Financial Factbook 2023

TOAGOSEI

Management's Discussion & Analysis

The financial section was translated into English based on some disclosed documents including the securities report of the Japanese version and is provided for information purpose only.

Overview of Fiscal 2023

During the period under review (January 1, 2023 to December 31, 2023), there was growing geopolitical risk amid no end in sight to the Ukraine war and the emergence of conflict in the Middle East. Amid this, Europe and North America embarked on monetary tightening measures to rein in inflation, and while Europe's economy remained sluggish throughout the year, the US economy was strong underpinned by personal consumption. At the same time, China's economy began to experience deflation resulting from the serious downturn in its real estate market, raising concerns about its weakening ability to grow.

In terms of the Japanese economy, while demand for commodity chemicals and semiconductors was sluggish, the economy has normalized after the easing of COVID-19 restrictions, a significant recovery in inbound tourism demand in the nonmanufacturing sector, such as restaurants and travel, the depreciation of the yen, and a recovery in production of automobiles, not to mention the accelerated pace of companies passing on price increases to product prices and wage increases.

Under these conditions, the Group focused on expanding sales including overseas by continuing to strengthen its supply system for performance products for semiconductors and carry out R&D of products for batteries for automotive applications. As a result, the Group recorded the following financial results for the period under review.

Net sales: ¥159,371 million (-0.9% YOY)
Operating income: ¥12,499 million (-13.1% YOY)
Ordinary income: ¥14,503 million (-11.8% YOY)
Net income attributable to owners of parent: ¥12,179 million (-2.5% YOY)

Following changes in the Company's organizational structure and management classification effective January 1, 2023, sustainability related businesses previously included in the Commodity Chemicals segment have been transferred to the Other Businesses segment from fiscal 2023. Year-on-year change is compared to the figures for fiscal 2022 prepared according to the revised classification method.

Outlined below are the results for our reportable segments.

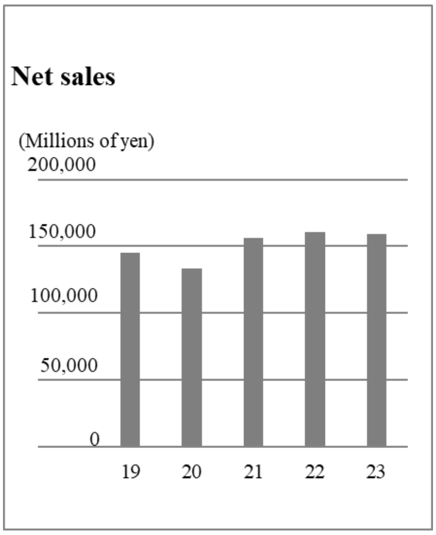
Sales by Segment

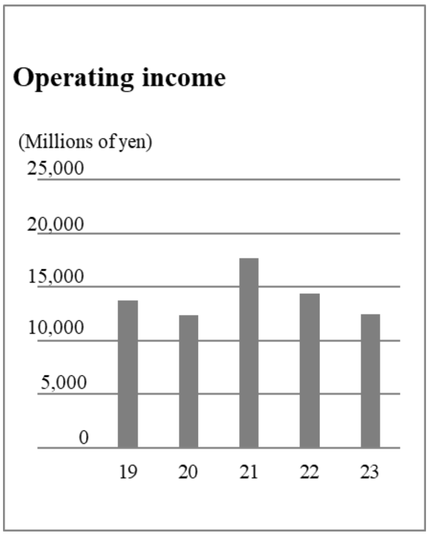
Commodity Chemicals

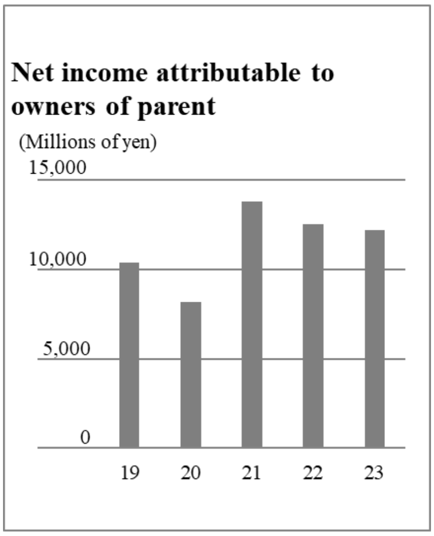
Electrolysis products experienced a downturn in sales volume caused by revisions to selling prices to cope with higher raw material and fuel prices from last year, but sales revenue increased with higher selling prices. Acrylic monomer products saw a downturn in sales revenue resulting from weaker market conditions overseas and diminished sales volume. Industrial gases posted higher sales revenue following price hikes initiated in response to rising raw material and fuel prices. As a result of the above, this segment posted net sales of ¥73,488 million (-0.6% YOY). Operating income totaled ¥6,769 million (-0.6% YOY) due to diminished sales volume and weaker market conditions for acrylic monomers.

Polymer & Oligomer

Acrylic polymers recorded higher sales revenue resulting from revisions to selling prices to cope with higher raw material and fuel prices. Acrylic oligomers recorded lower sales revenue amid diminished sales volume for displays and other products. Polymer flocculants posted a decrease in sales revenue due to lower sales volume overseas. As a result of these factors, this segment posted net sales of ¥33,765 million (-5.7% YOY). Operating income fell to ¥3,182 million (-25.3% YOY), impacted by lower sales volume.


Net sales
(Millions of yen)
200,000
150,000
100,000
50,000
0
19
20
21
22
23


Operating income
(Millions of yen)
25,000
20,000
15,000
10,000
5,000
0
19
20
21
22
23


Net income attributable to owners of parent
(Millions of yen)
15,000
10,000
5,000
0
19
20
21
22
23

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Adhesive Material

Instant glues for consumers posted higher sales revenue on revisions to selling prices to cope with higher raw material prices, despite reduced sales volume. Functional adhesives were affected by the downturn in production volume of smartphones, but sales volume for batteries for automotive applications increased substantially, resulting in an increase in sales revenue. As a result, this segment posted net sales of ¥12,410 million (+11.5% YOY).
Operating income totaled ¥361 million, compared to the previous fiscal year's operating loss of ¥255 million, owing to higher sales volume of adhesives for batteries for automotive applications and declining advertising expenses and other costs.

Performance Chemicals

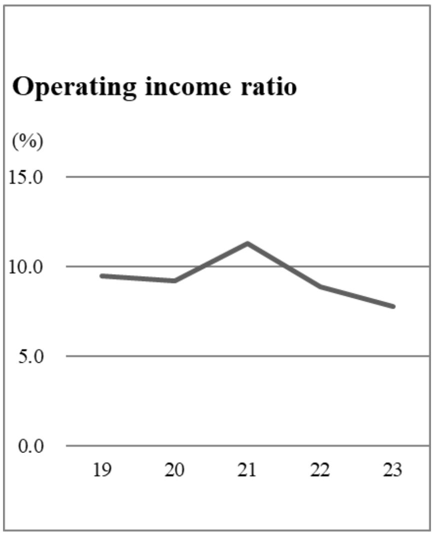
High-purity inorganic chemicals posted a decline in sales revenue owing to the impacts of the downturn in semiconductor market conditions. Inorganic functional materials posted lower sales revenue amid diminished sales volume of antimicrobial agents. Medical care products saw sales revenue increase on sales of samples for testing. As a result, this segment posted net sales of ¥9,943 million (-5.0% YOY).
Operating income fell to ¥1,547 million (-34.5% YOY) amid diminished sales volume as well as higher depreciation and technological research costs.

