,817	3,075	25,204
Inventories	11	9,911	13,132	107,639
Other current assets		3,780	7,564	62,000
Total current assets		176,482	178,396	1,462,262
Non-current assets				
Property, plant and equipment	12	117,603	161,034	1,319,950
Right-of-use assets	20	19,405	19,042	156,081
Goodwill	13	55,596	62,992	516,327
Intangible assets	13	17,320	18,092	148,295
Investments accounted for using equity method	15	1,578	1,191	9,762
Other financial assets	10, 34	33,563	23,011	188,614
Deferred tax assets	16	3,199	6,071	49,762
Other non-current assets		177	150	1,229
Total non-current assets		248,445	291,585	2,390,040
Total assets	6	¥424,928	¥469,981	$3,852,303

	Notes	Millions of yen 2021	Millions of yen 2022	Thousands of U.S. dollars 2022
Liabilities and equity				
Liabilities				
Current liabilities				
Trade and other payables	17, 34	¥46,506	¥57,967	$475,139
Bonds and borrowings	18, 34	445	8,180	67,049
Lease liabilities	20, 34	4,373	4,683	38,385
Other financial liabilities	19, 34	—	19,613	160,762
Income taxes payable		8,135	8,663	71,008
Provisions	22	1,847	1,529	12,532
Other current liabilities		13,644	13,289	108,926
Total current liabilities		74,952	113,927	933,827
Non-current liabilities				
Bonds and borrowings	18, 34	31,207	30,953	253,713
Lease liabilities	20, 34	15,327	14,862	121,819
Other financial liabilities	19, 34	13,703	1,757	14,401
Retirement benefit liability	21	18,027	18,144	148,721
Provisions	22	1,160	2,335	19,139
Deferred tax liabilities	16	2,368	2,646	21,688
Other non-current liabilities		10,343	7,491	61,401
Total non-current liabilities		92,137	78,191	640,909
Total liabilities		167,090	192,119	1,574,745
Equity				
Share capital	23	13,450	13,450	110,245
Capital surplus	23	(2,212)	(3,076)	(25,213)
Treasury shares	23	(10,787)	(10,694)	(87,655)
Other components of equity	23	8,500	12,161	99,680
Retained earnings	23	244,138	260,073	2,131,745
Equity attributable to owners of parent		253,089	271,914	2,228,803
Non-controlling interests		4,748	5,948	48,754
Total equity		257,837	277,862	2,277,557
Total liabilities and equity		¥424,928	¥469,981	$3,852,303

Consolidated Statement of Profit or Loss

Kurita Water Industries Ltd. and Consolidated Subsidiaries

	Notes	Millions of yen 2021	Millions of yen 2022	Thousands of U.S. dollars 2022
Net sales	6, 25	¥267,749	¥288,207	$2,362,352
Cost of sales		(173,073)	(183,928)	(1,507,606)
Gross profit		94,676	104,278	854,737
Selling, general and administrative expenses	26	(65,206)	(71,334)	(584,704)
Other income	27	5,929	6,119	50,155
Other expenses	28	(3,870)	(3,329)	(27,286)
Operating profit	6	31,529	35,734	292,901
Finance income	29	545	601	4,926
Finance costs	29	(1,923)	(6,176)	(50,622)
Share of profit (loss) of investments accounted for using equity method	15	(999)	(80)	(655)
Profit before tax		29,150	30,079	246,549
Income tax expense	16	(9,326)	(10,454)	(85,688)
Profit		19,824	19,624	160,852
Profit attributable to				
Owners of parent		19,088	18,471	151,401
Non-controlling interests		735	1,153	9,450
Profit		¥19,824	¥19,624	$160,852

	Notes	Yen 2021	Yen 2022	U.S. dollars 2022
Earnings per share				
Basic earnings per share	31	¥169.94	¥164.38	$1.35
Diluted earnings per share		—	—	—

Consolidated Statement of Comprehensive Income

Kurita Water Industries Ltd. and Consolidated Subsidiaries

	Notes	Millions of yen		Thousands of U.S. dollars
		2021	2022	2022
Profit		¥19,824	¥19,624	$160,852
Other comprehensive income				
Items that will not be reclassified to profit or loss				
Net change in fair value of financial assets measured at fair value through other comprehensive income	30	5,202	520	4,262
Remeasurements of defined benefit plans	30	(234)	417	3,418
Total of items that will not be reclassified to profit or loss	30	4,968	938	7,688
Items that may be reclassified to profit or loss	30			
Exchange differences on translation of foreign operations	30	4,851	8,692	71,245
Cash flow hedges	30	(594)	131	1,073
Share of other comprehensive income of investments accounted for using equity method	30	24	121	991
Total of items that may be reclassified to profit or loss	30	4,280	8,944	73,311
Total other comprehensive income	30	9,249	9,883	81,008
Comprehensive income		¥29,073	¥29,507	$241,860
Comprehensive income attributable to				
Owners of parent		¥28,021	¥27,501	$225,418
Non-controlling interests		1,052	2,005	16,434
Comprehensive income		¥29,073	¥29,507	$241,860

Consolidated Statement of Changes in Equity

Kurita Water Industries Ltd. and Consolidated Subsidiaries

		Millions of yen					
		Equity attributable to owners of parent					
					Other components of equity		
	Notes	Share capital	Capital surplus	Treasury shares	Exchange differences on translation of foreign operations	Cash flow hedges	Financial assets measured at fair value through other comprehensive income
Balance as of April 1, 2020		¥13,450	¥8,212	¥(10,893)	¥(9,033)	¥503	¥8,747
Profit							
Other comprehensive income					4,560	(594)	5,202
Comprehensive income		—	—	—	4,560	(594)	5,202
Purchase of treasury shares	23			(4)			
Dividends	24						
Share-based remuneration transactions	33		9	111			
Changes in ownership interest in subsidiaries			(991)		4		
Increase (decrease) by business combination	7						
Liabilities pertaining to forward contracts concluded with non-controlling shareholders	7		(10,578)				
Transfer from other components of equity to retained earnings							(888)
Other			1,135				
Total transactions with owners		—	(10,424)	106	4	—	(888)
Balance as of March 31, 2021		¥13,450	¥(2,212)	¥(10,787)	¥(4,469)	¥(91)	¥13,060
Profit							
Other comprehensive income					7,962	131	520
Comprehensive income		—	—	—	7,962	131	520
Purchase of treasury shares	23			(5)			
Dividends	24						
Share-based remuneration transactions	33		57	98			
Changes in ownership interest in subsidiaries			(1,115)				
Increase (decrease) by business combination	7						
Transfer from other components of equity to retained earnings							(4,954)
Other			193				
Total transactions with owners		—	(864)	93	—	—	(4,954)
Balance as of March 31, 2022		¥13,450	¥(3,076)	¥(10,694)	¥3,493	¥40	¥8,627

Millions of yen							
Equity attributable to owners of parent							
Other components of equity							
Remeasurements of defined benefit plans	Total	Retained earnings	Total	Non-controlling interests	Total		Notes
¥ —	¥216	¥231,456	¥242,442	¥1,666	¥244,108	**Balance as of April 1, 2020**	
	—	19,088	19,088	735	19,824	Profit	
(235)	8,932		8,932	316	9,249	Other comprehensive income	
(235)	8,932	19,088	28,021	1,052	29,073	Comprehensive income	
	—		(4)		(4)	Purchase of treasury shares	23
	—	(7,076)	(7,076)	(1,013)	(8,090)	Dividends	24
	—		120	(9)	111	Share-based remuneration transactions	33
	4		(986)	(208)	(1,194)	Changes in ownership interest in subsidiaries	
	—		—	3,260	3,260	Increase (decrease) by business combination	7
	—		(10,578)		(10,578)	Liabilities pertaining to forward contracts concluded with non-controlling shareholders	7
235	(653)	653	—		—	Transfer from other components of equity to retained earnings	
	—	16	1,152		1,152	Other	
235	(648)	(6,406)	(17,373)	2,029	(15,344)	Total transactions with owners	
¥ —	¥8,500	¥244,138	¥253,089	¥4,748	¥257,837	**Balance as of March 31, 2021**	
	—	18,471	18,471	1,153	19,624	Profit	
415	9,030		9,030	852	9,883	Other comprehensive income	
415	9,030	18,471	27,501	2,005	29,507	Comprehensive income	
	—		(5)		(5)	Purchase of treasury shares	23
	—	(7,865)	(7,865)	(943)	(8,809)	Dividends	24
	—		155	23	179	Share-based remuneration transactions	33
	—		(1,115)	(268)	(1,384)	Changes in ownership interest in subsidiaries	
	—		—	357	357	Increase (decrease) by business combination	7
(415)	(5,369)	5,369	—		—	Transfer from other components of equity to retained earnings	
	—	(41)	152	26	179	Other	
(415)	(5,369)	(2,536)	(8,677)	(805)	(9,483)	Total transactions with owners	
¥ —	¥12,161	¥260,073	¥271,914	¥5,948	¥277,862	**Balance as of March 31, 2022**	

		Thousands of U.S. dollars					
		Equity attributable to owners of parent					
					Other components of equity		
	Notes	Share capital	Capital surplus	Treasury shares	Exchange differences on translation of foreign operations	Cash flow hedges	Financial assets measured at fair value through other comprehensive income
Balance as of March 31, 2021		$110,245	$(18,131)	$(88,418)	$(36,631)	$(745)	$107,049
Profit							
Other comprehensive income					65,262	1,073	4,262
Comprehensive income		—	—	—	65,262	1,073	4,262
Purchase of treasury shares	23			(40)			
Dividends	24						
Share-based remuneration transactions	33		467	803			
Changes in ownership interest in subsidiaries			(9,139)				
Increase (decrease) by business combination	7						
Transfer from other components of equity to retained earnings							(40,606)
Other			1,581				
Total transactions with owners		—	(7,081)	762	—	—	(40,606)
Balance as of March 31, 2022		$110,245	$(25,213)	$(87,655)	$28,631	$327	$70,713

Thousands of U.S. dollars							
Equity attributable to owners of parent							
Other components of equity							
Remeasurements of defined benefit plans	Total	Retained earnings	Total	Non-controlling interests	Total		Notes
$ —	$69,672	$2,001,131	$2,074,500	$38,918	$2,113,418	**Balance as of March 31, 2021**	
	—	151,401	151,401	9,450	160,852	Profit	
3,401	74,016		74,016	6,983	81,008	Other comprehensive income	
3,401	74,016	151,401	225,418	16,434	241,860	Comprehensive income	
	—		(40)		(40)	Purchase of treasury shares	23
	—	(64,467)	(64,467)	(7,729)	(72,204)	Dividends	24
	—		1,270	188	1,467	Share-based remuneration transactions	33
	—		(9,139)	(2,196)	(11,344)	Changes in ownership interest in subsidiaries	
	—		—	2,926	2,926	Increase (decrease) by business combination	7
(3,401)	(44,008)	44,008	—		—	Transfer from other components of equity to retained earnings	
	—	(336)	1,245	213	1,467	Other	
(3,401)	(44,008)	(20,786)	(71,122)	(6,598)	(77,729)	Total transactions with owners	
$ —	$99,680	$2,131,745	$2,228,803	$48,754	$2,277,557	**Balance as of March 31, 2022**	

Consolidated Statement of Cash Flows

Kurita Water Industries Ltd. and Consolidated Subsidiaries

	Note	Millions of yen		Thousands of U.S. dollars
		2021	2022	2022
Cash flows from operating activities				
Profit before tax		¥29,150	¥30,079	$246,549
Depreciation and amortization		20,739	23,412	191,901
Share of loss (profit) of investments accounted for using equity method		999	80	655
Loss (gain) on sale of fixed assets		(1,333)	(4,073)	(33,385)
Decrease (increase) in inventories		254	(1,918)	(15,721)
Decrease (increase) in trade and other receivables		746	(6,713)	(55,024)
Increase (decrease) in trade and other payables		(2,904)	1,459	11,959
Other		(3,410)	(828)	(6,786)
Subtotal		44,242	41,497	340,139
Interest received		153	177	1,450
Dividends received		360	601	4,926
Interest paid		(213)	(232)	(1,901)
Income taxes paid		(4,541)	(13,308)	(109,081)
Net cash provided by operating activities		40,002	28,737	235,549
Cash flows from investing activities				
Payments into time deposits		(1,856)	(2,348)	(19,245)
Proceeds from withdrawal of time deposits		1,588	2,175	17,827
Purchase of property, plant and equipment		(14,055)	(55,096)	(451,606)
Proceeds from sale of property, plant and equipment	27	8,401	8,743	71,663
Purchase of intangible assets		(1,909)	(2,038)	(16,704)
Proceeds from sale of investment securities		2,533	9,197	75,385
Payments for acquisition of subsidiaries (after deduction of cash and cash equivalents included in acquired assets)	7, 32	(4,599)	(2,401)	(19,680)
Other		(874)	1,839	15,073
Net cash used in investing activities		(10,771)	(39,929)	(327,286)
Cash flows from financing activities				
Net increase (decrease) in short-term borrowings and commercial papers		(35,001)	7,577	62,106
Proceeds from issuance of bonds	18	29,882	—	—
Repayments of long-term borrowings		(645)	(485)	(3,975)
Repayments of lease liabilities		(5,033)	(5,005)	(41,024)
Dividends paid	24	(8,083)	(8,797)	(72,106)
Purchase of shares of subsidiaries not resulting in change in scope of consolidation		—	(1,440)	(11,803)
Other		29	224	1,836
Net cash used in financing activities		(18,852)	(7,927)	(64,975)
Effect of exchange rate changes on cash and cash equivalents		1,634	2,622	21,491
Net increase (decrease) in cash and cash equivalents		12,013	(16,497)	(135,221)
Cash and cash equivalents at beginning of period	8	50,215	62,228	510,065
Cash and cash equivalents at end of period	8	¥62,228	¥45,730	$374,836

Notes to Consolidated Financial Statements

Kurita Water Industries Ltd. and Consolidated Subsidiaries

1. Reporting entity

Kurita Water Industries Ltd. (the "Company") is a stock company located in Japan, which lists its shares on the Tokyo Stock Exchange. The registered addresses of its head office and major offices are disclosed on its official website (https://www.kurita.co.jp/english/).
The Company's consolidated financial statements consist of the Company and its consolidated subsidiaries (together, the "Group").
The major businesses of the Group are the water treatment chemicals business and the water treatment facilities business. Details regarding these businesses are provided in Note 6. "Segment information."

2. Basis of preparation

(1) Compliance with IFRS

The consolidated financial statements of the Group are prepared in compliance with International Financial Reporting Standards (IFRS), pursuant to the provisions of Article 93 of the Regulation on Terminology, Forms, and Preparation Method of Consolidated Financial Statements (Ministry of Finance Order No. 28 of 1976), as the Group meets the requirements for a "specified company complying with designated international accounting standards" set forth in Article 1-2 of the said regulation.

The consolidated financial statements of the Group were approved by Michiya Kadota, President and Representative Director, on June 29, 2022.

(2) Basis for measurement

As stated in Note 3. "Significant accounting policies," the consolidated financial statements of the Group have been prepared based on acquisition cost, with the exception of specified financial instruments, etc., measured at fair value.

(3) Functional currency and presentation currency

The consolidated financial statements of the Group are presented in Japanese yen, which is the functional currency of the Company. Amounts are presented in millions of yen, with fractional amounts less than one million yen rounded down to the nearest million yen.
The translation of yen amounts as of or for the year ended March 31, 2022 into U.S. dollars is included solely for the convenience of readers and has been made, as a matter of arithmetical computation only, at the rate of ¥122 to US$1, the prevailing rate on the Tokyo Foreign Exchange Market on March 31, 2022. The translation should not be construed as a representation that yen amounts have been, could have been or could in the future be converted into U.S. dollars at the above or any other rate.

3. Significant accounting policies

The consolidated financial statements of the Group are prepared based on the financial statements of the Company, its consolidated subsidiaries and its associates using unified accounting policies.

(1) Basis for consolidation
1) Subsidiaries

A subsidiary is a company that is controlled by the Group. When the Group is exposed, or has rights, to variable returns from its involvement with the company and has the current ability to affect those returns through its power over the company, the Group considers that it controls the company.
The financial statements of a subsidiary are included in the consolidated financial statements from the date the Group gains control until the date when it ceases to control the subsidiary.

If accounting policies adopted by a subsidiary differ from that adopted by the Group, appropriate adjustments are made to the financial statements of the subsidiary, as necessary.

Intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between entities of the Group and profits or losses resulting from intragroup transactions that are recognized in assets, are eliminated in full in preparing the consolidated financial statements.

The comprehensive income of subsidiaries is attributed to owners of parent and non-controlling interests, even if the balance of non-controlling interests is negative.

When the Group has disposed of part of the ownership interests in the subsidiary; and it still continues to control a subsidiary, such transaction is accounted for as an equity transaction.
Differences between the adjustment of non-controlling interests and the fair value of the consideration are recognized directly in equity as equity attributable to owners of parent.

If the Group loses control of a subsidiary, the gain or loss associated with the loss of control is recognized in profit or loss.

When the end of the reporting period of a subsidiary is different from that of the Company, the subsidiary’s additional financial information as of the same date of that of the Company, which is prepared for consolidation purposes, is used for the consolidation.

2) Associates

An associate is a company over which the Group has significant influence. When the Group has the power to participate in the financial and operating policy decisions of an investee but it is not control or joint control of those policies, the Group considers that it has significant influence over the company.
Investment in an associate is accounted for using the equity method from the date the Group comes to have significant influence until the date when it loses significant influence.

When applying the equity method, if an associate uses accounting policies other than those adopted in the consolidated financial statements, appropriate adjustments are made to the associate’s financial statements in preparing the consolidated financial statements to ensure conformity with the accounting policies of the Group.

The consolidated financial statements include investments in associates whose end of the reporting period is different from that of the Company since it is impracticable to unify their reporting periods with that of the Company due to reasons such as their relationships with other shareholders. Adjustments are made for the effects of significant transactions or events that occur during the period resulting from the difference in the reporting period. The date of the end of the reporting period of these associates accounted for using the equity method is December 31.

Profits resulting from transactions with an associate accounted for using the equity method that are recognized in assets, are deducted from investment in associates to the extent of the Group's ownership interests in the associate. Losses resulting from transactions with an associate that are recognized in assets are deducted from investment in associates in the same manner unless the losses indicate an impairment that requires recognition in the consolidated financial statements.

(2) Business combinations

The Group accounts for each business combination by applying the acquisition method.
The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the acquirer, the liabilities assumed and the equity instruments issued by the Group in exchange for control of the acquiree. If the consideration transferred exceeds the net of the amounts of the identifiable assets acquired and the liabilities assumed measured at their acquisition-date fair values, the Group recognizes the excess as goodwill in the consolidated statement of financial position. Conversely, if the consideration is less than the net of the fair values, the difference is immediately recognized as income in the consolidated statement of profit or loss.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the business combination occurs, provisional amounts are used for the accounting, and the provisional amounts recognized are adjusted during a measurement period of within one year from the acquisition date.
Acquisition-related costs incurred are recognized as expenses.
The additional acquisition of non-controlling interests after control of an acquiree is obtained is accounted for as an equity transaction and no goodwill is recognized from such transaction.

(3) Foreign currency translation

The consolidated financial statements of the Group are presented in Japanese yen, which is the functional currency of the Company. Each company in the Group determines its own functional currency, and the transactions of each company are measured in its functional currency.

Foreign currency transactions are translated into the functional currency at the average exchange rate during the period unless the exchange rate fluctuates significantly during such period. Foreign currency monetary assets and liabilities are translated using the closing rate as of each reporting period. Exchange differences arising from such translations and settlements are recognized in profit or loss. However, exchange differences arising from financial assets measured at fair value through other comprehensive income and cash flow hedges are recognized in other comprehensive income.

For foreign operations, assets and liabilities are translated into Japanese yen at the closing rate at the end of each reporting period, and income and expenses are translated into Japanese yen at the average exchange rate during the period unless the exchange rate fluctuates significantly during such period. All resulting exchange differences are recognized in other comprehensive income. On the disposal of a foreign operation, the cumulative amount of the exchange differences related to such foreign operation are reclassified from equity to profit or loss in the period of the disposal.

(4) Financial instruments
1) Financial assets
(i) Initial recognition and measurement

The Group classifies financial assets as fair value through profit or loss, fair value through other comprehensive income, or measured at amortized cost. This classification is determined at initial recognition of the assets. The Group recognizes a financial asset at the date when the Group becomes party to the contract of the financial instruments.

A financial asset is classified as financial assets measured at amortized cost if both of the following conditions are met; otherwise, it is classified as financial assets measured at fair value:

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

With regard to financial assets measured at fair value, with the exception of equity instruments held for trading which must be measured at fair value through profit or loss, each equity instrument is designated to be measured at fair value through profit or loss, or to be measured at fair value through other comprehensive income, and such designation is applied on a continuous basis.
All financial assets, unless classified as measured at fair value through profit or loss, are measured at their fair value plus transaction costs that are directly attributable to the financial assets.

(ii) Classification and subsequent measurement

After initial recognition, financial assets are measured based on their classification as follows:

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

(b) Other financial assets
Financial assets other than those measured at amortized cost are measured at fair value. Subsequent changes in the fair value of financial assets measured at fair value are recognized as profit or loss.

However, for investments in equity instruments that are designated to be measured at fair value through other comprehensive income, subsequent changes in their fair value are recognized in other comprehensive income, and if they are derecognized or their fair value has declined significantly, the amount previously recognized in other comprehensive income is reclassified to retained earnings. Dividends from that investment are recognized in profit or loss.

(iii) Derecognition

A financial asset is derecognized when the rights to receive benefits from the financial asset expire or the financial asset is transferred or substantially all of the risks and rewards of ownership of the financial asset are transferred.

2) Impairment of financial assets

Under IFRS 9 “Financial Instruments” (hereinafter “IFRS 9”), the Group estimates expected credit losses for financial assets that are subject to the impairment requirements of IFRS 9 at each reporting date and recognizes an allowance for doubtful accounts for such expected credit losses.
After initial recognition, expected credit losses are measured at the reporting date for each category of financial assets as follows:

Stage 1 Financial assets for which credit risk has not increased significantly since initial recognition:
12-month expected credit losses

Stage 2 Financial assets for which credit risk has increased significantly since initial recognition but no credit impairment has been identified:
Lifetime expected credit losses

Stage 3 Credit-impaired financial assets:
Lifetime expected credit losses

The Group directly reduces the carrying amount of a financial asset when its future recovery cannot be realistically expected and all collateral on the financial asset is enforced or transferred to the Group.

The Group determines that the credit risk on a financial asset has increased significantly since initial recognition if contractual payments are more than 60 days past due, that a financial instrument is in default if payments are more than one year past due, and that a financial asset is credit-impaired if at least one of the following events occurs:

- Significant financial difficulty for the issuer or obligor;
- A breach of contract, such as a default or delinquency in interest or principal payment;
- The creditor, for economic or legal reasons relating to the debtor's financial difficulty, granting to the debtor a concession that the creditor would not otherwise consider;
- It has become probable that the debtor will enter bankruptcy or other financial reorganization;
- The disappearance of an active market for that financial asset because of financial difficulties; or
- Substantial discounts on a purchased or originated financial asset that reflects the incurred credit losses.

The Group evaluates stage 1 financial instruments on a collective basis and stage 2 and 3 financial instruments on an individual basis.

12-month and lifetime expected credit losses are measured using reasonable and supportable information about past events, current conditions and forecasts of future economic conditions that is available without undue cost or effort at the end of the reporting period.

When an event that has an adverse impact on the estimated future cash flows of credit-impaired financial assets that were purchased or originated has occurred, that is, there is evidence that their credit is impaired, at initial recognition, for such purchased or originated credit-impaired financial assets, the cumulative changes in expected credit losses over their remaining life subsequent to initial recognition are recognized as an allowance for doubtful accounts at the reporting date.

3) Financial liabilities

(i) Initial recognition and measurement

The Group classifies financial liabilities as fair value through profit or loss or measured at amortized cost. This classification is determined at initial recognition of the financial liabilities.
All financial liabilities are initially measured at fair value, while financial liabilities measured at amortized cost are measured at their fair value minus transaction costs that are directly attributable to the financial liabilities.

(ii) Classification and subsequent measurement

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

(a) Financial liabilities measured at fair value through profit or loss
Financial liabilities measured at fair value through profit or loss are subsequently measured at fair value after initial recognition, and any gain or loss arising from remeasurements is recognized as profit or loss.

(b) Financial liabilities measured at amortized cost
Financial liabilities measured at amortized cost are measured at amortized cost using the effective interest method after initial recognition. Amortization using the effective interest method and any gain or loss on derecognition are recognized as profit or loss in the consolidated statement of profit or loss.

(iii) Derecognition

A financial liability is derecognized when the obligation is discharged or cancelled or expires.

4) Offsetting financial instruments

A financial asset and a financial liability are offset and the net amounts are presented in the consolidated statement of financial position only when the Group currently has a legally enforceable right to set off the recognized amounts and intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously.

5) Derivatives and hedge accounting

The Group uses derivatives, such as foreign exchange contracts and currency swap contracts, to hedge currency risks and interest rate risks. Derivatives are classified into financial assets measured at fair value through profit or loss and financial liabilities measured at fair value through profit or loss. Derivatives that meet the requirements for hedge accounting are designated as hedging instruments and hedge accounting is applied.

For the adoption of hedge accounting, the Group formally designates and documents the hedging relationship and the risk management objectives and strategies at the inception of the hedge. The documentation includes the details of the hedging instruments, the hedged items, the nature of the risks being hedged and the method of assessing hedge effectiveness. The Group assesses the hedging relationship on an ongoing basis with respect to whether the hedging relationship will be effective in the future.

The Group applies cash flow hedges to interest rate-related derivative transactions that meet the requirements for hedge accounting.

The portion of the changes in fair value of hedging instruments of cash flow hedges that is determined to be an effective hedge is recognized in other comprehensive income, and is accumulated as other components of equity until the hedged transaction is executed and recognized in profit or loss. The ineffective portion is recognized as profit or loss.

The amount that has been accumulated in other components of equity related to hedging instruments is reclassified to profit or loss when a hedged transaction affects profit or loss.
If a hedged transaction results in the recognition of non-financial assets or liabilities, the amounts that have been accumulated in other components of equity are accounted for as an adjustment to the initial cost of the non-financial assets or liabilities.

When forecast transactions are no longer expected to occur, hedge accounting is discontinued, and any cumulative gains and losses that have been accumulated in other components of equity are reclassified to profit or loss. Even if hedge accounting is discontinued, when hedged future cash flows are expected to occur, the amount that has been accumulated as other components of equity by the time of discontinuation of hedge accounting continues to be recognized in other components of equity until such future cash flows occur.

The Group does not apply fair value hedges or hedges of net investments in foreign operations.

6) Fair value of financial instruments

For fair value of financial instruments that are traded in active markets as of each fiscal year-end, quoted market prices or dealer prices are referred to.
Fair value of financial instruments for which there is no active market is calculated using appropriate valuation techniques.

(5) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, deposits withdrawable at any time and short-term, highly liquid investments with a maturity of three months or less from the acquisition date that are readily convertible to cash and which are subject to an insignificant risk of change in value.

(6) Inventories

The cost of inventories includes all costs of purchase, costs of conversion and all other costs incurred in bringing the inventories to their present location and condition.
Inventories are measured at the lower of cost and net realizable value. The cost is principally assigned by using the moving average method. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and estimated costs necessary to sell.

(7) Property, plant and equipment

The cost model is applied to property, plant and equipment and they are measured at cost less accumulated depreciation and accumulated impairment losses.
The cost includes any costs directly attributable to the acquisition of the asset, as well as costs of dismantling, removal, and restoration.

Except for assets that are not subject to depreciation, such as land, each asset is depreciated over its estimated useful life using the straight-line method (however, some assets, such as equipment for research and development, are depreciated using the diminishing balance method).

The estimated useful lives of major asset items are as follows:

・ Buildings and structures: 2 – 60 years;
・ Machinery, equipment and vehicles: 4 – 10 years

Estimated useful lives and depreciation methods, etc., are reviewed at each fiscal year-end, and if any changes occur, they are amended prospectively as changes in accounting estimates.

(8) Goodwill and intangible assets
1) Goodwill

The Group measures goodwill as the amount of the consideration transferred that is measured at the acquisition-date fair value, including the recognized amount of non-controlling interests in an acquiree, less the net of the acquisition-date amounts (usually fair value) of identifiable assets acquired and liabilities assumed.

Goodwill is not amortized. Goodwill is allocated to cash-generating units identified based on the region in which the business is conducted and the type of business and is tested for impairment annually or whenever there is any indication of impairment.
Impairment losses on goodwill are recognized in the consolidated statement of profit or loss, and they are not reversed in subsequent periods.

Goodwill is presented at the amount of acquisition cost less accumulated impairment losses.

2) Intangible assets

The cost model is applied to intangible assets, and such assets are measured at cost less accumulated amortization and accumulated impairment losses.

A separately acquired intangible asset is measured initially at cost. The cost of an intangible asset acquired in a business combination is measured at fair value at the acquisition date.
Expenditure on internally generated intangible assets, with the exception of an intangible asset arising from development that meets the recognition criteria, is recognized as expense when it is incurred.

An intangible asset with finite useful life is amortized over its estimated useful life using the straight-line method.

Estimated useful lives and amortization methods for intangible assets with finite useful lives are reviewed at each fiscal year-end, and if any changes occur, they are amended prospectively as changes in accounting estimates.

The estimated useful lives of major intangible assets with finite useful lives are as follows:

・ Software: 5 years;
・ Customer-related assets: 5 – 21 years

An intangible asset with indefinite useful life and an intangible asset not yet available for use are not amortized and are instead tested for impairment annually or whenever there is any indication of impairment for each individual asset or each cash-generating unit.

(9) Leases

For lease transactions as a lessee, at the commencement date of the lease, the Group measures a right-of-use asset at cost and a lease liability at the present value of the lease payments that are not paid at that date.
A right-of-use asset is depreciated over the shorter of its useful life or its lease term using the straight-line method.

The Group determines the lease term as the non-cancellable period of the lease, together with periods covered by an extension option that is reasonably certain to be exercised or a cancellation option that is reasonably certain not to be exercised.

Lease payments are apportioned to finance costs and repayments of lease liabilities using the effective interest method, and finance costs are recognized in the consolidated statement of profit or loss.

However, for short-term leases with a lease term of 12 months or less and leases for which the underlying assets are of low value, right-of-use assets and lease liabilities are not recognized, and the total lease payments are recognized as an expense on either a straight-line basis over the lease term or another systematic basis.

(10) Impairment of non-financial assets

The Group assesses at the end of each reporting period whether there is any indication of impairment for each asset. If there is any indication that an asset may be impaired or if the asset is required to test for impairment at least annually, the Group estimates the recoverable amount of the asset. If it is not possible to estimate the recoverable amount of the individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

The recoverable amount of an asset or cash-generating unit is measured at the higher of its fair value less costs of disposal or its value in use. When the carrying amount of the asset or cash-generating unit exceeds its recoverable amount, impairment losses for the asset are recognized and the carrying amount is reduced to its recoverable amount.

Value in use is determined as estimated future cash flows that are discounted to the present value, using a pre-tax discount rate that reflects the current market assessments of the time value of money, the risks specific to the asset and other factors. In calculating fair value less costs of disposal, an appropriate valuation model is used, supported by available indicators of fair value.

For an asset other than goodwill, the Group assesses whether there is any indication that an impairment loss recognized in the prior periods for the asset may no longer exist or may have decreased, such as any changes in the assumptions used to calculate the recoverable amount of the asset. If any such indication exists, the Group estimates the recoverable amount of the asset or cash-generating unit. When the recoverable amount exceeds the carrying amount of the asset or cash-generating unit, impairment losses are reversed up to the lower of the calculated recoverable amount and the carrying amount less depreciation and amortization, in the case where no impairment losses have been recognized in the prior periods.

(11) Employee benefits
1) Post-employment benefits

The Group implements defined benefit plans and defined contribution plans as its employees' post-employment benefit program.

The Group determines the present value of its defined benefit obligations and the related current service cost and prior service cost using the projected unit credit method.

The discount rate is determined by reference to market yields at the end of the reporting period on high-quality corporate bonds corresponding to the discount period, which is determined based on the period up to the expected benefit payment date in each future reporting period.

Remeasurements of defined benefit liability (asset) are recognized collectively as other comprehensive income in the period of their occurrence, and are immediately reclassified from other components of equity to retained earnings.

Prior service cost is amortized over the average period until benefits are vested using the straight-line method, while if the benefit has already been vested immediately after the introduction or change of the defined benefit plan, the prior service cost is recognized as profit or loss in the period in which it was incurred.

Contributions for retirement benefits under defined contribution plans are recognized as expenses at the time of contribution.

2) Short-term employee benefits

The Group recognizes the undiscounted amount of short-term employee benefits as an expense when an employee has rendered related service.
For bonus plans and paid absences, the Group recognizes the amount estimated to be paid under the applicable plan as liabilities when the Group has legal or constructive obligations to make such payments and reliable estimates of the obligations can be made.

(12) Share-based payment

The Group has introduced a performance-linked stock compensation program and a performance and share price-linked monetary compensation program.

The consideration for services received under the performance-linked stock compensation program is measured by reference to the fair value of the Company's shares on the grant date or is measured at the fair value of the incurred liabilities, and is recognized as an expense over the corresponding period, while the same amount is recognized as an increase in capital surplus or liabilities.

The consideration for services received under the performance and share price-linked monetary compensation program is measured by reference to the fair value of the Company's shares at the end of the reporting period, and is recognized as an expense over the corresponding period, while the same amount is recognized as an increase in liabilities. Fair value of the relevant liabilities is remeasured at the end of the reporting period and the settlement date, and any changes in fair value are recognized as profit or loss.

The details of the programs are provided in (Overview of performance-linked stock compensation program and performance and share price-linked monetary compensation program) in Note 33. “Share-based payments.”

(13) Provisions

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

Where the effect of the time value of money is material, the provision is measured at the present value of the expenditures expected to be required to settle the obligation. For calculation of the present value, a pre-tax discount rate that reflects the current market assessment of the time value of money and risks specific to the liability is used.

(14) Revenue
1) Revenue from contracts with customers

For revenue from contracts with customers, the Group identifies the contract with a customer, identifies the performance obligations in the contract at contract inception, determines the transaction price, allocates the transaction price to the performance obligations in the contract, and recognizes the revenue when the Group satisfies a performance obligation.

A performance obligation is satisfied when control of the goods or services associated with an identified performance obligation is transferred to the customer.

Revenue from contracts with customers is classified into the following:

・ Revenue from sales of products and construction contracting

For product sales contracts with customers, revenue is recognized when the product is delivered to the customer.

The consideration under the product sales contract is collected within a reasonable period after the time of delivery of the product to the customer and includes no significant financial component.

For construction contracts, control of assets is transferred to the customer over a certain period of time since the Company's performance does not create an asset with an alternative use and the Company has an enforceable right to payment for performance completed to date. Therefore, sales are recognized over the period of the construction contract, based on the degree of progress toward satisfaction of performance obligations as measured at the end of each reporting date. To measure progress, the input method is applied, using the ratio of the incurred cost against the estimated total cost for each contract.

Consumption taxes, value-added taxes, etc., are deducted from the transaction price when the Group is found to act as an agent of the taxation authority in the transaction, taking into comprehensive consideration the laws and regulations as well as the actual situation regarding transactions in each country. An amount substantially equivalent to the discount from the sales price under the contract with a customer is deducted from transaction price.

The Group has no significant obligations to return goods or to refund.

・ Technology revenue

Technology revenue is recognized on an accrual basis in accordance with the substance of the relevant contractual arrangements. The Group earns revenue under the contracts that allow third parties to manufacture and sell its products and use its technologies.

2) Interest revenue

Interest revenue is calculated by using the effective interest method.
For the financial assets described in (4) Financial instruments 2) Impairment of financial assets, interest revenue is recognized by using the effective interest method as follows, for each category of financial assets:

Stage 1 and stage 2 financial assets:
Carrying amount before deducting allowance for doubtful accounts × effective interest rate

Stage 3 financial assets:
Carrying amount after deducting allowance for doubtful accounts × effective interest rate

Purchased or originated credit-impaired financial assets:
Carrying amount after deducting allowance for doubtful accounts × credit-adjusted effective interest rate

3) Dividends

Dividends are recognized when the shareholders' rights to receive payment are established.

(15) Government grants

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

Government grants are recognized in profit or loss on a systematic basis over the periods in which the Group recognizes as expense the related costs for which the grants are intended to compensate.

Government grants related to assets are deducted from the carrying value of the assets.

(16) Income taxes

Income tax expense in the consolidated statement of profit or loss is presented as the aggregate amount of current tax and deferred tax.

Income taxes are recognized as profit or loss, except for the tax arising from items that are recognized in other comprehensive income or directly in equity, and the tax arising from business combinations.

Current taxes are measured at the amount expected to be paid to or recovered from the taxation authorities.
The amount of these taxes is calculated using the tax rates and tax laws that have been enacted or substantively enacted by the end of the reporting period.

Deferred taxes are recognized related to the temporary differences between the carrying amount of an asset and a liability at the end of the period for accounting purposes and its tax base.
A deferred tax asset is recognized for deductible temporary differences, unused tax credits and unused tax losses to the extent that it is probable that taxable profits will be available against which they can be utilized. A deferred tax liability is recognized, in principle, for all taxable temporary differences.

However, deferred tax assets or liabilities are not recognized for the following temporary differences deferred taxes arises from:

- The initial recognition of goodwill;
- The initial recognition of an asset or a liability in a transaction which is not a business combination and affects neither accounting profit nor taxable profit (tax loss) at the time of the transaction;
- For deductible temporary differences arising from investments in subsidiaries and associates and interests in joint arrangements when it is probable that the temporary differences will not reverse in the foreseeable future or it is not probable that taxable profits will be available against which the temporary differences can be utilized; or
- For taxable temporary differences associated with investments in subsidiaries and associates and interests in joint arrangements when the timing of the reversal of temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

At the end of each reporting period, the Group reassesses unrecognized deferred tax assets and recognizes a previously unrecognized deferred tax asset to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates that have been enacted or substantively enacted by the end of the reporting period.