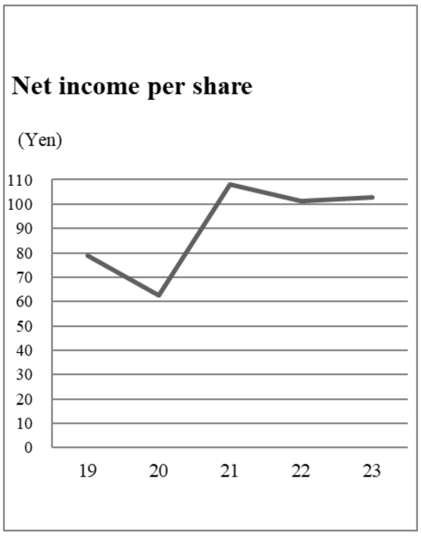
Plastics

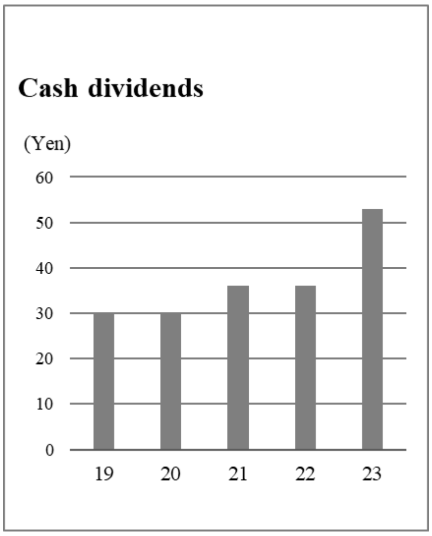
Piping equipment posted decreased sales revenue following a decline in sales volume caused by sluggish growth in housing starts. Nursing care products recorded an increase in sales revenue owing to price hikes in response to surging raw material prices. Elastomer compounds posted higher sales revenue owing to price hikes in response to surging raw material prices. As a result, this segment posted net sales of ¥27,867 million (+0.4% YOY).
Operating income totaled ¥1,473 million (-16.2% YOY) as a result of a decrease in sales volume and an increase in depreciation charges.

Other Businesses

This segment, which consists of the research and development business for new products, goods transportation, and trading-house operations, among others, recorded increased sales revenue from its trading department. The segment posted net sales of ¥1,896 million (+9.4% YOY) and an operating loss of ¥854 million.







Cash Flows

Cash and cash equivalents at end of the year stood at ¥47,636 million, an increase of ¥2,796 million from the previous term-end.

Net cash provided by operating activities increased by ¥10,649 million year on year to ¥21,638 million due to decreases in inventories and income taxes paid, despite a decrease in income before income taxes.

Net cash used in investing activities decreased by ¥51 million year on year to ¥3,528 million due to a decrease in purchases of property, plant and equipment.

Net cash used in financing activities increased by ¥6,060 million year on year to ¥15,524 million due to increases in cash dividends paid to non-controlling interests and expenditure for acquisition of shares of subsidiaries.

Business Performance Prospects for Fiscal 2024

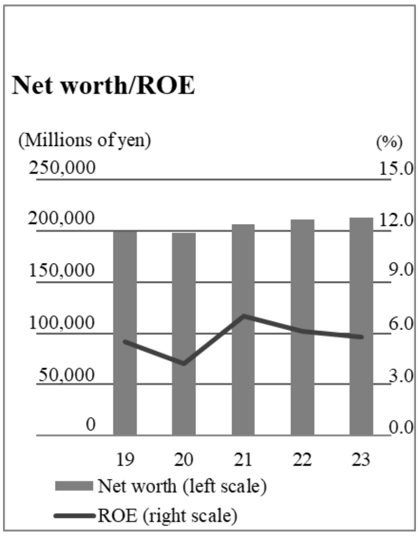
For the current term ending December 31, 2024, we forecast net sales of ¥168.3 billion, operating income of ¥14.0 billion, and net income attributable to owners of parent of ¥11.3 billion.

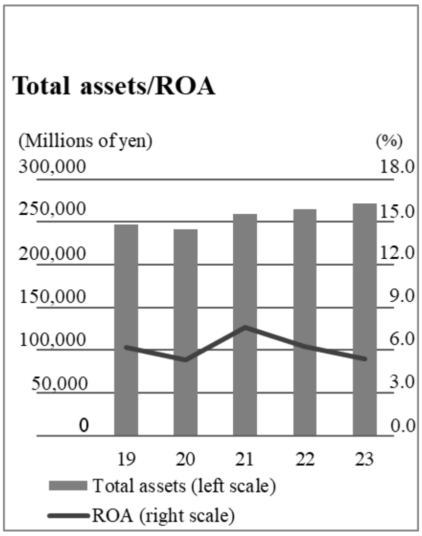
Economic Prospects for Fiscal 2024

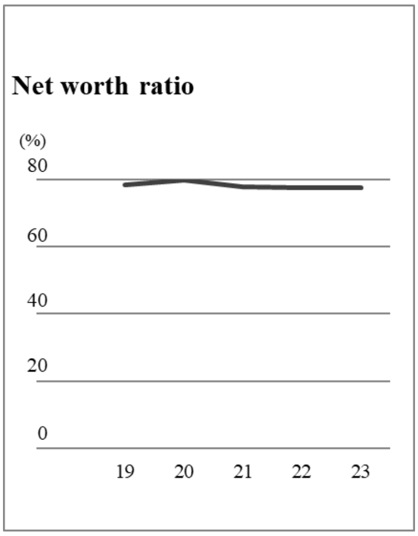
As for the future outlook, a highly uncertain situation is forecast to persist because of rising doubt with regard to geopolitical risk, inflation and interest rate trends.

Basic Policy on Shareholder Returns and Dividends for Fiscal 2023 and 2024

As announced in the "Announcement of Toagosei's Initiatives to Improve Our Price-to-Book Ratio (PBR)" dated August 4, 2023, the Company has set a target of a 100% total return ratio for the period of Medium-term Management Plan 2025, including share buybacks and dividends, in order to improve capital efficiency for realizing management that is mindful of capital costs and share price.







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Dividend for fiscal 2023: The year-end dividend for fiscal 2023 will be ¥33 per share. In fiscal 2023, we paid an ordinary dividend of ¥20 per share as an interim dividend; thus, the annual dividend per share will be ¥53 (dividend payout ratio of 51.6%). In addition, we acquired ¥5,999 million (4,708,800 shares) of treasury stock during fiscal 2023, resulting in a total return ratio of 100.5%, including share buybacks. In December 2023, the Company cancelled 5,000,000 treasury shares (4.1% of the total number of issued shares before cancellation).

Dividend for fiscal 2024: From the perspective of further returning profits to shareholders, the Company plans to pay an annual dividend of ¥58 per share in fiscal 2024 (dividend payout ratio of 58.3%, comprising an interim dividend of ¥29 per share and year-end dividend of ¥29 per share). Furthermore, in order to improve capital efficiency and enhance corporate value, the Company has decided to buy back ¥6.0 billion of its own shares. As a result, the total return ratio is expected to be 111.3%.

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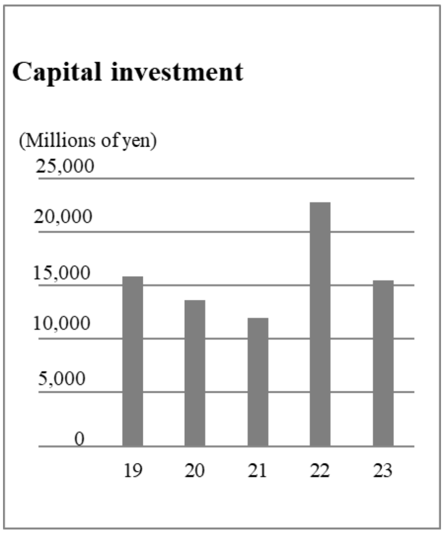
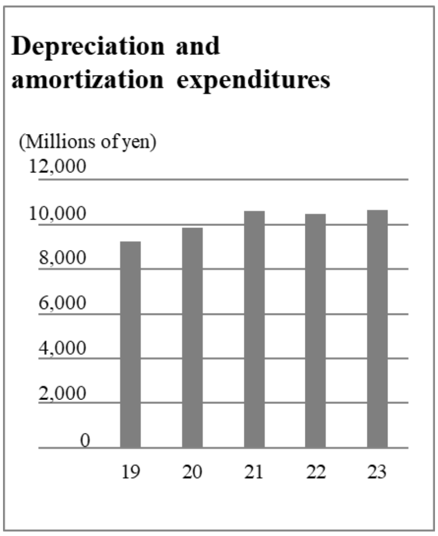
Business Risks

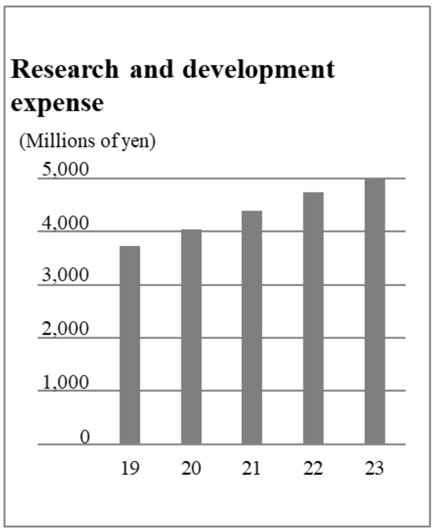
Of the matters concerning "Management's Discussion & Analysis," and "Consolidated Financial Statements and Others" contained in this report, major risks deemed to have the potential of significantly impacting the Group's financial position, business performance, and cash flows are stated below, provided, risks that may significantly impact investors' decisions are not limited to those described herein.