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

The income tax expense for each quarter is calculated based on an estimated yearly effective tax rate.

(17) Equity

1) Ordinary shares

For ordinary shares issued by the Company, the total issue price of the shares is recorded in share capital and capital surplus, and transaction costs, net of related tax effects, are deducted from capital surplus.

2) Treasury shares

Treasury shares are measured at cost and deducted from equity. No gain or loss is recognized in profit or loss on the purchase, sale or cancellation of treasury shares. The difference between the carrying amount and the consideration received from the sale is recognized in equity.

(18) Earnings per share

Basic earnings per share are calculated by dividing profit or loss attributable to common shareholders of the parent by the weighted average number of common shares outstanding, after adjusting for treasury shares, during the period.

(19) Liabilities pertaining to forward contracts concluded with non-controlling shareholders

For forward contracts for shares in subsidiaries which the Group has concluded with non-controlling shareholders, the present value of the expected transfer price is initially recognized as other financial liabilities, and the same amount is deducted from capital surplus. After initial recognition, the present value is measured at amortized cost using the effective interest method, in principle, and the amount of subsequent changes is recognized in profit or loss.

4. Significant accounting estimates and judgments

In preparing the consolidated financial statements of the Group, management is required to make judgments, estimates and assumptions that affect the application of accounting policies and the disclosure of reported amounts of income, expenses, assets and liabilities. However, actual results may differ from these estimates.

The estimates and their underlying assumptions are reviewed on a continuous basis. The impact of these reviews on estimates and assumptions are recognized in the period in which the estimates or assumptions are reviewed, the reporting period, and subsequent reporting periods.

In the application of the accounting policies, estimates and judgments that may have a particularly significant effect on the amounts recognized in the consolidated financial statements of the Group are as follows:

・ Valuation of goodwill

（Note 3. “Significant accounting policies (8) Goodwill and intangible assets”）

Careful judgments are made with external experts for estimates of future cash flows based on the business plan*, growth rates and discount rates to be used in the impairment test for goodwill. However, these judgments are subject to future uncertainties.
In addition, although the impact of COVID-19 on the future business performance has, to a certain extent, been factored into the business plan of each company, the timing of convergence is still uncertain, and that uncertainty may increase in the future.
In the event of an increase in the discount rate or a decrease in the growth rate, an impairment loss may be incurred.

*This refers to MVP-22, which is the medium-term management plan approved by management for the period up to fiscal 2022. Future plans thereafter are determined based on the growth rate in the medium-term management plan and through estimation on the basis of the long-term average growth rate, etc., of the market in which the cash-generating unit is operating.

- Estimates of the total cost of transactions that recognize revenue over a certain period of time
  （Note 3. “Significant accounting policies (14) Revenue”）
  The Group uses estimated total costs to measure the degree of the construction’s progress, which is used for recognizing revenues over a certain period of time. However, these estimates are subject to future uncertainties due to technical or physical factors and changes in the environment surrounding the contracts.

In addition, other estimates and judgments that are considered important are as follows:

- Estimates of fair value of intangible assets acquired in a business combination
  （Note 3. “Significant accounting policies (2) Business combinations”）
- Impairment of non-financial assets
  （Note 3. “Significant accounting policies (10) Impairment of non-financial assets”）
- Useful lives of intangible assets
  （Note 3. “Significant accounting policies (8) Goodwill and intangible assets”）
- Recoverability of deferred tax assets
  （Note 3. “Significant accounting policies (16) Income taxes”）
- Estimates of the extension option and cancellation option in lease agreements
  （Note 3. “Significant accounting policies (9) Leases”）
- Provisions
  （Note 3. “Significant accounting policies (13) Provisions”）
- Measurement of defined benefit obligations
  （Note 3. “Significant accounting policies (11) Employee benefits”）
- Fair value of financial instruments
  （Note 3. “Significant accounting policies (4) Financial instruments”）

(Additional information)
During the fiscal year ended March 31, 2022, economic activities worldwide showed signs of a recovery as economic activities began to return to normal backed by national economic stimulus measures and widespread vaccinations, although the momentum of recovery was weakened occasionally by movement restrictions and logistical disruptions due to the outbreak of COVID-19 variants. Both orders and sales for the Group increased mainly due to the rebound from the decrease in demand triggered by the stagnation in economic activities in the previous year caused by the spread of COVID-19.

It is difficult to reasonably predict the future spread of the disease, or when the spread would converge. However, the Group has made accounting estimates, including impairment tests for goodwill and intangible assets, based on the assumption that, according to information, etc., from external sources, economic activities will normalize due to the worldwide progress of vaccination and economic stimulus measures, allowing the economy to gradually recover. If a revision should become necessary, it may have a significant impact on the amounts to be recognized in the consolidated financial statements from the fiscal year ending March 31, 2023 onward.

5. New standards not yet applied

With respect to the standards or interpretations newly issued or amended by the date of the approval of the consolidated financial statements, the Group has not applied them early as of March 31, 2022.

The impact of the application is not stated herein, due to its immateriality.

6. Segment information

(1) Overview of reportable segments

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

The Group plans comprehensive strategies for the products and services that it handles in Japan and overseas and conducts business accordingly. The Group's operations are therefore classified into two reportable segments, the Water Treatment Chemicals business and the Water Treatment Facilities business.

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

(2) Information on reportable segments

The accounting policies for reportable segments are the same as the accounting policies for the Group, which are provided in Note 3. "Significant accounting policies." Intersegment sales are based on prevailing market prices.

Fiscal year ended March 31, 2021

	Millions of yen				
	Reportable segments				
2021	Water treatment chemicals	Water treatment facilities	Total	Adjustments (Notes)	Consolidated
Net sales					
Sales to external customers	¥103,231	¥164,518	¥267,749	¥ —	¥267,749
Intersegment sales	453	2,306	2,760	(2,760)	—
Total	103,684	166,825	270,509	(2,760)	267,749
Segment profit	11,816	19,634	31,451	78	31,529
Finance income					545
Finance costs					(1,923)
Share of profit (loss) of investments accounted for using equity method					(999)
Profit before tax					¥29,150
Segment assets	¥123,476	¥233,530	¥357,006	¥67,921	¥424,928
Other items					
Depreciation and amortization	¥4,986	¥15,752	¥20,739	¥ —	¥20,739
Impairment losses	—	1,419	1,419	—	1,419
Investments accounted for using equity method	1,448	110	1,558	19	1,578
Capital expenditures	8,719	25,848	34,568	—	34,568

Notes
1. Adjustments to segment profit include the elimination of inter-segment transactions, etc.
2. Segment profit presents the amount of operating profit.
3. Adjustments to segment assets include the elimination of inter-segment transactions, etc., and consist mainly of corporate assets unallocated to reportable segments.
4. Capital expenditures include an increase in right-of-use assets.
5. Capital expenditures do not include assets acquired through business acquisitions.
6. Impairment losses consist mainly of impairment losses on goodwill of ¥1,304 million.

Fiscal year ended March 31, 2022

2022	Millions of yen: Reportable segments: Water treatment chemicals	Water treatment facilities	Total	Adjustments (Notes)	Consolidated
Net sales					
Sales to external customers	¥117,672	¥170,534	¥288,207	¥ —	¥288,207
Intersegment sales	518	561	1,080	(1,080)	—
Total	118,191	171,095	289,287	(1,080)	288,207
Segment profit	14,560	21,169	35,729	4	35,734
Finance income					601
Finance costs					(6,176)
Share of profit (loss) of investments accounted for using equity method					(80)
Profit before tax					¥30,079
Segment assets	¥148,267	¥274,119	¥422,386	¥47,595	¥469,981
Other items					
Depreciation and amortization	¥5,935	¥17,477	¥23,412	¥ —	¥23,412
Impairment losses	380	647	1,028	—	1,028
Investments accounted for using equity method	988	163	1,152	39	1,191
Capital expenditures	11,454	57,016	68,471	—	68,471

2022	Thousands of U.S. dollars: Reportable segments: Water treatment chemicals	Water treatment facilities	Total	Adjustments (Notes)	Consolidated
Net sales					
Sales to external customers	$964,524	$1,397,819	$2,362,352	$ —	$2,362,352
Intersegment sales	4,245	4,598	8,852	(8,852)	—
Total	968,778	1,402,418	2,371,204	(8,852)	2,362,352
Segment profit	119,344	173,516	292,860	32	292,901
Finance income					4,926
Finance costs					(50,622)
Share of profit (loss) of investments accounted for using equity method					(655)
Profit before tax					$246,549
Segment assets	$1,215,303	$2,246,877	$3,462,180	$390,122	$3,852,303
Other items					
Depreciation and amortization	$48,647	$143,254	$191,901	$ —	$191,901
Impairment losses	3,114	5,303	8,426	—	8,426
Investments accounted for using equity method	8,098	1,336	9,442	319	9,762
Capital expenditures	93,885	467,344	561,237	—	561,237

Notes
1. Adjustments to segment profit include the elimination of inter-segment transactions, etc.
2. Segment profit presents the amount of operating profit.
3. Adjustments to segment assets include the elimination of inter-segment transactions, etc., and consist mainly of corporate assets unallocated to reportable segments.
4. Capital expenditures include an increase in right-of-use assets.
5. Capital expenditures do not include assets acquired through business acquisitions.
6. The amount of revenue recorded for transactions in which revenue is recognized over a certain period of time by the Company is ¥51,440 million ($421,639 thousand).

(3) Information about products and services

This information is omitted since the classification of products and services herein follows the same classification as used for reportable segments.

(4) Information about geographical areas

Non-current assets and net sales to external customers by geographical areas are as follows:

1) Non-current assets

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Japan	¥119,495	¥159,264	$1,305,442
Asia	17,939	19,450	159,426
Americas	55,693	61,740	506,065
EMEA	16,975	20,855	170,942
Total	¥210,104	¥261,311	$2,141,893

Note Non-current assets are allocated based on the location of assets, and financial instruments or deferred tax assets are not included. EMEA refers to the European, Middle Eastern and African regions. Meanwhile, the geographical classification for the purpose of disclosure was changed to integrate “Other” and “North America” into “Americas.” Accordingly, figures for the previous fiscal year have been reclassified based on this new classification.

2) Net sales

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Japan	¥161,371	¥159,365	$1,306,270
Asia	48,535	58,032	475,672
Americas	39,160	46,351	379,926
EMEA	18,681	24,457	200,467
Total	¥267,749	¥288,207	$2,362,352

Note Net sales are allocated to a country or areas based on the locations of customers. EMEA refers to the European, Middle Eastern and African regions. Meanwhile, the geographical classification for the purpose of disclosure was changed to integrate “Other” and “North America” into “Americas.” Accordingly, figures for the previous fiscal year have been reclassified based on this new classification.

(5) Information about major customers

This information is omitted since there is no single external customer that accounts for 10% or more of the net sales in the consolidated statement of profit or loss.

7. Business combinations and Acquisition of non-controlling interests

Fiscal year ended March 31, 2021

(Acquisition of Pentagon Technologies Group, Inc.)

On April 1, 2020, Kurita America Holdings Inc., a wholly owned subsidiary of the Company, purchased an additional 26% of shares of Pentagon Technologies Group, Inc. (hereinafter “Pentagon Technologies”), which is a U.S. tool cleaning company. Kurita America Holdings Inc. already held 25% of shares of Pentagon Technologies as of March 31, 2020. As a result, Kurita America Holdings Inc. owns 51% of shares of Pentagon Technologies, which became a consolidated subsidiary of the Company.

The Company made Pentagon Technologies its subsidiary to have a base for overseas service in the electronics industry, which the Company positions as a key business field, and to further increase its competitiveness in the market. The Company will also accelerate its business growth and offer new value by acquiring the cutting-edge tool cleaning technologies and expertise of Pentagon Technologies and creating synergies with the tool cleaning business that the Group has been developing in Japan.

(1) Acquisition cost and breakdown

Consideration for acquisition

2021	Millions of yen
Acquisition-date fair value of the shares of the acquiree held by the acquirer immediately before the acquisition date	¥5,379
Fair value of the shares of the acquiree additionally acquired on the acquisition date	5,594
Total	¥10,974

(2) Gain on remeasurement relating to business combinations

As a result of the remeasurement of the equity interest in the acquiree held immediately before the acquisition date at acquisition-date fair value, gain on remeasurement relating to business combinations of ¥463 million was recognized due to the relevant business combination. This gain is recorded in other income in the consolidated statement of profit or loss.

(3) Assets acquired and liabilities assumed

The fair value of identifiable assets acquired and liabilities assumed of Pentagon Technologies as of the acquisition date is as follows:

2021	Millions of yen
Fair value of consideration for acquisition	¥10,974
Fair value of assets acquired and liabilities assumed	
Cash and cash equivalents	995
Trade receivables	1,636
Other current assets	554
Technology-related assets	2,334
Customer-related assets	1,732
Other non-current assets	3,169
Trade and other payables	(1,520)
Non-current liabilities	(2,407)
Fair value of assets acquired and liabilities assumed (net)	6,494
Non-controlling interests	3,260
Goodwill	¥7,739

In the fourth quarter of the fiscal year ended March 31, 2021, the provisional accounting process was finalized, and the amount of goodwill as of the acquisition date decreased by ¥1,881 million. This was mainly attributable to increases of ¥1,234 million in non-current liabilities and ¥1,808 million in non-controlling interests, despite increases of ¥2,334 million in technology-related assets and ¥1,732 million in customer-related assets. The amount of goodwill that occurred was ¥7,739 million, which reflects expected excess earning power. The Group does not expect any amount related to recognized goodwill to be deductible for tax purposes.

Net sales and profit of Pentagon Technologies, which are included in the consolidated statement of profit or loss for the fiscal year ended March 31, 2021, are ¥11,350 million and ¥814 million, respectively. Non-controlling interests are measured at their ownership interests of the fair value of the identifiable net assets of the acquiree.

(4) Transactions that are accounted for separately from business combination

Acquisition-related costs were ¥171 million. The amount is recorded in other expenses in the consolidated statement of profit or loss.

(5) Forward contract concluded with non-controlling shareholders

With regard to the remaining 49% shares of Pentagon Technologies, a forward contract has been concluded between Kurita America Holdings, Inc. and non-controlling shareholders of Pentagon Technologies, under which it has been agreed that Pentagon Technologies will become a wholly owned subsidiary of Kurita America Holdings, Inc. with June 30, 2022 as the target date.
The present value of the expected transfer price based on the forward contract, which is ¥10,578 million, is initially recognized as other financial liabilities, and the same amount is deducted from capital surplus. After initial recognition, the present value is measured at amortized cost using the effective interest method, in principle, and the amount of subsequent changes is recognized in profit or loss.

Fiscal year ended March 31, 2022

(Business combinations of entities or businesses under common control)

(1) Outline of the transaction
1) Company names and businesses at the time of business combination

(i) Surviving company
Name: Kurita Water Industries Ltd.
Business: Manufacture and sale of water treatment chemicals and water treatment facilities, maintenance of water treatment facilities, ultrapure water supply, and soil and groundwater remediation

(ii) Merged company
Name: Kurita Engineering Co., Ltd. (hereinafter "Kurita Engineering")
Business: Plant cleaning and maintenance, manufacture and sale of cleaning and wastewater treatment chemicals, facilities and equipment, and rental of temporary machinery

2) Date of business combination

April 1, 2021

3) Legal form of business combination

Kurita Engineering has been dissolved through an absorption-type merger in which the Company is the surviving company.

4) Name of the company after business combination

Kurita Water Industries Ltd.

5) Main reason of integration

Kurita Engineering was established in 1959 when the chemical cleaning division was separated from the Company, and has been developing its business focusing on chemical cleaning for large plants in Japan as a leading company in plant facilities cleaning services. In the social and industrial infrastructure markets such as electric power, iron and steel, petroleum refining, and petrochemicals, which are the main markets for Kurita Engineering and the Company, there are growing needs to reduce environmental impact and improve productivity, including decarbonization measures against global climate change. This merger will enable the Company to flexibly invest its management resources, such as financial and human resources, into Kurita Engineering's solid technological and customer base so that the Company can accurately identify these needs and provide optimal solutions. We will aim to expand the scope of our plant facilities cleaning business and achieve sustainable growth by establishing a system to respond promptly to social demands and customer needs in the future social and industrial infrastructure markets.

(2) Outline of accounting

The business combination under common control is a business combination in which all companies or businesses involved are ultimately controlled by the same company before and after the business combination. The control is not temporary. The Group continues to perform accounting treatment based on carrying the amount for all business combination transactions under common control.

8. Cash and cash equivalents

The breakdown of cash and cash equivalents is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Cash and deposits	¥61,039	¥43,974	$360,442
Short-term investments	1,189	1,756	14,393
Total	¥62,228	¥45,730	$374,836

The balance of cash and cash equivalents in the consolidated statement of financial position matches that in the consolidated statement of cash flows.

9. Trade and other receivables

The breakdown of trade and other receivables is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Notes and accounts receivable - trade	¥64,031	¥75,290	$617,131
Accounts receivable - other	717	778	6,377
Contract asset	32,347	31,900	261,475
Lease receivables	1,041	1,260	10,327
Allowance for doubtful accounts	(393)	(338)	(2,770)
Total	¥97,745	¥108,892	$892,557

Notes 1. In the consolidated statement of financial position, trade and other receivables are presented in the amount after deduction of allowance for doubtful accounts.
2. With the exception of lease receivables, trade and other receivables are classified as financial assets measured at amortized cost.

10. Other financial assets

(1) Breakdown of other financial assets

The breakdown of other financial assets is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Shares	¥25,705	¥17,078	$139,983
Insurance funds	4,228	2,410	19,754
Leasehold deposits	1,735	1,897	15,549
Time deposits	2,454	2,757	22,598
Other	2,256	1,943	15,926
Total	¥36,380	¥26,086	$213,819
Current assets	¥2,817	¥3,075	$25,204
Non-current assets	33,563	23,011	188,614

Notes 1. In the consolidated statement of financial position, other financial assets are presented in the amount after deduction of allowance for doubtful accounts.
2. Insurance funds, shares, and time deposits and leasehold deposits are classified as financial assets measured at fair value through profit or loss, financial assets measured at fair value through other comprehensive income and financial assets measured at amortized cost, respectively. Other consists primarily of financial assets measured at amortized cost.

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

Major equity instruments and their fair values, of financial assets measured at fair value through other comprehensive income, are as follows:

	Millions of yen		Thousands of U.S. dollars
Name of shares	2021	2022	2022
Daikin Industries, Ltd.	¥11,057	¥5,550	$45,491
ONO PHARMACEUTICAL CO., LTD.	5,976	4,227	34,647
Shin-Etsu Chemical Co., Ltd.	3,327	3,359	27,532
NIPPON SHOKUBAI CO.,LTD.	1,183	994	8,147
Otsuka Holdings Co., Ltd.	937	846	6,934

Note Shares are held primarily for business relationship purposes, and are therefore designated as financial assets measured at fair value through other comprehensive income.

The Group sells (derecognizes) financial assets measured at fair value through other comprehensive income in order to ensure the efficient and effective use of the assets it holds.

Fair values at the time of sales and cumulative gain or loss on disposal recognized as other comprehensive income in equity are as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Fair value	¥2,536	¥9,212	$75,508
Cumulative gain or loss on disposal recognized as other comprehensive income in equity	1,290	7,259	59,500

Note Cumulative gain or loss on disposal recognized as other comprehensive income in equity are reclassified to retained earnings when the assets are sold or when their fair value declines significantly.