The Group established the Group Risk Management Rules as a mechanism for the routine identification and assessment of potential risks. Based upon this, risk countermeasures are formulated and the status of those countermeasures is checked, while measures are taken for the risks stated below. However, these countermeasures are not able to completely control the probability of risks emerging and the impact of risks if they emerge.

Forward-looking information stated herein is based on judgement by the Group as of the end of the fiscal year under review.







(1) Natural disasters

The Group has production and sales bases in Japan and overseas. If these bases are hit by natural disasters such as earthquakes, typhoons, volcanic eruptions, heavy rains, tornadoes, gusts of wind, floods, tsunamis, and storm surges, this may result in damage to buildings and equipment, suspension of operations and business activities, and other losses.

In particular, in the event of a Tokai, Tonankai, or Nankai earthquake, there may be substantial damage to the Group’s production and sales bases located in and around the Tokai, Kinki, and Shikoku regions, including the Nagoya Plant, the Group’s main production base. Similarly, in the event of an earthquake directly hitting the Tokyo metropolitan area, there may be substantial damage to the Group’s head office as well as production and sales bases located in and around the Kanto region.

Each base takes measures such as seismic retrofitting, regular disaster prevention drills simulating earthquakes and fires, and insurance coverage in case of earthquakes, fires, storms, and floods.

(2) Factory accidents

The main business of the Group is the manufacturing of chemical products. Accidents such as fires, explosions, and leaks of chemical substances may occur at the Group’s domestic and overseas plants due to equipment trouble and human errors, resulting in damage to buildings and equipment, the suspension of operations and business activities, and compensation for victims and local communities.

Each plant takes measures such as installing automatic stopping devices for emergencies, holding disaster prevention meetings to discuss safety and disaster prevention when equipment is newly constructed or replaced, regular disaster prevention drills, and taking out insurance coverage in case of accidents.

(3) Changing market needs and intensifying competition

The Group’s business consists of five segments and supplies a wide variety of products ranging from commodity chemicals including basic industrial materials to finished products for general consumers, enabling the Group to build a well-balanced business structure that is not easily affected by economic fluctuations. However, as the Group supplies its products to a wide range of industries and regions, the sales volumes and prices of its products may fluctuate significantly due to changes in the global or regional supply and demand environment, the emergence of alternative materials, changes in the purchasing policies of customers, and the sales prices of competitors.

In particular, many commodity chemicals, mainly in the Commodity Chemicals segment, are difficult to differentiate from other companies’ products in terms of their function and performance. Given the present trend of intensifying price competition, there is a possibility that the Group may not be able to maintain its competitive edge over rival companies that are able to sell products with the same qualities at lower prices.

Meanwhile, the sales volumes and prices of high value-added products, mainly in the Polymer & Oligomer, Adhesive Material, and Performance Chemicals segments, may fluctuate significantly depending on the demand of customers and the Group’s priority fields such as mobility and electronics.

In the Medium-Term Management Plan “Leap Forward to the Next 2025,” the Group established “the expansion of high-value-added products” as a numerical target, and aims to increase the high-value-added product to net sales ratio to 48% in 2025.

(4) Regulations, legal revisions, trade restrictions, deterioration of international relations

The Group has production bases and sales bases not only in Japan but also in the U.S., China, Taiwan, Hong Kong, Singapore, Thailand, and South Korea and is engaged in sales and procurement activities on a global scale. Therefore, the suspension of operations and business activities, criminal penalties and surcharges, and litigations may arise in the event of a violation and change in interpretation of, and a differing view from authorities on Japan’s Antimonopoly Act, Unfair Competition Prevention Act, Subcontract Act, Financial Instruments and Exchange Act, Foreign Exchange and Foreign Trade Act, export trading regulations, labor law, tax law, and regulations related to chemical substances, as well as various laws and regulations of relevant foreign countries and regions.

Furthermore, these laws and regulations may change due to institutional reforms, deregulation, greater regulatory controls, and trade restrictions, leading to the incurring of counter-measure costs and increased risk of violations.

The Group places particular importance on regulations related to chemical substances and has a system in place where the Environment & Safety Department and the Quality Assurance Department at the head office and manufacturing sites coordinate with each other to prevent violations. In addition, the Compliance Committee oversees and examines group-wide compliance practices for other laws and regulations.

In addition, international tensions are currently on the increase. The Group collects information from experts and government agencies, etc., and takes necessary measures as appropriate.

(5) Impairment of fixed assets

The Group owns a large amount of fixed assets, including land, machinery and equipment mainly for the manufacture of chemical products. In order to achieve sustainable growth and increase corporate value over the medium- to long-term, the Group may, while making aggressive capital investment, engage in joint ventures, strategic alliances and business acquisitions with third parties. Under the Medium-Term Management Plan "Leap Forward to the Next 2025," the Group aims to make a total of ¥68 billion in capital investment over the three years from 2023 to 2025.

Decisions on such capital investment and other investment programs will be made subject to careful assessment of capital cost, but impairment losses may arise due to a decline in profitability resulting from a significant deterioration in the business environment, falling market prices, a decrease in synergies, and other factors.

(6) Product liability, recall, and inferior quality

If a defect or inferior quality of products manufactured and sold by the Group causes damage to customers or third parties, compensation for damages and recall costs may be incurred, and sales of the said products may decrease.

The Group conducts quality inspections at each manufacturing site and has a system in place to adapt to requirements in order to supply products that meet customer requirements as well as applicable legal and regulatory requirements. The Group also takes measures to reduce the impact of any potential damage by arranging product liability insurance.

(7) Information security

The Group holds important managerial, operational, and technological information as well as personal information on its employees, etc. If a business partner or employee leaks such information intentionally or through negligence, or if a third party with malicious intentions breaks into the Group's information management server and illegally obtains the information, there may be damages such as deterioration of managerial, operational, and technological advantage, sanctions and compensation for information leakage, and costs required for retrieving the information.

In addition, the Company's core systems may be affected by external attacks, such as cyberattacks.

To prevent information leaks, the Group concludes non-disclosure agreements with business partners with whom it shares important information, and instills awareness of information management and information handling rules among its employees through education programs. In addition, the Group works to continually improve its information security measures, including measures against computer viruses.

(8) Soaring prices of raw materials, fuel, and other materials and changes in the prices of crude oil and naphtha

Soaring prices of raw materials, fuel, and other materials will lead to an increase in the Group's manufacturing costs. In particular, higher prices of crude oil and naphtha will result in a rise in the manufacturing costs of acrylic monomer products in the Commodity Chemicals segment and other products, and if the Group is unable to sufficiently raise its sales prices and rationalize its operations to offset these changes, it may put pressure on the Group's profits.

On the other hand, falling prices of crude oil and naphtha may cause the Group's sales prices to decline and may result in valuation losses on inventories.

A price formula has been established mainly with domestic business partners to ensure appropriate manufacturing costs and sales prices linked to crude oil and naphtha prices. However, these measures may not work in situations where prices are volatile or in competitive overseas markets.

(9) Infectious and communicable diseases

In the event of a widespread outbreak of an infectious or communicable disease that requires quarantine and movement restrictions, in addition to a general stagnation of economic activities, the business activities and distribution of the Group's customers and suppliers may be disrupted, potentially restricting the Group's operations and business activities. Furthermore, if the infection spreads to employees of the Group, operations may be temporarily suspended.

The Group has established a system that prevents the spread of infections and enables safe and continuous operations and business activities by establishing a system allowing telework and installing infection prevention goods such as disinfectants.

(10) Suspension of raw material and fuel supplies and supply chain interruption

The Group conducts business keeping in mind the balance between cost reduction and stable procurement, but if the raw materials and fuel essential for manufacturing cannot be procured due to accidents at suppliers, production suspension, bankruptcy, and other reasons, the Group's operations may be suspended.

The Group strives to build a stable supply system by purchasing from multiple sources and maintaining constant communication with its suppliers.

(11) Environmental pollution and calls for sustainability

While complying with laws and regulations related to environmental conservation, the Group carries out environmentally conscious business activities by announcing its reduction targets for carbon dioxide emissions and maintaining thorough control of environmentally hazardous substances with the establishment of voluntary control values. However, as the Group operates chemical plants, soil, air, or water pollution may be discovered, resulting in the interruption of production activities and compensation costs. Furthermore, the chemical business, which is an energy-intensive industry, is being strongly urged to meet social demands such as further reduction of carbon dioxide emissions for sustainable social development, as exemplified by the SDGs and the ESG investment movement.

The Group will take further steps to reduce greenhouse gas emissions, energy consumption, waste, and environmentally hazardous substances mainly through the Sustainability Promotion Committee, which is chaired by the President. In particular, with regard to the reduction of greenhouse gases, the Group increased our reduction target in 2021 from the existing target, and created a roadmap toward the targets of "a 50% reduction in 2030 compared to 2013 (205,000 tons)" and "carbon neutral (virtually zero emissions) in 2050." In addition, the Group calculated greenhouse gas emissions in three categories (Scope 1-3), including supply chains, and conducted a scenario analysis in accordance with TCFD guidelines in order to understand the risks and opportunities that climate change has on our business and to clarify future measures.

(12) Foreign exchange fluctuations

The Group imports raw materials from overseas and also exports products manufactured in Japan to other countries, but the volume of raw materials it imports exceeds the volume of products it exports. Therefore, if the yen depreciates against foreign currencies, overall costs will increase. However, when the yen weakens, the export industry in Japan generally becomes more competitive internationally, and the demand for products sold by the Group becomes easier to stimulate.

Meanwhile, in the Medium-Term Management Plan "Leap Forward to the Next 2025," the Group aims to raise its overseas net sales ratio by 30% in 2025 from 2022 through aggressive overseas expansion. Therefore, the nature of the risk may change depending on the progress of the plan.

To mitigate the risk, the Group takes measures such as making financial plans to use foreign currencies earned through exports and dividends from overseas affiliates for import payments.

Management's Discussion & Analysis

(13) Human rights and compliance risks

In the event that the Company is unable to respond appropriately to human rights issues or compliance violations within the Group or in our supply chain, this may result in administrative penalties, the suspension of transactions with customers, and the loss of social trust.

The Group has established the "Toagosei Group Human Rights Policy" based on international principles, and the "Sustainable Procurement Guidelines" to demonstrate our way of thinking to our business partners. In addition, we are creating handbooks, etc. in order to provide compliance education to employees. Through these measures, we are striving to reduce human rights and compliance risks.

> Estimates or projections included in this report are based on facts known to the Company's management as of the time of writing, and actual results may therefore differ substantially from such statements.

[Accounting Practices]

1. Method of preparing consolidated financial statements and non-consolidated financial statements
   (1) The Company's consolidated financial statements are prepared in accordance with the Ordinance on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements (Ordinance of the Ministry of Finance No. 28 of 1976).
   (2) The Company's non-consolidated financial statements are prepared in accordance with the Ordinance on the Terminology, Forms, and Preparation Methods of Financial Statements, etc. (Ordinance of the Ministry of Finance No. 59 of 1963; hereinafter "Ordinance on Financial Statements, etc.").
   The Company falls under the category of a special company submitting financial statements, and prepares financial statements in accordance with the provisions of Article 127 of the Ordinance on Financial Statements, etc.

2. Audit certification
   In accordance with the provisions of Article 193-2, Paragraph 1 of the Financial Instruments and Exchange Act, Ernst & Young ShinNihon LLC has audited the Company's Consolidated Financial Statements for the current fiscal year (January 1 to December 31, 2023) and the Company's Non-consolidated Financial Statements for the current fiscal year (January 1 to December 31, 2023).

3. Special efforts to ensure the appropriateness of the consolidated financial statements, etc.
   The Company makes special efforts to ensure the appropriateness of the consolidated financial statements, etc. Specifically, we have joined the Financial Accounting Standards Foundation in order to appropriately understand the details of accounting standards, etc. and to establish a system that enables us to appropriately prepare the consolidated financial statements, etc.
   The Company also participates in seminars, etc. held by the Financial Accounting Standards Foundation.

1. [Consolidated Financial Statements and Others]

(1) [Consolidated Financial Statements]

i) [Consolidated Balance Sheets]

(Millions of yen)

December 31,		2022		2023
Assets				
Current assets				
Cash and deposits		40,366		39,108
Notes and accounts receivable	*1, *7	49,848	*1, *7	51,102
Securities		18,000		17,000
Inventories	*3	25,511	*3	24,792
Other current assets		5,309		2,904
Allowance for doubtful receivables		(50)		(47)
Total current assets		138,985		134,860
Fixed assets				
Property, plant and equipment				
Buildings and structures, net		27,467		26,998
Machinery, equipment and other, net		24,399		25,451
Tools, furniture and fixtures, net		2,908		3,242
Land		29,146		29,249
Leased assets, net		1,186		1,108
Construction in progress		5,666		10,482
Total property, plant and equipment	*5, *6	90,774	*5, *6	96,532
Intangible fixed assets		1,592		1,579
Investments and other assets				
Investment securities	*4	28,472	*4	32,912
Net defined benefit asset		2,704		3,736
Deferred tax assets		90		61
Other assets		2,522	*4	2,609
Allowance for doubtful receivables		(6)		(6)
Total investments and other assets		33,782		39,313
Total fixed assets		126,150		137,425
Total assets		265,135		272,285

See accompanying notes to consolidated financial statements.

				(Millions of yen)
December 31,		2022		2023
Liabilities				
Current liabilities				
Notes and accounts payable	*7	19,653	*7	19,091
Short-term bank loans		2,475		2,499
Lease obligations		173		174
Accrued income taxes		2,176		2,281
Accrued bonuses for employees		16		14
Provision for product recalls		—		308
Other current liabilities	*2, *7	13,296	*2, *7	17,110
Total current liabilities		37,792		41,480
Long-term liabilities				
Long-term debt		8,590		8,595
Lease obligations		1,137		1,077
Deferred tax liabilities		2,875		4,721
Net defined benefit liability		117		119
Provision for share awards		—		145
Other long-term liabilities		3,815		3,627
Total long-term liabilities		16,535		18,287
Total liabilities		54,328		59,767
Net assets				
Shareholders' equity				
Common stock		20,886		20,886
Capital surplus		15,095		14,166
Retained earnings		158,154		159,562
Treasury stock		(1,081)		(786)
Total shareholders' equity		193,053		193,828
Accumulated other comprehensive income				
Unrealized holding gain on available-for-sale securities		9,598		13,319
Translation adjustments		3,471		3,992
Remeasurements of defined benefit plans		(154)		369
Total accumulated other comprehensive income		12,915		17,681
Non-controlling interests		4,837		1,008
Total net assets		210,807		212,518
Total liabilities and net assets		265,135		272,285

See accompanying notes to consolidated financial statements.

ii) [Consolidated Statements of Income and Consolidated Statements of Comprehensive Income]
[Consolidated Statements of Income]

(Millions of yen)

Years ended December 31,	2022		2023	
Net sales	*1	160,825	*1	159,371
Cost of sales	*2	117,891	*2	118,004
Gross profit		42,933		41,367
Selling, general and administrative expenses				
Selling expenses	*3	15,911	*3	15,641
General and administrative expenses	*4, *5	12,639	*4, *5	13,225
Total selling, general and administrative expenses		28,551		28,867
Operating income		14,382		12,499
Non-operating income				
Interest income		68		259
Dividend income		1,020		1,061
Equity in earnings of affiliates		128		185
Foreign currency exchange gains		753		343
Rent income on non-current assets		182		174
Gain on sale of goods		256		107
Other		77		275
Total non-operating income		2,486		2,406
Non-operating expenses				
Interest expenses		100		131
Environment readiness fee		208		120
Loss on investments in partnerships		10		53
Inactive facilities expenses		25		13
Other		79		84
Total non-operating expenses		423		402
Ordinary profit		16,446		14,503
Extraordinary gains				
Gain on sales of investment securities		2,554		4,079
Subsidy income		283		84
Total extraordinary gains		2,837		4,163
Extraordinary losses				
Loss on disposal of non-current assets	*6	559	*6	1,255
Provision for product recalls		—	*7	311
Loss on valuation of investment securities		91		3
Loss on sales of investment securities		—		2
Impairment loss	*8	959		—
Expenses of soil pollution measures	*9	358		—
Total extraordinary losses		1,968		1,572
Income before income taxes		17,314		17,094
Income taxes -- Current		4,679		4,851
Income taxes -- Deferred		(118)		10
Total income taxes		4,560		4,862
Net income		12,754		12,232
Net income attributable to non-controlling interests		260		52
Net income attributable to owners of parent		12,494		12,179

See accompanying notes to consolidated financial statements.