11. Inventories

The breakdown of inventories is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Finished goods	¥5,248	¥6,640	$54,426
Work in process	948	1,029	8,434
Raw materials and supplies	3,714	5,462	44,770
Total	¥9,911	¥13,132	$107,639

12. Property, plant and equipment

Changes in carrying amount, acquisition cost, accumulated depreciation and impairment losses of property, plant and equipment are as follows:

1) Carrying amount

	Millions of yen					
	Buildings and structures	Machinery and vehicles	Land	Construction in progress	Other	Total
Balance as of April 1, 2020	¥19,847	¥62,231	¥12,624	¥7,376	¥4,277	¥106,358
Individual acquisition	104	707	—	25,885	816	27,513
Acquisition through business combination	556	1,591	—	—	69	2,216
Depreciation (Note)	(1,874)	(10,349)	—	—	(1,543)	(13,766)
Impairment loss	(15)	—	(99)	—	—	(115)
Sale or disposal	(423)	(3,643)	(1,138)	—	(108)	(5,312)
Reclassification to other account	699	9,612	—	(11,699)	961	(425)
Exchange differences on translation of foreign operations	144	636	150	103	127	1,162
Other	(0)	18	0	0	(45)	(26)
Balance as of March 31, 2021	¥19,039	¥60,805	¥11,537	¥21,666	¥4,554	¥117,603
Individual acquisition	276	1,260	—	61,006	515	63,058
Acquisition through business combination	559	129	—	—	26	715
Depreciation (Note)	(2,041)	(12,265)	—	—	(1,631)	(15,939)
Impairment loss	(476)	(131)	(400)	—	(19)	(1,027)
Sale or disposal	(248)	(177)	(4,301)	—	(49)	(4,777)
Reclassification to other account	25,806	19,603	—	(48,346)	2,568	(368)
Exchange differences on translation of foreign operations	365	571	13	255	156	1,364
Other	16	21	—	(0)	366	404
Balance as of March 31, 2022	¥43,298	¥69,817	¥6,849	¥34,581	¥6,488	¥161,034

	Thousands of U.S. dollars					
	Buildings and structures	Machinery and vehicles	Land	Construction in progress	Other	Total
Balance as of March 31, 2021	$156,057	$498,401	$94,565	$177,590	$37,327	$963,959
Individual acquisition	2,262	10,327	—	500,049	4,221	516,868
Acquisition through business combination	4,581	1,057	—	—	213	5,860
Depreciation (Note)	(16,729)	(100,532)	—	—	(13,368)	(130,647)
Impairment loss	(3,901)	(1,073)	(3,278)	—	(155)	(8,418)
Sale or disposal	(2,032)	(1,450)	(35,254)	—	(401)	(39,155)
Reclassification to other account	211,524	160,680	—	(396,278)	21,049	(3,016)
Exchange differences on translation of foreign operations	2,991	4,680	106	2,090	1,278	11,180
Other	131	172	—	(0)	3,000	3,311
Balance as of March 31, 2022	$354,901	$572,270	$56,139	$283,450	$53,180	$1,319,950

Note Depreciation of property, plant and equipment is included in cost of sales and selling, general and administrative expenses in the consolidated statement of profit or loss.

2) Acquisition cost

	Millions of yen					
	Buildings and structures	Machinery and vehicles	Land	Construction in progress	Other	Total
Balance as of April 1, 2020	¥48,956	¥171,861	¥13,122	¥7,376	¥17,509	¥258,826
Balance as of March 31, 2021	¥49,605	¥177,839	¥12,036	¥21,666	¥18,440	¥279,588
Balance as of March 31, 2022	¥74,439	¥198,432	¥7,678	¥34,581	¥21,089	¥336,221

	Thousands of U.S. dollars					
	Buildings and structures	Machinery and vehicles	Land	Construction in progress	Other	Total
Balance as of March 31, 2022	$610,155	$1,626,491	$62,934	$283,450	$172,860	$2,755,909

3) Accumulated depreciation and impairment losses

	Millions of yen					
	Buildings and structures	Machinery and vehicles	Land	Construction in progress	Other	Total
Balance as of April 1, 2020	¥29,109	¥109,630	¥497	¥ —	¥13,232	¥152,468
Balance as of March 31, 2021	¥30,565	¥117,034	¥498	¥ —	¥13,885	¥161,984
Balance as of March 31, 2022	¥31,141	¥128,615	¥829	¥ —	¥14,601	¥175,187

	Thousands of U.S. dollars					
	Buildings and structures	Machinery and vehicles	Land	Construction in progress	Other	Total
Balance as of March 31, 2022	$255,254	$1,054,221	$6,795	$ —	$119,680	$1,435,959

13. Goodwill and intangible assets

(1) Table of changes

Changes in carrying amount, acquisition cost, accumulated amortization and impairment losses of goodwill and intangible fixed assets are as follows:

1) Carrying amount

	Millions of yen				
	Goodwill	Software	Customer-related assets	Other	Total
Balance as of April 1, 2020	¥47,033	¥3,307	¥7,655	¥2,418	¥60,415
Individual acquisition	—	1,908	—	1	1,909
Acquisition through business combination	7,739	—	1,732	2,371	11,843
Amortization (Note)	—	(1,122)	(881)	(819)	(2,823)
Impairment loss	(1,304)	—	—	—	(1,304)
Sale or disposal	—	(33)	—	—	(33)
Exchange differences on translation of foreign operations	2,136	27	209	42	2,416
Other changes	(8)	455	(0)	47	494
Balance as of March 31, 2021	¥55,596	¥4,542	¥8,716	¥4,061	¥72,916
Individual acquisition	—	2,005	16	15	2,037
Acquisition through business combination	2,320	0	661	0	2,982
Amortization (Note)	—	(1,444)	(1,048)	(828)	(3,321)
Impairment loss	—	(1)	—	—	(1)
Sale or disposal	—	(2)	—	(0)	(2)
Exchange differences on translation of foreign operations	5,075	23	729	209	6,037
Other changes	—	331	66	37	435
Balance as of March 31, 2022	¥62,992	¥5,454	¥9,142	¥3,494	¥81,084

	Thousands of U.S. dollars				
	Goodwill	Software	Customer-related assets	Other	Total
Balance as of March 31, 2021	$455,704	$37,229	$71,442	$33,286	$597,672
Individual acquisition	—	16,434	131	122	16,696
Acquisition through business combination	19,016	0	5,418	0	24,442
Amortization (Note)	—	(11,836)	(8,590)	(6,786)	(27,221)
Impairment loss	—	(8)	—	—	(8)
Sale or disposal	—	(16)	—	(0)	(16)
Exchange differences on translation of foreign operations	41,598	188	5,975	1,713	49,483
Other changes	—	2,713	540	303	3,565
Balance as of March 31, 2022	$516,327	$44,704	$74,934	$28,639	$664,622

Note Amortization of intangible assets is included in cost of sales and selling, general and administrative expenses in the consolidated statement of profit or loss.

2) Acquisition cost

	Millions of yen				
	Goodwill	Software	Customer-related assets	Other	Total
Balance as of April 1, 2020	¥48,204	¥13,694	¥10,308	¥4,686	¥76,894
Balance as of March 31, 2021	¥58,071	¥15,384	¥12,472	¥6,896	¥92,825
Balance as of March 31, 2022	¥65,467	¥17,741	¥14,272	¥7,263	¥104,744

	Thousands of U.S. dollars				
	Goodwill	Software	Customer-related assets	Other	Total
Balance as of March 31, 2022	$536,614	$145,418	$116,983	$59,532	$858,557

3) Accumulated amortization and impairment losses

	Millions of yen				
	Goodwill	Software	Customer-related assets	Other	Total
Balance as of April 1, 2020	¥1,171	¥10,387	¥2,652	¥2,268	¥16,479
Balance as of March 31, 2021	¥2,475	¥10,841	¥3,756	¥2,835	¥19,908
Balance as of March 31, 2022	¥2,475	¥12,286	¥5,129	¥3,768	¥23,660

	Thousands of U.S. dollars				
	Goodwill	Software	Customer-related assets	Other	Total
Balance as of March 31, 2022	$20,286	$100,704	$42,040	$30,885	$193,934

(2) Impairment tests for goodwill

The carrying amount of the goodwill allocated to each cash-generating unit is as follows:

	Millions of yen		Thousands of U.S. dollars
Reportable segments	2021	2022	2022
Water Treatment Chemicals	¥40,584	¥46,396	$380,295
Kurita Europe GmbH	11,710	14,309	117,286
Hansu Co., Ltd.	4,739	4,908	40,229
Avista Technologies, Inc.	4,390	4,853	39,778
Kurita America, Inc.	19,744	22,325	182,991
Water Treatment Facilities	¥15,011	¥16,595	$136,024
Kurita America, Inc.	5,232	5,784	47,409
Kurita Fracta Holdings, Inc.	1,814	2,006	16,442
Pentagon Technologies Group, Inc.	7,964	8,804	72,163
Total	¥55,596	¥62,992	$516,327

Impairment tests for major goodwill are performed as follows:

1) Kurita Europe GmbH (Water Treatment Chemicals business)

The recoverable amount is measured at value in use. The value in use is calculated by discounting future cash flows at 6.8%, and the discount rate used is determined with reference to the weighted average cost of capital for the cash-generating unit. The forecast period of future cash flows is five years, based on a business plan that was created reflecting past experience and external information and approved by management. For periods after five years, a growth rate of 1.0% is used, which was determined by taking into account the conditions of the market in which the cash-generating unit is operating. Accordingly, the recoverable amount exceeds the carrying amount, and therefore, no impairment loss was recognized for the fiscal year ended March 31, 2022.
For the fiscal year ended March 31, 2021, the forecast period of future cash flows was five years, and the discount rate and the growth rate used were 6.3% and 1.0%, respectively.
The Group considers that, even if key assumptions used in the impairment test change within a reasonably foreseeable range, a significant impairment is unlikely to occur in the cash-generating unit.

2) Hansu Co., Ltd. (Water Treatment Chemicals business)

The recoverable amount is measured at value in use. The value in use is calculated by discounting future cash flows at 11.4%, and the discount rate used is determined with reference to the weighted average cost of capital for the cash-generating unit. The forecast period of future cash flows is five years, based on a business plan that was created reflecting past experience and external information and approved by management. For periods after five years, a growth rate of 0.0% is used, which was determined by taking into account the conditions of the market in which the cash-generating unit is operating. Accordingly, the recoverable amount exceeds the carrying amount, and therefore, no impairment loss was recognized for the fiscal year ended March 31, 2022.
For the fiscal year ended March 31, 2021, the forecast period of future cash flows was five years, and the discount rate and the growth rate used were 11.2% and 0.0%, respectively.
The Group considers that, even if key assumptions used in the impairment test change within a reasonably foreseeable range, a significant impairment is unlikely to occur in the cash-generating unit.

3) Avista Technologies, Inc. (Water Treatment Chemicals business)

The recoverable amount is measured at value in use. The value in use is calculated by discounting future cash flows at 9.5%, and the discount rate used is determined with reference to the weighted average cost of capital for the cash-generating unit.
The forecast period of future cash flows is five years, based on a business plan that was created reflecting past experience and external information and approved by management. For periods after five years, a growth rate of 2.2% is used, which was determined by taking into account the conditions of the market in which the cash-generating unit is operating. Accordingly, the recoverable amount exceeds the carrying amount, and therefore, no impairment loss was recognized for the fiscal year ended March 31, 2022.
For the fiscal year ended March 31, 2021, the forecast period of future cash flows was five years, and the discount rate and the growth rate used were 9.3% and 2.2%, respectively.
The Group considers that, even if key assumptions used in the impairment test change within a reasonably foreseeable range, a significant impairment is unlikely to occur in the cash-generating unit.

4) Kurita America, Inc. (Water Treatment Chemicals business and Water Treatment Facilities business)

The recoverable amount is measured at value in use. The value in use is calculated by discounting future cash flows at 9.5%, and the discount rate used is determined with reference to the weighted average cost of capital for the cash-generating unit.
Despite the serious impact of the developments in the first half of the fiscal year ended March 31, 2022, including the decline in private demand associated with the closure of commercial facilities due to the spread of COVID-19 and other factors, delay in shipment of products due to logistic disruption and soaring costs of materials and distribution triggered by inflation, we expect to see an improvement in business performance due to positive prospects, such as normalization of product shipment and the progress in the negotiation with customers for price increase, as well as the strengthening of sales structure suitable for the focused markets in the course of the latter half of the fiscal year.
The forecast period of future cash flows is five years, based on a business plan that was created reflecting past experience and external information and approved by management. For periods after five years, a growth rate of 2.2% is used, which was determined by taking into account the conditions of the market in which the cash-generating unit is operating. Accordingly, the recoverable amounts exceed each of their carrying amounts, and therefore, no impairment loss was recognized for the fiscal year ended March 31, 2022.
For the fiscal year ended March 31, 2021, the forecast period of future cash flows was five years, and the discount rate and the growth rate used were 8.9% and 1.7%, respectively.
The Group considers that, even if key assumptions used in the impairment test change within a reasonably foreseeable range, a significant impairment is unlikely to occur in the cash-generating unit.

5) Kurita Fracta Holdings, Inc. (Water Treatment Facilities business)

The recoverable amount is measured at value in use. The value in use is calculated by discounting future cash flows at 17.9%, and the discount rate used is determined with reference to the weighted average cost of capital for the cash-generating unit. The forecast period of future cash flows is five years, based on a business plan that was created reflecting past experience and external information and approved by management. For periods after five years, a growth rate of 2.5% is used, which was determined by taking into account the conditions of the market in which the cash-generating unit is operating. Accordingly, the recoverable amounts exceed each of their carrying amounts, and therefore, no impairment loss was recognized for the fiscal year ended March 31, 2022.
For the fiscal year ended March 31, 2021, the forecast period of future cash flows was five years, and the discount rate and the growth rate used were 18.0% and 2.5%, respectively.
The Group considers that, even if key assumptions used in the impairment test change within a reasonably foreseeable range, a significant impairment is unlikely to occur in the cash-generating unit.

6) Pentagon Technologies Group, Inc. (Water Treatment Facilities business)

The recoverable amount is measured at value in use. The value in use is calculated by discounting future cash flows at 10.7%, and the discount rate used is determined with reference to the weighted average cost of capital for the cash-generating unit. The forecast period of future cash flows is five years, based on a business plan that was created reflecting past experience and external information and approved by management. For periods after five years, a growth rate of 2.2% is used, which was determined by taking into account the conditions of the market in which the cash-generating unit is operating. Accordingly, the recoverable amount exceeds the carrying amount, and therefore, no impairment loss was recognized for the fiscal year ended March 31, 2022.
For the fiscal year ended March 31, 2021, the forecast period of future cash flows was five years, and the discount rate and the growth rate used were 10.6% and 1.7%, respectively.
The Group considers that, even if key assumptions used in the impairment test change within a reasonably foreseeable range, a significant impairment is unlikely to occur in the cash-generating unit.

14. Impairment losses for non-financial assets

Business assets are grouped mainly by segment and idle assets are grouped by individual property.

Fiscal year ended March 31, 2021

For the fiscal year ended March 31, 2021, impairment losses of ¥1,304 million were recognized mainly on goodwill.

Fiscal year ended March 31, 2022

For the fiscal year ended March 31, 2022, impairment losses of ¥1,028 million ($8,426 thousand) [¥1,027 million ($8,418 thousand) for property, plant and equipment, ¥1 million ($8 thousand) for intangible assets] were recorded in “Other expenses,” as a result of the closure of the Yamaguchi Plant accompanying the reorganization of manufacturing bases in the domestic Water Treatment Facilities business and the decision to suspend the operation of the plant of Kurita Water Industries (Jiangyin) Co. (Water Treatment Chemicals business) due to a review of the production structures for water treatment chemicals in China. The breakdown of impairment losses by segment is provided in Note 6. “Segment Information.”

15. Investments accounted for using equity method

(1) Material associates

Not applicable.

(2) Individually immaterial associates

(i) The carrying amount of investments in individually immaterial associates is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Total carrying amount	¥1,578	¥1,191	$9,762

(ii) The aggregate amount of the Group’s share of profit and comprehensive income of individually immaterial associates is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Share of:			
Profit	¥(999)	¥(80)	$(655)
Other comprehensive income	24	121	991
Comprehensive income	¥(975)	¥41	$336

16. Income taxes

(1) Deferred tax assets and deferred tax liabilities

Deferred tax assets and deferred tax liabilities, classified by primary cause, are as follows:

Fiscal year ended March 31, 2021

	Millions of yen				
2021	April 1, 2020	Recognized through profit or loss	Recognized in other comprehensive income	Other	March 31, 2021
Deferred tax assets					
Depreciation	¥2,575	¥49	¥ —	¥ —	¥2,624
Net defined benefit liability	4,751	142	97	—	4,991
Accrued bonuses to employees	743	88	—	—	832
Accrued paid absences	655	17	—	—	672
The carryforward of unused tax losses	762	383	—	—	1,145
Unrealized gain on the sale of fixed assets	479	(168)	—	—	311
Other	2,707	835	40	—	3,583
Total deferred tax assets	12,677	1,347	137	—	14,161
Deferred tax liabilities					
Financial assets measured at fair value through other comprehensive income	3,984	—	1,821	—	5,805
Tax effects related to retained earnings of foreign subsidiaries	1,680	485	—	—	2,166
Other	4,062	161	(221)	1,355	5,358
Total deferred tax liabilities	9,728	647	1,599	1,355	13,330
Net	¥2,949	¥700	¥(1,462)	¥(1,355)	¥831

Fiscal year ended March 31, 2022

	Millions of yen				
2022	April 1, 2021	Recognized through profit or loss	Recognized in other comprehensive income	Other	March 31, 2022
Deferred tax assets					
Depreciation	¥2,624	¥347	¥ —	¥ —	¥2,972
Net defined benefit liability	4,991	311	(105)	—	5,196
Accrued bonuses to employees	832	41	—	—	873
Accrued paid absences	672	68	—	—	740
The carryforward of unused tax losses	1,145	(109)	—	—	1,036
Unrealized gain on the sale of fixed assets	311	(8)	—	—	302
Other	3,583	182	(57)	—	3,708
Total deferred tax assets	14,161	834	(163)	—	14,831
Deferred tax liabilities					
Financial assets measured at fair value through other comprehensive income	5,805	—	(1,983)	—	3,822
Tax effects related to retained earnings of foreign subsidiaries	2,166	535	—	—	2,701
Other	5,358	(782)	—	306	4,883
Total deferred tax liabilities	13,330	(246)	(1,983)	306	11,406
Net	¥831	¥1,080	¥1,819	¥(306)	¥3,425

2022	April 1, 2021	Recognized through profit or loss	Recognized in other comprehensive income	Other	March 31, 2022
	Thousands of U.S. dollars				
Deferred tax assets					
Depreciation	$21,508	$2,844	$ —	$ —	$24,360
Net defined benefit liability	40,909	2,549	(860)	—	42,590
Accrued bonuses to employees	6,819	336	—	—	7,155
Accrued paid absences	5,508	557	—	—	6,065
The carryforward of unused tax losses	9,385	(893)	—	—	8,491
Unrealized gain on the sale of fixed assets	2,549	(65)	—	—	2,475
Other	29,368	1,491	(467)	—	30,393
Total deferred tax assets	116,073	6,836	(1,336)	—	121,565
Deferred tax liabilities					
Financial assets measured at fair value through other comprehensive income	47,581	—	(16,254)	—	31,327
Tax effects related to retained earnings of foreign subsidiaries	17,754	4,385	—	—	22,139
Other	43,918	(6,409)	—	2,508	40,024
Total deferred tax liabilities	109,262	(2,016)	(16,254)	2,508	93,491
Net	$6,811	$8,852	$14,909	$(2,508)	$28,073

(2) Unrecognized deferred tax assets

The following are deductible temporary differences, the carryforward of unused tax losses (breakdown by expiration) and unused tax credits (breakdown by expiration) for which no deferred tax assets are recognized in the consolidated statement of financial position. Amounts hereunder are presented on a tax amount basis.