[Consolidated Statements of Comprehensive Income]

(Millions of yen)

Years ended December 31,		2022		2023
Net income		12,754		12,232
Other comprehensive income				
Unrealized holding gain on available-for-sale securities		(148)		3,724
Translation adjustments		1,304		544
Remeasurements of defined benefit plans, net of tax		(573)		523
Total other comprehensive income	*1	581	*1	4,792
Comprehensive income		13,336		17,024
Comprehensive income attributable to:				
Owners of the parent		13,042		16,945
Non-controlling interests		293		79

See accompanying notes to consolidated financial statements.

iii) [Consolidated Statements of Changes in Net Assets]

(Millions of yen)

Year ended December 31, 2022	Shareholders' equity: Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Balance at beginning of the year	20,886	15,046	153,693	(230)	189,396
Cumulative effects of changes in accounting policies			(54)		(54)
Restated balance	20,886	15,046	153,638	(230)	189,341
Changes during the year:					
Cash dividends			(4,603)		(4,603)
Net income attributable to owners of parent			12,494		12,494
Purchase of treasury stock				(4,303)	(4,303)
Gain on sales of treasury stock		(2)		80	78
Cancellation of treasury stock		(3,371)		3,371	—
Transfer from retained earnings to capital surplus		3,373	(3,373)		—
Change in ownership interest of parent due to transactions with non-controlling interests		48			48
Net changes in items other than shareholders' equity					
Total changes during the year	—	48	4,516	(851)	3,712
Balance at end of the year	20,886	15,095	158,154	(1,081)	193,053

Year ended December 31, 2022	Accumulated other comprehensive income: Unrealized holding gain on available-for-sale securities	Translation adjustments	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
Balance at beginning of the year	9,749	2,199	419	12,367	4,848	206,612
Cumulative effects of changes in accounting policies						(54)
Restated balance	9,749	2,199	419	12,367	4,848	206,557
Changes during the year:						
Cash dividends						(4,603)
Net income attributable to owners of parent						12,494
Purchase of treasury stock						(4,303)
Gain on sales of treasury stock						78
Cancellation of treasury stock						—
Transfer from retained earnings to capital surplus						—
Change in ownership interest of parent due to transactions with non-controlling interests						48
Net changes in items other than shareholders' equity	(151)	1,272	(573)	548	(10)	537
Total changes during the year	(151)	1,272	(573)	548	(10)	4,250
Balance at end of the year	9,598	3,471	(154)	12,915	4,837	210,807

See accompanying notes to consolidated financial statements.

(Millions of yen)

Year ended December 31, 2023	Shareholders' equity				
	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Balance at beginning of the year	20,886	15,095	158,154	(1,081)	193,053
Cumulative effects of changes in accounting policies					—
Restated balance	20,886	15,095	158,154	(1,081)	193,053
Changes during the year:					
Cash dividends			(4,559)		(4,559)
Net income attributable to owners of parent			12,179		12,179
Purchase of treasury stock				(6,005)	(6,005)
Gain on sales of treasury stock		30		57	88
Cancellation of treasury stock		(6,242)		6,242	—
Transfer from retained earnings to capital surplus		6,212	(6,212)		—
Change in ownership interest of parent due to transactions with non-controlling interests		(928)			(928)
Net changes in items other than shareholders' equity					
Total changes during the year	—	(928)	1,407	295	775
Balance at end of the year	20,886	14,166	159,562	(786)	193,828

Year ended December 31, 2023	Accumulated other comprehensive income				Non-controlling interests	Total net assets
	Unrealized holding gain on available-for-sale securities	Translation adjustments	Remeasurements of defined benefit plans	Total accumulated other comprehensive income		
Balance at beginning of the year	9,598	3,471	(154)	12,915	4,837	210,807
Cumulative effects of changes in accounting policies						—
Restated balance	9,598	3,471	(154)	12,915	4,837	210,807
Changes during the year:						
Cash dividends						(4,559)
Net income attributable to owners of parent						12,179
Purchase of treasury stock						(6,005)
Gain on sales of treasury stock						88
Cancellation of treasury stock						—
Transfer from retained earnings to capital surplus						—
Change in ownership interest of parent due to transactions with non-controlling interests						(928)
Net changes in items other than shareholders' equity	3,721	520	523	4,765	(3,829)	936
Total changes during the year	3,721	520	523	4,765	(3,829)	1,711
Balance at end of the year	13,319	3,992	369	17,681	1,008	212,518

See accompanying notes to consolidated financial statements.

iv) [Consolidated Statements of Cash Flows]

		(Millions of yen)
Years ended December 31,	2022	2023
Operating activities		
Income before income taxes	17,314	17,094
Depreciation and amortization	10,457	10,656
Impairment loss	959	—
Increase or decrease in allowance for doubtful receivables (Minus means decrease.)	2	(4)
Increase or decrease in provision for product recalls (Minus means decrease.)	—	308
Increase or decrease in provision for share awards (Minus means decrease.)	—	145
Increase or decrease in other provisions (Minus means decrease.)	3	(1)
Increase or decrease in net defined benefit asset (Minus means increase.)	(365)	(278)
Increase or decrease in net defined benefit liability (Minus means decrease.)	(23)	1
Interest and dividend income	(1,088)	(1,321)
Interest expense	100	131
Foreign currency exchange gains or losses (Minus means gains.)	(660)	(399)
Gain or loss on sales of investment securities (Minus means gain.)	(2,554)	(4,076)
Gain or loss on valuation of investment securities (Minus means gain.)	91	3
Equity in earnings or losses of affiliates (Minus means earnings.)	(128)	(185)
Subsidy income	(283)	(84)
Gain or loss on disposal of non-current assets (Minus means gain.)	559	1,255
Increase or decrease in receivables (Minus means increase.)	(1,124)	(1,139)
Increase or decrease in inventories (Minus means increase.)	(5,795)	870
Increase or decrease in payables (Minus means decrease.)	1,138	(618)
Other	(2,862)	2,632
Subtotal	15,741	24,990
Interest and dividends received	1,190	1,367
Interest paid	(97)	(126)
Subsidy income received	398	84
Income taxes paid	(6,243)	(4,677)
Net cash provided by operating activities	10,988	21,638
Investing activities		
Increase or decrease in time deposits (Minus means increase.)	16,056	5,301
Purchases of investment securities	(623)	(290)
Proceeds from sales of investment securities	3,049	5,228
Purchases of property, plant and equipment	(20,295)	(11,660)
Other	(1,766)	(2,107)
Net cash used in investing activities	(3,579)	(3,528)

See accompanying notes to consolidated financial statements.

(Millions of yen)

Years ended December 31,	2022	2023
Financing activities		
Net increase or decrease in short-term borrowings (Minus means decrease.)	12	—
Proceeds from long-term borrowings	—	168
Repayment of long-term borrowings	(143)	(140)
Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation	(158)	(2,849)
Proceeds from sales of treasury stock	0	5
Purchases of treasury stock	(4,303)	(6,002)
Increase or decrease in deposits for purchases of treasury stock (Minus means decrease.)	—	0
Repayment of lease obligations	(171)	(165)
Cash dividends paid	(4,599)	(4,553)
Cash dividends paid to non-controlling interests	(97)	(1,987)
Net cash used in financing activities	(9,464)	(15,524)
Effect of exchange rate changes on cash and cash equivalents	390	210
Net increase or decrease in cash and cash equivalents (Minus means decrease.)	(1,664)	2,796
Cash and cash equivalents at beginning of the year	46,504	44,839
Cash and cash equivalents at end of the year	*1 44,839	*1 47,636

See accompanying notes to consolidated financial statements.