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Deductible temporary differences	¥5,437	¥8,185	$67,090
The carryforward of unused tax losses			
Less than 1 year	¥ —	¥ —	$ —
1 year or more and less than 5 years	18	36	295
5 years or more	2,206	2,956	24,229
Total	¥2,225	¥2,992	$24,524
The carryforward of unused tax credits			
Less than 1 year	¥ —	¥ —	$ —
1 year or more and less than 5 years	—	—	—
5 years or more	—	—	—
Total	¥ —	¥ —	$ —

(3) Unrecognized deferred tax liabilities

The total amount of temporary differences related to investments in subsidiaries, etc., that are not recognized as deferred tax liabilities as of March 31, 2021 and 2022 are ¥30,095 million and ¥35,265 million ($289,057 thousand), respectively. When the Group is capable of controlling the timing of the reversal of temporary differences and the temporary differences will not reverse within the foreseeable future, no deferred tax liability related to such temporary differences is recognized.

(4) Income taxes recognized through profit or loss

The breakdown of income taxes recognized through profit or loss is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Current tax expense	¥10,026	¥11,535	$94,549
Deferred tax expense			
Origination and reversal of temporary differences	(207)	(1,080)	(8,852)
Changes in unrecognized deferred tax assets	(422)	—	—
Other	(69)	0	0
Total deferred tax expense	(700)	(1,080)	(8,852)
Total	¥9,326	¥10,454	$85,688

(5) Reconciliation of the effective tax rate

Below is a breakdown of the principal items that caused a difference between the statutory effective tax rate and the average effective tax rate. The Company is primarily subject to corporate tax, inhabitants' tax and enterprise tax. The statutory effective tax rate calculated based on these taxes is 30.6%. Foreign subsidiaries are subject to income taxes, etc., in their respective countries of domicile.

	2021	2022
Domestic statutory effective tax rate	30.6%	30.6%
Items permanently not tax deductible, such as entertainment expenses	0.4%	0.7%
Items permanently not taxable, such as dividend income	(0.0%)	(0.0%)
Increase (decrease) in unrecognized deferred tax assets	(0.8%)	4.4%
Tax credits	(0.9%)	(2.5%)
Difference in tax rates applied to foreign subsidiaries	(1.7%)	(1.4%)
Impairment of goodwill	1.4%	—%
Other	3.0%	3.0%
Average effective tax rate	32.0%	34.8%

17. Trade and other payables

The breakdown of trade and other payables is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Notes and accounts payable - trade	¥22,907	¥25,288	$207,278
Accounts payable - other	18,712	26,357	216,040
Contract liabilities	4,886	6,320	51,803
Total	¥46,506	¥57,967	$475,139

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

18. Bonds and borrowings

The breakdown of bonds and borrowings is as follows:

	Millions of yen		Thousands of U.S. dollars	Average interest rate	Due date
	2021	2022	2022		
Short-term borrowings	¥ —	¥2,739	$22,450	1.15%	
Current portion of long-term borrowings	445	440	3,606	2.64%	
Commercial papers	—	5,000	40,983	0.02%	
Long-term borrowings	1,317	1,040	8,524	3.42%	2023-2027
Bonds	29,889	29,913	245,188	0.15%	2025
Total	¥31,652	¥39,133	$320,762		
Current liabilities	¥445	¥8,180	$67,049		
Non-current liabilities	31,207	30,953	253,713		
Total	¥31,652	¥39,133	$320,762		

Notes 1. The average interest rate is calculated using interest rates and balances as of March 31, 2022.
2. Bonds and borrowings are classified as financial liabilities measured at amortized cost.
3. The borrowings have no financial covenants that have a significant effect on the financial activities of the Group.

The terms and conditions of the issuance of bonds are summarized as follows:

Name	Issue	Issue date	Millions of yen 2021	Millions of yen 2022	Thousands of U.S. dollars 2022	Interest rate	Collateral	Redemption period
The Company	First series of unsecured bonds	December 10, 2020	¥30,000	¥30,000	$245,901	0.15%	None	December 10, 2025

19. Other financial liabilities

The breakdown of other financial liabilities is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Long-term guarantee deposits	¥1,182	¥797	$6,532
Put options granted to non-controlling shareholders	193	—	—
Liabilities pertaining to forward contracts concluded with non-controlling shareholders	12,326	19,613	160,762
Contingent consideration	—	781	6,401
Other	—	177	1,450
Total	¥13,703	¥21,371	$175,172
Current liabilities	¥ —	¥19,613	$160,762
Non-current liabilities	13,703	1,757	14,401
Total	¥13,703	¥21,371	$175,172

Notes 1. Long-term guarantee deposits and liabilities pertaining to forward contracts concluded with non-controlling shareholders are classified as financial liabilities measured at amortized cost.
2. Put options granted to non-controlling shareholders and contingent consideration are classified as financial liabilities measured at fair value through profit or loss.

20. Leases

Lease as lessee

The Group mainly leases buildings and structures, machinery, equipment and vehicles and land. Lease terms mainly range from one year to 30 years, while the average interest rate that is applied to lease liabilities is 1.4%. There are no significant purchase options, escalation clauses, or restrictions imposed under lease agreements (including restrictions on dividends, additional borrowings and additional leases). In domestic businesses in particular, lease agreements for buildings mostly allow the lessee to repeatedly exercise an extension option and also include an early cancellation option only if cancellation is noticed in writing to the counterparty no later than six months in advance. Only those lease payments corresponding to the period during which the exercise of such options was reasonably expected with certainty are included in the measurement of lease liabilities.

1) Right-of-use assets

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Buildings and structures	¥8,452	¥8,339	$68,352
Machinery and vehicles	1,610	1,506	12,344
Land	8,751	8,508	69,737
Other	591	687	5,631
Total	¥19,405	¥19,042	$156,081

Note The increases in right-of-use assets for the fiscal years ended March 31, 2021 and 2022 were ¥5,145 million and ¥3,375 million ($27,663 thousand), respectively.

2) Expenses from lease

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Depreciation of right-of-use assets			
Buildings and structures	¥2,778	¥2,804	$22,983
Machinery and vehicles	684	697	5,713
Land	420	413	3,385
Other	256	236	1,934
Total depreciation of right-of-use assets	4,139	4,151	34,024
Interest expenses on lease liabilities	225	300	2,459
Short-term lease expense	1,020	975	7,991
Lease expense of low-value assets	136	173	1,418
Total expenses	¥5,522	¥5,600	$45,901

3) Maturity analysis of lease liabilities

The maturity analysis of lease liabilities is described in Note 34. “Financial instruments (3) Liquidity risk.”

4) Total cash outflow for leases

The total amount of lease-related cash outflows for the fiscal years ended March 31, 2021 and 2022 was ¥5,449 million and ¥5,453 million ($44,696 thousand), respectively.

21. Employee benefits

(1) Overview of the retirement benefit plan adopted by the Group

The Company and certain consolidated subsidiaries adopt funded and unfunded defined benefit plans and defined contribution plans in order to provide retirement benefits to employees. Nearly all employees are covered by these plans.
While these retirement benefit plans are exposed to risks, including general investment risks, interest rate risks and inflation risks, none are considered to be material.

The funded defined benefit plan is operated by pension funds that are legally separate from the Group. The board of directors of the pension funds and the organization entrusted with management of the pension funds are required by law to act in the best interests of the plan members, while bearing the responsibility for managing plan assets in accordance with given policies.

(2) Defined benefit plan
1) Reconciliation of defined benefit obligations and plan assets

The relationship between defined benefit obligations and plan assets and net defined benefit liability (asset) presented in the consolidated statement of financial position is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Present value of funded defined benefit obligations	¥671	¥681	$5,581
Fair value of plan assets	(566)	(646)	(5,295)
Sub-total	105	35	286
Present value of unfunded defined benefit obligations	17,921	18,108	148,426
Net defined benefit liability (asset)	¥18,027	¥18,144	$148,721
Amount presented in the consolidated statement of financial position			
Retirement benefit liabilities	¥18,027	¥18,144	$148,721
Net defined benefit liability (asset)	¥18,027	¥18,144	$148,721

2) Reconciliation of the present value of defined benefit obligations

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

	Millions of yen		
	In Japan	Outside Japan	Total
Balance as of April 1, 2020	¥14,846	¥2,575	¥17,421
Current service cost	972	206	1,179
Interest expense	65	58	123
Benefits paid	(596)	(256)	(853)
Remeasurements			
Actuarial gains and losses arising from changes in demographic assumptions	142	(16)	125
Actuarial gains and losses arising from changes in financial assumptions	198	8	206
Prior service cost and gains and losses on settlement	—	(39)	(39)
Exchange differences on translation of foreign operations	—	227	227
Other changes	151	49	201
Balance as of March 31, 2021	¥15,779	¥2,814	¥18,593
Current service cost	1,001	209	1,210
Interest expense	56	55	112
Benefits paid	(717)	(144)	(861)
Remeasurements			
Actuarial gains and losses arising from changes in demographic assumptions	(174)	(26)	(201)
Actuarial gains and losses arising from changes in financial assumptions	(84)	(291)	(376)
Exchange differences on translation of foreign operations	—	159	159
Other changes	12	141	153
Balance as of March 31, 2022	¥15,873	¥2,917	¥18,790

	Thousands of U.S. dollars		
	In Japan	Outside Japan	Total
Balance as of March 31, 2021	$129,336	$23,065	$152,401
Current service cost	8,204	1,713	9,918
Interest expense	459	450	918
Benefits paid	(5,877)	(1,180)	(7,057)
Remeasurements			
Actuarial gains and losses arising from changes in demographic assumptions	(1,426)	(213)	(1,647)
Actuarial gains and losses arising from changes in financial assumptions	(688)	(2,385)	(3,081)
Exchange differences on translation of foreign operations	—	1,303	1,303
Other changes	98	1,155	1,254
Balance as of March 31, 2022	$130,106	$23,909	$154,016

The weighted average duration of defined benefit obligations of the Company and principal consolidated subsidiaries was 12 years in Japan and 24 years overseas in the fiscal year ended March 31, 2021, and 12 years in Japan and 22 years overseas in the fiscal year ended March 31, 2022.

3) Reconciliation of the fair value of plan assets

Changes in fair value of plan assets are as follows:

	Millions of yen
	Outside Japan
Balance as of April 1, 2020	¥508
Interest income	10
Benefits paid	(258)
Contributions to the plan by the employer	258
Remeasurements	
Return on plan assets	0
Exchange differences on translation of foreign operations	48
Other changes	(1)
Balance as of March 31, 2021	¥566
Interest income	13
Benefits paid	(40)
Contributions to the plan by the employer	85
Remeasurements	
Return on plan assets	6
Exchange differences on translation of foreign operations	15
Other changes	(1)
Balance as of March 31, 2022	¥646

	Thousands of U.S. dollars
	Outside Japan
Balance as of March 31, 2021	$4,639
Interest income	106
Benefits paid	(327)
Contributions to the plan by the employer	696
Remeasurements	
Return on plan assets	49
Exchange differences on translation of foreign operations	122
Other changes	(8)
Balance as of March 31, 2022	$5,295

Information of changes in plan assets in Japan is omitted, as there is nothing applicable.

For the defined contribution plans, in the fiscal year ending March 31, 2023, the Group is scheduled to contribute ¥70 million ($573 thousand).

4) Fair values of plan assets by asset category

Fair values of plan assets by principal asset category are as follows:

	Market price in an active market		
	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Cash and cash equivalents	¥566	¥646	$5,295
Total	¥566	¥646	$5,295

5) Actuarial assumptions

The significant actuarial assumptions used to calculate the present value of defined benefit obligations of the Company and its main domestic consolidated subsidiaries are as follows:

	2021	2022
Discount rate	0.40%	0.50%

A sensitivity analysis (effects on defined benefit obligations) of significant actuarial assumptions of the Company and its main domestic consolidated subsidiaries is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Discount rate			
0.5% increase	¥(781)	¥(771)	$(6,319)
0.5% decrease	852	841	6,893

(3) Employee benefits expense

The employee benefits expense included in cost of sales and selling, general and administrative expenses in the consolidated statement of profit or loss is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Wages, salaries, bonuses, etc.	¥49,845	¥55,227	$452,680
Retirement benefit expenses	3,089	2,751	22,549
Other employee benefits expenses	8,342	9,226	75,622
Total	¥61,277	¥67,205	$550,860

The amounts recognized as expense for the defined contribution plan were ¥1,169 million and ¥1,317 million ($10,795 thousand) in the fiscal years ended March 31, 2021 and 2022, respectively.

22. Provisions

An explanation for each provision is as follows:

1) Provision for loss on construction contracts

The Group recognizes a provision for losses that are expected to occur in or after the following fiscal year, with respect to contracted constructions for which a loss is expected to occur and the amount of such loss can be reasonably estimated. Related expenses are expected to be incurred prior to completion of the construction, and additional expenses may arise in the case of an increase in estimated costs.

2) Provision for product warranties

To provide for warranty expenses that are expected to occur during the Company’s warranty period for some delivered products or services, the Group recognizes a provision based on the actual amount of warranty expenses paid in past fiscal years, taking into account the prospect of future warranty expenses.

3) Asset retirement obligations

To provide for the Group's obligation to restore rental offices, buildings, etc., held by the Group, the Group recognizes asset retirement obligations. Related expenses are expected to be paid after the usage period has elapsed, and will be affected by future business plans, etc.

4) Provision for business restructuring

The Group recognizes a provision for losses that are expected to occur in the future, due to partial closures and relocations, etc., of the Group's overseas bases. While these expenses are expected to be paid in the fiscal year ending March 31, 2023, additional expenses may be incurred if there is an increase in the estimated cost.

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

Fiscal year ended March 31, 2022

	Millions of yen					
	Provision for loss on construction contracts	Provision for product warranties	Asset retirement obligations	Provision for business restructuring	Other	Total
Balance as of April 1, 2021	¥121	¥999	¥1,166	¥641	¥77	¥3,007
Increase during the period	7	1,026	1,173	—	—	2,207
Decrease during the period						
(due to intended use)	(121)	(882)	—	(244)	(77)	(1,327)
(reversal)	—	(8)	—	(59)	—	(67)
Other	—	23	1	19	—	45
Balance as of March 31, 2022	¥7	¥1,157	¥2,341	¥357	¥ —	¥3,864
Current liabilities	¥7	¥1,155	¥9	¥357	¥ —	¥1,529
Non-current liabilities	—	2	2,332	—	—	2,335

	Thousands of U.S. dollars					
	Provision for loss on construction contracts	Provision for product warranties	Asset retirement obligations	Provision for business restructuring	Other	Total
Balance as of April 1, 2021	$991	$8,188	$9,557	$5,254	$631	$24,647
Increase during the period	57	8,409	9,614	—	—	18,090
Decrease during the period						
(due to intended use)	(991)	(7,229)	—	(2,000)	(631)	(10,877)
(reversal)	—	(65)	—	(483)	—	(549)
Other	—	188	8	155	—	368
Balance as of March 31, 2022	$57	$9,483	$19,188	$2,926	$ —	$31,672
Current liabilities	$57	$9,467	$73	$2,926	$ —	$12,532
Non-current liabilities	—	16	19,114	—	—	19,139

23. Share capital and other equity items

(1) Share capital and capital surplus

The Japanese Companies Act (hereinafter the "Companies Act") provides that 50% or more of the amount paid or granted for share issue can be incorporated into share capital, while the remaining amount can be incorporated into capital reserves, which is included in capital surplus. The Companies Act also provides that capital reserves can be incorporated into share capital by a resolution of a general meeting of shareholders.

1) Number of authorized shares

The total number of authorized shares as of March 31, 2021 and 2022 remained at 531,000 thousand shares of common stock.

2) Number of shares outstanding

	Thousand shares
	Number of common shares
April 1, 2020	116,200
Increase (decrease)	—
March 31, 2021	116,200
Increase (decrease)	—
March 31, 2022	116,200

Note All of the shares issued by the Company are no-par common stock without any limitation on the rights of the shares, and the outstanding shares have been paid in full.

(2) Retained earnings

The Companies Act provides that 10% of the amount to be paid as dividends from surplus shall be accumulated as capital reserves or retained earnings reserves until the total amount of capital reserves and retained earnings reserves reaches 25% of capital stock. The accumulated retained earnings reserves can be used to eliminate losses carried forward. In addition, the retained earnings reserves can be reversed by a resolution of a general meeting of shareholders.

(3) Treasury shares

	Thousand shares	Millions of yen	Thousands of U.S. dollars
	Number of shares outstanding	Amount	
April 1, 2020	3,904	¥10,893	
Increase (decrease)	(45)	(106)	
March 31, 2021	3,859	¥10,787	$88,418
Increase (decrease)	(39)	(93)	(762)
March 31, 2022	3,819	¥10,694	$87,655

(4) Liabilities pertaining to forward contracts concluded with non-controlling shareholders

For forward contracts for shares in subsidiaries that have been concluded with non-controlling shareholders of Pentagon Technologies Group, Inc., a consolidated subsidiary, the Company deducted the liabilities pursuant to the relevant contract from capital surplus.
The amount deducted from capital surplus in the fiscal year ended March 31, 2021 was ¥10,578 million.
For further details regarding the liabilities pertaining to forward contracts concluded with non-controlling shareholders, please refer to Note 3. "Significant accounting policies (19) Liabilities pertaining to forward contracts concluded with non-controlling shareholders."

24. Dividends

(1) Amount of dividends paid

Fiscal year ended March 31, 2021

Resolution	Type of shares	Millions of yen Total amount of dividend	Yen Dividend per share	Record date	Effective date
June 29, 2020 Ordinary General Meeting of Shareholders	Common share	¥3,490	¥31	March 31, 2020	June 30, 2020
November 5, 2020 Board of Directors' meeting	Common share	¥3,603	¥32	September 30, 2020	November 27, 2020

Note The total amount of dividends determined by a resolution of the Ordinary General Meeting of Shareholders held on June 29, 2020 includes dividends of ¥9 million paid for 312 thousand shares of the Company (entrusted for performance-linked stock compensation for Directors) held by the trust account of Custody Bank of Japan, Ltd.
The total amount of dividends determined by a resolution of the Board of Directors meeting held on November 5, 2020 includes dividends of ¥8 million paid for 274 thousand shares of the Company (entrusted for performance-linked stock compensation for Directors) held by the trust account of Custody Bank of Japan, Ltd.