[Notes]

(Basis for Preparation of Consolidated Financial Statements)

1. Scope of consolidation

(1) Consolidated subsidiaries: 19

Toagosei (Shanghai) Management Co., Ltd. was newly established; therefore, it was included in the scope of consolidation from the fiscal year under review.

(2) Unconsolidated subsidiaries: 3

A major unconsolidated subsidiary is Toa Kenso Co., Ltd. The unconsolidated subsidiaries have an immaterial effect on the Company's consolidated financial statements as a whole in terms of the sum of total assets, the sum of net sales, the sum of net income/loss, and the sum of retained earnings.

2. Application of equity method

(1) Unconsolidated subsidiaries and affiliates which are accounted for by the equity method

Affiliates: 1 Partnership: 1

Chubu Liquid Oxygen Co., Ltd.

Elmer's & Toagosei Co.

(2) Unconsolidated subsidiaries and affiliates which are not accounted for by the equity method

Unconsolidated subsidiaries: 3

Affiliates: 10

Toyo Denka Kogyo Co., Ltd., etc.

(3) Reason for exclusion from application of equity method accounting:

Because the effect of their net income/loss and retained earnings on the Company's consolidated financial statements is immaterial and they are not important as a whole in accounting terms.

3. Fiscal year-end of consolidated subsidiaries

The fiscal year-end of consolidated subsidiaries is the same as the Company's consolidated fiscal year-end.

4. Accounting policies

(1) Basis and method for valuation of major assets

1) Securities

Available-for-sale securities

Securities other than shares, etc. that do not have a market price classified as available-for-sale securities

Securities other than shares, etc. that do not have a market price classified as available-for-sale securities are carried at fair value determined with changes in unrealized holding gain or loss, net of the applicable income taxes, included directly in net assets.

Shares, etc. that do not have a market price classified as available-for-sale securities

Shares, etc. that do not have a market price classified as available-for-sale securities are carried at cost. Cost of securities sold is determined by the moving average method.

2) Derivative

Derivative financial instruments are carried at fair value.

3) Inventories

Inventories are stated at the lower of cost or net selling value, cost being determined by the moving average method. (The balance sheet amounts are written down if there is any decrease in profitability.)

(2) Depreciation and amortization of major depreciable and amortizable assets

1) Property, plant and equipment (excluding leased assets)

Depreciation of property, plant and equipment is calculated by the straight-line method based on the estimated useful lives of the respective assets and their residual value.

The useful lives for major property, plant and equipment are as follows:

Buildings and structures	2–75 years
Machinery, equipment and other	2–17 years
Tools, furniture and fixtures	2–20 years

2) Intangible fixed assets (excluding leased assets)

Amortization of intangible fixed assets, primarily consisting of software, is calculated by the straight-line method based on the estimated useful lives of the respective assets in this category (primarily 5 years for software).

3) Leased assets (leased assets relating to finance lease transactions that do not transfer ownership)

Depreciation of leased assets shall be calculated based on the assumption that the useful lives equal the lease term and the residual value is zero.

(3) Posting standards for providing major allowance

1) Allowance for doubtful receivables

The allowance for bad debts and doubtful receivables in respect of individual bad debts is provided in an amount sufficient to cover credit losses based on the collectability of individual receivables. The allowance for receivables other than those described above is based on past credit loss experience.

2) Accrued bonuses for employees

Accrued bonuses for employees are provided at the estimated amounts expected to be paid to employees for one consolidated subsidiary.

3) Provision for share awards

In preparation for the granting of the Company's shares to employees based on the Share Granting Regulations, the estimated amount of stock benefit obligations at the end of the current fiscal year is recognized.

4) Provision for product recalls

A reasonable estimate of costs expected to be incurred in the future due to the voluntary recall of some products sold in the past is recognized.

(4) Accounting methods relating to retirement benefits

1) Periodic allocation of estimated retirement benefits

In calculating retirement benefit obligation, the benefit formula basis is applied for allocation of projected retirement benefit to the periods until the end of the current fiscal year.

2) Amortization of actuarial gain or loss and prior service costs

Actuarial gain or loss of the Company is amortized in the year following the year in which the gain or loss is recognized by the straight-line method over the average remaining years of service of the eligible employees (primarily 10 years) when incurred in each fiscal year. Prior service costs are expensed using the straight-line method over the average remaining years of service of the eligible employees (primarily 10 years) when incurred.

3) Adoption of the simplified method in SMEs

In calculating net defined benefit liability and retirement benefit expenses, some consolidated subsidiaries adopt the simplified method where the projected benefit obligation is an estimated amount of retirement benefits, assuming that all employees terminate their services on the balance sheet date for their own convenience.

(5) Revenue and expense recognition standards

In accordance with the following five steps, the Group recognizes revenue at the amount expected to be received in exchange for promised goods or services when control of said promised goods or services is transferred to the customer.

Step 1: Identify the contract(s) with a customer
Step 2: Identify the performance obligations in the contract
Step 3: Determine the transaction price
Step 4: Allocate the transaction price to the performance obligations in the contract
Step 5: Recognize revenue when (or as) a performance obligation is satisfied

The Group is engaged primarily in the manufacture and sale of products in each of the Commodity Chemicals Business, Polymer & Oligomer Business, Adhesive Material Business, Performance Chemicals Business, and Plastics Business. The performance obligation is generally deemed to be satisfied when the customer obtains control of said products at the time of their delivery, and revenue from sales of said products is recognized at the time of delivery. With domestic sales, the normal period is from the time of shipment to the time that control of the products is transferred to the customer. Therefore, revenue is recognized at the time of shipment in accordance with the treatment of shipping standards, etc. stipulated in Paragraph 98 of the Implementation Guidance on Accounting Standard for Revenue Recognition.

Revenue is calculated on the basis of the consideration promised in the contract with the customer, less returned goods, discounts, rebates, etc., to the extent that it is highly probable that there will be no significant reversal of revenue. The promised consideration is collected primarily within one year of the time the performance obligation is satisfied, and does not include a significant financing component.

Revenue from transactions for which the Group acts as an agent is recognized on a net basis.

(6) Foreign currency translation

Receivables and payables in foreign currencies are translated into yen at the rates of exchange in effect at the balance sheet date, and the resulting translation gain or loss is charged or credited to income.

Assets and liabilities of the foreign consolidated subsidiaries are translated at the same exchange rates. Revenue and expense accounts of the foreign consolidated subsidiaries are translated at periodical average rates during the fiscal year. The resulting translation gain or loss is included in “Translation adjustments” and “Non-controlling interests” under “Net assets.”

(7) Goodwill amortization method and amortization period

The amortization of goodwill is determined on an individual basis, and goodwill is amortized evenly over a reasonable number of years within a period of 20 years.

(8) Scope of funds in the consolidated statements of cash flows

Funds (cash and cash equivalents) in the consolidated statements of cash flows comprise cash on hand, bank deposits available for withdrawal on demand and readily available short-term investments with maturities of three months or less, which are exposed to minor risk of fluctuation in value.

(Significant Accounting Estimates)

For the fiscal year ended December 31, 2022

Impairment of fixed assets

(1) Amounts recognized in the consolidated financial statements

	(Millions of yen)
Property, plant and equipment and intangible fixed assets	92,367
Impairment loss	959

(2) Information on significant accounting estimates pertaining to identified items

The Group regularly assesses signs of impairment for each asset group and estimates the recoverable amount in the event of such signs. Future cash flows expected to be obtained from the relevant asset group are used to estimate the recoverable amount. Future cash flow forecasts are formulated in consideration of future market trends and the state of business activities but in the event that future cash flow forecasts are amended, or if it is determined that the amount is unrecoverable, an impairment loss may be recognized.

For the fiscal year ended December 31, 2023

1. Impairment of fixed assets

(1) Amounts recognized in the consolidated financial statements

	(Millions of yen)
Property, plant, equipment and intangible fixed assets	98,111
Impairment loss	—

(2) Information on significant accounting estimates pertaining to identified items

The Group regularly assesses signs of impairment for each asset group and estimates the recoverable amount in the event of such signs. Future cash flows expected to be obtained from the relevant asset group are used to estimate the recoverable amount. Future cash flow forecasts are formulated in consideration of future market trends and the state of business activities but in the event that future cash flow forecasts are amended, or if it is determined that the amount is unrecoverable, an impairment loss may be recognized.

2. Assessment of the necessity of recognizing impairment on the fixed assets of Toagosei Singapore Pte Ltd. (hereinafter, “TGS”)

(1) Amounts recognized in the consolidated financial statements

	(Millions of yen)
Property, plant, equipment and intangible fixed assets	1,470
Impairment loss	—

(Note) The above amounts represent the amounts of property, plant, equipment and intangible fixed assets owned by TGS of the ¥98,111 million in property, plant, equipment and intangible fixed assets recognized in the consolidated financial statements for the current fiscal year.

(2) Information on significant accounting estimates pertaining to identified items

a. Calculation method

As a result of assessing signs of impairment as described in “1. Impairment of fixed assets” above, a downturn in profitability in the fiscal year under review was observed at TGS, a consolidated subsidiary operating in the Commodity Chemicals Business, due to changes in the business environment, and signs of impairment were assessed. However, the impairment test indicated that the present value of future cash flows obtained from the asset group consisting of the property, plant and equipment and intangible fixed assets of TGS exceeded their book value. As a result, an impairment loss was not recognized. Estimates of future cash flows resulting from the continued use of the asset group are based on the business plan and the growth rate estimated within the long-term average growth rate of the market for a period exceeding the period during which the business plan was formulated.

b. Key assumptions

The key assumptions used in estimating present value of future cash flows are the sales volume and discount rates that form the basis of the business plan.

c. Impact on the consolidated financial statements for the next fiscal year

The abovementioned key assumptions for estimating present value of future cash flows are subject to uncertainty, and an impairment loss may be incurred in the event of a reduction in sales volume, an increase in the discount rate, or any other eventuality.

(Changes in Accounting Policies)

Application of the Implementation Guidance on Accounting Standard for Fair Value Measurement

The “Implementation Guidance on Accounting Standard for Fair Value Measurement” (ASBJ Guidance No. 31 issued on June 17, 2021; hereinafter, “Guidance on Fair Value Measurement Standard”) has been applied from the beginning of the current fiscal year. In accordance with the transitional treatment stipulated in Paragraph 27-2 of the Guidance on Fair Value Measurement Standard, the new accounting policy stipulated in the Guidance on Fair Value Measurement Standard will be applied prospectively. There is no impact on the consolidated financial statements for the current fiscal year.

(Changes in Presentation Method)

(Notes to Consolidated Statements of Income)

“Loss on investments in partnerships,” which was included in “Other” under “Non-operating expenses” in the previous fiscal year, is presented separately from the current fiscal year due to its increased materiality. In order to reflect this change in presentation method, the consolidated financial statements for the previous fiscal year have been reclassified.

As a result, the ¥89 million shown in “Other” under “Non-operating expenses” in the consolidated statements of income for the previous fiscal year has been reclassified as “Loss on investments in partnerships” of ¥10 million and “Other” of ¥79 million.

(Additional Information)

(Employee Stock Compensation Plan)

In April 2023, the Company introduced an employee stock compensation plan (hereinafter, the “Plan”) with the purpose of enhancing the welfare and benefits plan for the Company’s employees (hereinafter, the “Employees”), to further promote the execution of business operations aiming to improve business performance by further increasing the Employees’ awareness toward the Company’s business performance and increasing the share price, and to enhance the Company’s corporate value over the medium to long term.

(1) Overview of the transactions

The Plan is an incentive plan whereby money contributed by the Company will be used to establish a trust (hereinafter, the “Trust”), and the Trust will acquire the common stock (hereinafter, the “Company Shares”), and then the Company Shares will be granted to the Employees through the Trust based on points awarded to the Employees who satisfy certain conditions. The points shall be awarded to the Employees based on his/her job title/duties pursuant to the Share Granting Regulations established by the Company’s Board of Directors. The number of the Company Shares to be granted to each of the Employees will be determined based on the number of points he/she was awarded.

The funds used to acquire the Company Shares by the Trust will be provided in full by the Company; thus, the Employees do not bear any burden.

(2) Company shares remaining in the trust

The Company Shares remaining in the Trust are recorded as treasury stock in net assets based on the book value in the Trust (excluding the amount of ancillary expenses). The book value and number of said treasury stock are ¥474 million and 386 thousand shares, respectively, at the end of the current fiscal year.

(Notes to Consolidated Balance Sheets)

*1 Amount of receivables arising from contracts with customers in notes and accounts receivable

(Millions of yen)

December 31,	2022	2023
Notes receivable - trade	10,645	11,645
Accounts receivable - trade	39,203	39,456

*2 Amount of contract liabilities in other current liabilities

(Millions of yen)

December 31,	2022	2023
Contract liabilities	49	37

*3. Components of inventories:

(Millions of yen)

December 31,	2022	2023
Merchandise and finished products (including semi-finished products)	17,309	17,321
Work in process	599	567
Raw materials and supplies	7,602	6,903
Total	25,511	24,792

*4. Investments in unconsolidated subsidiaries and affiliates were as follows:

(Millions of yen)

December 31,	2022	2023
Investment securities (stocks)	1,624	1,640
Other (investments and other assets)	—	32

*5. Assets pledged as collateral:

December 31, 2022

Assets pledged as collateral		
Classification	Book value (Millions of yen)	Type of security interests
Buildings and structures	9,883	Plant foundation
Machinery, equipment and other	13,632	ditto
Tools, furniture and fixtures	1,556	ditto
Land	4,448	ditto
Total	29,521	

(Note) The assets described above are pledged as collateral, but there are no corresponding secured obligations.

December 31, 2023

Assets pledged as collateral		
Classification	Book value (Millions of yen)	Type of security interests
Buildings and structures	9,814	Plant foundation
Machinery, equipment and other	15,234	ditto
Tools, furniture and fixtures	1,663	ditto
Land	4,454	ditto
Total	31,166	

(Note) The assets described above are pledged as collateral, but there are no corresponding secured obligations.

*6. Accumulated depreciation of property, plant and equipment:

(Millions of yen)

December 31,	2022	2023
	211,779	217,751

*7. Notes matured at the balance sheet date and cash settlement payable as of the balance sheet date (method of cash settlement payable at due date with the same terms as notes) are treated as if they were settled on the maturity date. Because the balance sheet date of the current fiscal year fell on a holiday for financial institutions, the notes matured and cash settlement payable at the balance sheet date were excluded from the balance as of the end of the current fiscal year.

(Millions of yen)

December 31,	2022	2023
Notes and accounts receivable	5,689	5,731
Notes and accounts payable	2,264	2,223
Other (Current liabilities)	570	696

8. Contingent liabilities and secured liabilities:

(Millions of yen)

December 31,		2022	2023
Employees	Guarantees against loans from financial institutions	40	15
Hokuriku Liquid Oxygen Co., Ltd.	ditto	63	46
Total		103	61

(Notes to Consolidated Statements of Income)

*1. For net sales, the Company does not disaggregate revenues from contracts with customers and other sources of revenue. The amount of revenue from contracts with customers is presented in (Revenue Recognition) 1. Disaggregation of revenue from contracts with customers in the Notes to (1) Consolidated Financial Statements.

*2. Inventories as at the fiscal year-end represent the book value written-down due to a decrease in profitability. The following losses on devaluation of inventories were included in cost of sales (the amount stated is the amount after offset by reversal):

Years ended December 31,	2022	2023 (Millions of yen)
	105	215

*3. Major items of selling expenses:

Years ended December 31,	2022	2023 (Millions of yen)
Transportation expenses	8,936	8,292
Salaries	2,121	2,195
Bonuses	935	835
Retirement benefit expenses	112	127
Depreciation and amortization	148	139

*4. Major items of general and administrative expenses:

Years ended December 31,	2022	2023 (Millions of yen)
Salaries	2,707	2,776
Bonuses	1,442	1,269
Retirement benefit expenses	182	200
Depreciation and amortization	1,434	1,429

*5. Research and development cost included in general and administrative expenses and manufacturing cost:

Years ended December 31,	2022	2023 (Millions of yen)
	4,748	5,039

*6. Components of loss on disposal of non-current assets:

Years ended December 31,	2022	2023 (Millions of yen)
Machinery, equipment and other	72	50
Disposal costs	244	1,114
Buildings and structures, etc.	241	89

*7. Provision for product recalls:

Year ended December 31, 2022

Not applicable.