Fiscal year ended March 31, 2022

Resolution	Type of shares	Millions of yen Total amount of dividend	Yen Dividend per share	Record date	Effective date
June 29, 2021 Ordinary General Meeting of Shareholders	Common share	¥3,828	¥34	March 31, 2021	June 30, 2021
October 29, 2021 Board of Directors' meeting	Common share	¥4,054	¥36	September 30, 2021	November 29, 2021

Resolution	Type of shares	Thousands of U.S. dollars Total amount of dividend	U.S. dollar Dividend per share	Record date	Effective date
June 29, 2021 Ordinary General Meeting of Shareholders	Common share	$31,377	$0.28	March 31, 2021	June 30, 2021
October 29, 2021 Board of Directors' meeting	Common share	$33,229	$0.30	September 30, 2021	November 29, 2021

Note The total amount of dividends determined by a resolution of the Ordinary General Meeting of Shareholders held on June 29, 2021 includes dividends of ¥9 million ($73 thousand) paid for 274 thousand shares of the Company (entrusted for performance-linked stock compensation for Directors) held by the trust account of Custody Bank of Japan, Ltd.
The total amount of dividends determined by a resolution of the Board of Directors meeting held on October 29, 2021 includes dividends of ¥8 million ($65 thousand) paid for 244 thousand shares of the Company (entrusted for performance-linked stock compensation for Directors) held by the trust account of Custody Bank of Japan, Ltd.

(2) Dividends whose effective date falls in the fiscal year ending March 31, 2023

Resolution	Type of shares	Millions of yen Total amount of dividend	Yen Dividend per share	Record date	Effective date
June 29, 2022 Ordinary General Meeting of Shareholders	Common share	¥4,054	¥36	March 31, 2022	June 30, 2022

Resolution	Type of shares	Thousands of U.S. dollars Total amount of dividend	U.S. dollar Dividend per share	Record date	Effective date
June 29, 2022 Ordinary General Meeting of Shareholders	Common share	$33,229	$0.30	March 31, 2022	June 30, 2022

Note The total amount of dividends determined by a resolution of the Ordinary General Meeting of Shareholders held on June 29, 2022 includes dividends of ¥8 million ($65 thousand) paid for 244 thousand shares of the Company (entrusted for performance-linked stock compensation for Directors) held by the trust account of Custody Bank of Japan, Ltd.

25. Net sales

(1) Breakdown of net sales recognized from contracts with customers

Fiscal year ended March 31, 2021

	Millions of yen		
	Reportable segments		
2021	Water treatment chemicals	Water treatment facilities	Consolidated
Japan	¥42,240	¥119,131	¥161,371
Asia	22,457	26,077	48,535
Americas	19,850	19,309	39,160
EMEA	18,681	—	18,681
Total	¥103,231	¥164,518	¥267,749

Notes 1. The above amounts are presented after deduction of inter-segment transactions.
2. Net sales are broken down into countries or regions based on customer location. EMEA refers to the European, Middle Eastern and African regions.
3. From the fiscal year ended March 31, 2022, the geographical classification for the purpose of disclosure was changed to integrate “Other” and “North America” into “Americas.” Accordingly, figures for the fiscal year ended March 31, 2021 have been reclassified based on this new classification.

Fiscal year ended March 31, 2022

	Millions of yen		
	Reportable segments		
2022	Water treatment chemicals	Water treatment facilities	Consolidated
Japan	¥42,826	¥116,538	¥159,365
Asia	26,783	31,249	58,032
Americas	23,605	22,745	46,351
EMEA	24,457	—	24,457
Total	¥117,672	¥170,534	¥288,207

2022	Thousands of U.S. dollars Reportable segments Water treatment chemicals	 Water treatment facilities	 Consolidated
Japan	$351,032	$955,229	$1,306,270
Asia	219,532	256,139	475,672
Americas	193,483	186,434	379,926
EMEA	200,467	—	200,467
Total	$964,524	$1,397,819	$2,362,352

Notes
1. The above amounts are presented after deduction of inter-segment transactions.
2. Net sales are broken down into countries or regions based on customer location. EMEA refers to the European, Middle Eastern and African regions.
3. From the fiscal year ended March 31, 2022, the geographical classification for the purpose of disclosure was changed to integrate “Other” and “North America” into “Americas.”

(2) Contract balances

The balance of receivables from contracts with customers, contract assets and contract liabilities is as follows:

Fiscal year ended March 31, 2021

2021	Millions of yen 2020	 2021
Receivables from contracts with customers	¥69,338	¥64,031
Contract assets	24,218	32,347
Contract liabilities	5,912	4,886

Fiscal year ended March 31, 2022

2022	Millions of yen 2021	 2022	Thousands of U.S. dollars 2022
Receivables from contracts with customers	¥64,031	¥75,290	$617,131
Contract assets	32,347	31,900	261,475
Contract liabilities	4,886	6,320	51,803

In the consolidated statement of financial position, receivables from contracts with customers and contract assets are included in trade and other receivables, while contract liabilities are included in other current liabilities.

Revenues that were included in the balance of contract liabilities at the beginning of the fiscal years ended March 31, 2021 and 2022 were ¥5,912 million and ¥4,886 million ($40,049 thousand), respectively. Among the revenue for the fiscal years ended March 31, 2021 and 2022, the amount of revenue from performance obligations satisfied in past fiscal years is immaterial.

Significant changes in the balances of contract assets and contract liabilities are as follows:

	Millions of yen				Thousands of U.S. dollars	
	2021		2022		2022	
	Contract assets	Contract liabilities	Contract assets	Contract liabilities	Contract assets	Contract liabilities
Increase due to recognition of net sales	¥72,526	¥ —	¥79,662	¥ —	$652,967	$ —
Decrease due to transfer to receivables	(65,707)	—	(80,201)	—	(657,385)	—
Increase due to receipt of cash	—	9,175	—	12,689	—	104,008
Decrease due to recognition of net sales	—	(10,333)	—	(11,549)	—	(94,663)

(3) Performance obligations

For sales of products, when products have been delivered, the Company determines that performance obligations have been satisfied and recognizes their sales.
For construction contracting, sales are recognized over the period of the construction contract, as performance obligations are satisfied according to the construction's progress. To measure progress, the input method is applied, using the ratio of the incurred cost against the estimated total cost for each contract.

Considerations are received within a reasonable period from the time of satisfaction of performance obligations. For these contracts, the expedient provided for in IFRS 15 "Revenue from Contracts with Customers" is applied, and no adjustments related to financing components are performed.
Sales are measured at the consideration promised in the contract.

There are no significant contracts with customers regarding a return of products.

Furthermore, in connection with construction contracts, etc., the Company provides product warranty, such as the free repair of defects identified within a certain period of time. Such warranty intends to provide customers with a warranty to ensure that the products, etc., of the Company function as intended, in accordance with the specifications agreed upon with the customers. Future expenditures are estimated by taking into account actual product warranty expenses in the past, and are recognized as a provision for product warranties.

The total amount of transaction price allocated to remaining performance obligations was ¥61,754 million at March 31, 2021, while the total amount of transaction price allocated to remaining performance obligations at March 31, 2022 was ¥89,001 million ($729,516 thousand). For these transactions, revenue will be recognized on a step-by-step basis within approximately three years to come, commensurate with the progress in the contract performance.

26. Selling, general and administrative expenses

The breakdown of selling, general and administrative expenses is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Research and development expenses	¥5,317	¥5,386	$44,147
Employee benefits expense	35,962	38,365	314,467
Depreciation and amortization	7,257	8,064	66,098
Other	16,668	19,516	159,967
Total	¥65,206	¥71,334	$584,704

27. Other income

The breakdown of the items and amounts included in other income is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Gain on sale of fixed assets	¥1,342	¥4,079	$33,434
Gain on settlement of contracts	2,066	—	—
Other	2,521	2,040	16,721
Total	¥5,929	¥6,119	$50,155

Notes 1. Gain on settlement of contracts for the fiscal year ended March 31, 2021 was generated as a result of the termination of a contract with a certain customer in the ultrapure water supply business.
2. Among gain on sale of fixed assets for the fiscal year ended March 31, 2022, ¥2,894 million ($23,721 thousand) is due to the sale of the land of former Head Office (in Shinjuku) and ¥1,079 million ($8,844 thousand) is due to the sale of the land and building of Osaka Office.

28. Other expenses

The breakdown of the items and amounts included in other expenses is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Loss on sales and retirement of property, plant and equipment	¥156	¥93	$762
Impairment losses	1,419	1,028	8,426
Other	2,294	2,207	18,090
Total	¥3,870	¥3,329	$27,286

Notes 1. Among the impairment losses for the fiscal year ended March 31, 2021, ¥1,304 million is from an impairment of goodwill related to Kurita Fracta Holdings, Inc. Details are provided in Note 13. "Goodwill and intangible assets."

2. Impairment losses for the fiscal year ended March 31, 2022 were mainly incurred due to the closure of the Yamaguchi Plant accompanying the reorganization of manufacturing bases in the domestic Water Treatment Facilities business and the decision to suspend the operation of the plant of Kurita Water Industries (Jiangyin) Co. (Water Treatment Chemicals business) due to a review of the production structures for water treatment chemicals in China.

29. Finance income and Finance costs

(1) Finance income

The breakdown of finance income is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Dividend income			
Dividend income from financial assets held at end of period	¥320	¥272	$2,229
Dividend income from financial assets derecognized during the period	40	120	983
Interest income	132	190	1,557
Foreign exchange gains	22	—	—
Other	28	18	147
Total	¥545	¥601	$4,926

Notes 1. Dividend income relates to financial assets measured at fair value through other comprehensive income.

2. Interest income relates to financial assets measured at amortized cost.

(2) Finance costs

The breakdown of finance costs is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Interest expense	¥249	¥209	$1,713
Loss on valuation and realization of fair value	19	30	245
Foreign exchange loss	—	22	180
Other	1,655	5,913	48,467
Total	¥1,923	¥6,176	$50,622

Notes 1. Interest expense mainly relates to financial liabilities measured at amortized cost.

2. Other consists mainly of costs related to the subsequent measurement of the fair value of liabilities pertaining to forward contracts concluded with non-controlling shareholders of Pentagon Technologies Group, Inc. (United States), which amounted to ¥1,381 million and ¥5,496 million ($45,049 thousand) for the fiscal year ended March 31, 2021 and 2022, respectively.

30. Other comprehensive income

The amount arising during the period, reclassification adjustments to profit or loss and the impact of tax effects for each item of other comprehensive income are as follows:

Fiscal year ended March 31, 2021

	Millions of yen				
2021	Amount arising during the period	Reclassification adjustments	Before tax effects	Tax effects	Net of tax effects
Items that will not be reclassified to profit or loss					
Net change in fair value of financial assets measured at fair value through other comprehensive income	¥7,124	¥ —	¥7,124	¥(1,921)	¥5,202
Remeasurements of defined benefit plans	(331)	—	(331)	97	(234)
Total of items that will not be reclassified to profit or loss	6,792	—	6,792	(1,824)	4,968
Items that may be reclassified to profit or loss					
Exchange differences on translation of foreign operations	4,851	—	4,851	—	4,851
Cash flow hedges	(851)	(4)	(856)	262	(594)
Share of other comprehensive income of investments accounted for using equity method	24	—	24	—	24
Total of items that may be reclassified to profit or loss	4,023	(4)	4,018	262	4,280
Total	¥10,816	¥(4)	¥10,811	¥(1,562)	¥9,249

Fiscal year ended March 31, 2022

	Millions of yen				
2022	Amount arising during the period	Reclassification adjustments	Before tax effects	Tax effects	Net of tax effects
Items that will not be reclassified to profit or loss					
Net change in fair value of financial assets measured at fair value through other comprehensive income	¥(1,462)	¥ —	¥(1,462)	¥1,983	¥520
Remeasurements of defined benefit plans	523	—	523	(105)	417
Total of items that will not be reclassified to profit or loss	(939)	—	(939)	1,877	938
Items that may be reclassified to profit or loss					
Exchange differences on translation of foreign operations	8,692	—	8,692	—	8,692
Cash flow hedges	(223)	412	189	(57)	131
Share of other comprehensive income of investments accounted for using equity method	94	26	121	—	121
Total of items that may be reclassified to profit or loss	8,563	439	9,002	(57)	8,944
Total	¥7,624	¥439	¥8,063	¥1,819	¥9,883

2022	Thousands of U.S. dollars				
	Amount arising during the period	Reclassification adjustments	Before tax effects	Tax effects	Net of tax effects
Items that will not be reclassified to profit or loss					
Net change in fair value of financial assets measured at fair value through other comprehensive income	$(11,983)	$ —	$(11,983)	$16,254	$4,262
Remeasurements of defined benefit plans	4,286	—	4,286	(860)	3,418
Total of items that will not be reclassified to profit or loss	(7,696)	—	(7,696)	15,385	7,688
Items that may be reclassified to profit or loss					
Exchange differences on translation of foreign operations	71,245	—	71,245	—	71,245
Cash flow hedges	(1,827)	3,377	1,549	(467)	1,073
Share of other comprehensive income of investments accounted for using equity method	770	213	991	—	991
Total of items that may be reclassified to profit or loss	70,188	3,598	73,786	(467)	73,311
Total	$62,491	$3,598	$66,090	$14,909	$81,008

31. Earnings per share

The calculation bases for basic earnings per share are as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Profit attributable to owners of parent	¥19,088	¥18,471	$151,401
Profit not attributable to ordinary shareholders of parent	—	—	—
Profit used for calculation of basic earnings per share	19,088	18,471	151,401
Average number of common shares during the period (shares)	112,327,368	112,368,155	112,368,155

Notes 1. Diluted earnings per share are not stated because there are no dilutive shares.
2. The Company's own shares posted as treasury shares remaining in trust are included in the treasury shares that are deducted in the calculation of the average number of shares outstanding for calculation for basic net income per share. The numbers of average shares of the treasury shares that are deducted for the fiscal years ended March 31, 2021 and 2022 are 286 thousand shares and 253 thousand shares, respectively.

32. Cash flow information

(1) Changes in liabilities arising from financing activities

The changes in liabilities arising from financing activities are as follows:

	Millions of yen			
	Bonds and long-term borrowings	Short-term borrowings and commercial papers	Lease liabilities	Total
Balance as of April 1, 2020	¥1,676	¥35,001	¥17,936	¥54,614
Changes arising from cash flows	29,236	(35,001)	(5,033)	(10,798)
Non-cash changes				
Obtaining or losing control of subsidiaries	699	—	921	1,620
New lease agreements	—	—	4,294	4,294
Exchange differences	40	—	166	206
Other	—	—	1,415	1,415
Balance as of March 31, 2021	¥31,652	¥ —	¥19,701	¥51,353
Changes arising from cash flows	(427)	7,577	(5,005)	2,144
Non-cash changes				
Obtaining or losing control of subsidiaries	—	—	31	31
New lease agreements	—	—	4,410	4,410
Exchange differences	145	161	456	763
Other	23	—	(47)	(23)
Balance as of March 31, 2022	¥31,394	¥7,739	¥19,546	¥58,680

	Thousands of U.S. dollars			
	Bonds and long-term borrowings	Short-term borrowings and commercial papers	Lease liabilities	Total
Balance as of March 31, 2021	$259,442	$ —	$161,483	$420,926
Changes arising from cash flows	(3,500)	62,106	(41,024)	17,573
Non-cash changes				
Obtaining or losing control of subsidiaries	—	—	254	254
New lease agreements	—	—	36,147	36,147
Exchange differences	1,188	1,319	3,737	6,254
Other	188	—	(385)	(188)
Balance as of March 31, 2022	$257,327	$63,434	$160,213	$480,983

(2) Payments for acquisition of businesses

The relationship between the consideration paid for the acquisition of businesses and the income and expenditure for it is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Consideration paid in cash	¥5,594	¥2,666	$21,852
Cash and cash equivalents included in the assets of the acquiree at the time of acquiring control	(995)	(264)	(2,163)
Payments for acquisition of businesses	¥4,599	¥2,401	$19,680

33. Share-based payments

(Overview of performance-linked stock compensation program and performance and share price-linked monetary compensation program)

The Company has introduced a performance-linked stock compensation program that covers Directors (excluding External Directors; hereinafter the same shall apply) and Executive Officers as well as full-time directors of certain domestic subsidiaries and associates, and a performance and share price-linked monetary compensation program that covers certain officers of overseas subsidiaries and associates.

1. Performance-linked stock compensation program for Directors and for Executive Officers and certain full-time directors of domestic subsidiaries and associates

(1) Overview of the program
1) For Directors

Under the performance-linked stock compensation program for Directors, points are granted to eligible individuals based on their position and performance, and upon their retirement from the post of Director, the Company's shares are delivered at a number equivalent to their accumulated points granted, and money is delivered at an amount equivalent to the conversion amount of the Company's shares into cash. For the introduction of the program, a stock delivery trust (hereinafter the "Trust") system for officers has been applied, which is established through the monetary contributions of the Company. The program was resolved with a trust period of five years at the 80th Ordinary General Meeting of Shareholders held on June 29, 2016 and was introduced accordingly. As the term of the Trust is expiring, at a meeting of the Board of Directors held on May 28, 2021, the Company decided to extend the term for three years.

2) For Executive Officers and full-time directors of certain domestic subsidiaries and associates

Under the performance-linked stock compensation program for Executive Officers and full-time directors of certain domestic subsidiaries and associates, points are granted to eligible individuals based on their position and performance, and upon their retirement, the Company's shares are delivered at a number equivalent to their accumulated points granted, and money is delivered at an amount equivalent to the conversion amount of the Company's shares into cash, to the Executive Officers and full-time directors of certain domestic subsidiaries and associates who will retire (hereinafter collectively the "Retirees"). The program employs a system in which the Retirees pay to the Company monetary compensation receivables (contributed properties in kind related to the payment for the Company's common shares) granted by the company from which they retire and the Company delivers the Company's shares to the Retirees through a disposal of treasury shares or issuance of new shares. The program for Executive Officers was resolved at the Board of Directors meeting held on February 27, 2018, and the program for full-time directors of certain domestic subsidiaries and associates was resolved at the Ordinary General Meeting of Shareholders of each company held in and after 2018, both of which were introduced accordingly.

(2) Upper limits of the total number of shares scheduled to be acquired by Directors and the number of shares scheduled to be acquired by Executive Officers and full-time directors of certain domestic subsidiaries and associates.

1) For Directors: 339,800 shares

2) For Executive Officers and full-time directors of certain domestic subsidiaries and associates

In principle, points up to the equivalent of 2,215 shares annually are granted to each person.

(3) Scope of persons entitled to acquire beneficiary and other rights under the program

Directors as well as Executive Officers and full-time directors of certain domestic subsidiaries and associates

2. Performance and share price-linked monetary compensation program for certain officers of overseas subsidiaries and associates

(1) Overview of the program

Under the performance and share price-linked monetary compensation program for officers of certain overseas subsidiaries and associates, points are granted to eligible individuals based on their performance, and three years after the end of the period subject to performance evaluation, money is delivered at an amount equivalent to the conversion amount of the number of the Company's shares equivalent to the number of points granted into cash.

(2) Scope of persons entitled to acquire beneficiary and other rights under the program

Certain officers of overseas subsidiaries and associates

(Total amount of expenses under the performance-linked stock compensation program and the performance and share price-linked monetary compensation program)

The part involving delivery of shares is accounted for as an equity-settled share-based payment transaction, while the part involving payment of cash is accounted for as a cash-settled share-based payment transaction.
For the fiscal years ended March 31, 2021 and 2022, the expenses recorded in connection with this program were ¥250 million and ¥280 million ($2,295 thousand), respectively.

(Liabilities arising from the performance-linked stock compensation program and the performance and share price-linked monetary compensation program)

Liabilities arising from the part associated with the cash-settled share-based payment transaction are recognized as liabilities arising from stock compensation, under other non-current liabilities.
The carrying amount of the liabilities arising from the program was ¥414 million and ¥473 million ($3,877 thousand) as of March 31, 2021 and 2022, respectively.

(Changes in number of points and their weighted average fair value)

Changes in the number of points and their weighted average fair value for the fiscal years ended March 31, 2021 and 2022 are as follows:

As the fair value as of the grant date of points is deemed to approximate the price of the Company's shares, it is measured mainly using the price of the Company's shares as of the grant date. No adjustments are made in consideration of prospective dividends.

	Yen		U.S. dollars
	2021	2022	2022
Beginning balance of unexercised points	132,021 point	151,742 point	151,742 point
Increase due to grant of points	71,119 point	58,513 point	58,513 point
Decrease due to exercise of points	(51,398) point	(48,197) point	(48,197) point
Ending balance of unexercised points	151,742 point	162,058 point	162,058 point
Ending balance of exercisable points	151,742 point	162,058 point	162,058 point
Weighted average fair value as of the grant dates	¥2,949	¥5,120	$41,967

34. Financial instruments

(1) Capital management

The Group's basic policy is to secure the liquidity needed for business operations and maintain a stable financing structure.
Short-term working capital is basically supplied by the Group's own funds. Capital investment and other investments in growth fields depend chiefly on the Group's own funds, but the Group anticipates procurement in the bond market and through bank loans as required.
Temporary surplus funds are invested in highly safe financial assets, while derivatives are used only to avoid the risks described below. In addition, it is our policy not to engage in speculative transactions.

	2021	2022
Ratio of equity attributable to owners of parent	59.6%	57.9%

(2) Credit risk management
1) Content and management of risk

Notes and accounts receivable-trade, which are trade receivables of the Group, are exposed to customer's credit risk.
Regarding such risk, in accordance with internal regulations, the Group conducts credit investigations of its principal business partners, and manages the due dates and outstanding balances of each business partner. In addition, efforts are made to quickly identify and mitigate any concerns regarding collection that are mainly due to worsening financial positions.
Furthermore, regarding the use of derivatives, the Group deals with only financial institutions with high credit standing, in order to reduce credit risk.
The carrying amount of financial assets presented in the consolidated statement of financial position is the maximum exposure to credit risk of the Group's financial assets.
For trade and other receivables, the Group always measures the allowance for doubtful accounts at the same amount as the lifetime expected credit losses (simplified approach).
For financial assets measured at amortized cost other than the above, in order to recognize and measure the allowance for doubtful accounts, financial assets are categorized into the following stages based on the existence of a significant increase in credit risk and the existence of a credit impairment (general approach).

Stage 1: Financial assets for which credit risk has not increased significantly since initial recognition
Stage 2: Financial assets for which credit risk has increased significantly since initial recognition but no credit impairment has been identified
Stage 3: Credit-impaired financial assets

2) Quantitative and qualitative information on allowance for doubtful accounts and financial assets covered

Changes in the total carrying amount of held financial assets are as follows:

	Millions of yen				
		Financial assets under a general approach			
		Stage 1	Stage 2	Stage 3	
	Financial assets under a simplified approach	Financial assets recognized at the same amount as the 12-month expected credit losses	Financial assets with a significant increase in credit risk since initial recognition	Credit-impaired financial assets	Total
Balance as of March 31, 2021	¥98,138	¥5,207	¥510	¥96	¥103,953
Balance as of March 31, 2022	¥109,230	¥5,595	¥401	¥111	¥115,339

	Thousands of U.S. dollars				
		Financial assets under a general approach			
		Stage 1	Stage 2	Stage 3	
	Financial assets under a simplified approach	Financial assets recognized at the same amount as the 12-month expected credit losses	Financial assets with a significant increase in credit risk since initial recognition	Credit-impaired financial assets	Total
Balance as of March 31, 2022	$895,327	$45,860	$3,286	$909	$945,401

Changes in the allowance for doubtful accounts are as follows:

	Millions of yen				
		Financial assets under a general approach			
		Stage 1	Stage 2	Stage 3	
	Financial assets under a simplified approach	Financial assets recognized at the same amount as the 12-month expected credit losses	Financial assets with a significant increase in credit risk since initial recognition	Credit-impaired financial assets	Total
Balance as of April 1, 2020	¥524	¥ —	¥377	¥80	¥982
Increase during the period	231	—	202	6	440
Decrease during the period	(362)	—	(81)	—	(443)
Balance as of March 31, 2021	¥393	¥ —	¥498	¥87	¥979
Increase during the period	46	—	155	20	222
Decrease during the period	(101)	—	(268)	—	(369)
Balance as of March 31, 2022	¥338	¥ —	¥386	¥107	¥832

	Thousands of U.S. dollars				
		Financial assets under a general approach			
		Stage 1	Stage 2	Stage 3	
	Financial assets under a simplified approach	Financial assets recognized at the same amount as the 12-month expected credit losses	Financial assets with a significant increase in credit risk since initial recognition	Credit-impaired financial assets	Total
Balance as of March 31, 2021	$3,221	$ —	$4,081	$713	$8,024
Increase during the period	377	—	1,270	163	1,819
Decrease during the period	(827)	—	(2,196)	—	(3,024)
Balance as of March 31, 2022	$2,770	$ —	$3,163	$877	$6,819

Aging analyses for the financial assets as of fiscal years ended March 31, 2021 and 2022 are as follows: The amounts expected to be recovered by insurance coverage and collateral obtained are included.

Fiscal year ended March 31, 2021

	Millions of yen			
		Past due amount		
2021	Total	Up to 2 months (including not past due)	Over 2 months and up to 1 year	Over 1 year
Trade and other receivables	¥98,138	¥92,149	¥3,562	¥2,426
Other financial assets	5,814	5,147	36	631

Fiscal year ended March 31, 2022

	Millions of yen			
		Past due amount		
2022	Total	Up to 2 months (including not past due)	Over 2 months and up to 1 year	Over 1 year
Trade and other receivables	¥109,230	¥103,634	¥2,937	¥2,659
Other financial assets	6,108	5,427	39	642

	Thousands of U.S. dollars			
		Past due amount		
2022	Total	Up to 2 months (including not past due)	Over 2 months and up to 1 year	Over 1 year
Trade and other receivables	$895,327	$849,459	$24,073	$21,795
Other financial assets	50,065	44,483	319	5,262

(3) Liquidity risk

The Group procures necessary funds mainly in the bond market and through bank loans. Financial liabilities, such as bonds and borrowing, are exposed to liquidity risk. Such liquidity risk is primarily managed by having the Finance Division formulate and update a cash flow management plan in a timely manner, based on reports from each department, maintaining liquidity on hand above a certain level of consolidated net sales and taking other measures.

The balance of financial liabilities by due date is as follows:

Fiscal year ended March 31, 2021

2021	Millions of yen Book balance	Contractual cash flows	Up to 1 year	Over 1 year and up to 2 years	Over 2 years and up to 3 years	Over 3 years and up to 4 years	Over 4 years and up to 5 years	Over 5 years
Non-derivative financial liabilities								
Trade and other payables	¥46,506	¥46,506	¥46,506	¥ —	¥ —	¥ —	¥ —	¥ —
Bonds	29,889	30,227	45	45	45	45	30,045	—
Long-term borrowings	1,763	1,914	491	471	249	241	234	226
Lease liabilities	19,701	21,472	4,561	3,409	1,823	1,141	983	9,553
Liabilities pertaining to forward contracts concluded with non-controlling shareholders	12,326	13,384	—	13,384	—	—	—	—
Total	¥110,187	¥113,505	¥51,605	¥17,310	¥2,118	¥1,428	¥31,262	¥9,779

2021	Millions of yen Book balance	Contractual cash flows	Up to 1 year	Over 1 year and up to 2 years	Over 2 years and up to 3 years	Over 3 years and up to 4 years	Over 4 years and up to 5 years	Over 5 years
Derivative liabilities								
Put options on shares in foreign subsidiaries	¥193	¥227	¥ —	¥227	¥ —	¥ —	¥ —	¥ —
Total	¥193	¥227	¥ —	¥227	¥ —	¥ —	¥ —	¥ —

Fiscal year ended March 31, 2022

2022	Millions of yen Book balance	Contractual cash flows	Up to 1 year	Over 1 year and up to 2 years	Over 2 years and up to 3 years	Over 3 years and up to 4 years	Over 4 years and up to 5 years	Over 5 years
Non-derivative financial liabilities								
Trade and other payables	¥57,967	¥57,967	¥57,967	¥ —	¥ —	¥ —	¥ —	¥ —
Commercial papers	5,000	5,000	5,000	—	—	—	—	—
Bonds	29,913	30,182	45	45	45	30,045	—	—
Short-term borrowings	2,739	2,763	2,763	—	—	—	—	—
Long-term borrowings	1,481	1,597	482	338	267	258	250	—
Lease liabilities	19,546	21,595	4,920	3,041	1,946	1,281	1,128	9,277
Liabilities pertaining to forward contracts concluded with non-controlling shareholders	19,613	19,746	19,746	—	—	—	—	—
Liabilities under contingent consideration agreements	781	956	—	410	273	273	—	—
Total	¥137,043	¥139,809	¥90,925	¥3,836	¥2,532	¥31,859	¥1,378	¥9,277

2022	Millions of yen Book balance	Contractual cash flows	Up to 1 year	Over 1 year and up to 2 years	Over 2 years and up to 3 years	Over 3 years and up to 4 years	Over 4 years and up to 5 years	Over 5 years
Derivative liabilities								
Currency swaps	¥171	¥171	¥31	¥31	¥31	¥0	¥75	¥ —
Total	¥171	¥171	¥31	¥31	¥31	¥0	¥75	¥ —

2022	Thousands of U.S. dollars Book balance	Contractual cash flows	Up to 1 year	Over 1 year and up to 2 years	Over 2 years and up to 3 years	Over 3 years and up to 4 years	Over 4 years and up to 5 years	Over 5 years
Non-derivative financial liabilities								
Trade and other payables	$475,139	$475,139	$475,139	$ —	$ —	$ —	$ —	$ —
Commercial papers	40,983	40,983	40,983	—	—	—	—	—
Bonds	245,188	247,393	368	368	368	246,270	—	—
Short-term borrowings	22,450	22,647	22,647	—	—	—	—	—
Long-term borrowings	12,139	13,090	3,950	2,770	2,188	2,114	2,049	—
Lease liabilities	160,213	177,008	40,327	24,926	15,950	10,500	9,245	76,040
Liabilities pertaining to forward contracts concluded with non-controlling shareholders	160,762	161,852	161,852	—	—	—	—	—
Liabilities under contingent consideration agreements	6,401	7,836	—	3,360	2,237	2,237	—	—
Total	$1,123,303	$1,145,975	$745,286	$31,442	$20,754	$261,139	$11,295	$76,040

2022	Thousands of U.S. dollars Book balance	Contractual cash flows	Up to 1 year	Over 1 year and up to 2 years	Over 2 years and up to 3 years	Over 3 years and up to 4 years	Over 4 years and up to 5 years	Over 5 years
Derivative liabilities								
Currency swaps	$1,401	$1,401	$254	$254	$254	$0	$614	$ —
Total	$1,401	$1,401	$254	$254	$254	$0	$614	$ —

The cash flows included in this maturity analysis are not expected to be generated significantly earlier or at significantly different amounts.

The total amount of overdraft and commitment line and the balance of executed loans are as follows:

	Millions of yen 2021	2022	Thousands of U.S. dollars 2022
Total amount of overdraft and commitment line	¥61,615	¥66,673	$546,500
Balance of executed loans	—	1,199	9,827
Balance of unexecuted loans	¥61,615	¥65,473	$536,663

(4) Market risk
1) Foreign exchange risk

Since the Group operates its business globally, its transactions denominated in currencies other than the functional currency are exposed to foreign exchange risks. In principle, the Group uses forward foreign exchange contracts to hedge exchange rate fluctuation risks, which are identified by currency and month.

Sensitivity analysis of exchange rate fluctuation risks

With regard to the financial instruments held by the Group at the end of the fiscal year, the effect of the U.S. dollar and the renminbi becoming stronger against the yen by 1 yen, on profit before tax in the consolidated statement of profit or loss is as follows. This analysis assumes that all other variables remain constant.

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
U.S. dollar	¥(39)	¥(21)	$(172)
Renminbi	(47)	(37)	(303)

2) Market price risk

The Group holds equity instruments with quoted market prices for policy investment aims, such as the smooth implementation of business alliances. With regard to equity instruments with quoted market prices, since their market prices are determined based on market principles, the value of such financial instruments may decline depending on trends in the market economy. For such equity instruments with quoted market prices, their quoted market prices, the financial conditions of the issuers (business partner companies) and other relevant factors are regularly monitored, and the holding status of those instruments is also continuously reviewed, taking into account relationships with business partner companies.

Sensitivity analysis of quoted market prices

With regard to the equity instruments with quoted market prices held by the Group at the end of the fiscal year, the effect of a 1% decline in the quoted market prices at the end of the fiscal year on other comprehensive income (before tax effects) in the consolidated statement of comprehensive income is as follows. In this analysis, the amount of the effect is calculated by multiplying the values of the equity instruments at the end of the fiscal year by 1%.

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Other comprehensive income (before tax effects)	¥(250)	¥(164)	$(1,344)

(5) Fair value
1) Fair value of financial instruments

The fair values of financial liabilities measured at amortized cost and their carrying amounts in the consolidated statement of financial position are as follows:
Financial instruments whose carrying amounts are reasonable approximations of fair values and immaterial financial instruments are not included in the table below.

	Millions of yen				Thousands of U.S. dollars	
	2021		2022		2022	
	Carrying amount	Fair value	Carrying amount	Fair value	Carrying amount	Fair value
Financial liabilities						
Borrowings	¥1,328	¥1,317	¥1,285	¥1,290	$10,532	$10,573
Bonds	29,889	29,859	29,913	29,814	245,188	244,377

2) Fair value measurement method

The fair values of financial assets and financial liabilities are calculated as follows:

(Derivatives)

Derivatives include foreign exchange contracts, currency swaps and put options on shares in foreign subsidiaries.
Foreign exchange contracts and currency swaps, whose fair values are calculated based on forward exchange rate or quoted prices obtained from financial institutions and other available information, are categorized within Level 2.
Put options on shares in foreign subsidiaries, whose fair values are evaluated based on the present value of the amount that may be required to be paid to counterparties, are categorized within Level 3. This valuation model uses unobservable inputs, such as discount rates. The fair values are assumed to fluctuate, depending on the business plan, interest rates, etc., at each point in time.

(Shares, etc.)

Shares, etc., include shares for which an active market exists, investment trusts and unlisted shares. Shares with active markets are evaluated by prices quoted at the stock exchange, and are categorized within Level 1. Investment trusts are evaluated by prices quoted at the stock exchange or prices provided by correspondent financial institutions, etc., and are categorized within Level 1. Unlisted shares, whose fair values are calculated by valuation techniques, such as the comparable peer company multiples method, using unobservable inputs, such as valuation multiples, are categorized within Level 3.

(Borrowings)

Since short-term borrowings are settled in a short period of time, their fair values approximate their carrying amounts.
Long-term borrowings, whose fair values are calculated by discounting the sum of the principal and interest using the interest rate that would be applied if new borrowings were made with similar terms, are categorized within Level 2.
However, since floating rate long-term borrowings reflect market interest rates in a short period of time and credit standings after execution do not vary significantly, their fair values approximate their carrying amounts.

(Bonds)

Bonds, whose fair values are calculated by discounting the sum of the principal and interest using the interest rate that takes into account the remaining period and credit risk of the relevant bonds, are categorized within Level 2.

(Liabilities pertaining to forward contracts concluded with non-controlling shareholders)

For forward contracts for shares in subsidiaries which the Group has concluded with non-controlling shareholders, the present value of the expected transfer price is initially recognized as other financial liabilities, and after initial recognition, in principle, the present value is measured at amortized cost using the effective interest method and the amount of subsequent changes is recognized in profit or loss. Fair values of liabilities pertaining to forward contracts concluded with non-controlling shareholders are calculated by discounting future cash flows, and their fair values approximate their carrying amounts.

In the fiscal year ended March 31, 2022, as a result of subsequent measurement of the liabilities, finance costs of ¥5,496 million ($45,049 thousand) were recorded. Primarily due to this, the balance of these liabilities pertaining to forward contracts was ¥19,613 million ($160,762 thousand), an increase of ¥7,286 million ($59,721 thousand) from the end of the previous consolidated fiscal year.

(Other (financial liabilities))

Fair values of other (financial liabilities) are evaluated at the amount calculated by the discounted cash flow method using unobservable inputs, and are therefore categorized within Level 3.

(Financial instruments other than the above mentioned)

Since financial instruments other than the above mentioned are mainly settled in a short period of time, their fair values approximate their carrying amounts.

3) Fair value hierarchy

The following is an analysis of financial instruments recorded at fair value by valuation methods. Based on the inputs used to measure fair values, the fair value levels are classified as follows:

Level 1: Fair value measured using (unadjusted) quoted market prices in active markets for identical assets or liabilities.
Level 2: Fair value measured using directly or indirectly observable inputs other than Level 1 inputs.
Level 3: Fair value measured using significant unobservable inputs.

Transfers between levels of the fair value hierarchy are recognized on the date of occurrence of the event or change in circumstances that causes the transfer. No transfer was made between levels for the fiscal years ended March 31, 2021 and 2022.

Financial instruments measured at fair value

Fiscal year ended March 31, 2021

	Millions of yen			
2021	Level 1	Level 2	Level 3	Total
Derivative assets	¥ —	¥4	¥ —	¥4
Financial assets measured at fair value through other comprehensive income:				
Shares, etc.	25,007	—	5,765	30,772
Derivative liabilities	—	—	193	193

Fiscal year ended March 31, 2022

	Millions of yen			
2022	Level 1	Level 2	Level 3	Total
Derivative assets	¥ —	¥2	¥ —	¥2
Financial assets measured at fair value through other comprehensive income:				
Shares, etc.	16,433	—	4,059	20,492
Derivative liabilities	—	171	—	171
Other (financial liabilities)	—	—	781	781

	Thousands of U.S. dollars			
2022	Level 1	Level 2	Level 3	Total
Derivative assets	$ —	$16	$ —	$16
Financial assets measured at fair value through other comprehensive income:				
Shares, etc.	134,696	—	33,270	167,967
Derivative liabilities	—	1,401	—	1,401
Other (financial liabilities)	—	—	6,401	6,401

For financial instruments categorized within Level 3, external evaluation specialists or appropriate persons in charge of evaluation conduct an evaluation and analysis of the results in accordance with the evaluation policy and procedures approved by the Manager of the Corporate Planning and Control Division. The evaluation results have been reviewed and approved by the Manager of the Corporate Planning and Control Division.

Among derivative liabilities categorized within Level 3, for put options on shares in foreign subsidiaries, the significant unobservable input for the measurement of their fair value is the discount rate. As discount rates decline (rise), fair values increase (decrease).

Fair values of unlisted shares categorized within Level 3 are measured by the comparable peer company multiples method and net asset-based valuation model, etc. Since this valuation model employs unobservable inputs, such as the price book-value ratio, unlisted shares are categorized within Level 3.

Reconciliation from the beginning balance to the ending balance of financial instruments categorized within Level 3

	Millions of yen				Thousands of U.S. dollars	
	2021		2022		2022	
	Financial assets	Financial liabilities	Financial assets	Financial liabilities	Financial assets	Financial liabilities
Beginning balance	¥4,745	¥1,397	¥5,765	¥193	$47,254	$1,581
Total gains and losses	230	—	105	—	860	—
Profit or loss	(15)	—	(24)	—	(196)	—
Other comprehensive income	246	—	129	—	1,057	—
Purchase	803	—	890	—	7,295	—
Issuance	—	—	—	781	—	6,401
Sale	(17)	—	(2,698)	—	(22,114)	—
Other	4	(1,203)	(3)	(193)	(24)	(1,581)
Ending balance	¥5,765	¥193	¥4,059	¥781	$33,270	$6,401
Changes in unrealized gains and losses for the period recognized in profit or loss for assets and liabilities held at the end of the reporting period	¥(15)	¥ —	¥76	¥ —	$622	$ —

The gains and losses included in profit or loss are for financial assets and financial liabilities measured at fair value through profit or loss as of the fiscal year-end. Such profit or loss is included in finance income and finance costs in the consolidated statement of profit or loss.

The gains and losses included in other comprehensive income are for financial assets measured at fair value through other comprehensive income as of the fiscal year-end. Such gains and losses are included in net change in the fair value of financial assets measured at fair value through other comprehensive income in the consolidated statement of comprehensive income.

(6) Derivatives and hedging activities

Derivative transactions consist of forward foreign exchange contracts for the purpose of hedging exchange rate fluctuation risks related to foreign currency-denominated trade receivables and payables and currency swap transactions for the purpose of hedging exchange rate fluctuation risks related to foreign currency-denominated loans.

In applying hedge accounting, in order to ensure that there is an economic relationship in which changes in fair value or cash flows of the hedged item caused by the risk being hedged are offset by changes in fair value or cash flows of the hedging instrument, the existence of such economic relationship between the hedged item and hedging instrument is confirmed. This confirmation is achieved through a qualitative assessment of whether the significant terms and conditions of the hedged item match or closely conform to those of the hedging instrument and through a quantitative assessment of whether changes in the values of the hedged item and hedging instrument offset each other due to the same risk. In addition, an appropriate hedge ratio has been set in light of the economic relationship between the hedged item and hedging instrument and the risk management strategy.

Any hedge ineffectiveness is recognized in profit or loss. The amount recognized in profit or loss for the hedge ineffectiveness and the portion excluded from the assessment of hedge effectiveness in the previous fiscal year and this fiscal year is immaterial. The amount reclassified from other components of equity in the consolidated statement of financial position to profit or loss in the previous and this fiscal year because forecasted transactions are no longer expected to occur is also immaterial.

The notional principal and average price of main hedging instruments are as follows:

Fiscal year ended March 31, 2021

2021	Notional principal and average price	Millions of yen		
		Up to 1 year	Over 1 year	Total
Cash flow hedges				
Currency swaps	Notional principal	¥1,376	¥6,026	¥7,402
(Receive Yen, Pay Euros)	Forward rate (Yen)	134.29	131.72	—
Currency swaps	Notional principal	74	—	74
(Receive Yen, Pay South Korean won)	Forward rate (Yen)	0.0935	—	—
Total		¥1,451	¥6,026	¥7,477

Fiscal year ended March 31, 2022

2022	Notional principal and average price	Millions of yen		
		Up to 1 year	Over 1 year	Total
Cash flow hedges				
Currency swaps	Notional principal	¥1,376	¥4,649	¥6,026
(Receive Yen, Pay Euros)	Forward rate (Yen)	134.29	130.98	—
Total		¥1,376	¥4,649	¥6,026

2022	Notional principal and average price	Thousands of U.S. dollars		
		Up to 1 year	Over 1 year	Total
Cash flow hedges				
Currency swaps	Notional principal	$11,278	$38,106	$49,393
(Receive Yen, Pay Euros)	Forward rate (U.S. dollars)	1.10	1.07	—
Total		$11,278	$38,106	$49,393

The carrying amounts of hedging instruments to which hedge accounting is applied by type of hedge are as follows:

	Millions of yen				Thousands of U.S. dollars		Account in consolidated statement of financial position and in consolidated statement of profit or loss of transfer adjustments
	2021		2022		2022		
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	
Cash flow hedges							
Foreign exchange risk	¥ —	¥ 0	¥ —	¥ 172	$ —	$ 1,409	Note

Note Other financial assets in current and non-current assets, other financial liabilities in current and non-current liabilities, finance income and finance costs.

The balance of cash flow hedge reserve related to cash flow hedges is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Cash flow hedges			
Foreign exchange risk	¥(91)	¥40	$327

The contract amount and the carrying amount of derivatives to which hedge accounting is not applied are as follows:

Fiscal year ended March 31, 2021

	Millions of yen				Account in consolidated statement of financial position
2021	Contract amount, etc.	Over 1 year	Assets	Liabilities	
Currency swaps (Receive Yen, Pay South Korean won)	¥138	¥68	¥4	¥ —	Note

Note Other financial assets in current and non-current assets and other financial liabilities in current and non-current liabilities.

Fiscal year ended March 31, 2022

	Millions of yen				Account in consolidated statement of financial position
2022	Contract amount, etc.	Over 1 year	Assets	Liabilities	
Currency swaps (Receive Yen, Pay South Korean won)	¥68	¥68	¥0	¥ —	Note

	Thousands of U.S. dollars				Account in consolidated statement of financial position
2022	Contract amount, etc.	Over 1 year	Assets	Liabilities	
Currency swaps (Receive Yen, Pay South Korean won)	$557	$557	$0	$ —	Note

Note Other financial assets in current and non-current assets and other financial liabilities in current and non-current liabilities.

35. Subsidiaries and associates

The Group's consolidated subsidiaries as of March 31, 2022 are as follows:

Company name	Location	Main business	Ownership ratio of voting rights
Kurita Europe GmbH	Mannheim, Germany	Water treatment chemicals	100.0%
Kurita Water Industries (Dalian) Co., Ltd.	Liaoning, China	Water treatment chemicals	90.1%
Kurita Water Industries (Suzhou) Ltd.	Jiangsu, China	Water treatment facilities	100.0%
Hansu Technical Service Ltd.	Gyeonggi-do, Korea	Water treatment facilities	100.0%
Hansu Co., Ltd.	Seoul, Korea	Water treatment chemicals	100.0%
Kurita Water (Malaysia) Sdn.Bhd.	Selangor, Malaysia	Water treatment chemicals and Water treatment facilities	100.0%
Pentagon Technologies Group, Inc.	California, U.S.A.	Water treatment facilities	51.0%
Kurita America, Inc.	Minnesota, U.S.A.	Water treatment chemicals and Water treatment facilities	100.0%
Kuritaz Co., Ltd.	Toshima-ku, Tokyo	Water treatment facilities	100.0%
Kuritec Service Co., Ltd.	Chuo-ku, Osaka	Water treatment facilities	100.0%
Kurita Chemical Manufacturing Ltd.	Gokamachi, Sashima-gun, Ibaraki	Water treatment chemicals	100.0%
59 other companies			

The Group's associates accounted for using the equity method as of March 31, 2022 are as follows:

Company name	Location	Main business	Ownership ratio of voting rights
Angang Kurita (Anshan) Water Treatment Co., Ltd.	Liaoning, China	Water treatment chemicals	40.0%
Another company			

Notes 1. The main business column refers to segment names.
2. Kurita Europe GmbH, Hansu Technical Service Ltd. and Kurita Chemical Manufacturing Ltd. are the specified subsidiary companies.

36. Related parties

(1) Transactions with related parties

For the fiscal years ended March 31, 2021 and 2022, information on transactions with related parties has been omitted due to the absence of significant transactions.

(2) Compensation for key management personnel

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Short-term employee benefits	¥442	¥428	$3,508
Share-based payment	119	83	680

Note Compensation for key management personnel is compensation for Directors (including External Directors) and Audit & Supervisory Board Members (including external members of the Audit & Supervisory Board) of the Company.

37. Commitments

The total contract amount regarding commitments for asset purchases, etc., is as follows:

	Millions of yen		Thousands of U.S. dollars
	2021	2022	2022
Acquisition of property, plant and equipment	¥27,793	¥19,606	$160,704

Note Commitments as of March 31, 2022 consist primarily of those associated with the acquisition of a certain facility in the ultrapure water supply business.

38. Subsequent events

(Issuance of bonds)

In accordance with a resolution of the Board of Directors' meeting held on November 30, 2021, the Company decided on May 20, 2022 (conditional resolution date) to issue second series of unsecured bonds on May 26, 2022. Payments have been completed on May 26, 2022. The summary of the issuance is as follows:

(1)	Name of bonds	Kurita Water Industries Ltd. Second Series of Unsecured Bonds (five-year bonds)
(2)	Total issue amount	¥10 billion ($81,967 thousand)
(3)	Interest rate	0.290%
(4)	Pay-in amount	¥100 for ¥100 of the amount of each bond
(5)	Redemption amount	¥100 for ¥100 of the amount of each bond
(6)	Pay-in date	May 26, 2022
(7)	Redemption date	May 26, 2027
(8)	Rating received	A+ (Rating and Investment Information, Inc.)
(9)	Underwriting company	Mitsubishi UFJ Morgan Stanley Securities Co., Ltd., Nomura Securities Co., Ltd. and Daiwa Securities Co. Ltd.
(10)	Fiscal agent	Resona Bank, Limited.
(11)	Content of collaterals	No collateral or guarantee is provided, and no assets are reserved specifically for the bonds.
(12)	Use of funds	Funds are planned to be used as funding for investment and lending.

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Independent Auditor’s Report

Grant Thornton

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of Kurita Water Industries Ltd.

Opinion

We have audited the consolidated financial statements of Kurita Water Industries Ltd. (“the Company”) and its consolidated subsidiaries (collectively referred to as “the Group”), which comprise the consolidated statement of financial position as at March 31, 2022, and the consolidated statement of profit or loss, comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at March 31, 2022, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs).

Convenience Translation

The United States dollar amounts in the accompanying consolidated financial statements with respect to the year ended March 31, 2022 are presented solely for the convenience. Our audit also included the translation of Japanese yen amounts into United States dollar amounts and, in our opinion, such translation has been made on the basis described in Note 2 to the consolidated financial statements.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in Japan. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated

Financial Statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Japan, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of Matter

We draw attention to Note 38 "Subsequent events" to the consolidated financial statements. In accordance with a resolution of the Board of Directors' meeting held on November 30, 2021, the Company decided on May 20, 2022 (conditional resolution date) to issue second series of unsecured bonds on May 26, 2022 and payments have been completed on May 26, 2022. Our opinion is not modified in respect of this matter.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Valuation of goodwill	
Description of Key Audit Matter	Auditor's Response
The Group recorded goodwill of ¥62,992 million (13.4% of total assets) in the consolidated statement of financial position for the current fiscal year, all of which pertain to overseas subsidiaries. Impairment tests for goodwill are required each year and the assumptions used in the impairment test are disclosed in Note 13. (2) of the Notes to Consolidated Financial	In reviewing valuation of goodwill, we evaluated the design and operation of the Group's internal controls over the development of future plans underlying impairment tests, the calculation of value in use and the measurement of impairment losses. The appropriateness of the significant goodwill impairment test was assessed primarily as to whether the following

Statements. When performing the impairment test, the Group calculates the recoverable amount of the cash-generating units, including goodwill, based on its value in use. If the recoverable amount is less than the carrying amount as a result of the impairment test, the Group recognizes an impairment loss and writes down the carrying amount to the recoverable amount. The value in use is calculated as the present value of the future cash flows expected to be generated by the cash-generating units, including goodwill. Future cash flows are calculated based on the estimated amounts based on the business plans for each cash-generating unit included in MVP-22 plan, a medium-term management plan approved by management. MVP-22 Plan is a medium-term management plan up to fiscal year 2022, and future plans thereafter are estimated and determined based on the growth rate in the mid-term management plan, and the long-term average growth rate of the markets to which the cash-generating unit belongs and other factors. Significant assumptions in estimating the value in use of each cash-generating unit are business plan-based estimates of future cash flows, growth rates and	procedures were performed by us or, as circumstances warrant, by directing the auditors of the subsidiary to perform some or all of the audit procedures. We received reports on the results of the audit procedures from the auditors of the subsidiary and evaluated whether sufficient and appropriate audit evidence was obtained. • Valuation experts were engaged as necessary to verify valuation methods in the calculation of value in use. • We evaluated the accuracy of estimates of future plans by comparing budgets in the medium-term management plan and previous years with actual results. • Regarding market growth rates, etc., which are important assumptions used in estimating the future plans, we conducted a discussion with management and business managers. If necessary, we made an analysis on trends in actual results for each cash-generating unit and comparison with external data, such as available market forecasts or similar enterprises to assess the reasonableness of market growth rates, etc. • We conducted a discussion with management about the impact of COVID-19 on the market to which the cash-generating unit belongs,

discount rates for subsequent periods. Future plans are mainly affected by market growth rates and other factors. In the estimate for the current fiscal year, it is necessary to take into account the spread of the COVID-19 and a sharp increase in raw materials, materials, and energy costs due to Russia's invasion of Ukraine. In particular, Kurita America, Inc., which has a large goodwill amount of 28,110 million yen, suffered from mainly a decline in private demand following the closure of commercial facilities in the first half of the current fiscal year due to the spread of the COVID-19, delays in shipments of products due to supply chain disruptions, and increasing raw material prices and logistics costs due to inflation. Given the complexity of the goodwill impairment test and the uncertainty associated with changes in the operating environment regarding estimates of future cash flows reflected the above impacts, market growth rates, discount rates, and the requirement of management's judgment, we identified valuation of goodwill impairment as a key audit matter.	and examined whether it was properly reflected in the estimates of the future plans. • Regarding Water Treatment Chemicals business in Kurita America Inc., we verified that the analytical results in the main market prepared by the company and the future plan were consistent and its reasonableness. In addition, we examined the validity of its Water Treatment Facilities business by comparing the gross profit margin on the order list with the gross profit margin on future plans. • Regarding future cash flows, the consistency between the future plan underlying such plans and the medium-term management plan approved by management and the budget for the fiscal year ending March 31, 2023. • For discount rates, which are important assumptions, we compare it to that of previous years and verified basic data. If necessary, we compared it to the estimated results using external data available from our valuation experts. We also assessed the impact of changes in the discount rate on changes in value in use.

Estimate of the total cost of transactions in Kurita Water Industries Ltd. that recognizes revenue over a certain period of time	
Description of Key Audit Matter	Auditor's Response
As disclosed in Note 3. (14) to the consolidated financial statements, the Group recognizes revenue over the term of the contract for construction contracts as performance obligations are satisfied as construction progresses and applies the input method, which uses the ratio of costs incurred to estimated total costs on a contract-by-contract basis to measure progress. As disclosed in Note 6. (2) to the consolidated financial statements, the amount of revenue recorded for transactions in which revenue is recognized over a certain period of time by the parent company Kurita Water Industries Ltd.("the Company") is ¥51,440 million, which accounts for a significant percentage of consolidated net sales of ¥288,207 million. A significant assumption when recognizing revenue over a certain period of time is an estimate of total cost. Estimates of total cost may be affected by changes in the content of contracts that occur due to changes in the environment surrounding contracts with customers. The Company implements income and expenditure management and progress management, etc. for each construction unit. In order to properly estimate the	In reviewing the adequacy of the estimates of the total cost of transactions in the Company that recognize revenue over a certain period of time, we primarily performed the following audit procedures: • We conducted a discussion with management regarding important matters in establishing internal controls related to estimating total cost, including timely revisions of estimates, as well as assessing the design and operation of such internal controls. • In order to verify whether the estimate of the total cost for the initial budget is properly made, for the construction of new orders extracted by a certain standard, we conducted an interview with the person in charge of managing the sales/expenditures of the construction, etc., and compared with other construction on the initial cost ratio. • In order to verify that the revision of the estimate of the total cost is conducted in a timely and appropriate manner, for the construction extracted by certain criteria by comparing the estimate of the total cost with the incurred cost, we

total cost, the Company has established and operates internal controls for the allocation of the initial budget and the revision of the total cost. In particular, with respect to construction work involving design departments, the Company performs a business process review on a monthly basis to review the execution of the initial budget and revises its estimates of total costs as necessary. Due to the uncertainty associated with technological or physical factors, changes in the environment surrounding the contract, the significant potential impact and involvement of management judgment, we identified estimate of the total cost of transactions in Kurita Water Industries, Ltd. that recognize revenue over a certain period of time as a key audit matter.	reviewed the construction ledgers and the business process reviews, conducted a interview with the persons in charge of managing the sales/expenditures of the construction, etc., and compared the actual progress with the progress on the progress chart. • We examined the estimates of the total cost at the end of the current fiscal year in comparison with the estimates at the end of the previous fiscal year and the reasons for the change as well as verified the accuracy of the estimates of the total cost by a comparative review between the estimates and the actual results.

Other Information

The other information comprises the information included in the Group's disclosure documents accompanying audited consolidated financial statements, but does not include the consolidated financial statements and our auditor's report thereon. Management is responsible for the other information. The Audit & Supervisory Board Members and the Audit & Supervisory Board are responsible for overseeing the Directors' execution of duties relating to the design and operating effectiveness of the controls over the Group's other information reporting process.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and the Audit & Supervisory Board Members and the Audit & Supervisory Board for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, including whether the use of the disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The Audit & Supervisory Board Members and the Audit & Supervisory Board are responsible for overseeing the Directors' execution of duties relating to the design and operating effectiveness of the controls over the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with auditing standards generally accepted in Japan will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.
As part of an audit in accordance with auditing standards generally accepted in Japan, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required

to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate whether the presentation and disclosures of the consolidated financial statements are in accordance with IFRSs, the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit & Supervisory Board Members and the Audit & Supervisory Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit & Supervisory Board Members and the Audit & Supervisory Board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Audit & Supervisory Board Members and the Audit & Supervisory Board, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Interest Required to Be Disclosed by the Certified Public Accountants Act of Japan

Our firm and its designated engagement partners do not have any interest in the Group which is required to be disclosed pursuant to the provisions of the Certified Public Accountants Act of Japan.

T. Shibaya

Tetsuo Shibaya
Designated Engagement Partner
Certified Public Accountant

Makio Wada

Makio Wada
Designated Engagement Partner
Certified Public Accountant

Kenta Nishimura

Kenta Nishimura
Designated Engagement Partner
Certified Public Accountant

Grant Thornton Taiyo LLC
Tokyo, Japan
30, September, 2022