Year ended December 31, 2023

In accordance with the decision by Aron Kasei Co., Ltd., a consolidated subsidiary of the Company, to voluntary recall some of the products it had sold in the past, a total of ¥311 million has been recognized as extraordinary losses, consisting of expenses incurred during the current fiscal year and expenses expected to be incurred in the future.

*8. Impairment loss:

Year ended December 31, 2022

The Company and its consolidated subsidiaries have recognized impairment loss on the following class of assets:

Location	Major use	Category	Impairment loss (Millions of yen)
Minami-ku, Yokohama-shi	Company housing and dormitory	Land and buildings	728
Suita-shi, Osaka Prefecture	Dormitory	Land	231

(Outline and grouping method)

The Company operates multiple businesses and has grouped business-use assets according to the minimum unit in each of the Commodity Chemicals, Polymer & Oligomer, Adhesive Material, and Performance Chemicals segments. In addition, consolidated subsidiaries mainly operate a single business, and the companies themselves form the minimum asset group.

The Company wrote down the book values of company housing and a dormitory in Yokohama-shi due to the decision to sell the land due to the discontinued use of the dormitory, and the book value of a dormitory in Osaka Prefecture due to a significant reduction in the market value of the land, to their respective recoverable amounts. Accordingly, ¥959 million of impairment loss was recognized under extraordinary losses in the statement of income.

(Components of impairment loss)

The impairment loss was ¥640 million for land, ¥163 million for buildings and ¥155 million for other.

(Calculation of recoverable amounts, etc.)

The recoverable amounts applicable to assets for which impairment losses were recognized for the corresponding year ended December 31, 2022 were measured using the net realizable value for land, and the net realizable value is calculated on the basis of the appraisal value. Fixed assets other than land are assessed on the basis of the memorandum value.

Year ended December 31, 2023

Not applicable.

*9. Expenses of soil pollution measures:

Year ended December 31, 2022

Expenses related to the removal, etc. of soil and contaminated groundwater at the planned construction site for offices, etc. of the Company's Nagoya Plant and the planned construction site for company housing, etc. on a site owned in Tsurumi-ku, Yokohama-shi are recognized under extraordinary losses.

Year ended December 31, 2023

Not applicable.

(Notes to Consolidated Statements of Comprehensive Income)

*1. Reclassification adjustment and tax effect of other comprehensive income:

Years ended December 31,	2022	2023
	(Millions of yen)	
Unrealized holding gain on available-for-sale securities		
Amount arising during the fiscal year	2,329	9,414
Reclassification adjustment	(2,554)	(4,076)
Amount before tax effect	(225)	5,337
Tax effect	76	(1,613)
Unrealized holding gain on available-for-sale securities	(148)	3,724
Translation adjustments		
Amount arising during the fiscal year	1,304	544
Amount before tax effect	1,304	544
Tax effect	—	—
Translation adjustments	1,304	544
Remeasurements of defined benefit plans, net of tax		
Amount arising during the fiscal year	(744)	757
Reclassification adjustment	(81)	(4)
Amount before tax effect	(825)	753
Tax effect	252	(230)
Remeasurements of defined benefit plans, net of tax	(573)	523
Total other comprehensive income	581	4,792

(Notes to Consolidated Statements of Changes in Net Assets)

Year ended December 31, 2022

1. Matters related to the type and total number of issued shares and the type and total number of shares of treasury stock:

(Thousands of shares)

Type of shares	Number of shares at beginning of the year	Increase in the number of shares in the year	Decrease in the number of shares in the year	Number of shares at end of the year
Issued shares				
Common stock (Note 1)	125,200	—	3,100	122,100
Total	125,200	—	3,100	122,100
Treasury stock				
Common stock (Notes 2, 3)	183	3,983	3,172	994
Total	183	3,983	3,172	994

(Notes) 1. The decrease in the number of issued shares (common stock) is due to cancellation of treasury stock.

2. The increase in the number of treasury stock (common stock) consists of the increase of 3,978 thousand shares due to treasury stock acquisition and the increase of 5 thousand shares due to purchase of less-than-one-unit shares.

3. The decrease in the number of treasury stock (common stock) consists of the decrease of 3,100 thousand shares due to cancellation of treasury stock, the decrease of 71 thousand shares due to disposal of treasury stock as the restricted share-based remuneration and the decrease of 0 thousand shares due to sales of less-than-one-unit shares.

2. Matters related to dividends

(1) Amount of dividends paid

Resolution	Type of shares	Gross amount (Millions of yen)	Dividend per share (Yen)	Record date	Effective date
March 30, 2022 109th Annual Shareholders' Meeting	Common stock	2,375	19.00	December 31, 2021	March 31, 2022
July 29, 2022 Board of Directors	Common stock	2,228	18.00	June 30, 2022	September 6, 2022

(2) Dividends whose record date was in the year ended December 31, 2022 but whose effective date is in the year ending December 31, 2023

Resolution	Type of shares	Gross amount (Millions of yen)	Source of dividends	Dividend per share (Yen)	Record date	Effective date
March 30, 2023 110th Annual Shareholders' Meeting	Common stock	2,179	Retained earnings	18.00	December 31, 2022	March 31, 2023

Year ended December 31, 2023

1. Matters related to the type and total number of issued shares and the type and total number of shares of treasury stock:

(Thousands of shares)

Type of shares	Number of shares at beginning of the year	Increase in the number of shares in the year	Decrease in the number of shares in the year	Number of shares at end of the year
Issued shares				
Common stock (Note 1)	122,100	—	5,000	117,100
Total	122,100	—	5,000	117,100
Treasury stock				
Common stock (Notes 2, 3, 4)	994	4,712	5,071	636
Total	994	4,712	5,071	636

(Notes)
1. The decrease in the number of issued shares (common stock) is due to cancellation of treasury stock.
2. The increase in the number of treasury stock (common stock) consists of the increase of 4,708 thousand shares due to treasury stock acquisition and the increase of 4 thousand shares due to purchase of less-than-one-unit shares.
3. The decrease in the number of treasury stock (common stock) consists of the decrease of 5,000 thousand shares due to cancellation of treasury stock, the decrease of 69 thousand shares due to disposal of treasury stock as the restricted share-based remuneration for Directors, etc., the decrease of 1 thousand shares due to disposal of treasury stock under the Employee Stock Compensation Plan, and the decrease of 0 thousand shares due to sales of less-than-one-unit shares.
4. The number of treasury stock (common stock) at end of the year includes 386 thousand shares of the Company held by the employee share granting trust.

2. Matters related to dividends

(1) Amount of dividends paid

Resolution	Type of shares	Gross amount (Millions of yen)	Dividend per share (Yen)	Record date	Effective date
March 30, 2023 110th Annual Shareholders' Meeting	Common stock	2,179	18.00	December 31, 2022	March 31, 2023
July 31, 2023 Board of Directors	Common stock	2,379	20.00	June 30, 2023	September 6, 2023

(Note) The total amount of dividends determined by resolution of the meeting of the Board of Directors held on July 31, 2023 includes ¥7 million in dividends for shares of the Company held by the employee share granting trust.

(2) Dividends whose record date was in the year ended December 31, 2023 but whose effective date is in the year ending December 31, 2024

Resolution	Type of shares	Gross amount (Millions of yen)	Source of dividends	Dividend per share (Yen)	Record date	Effective date
March 28, 2024 111th Annual Shareholders' Meeting	Common stock	3,856	Retained earnings	33.00	December 31, 2023	March 29, 2024

(Note) The total amount of dividends determined by resolution of the Annual Shareholders' Meeting held on March 28, 2024 includes ¥12 million in dividends for shares of the Company held by the employee share granting trust.

(Notes to Consolidated Statements of Cash Flows)

*1. Reconciliation of the balance of cash and cash equivalents in the consolidated statement of cash flows to cash and deposits included in the consolidated balance sheet:

(Millions of yen)

Years ended December 31,	2022	2023
Cash and deposits	40,366	39,108
Securities	18,000	17,000
Time deposits with terms in excess of 3 months	(11,526)	(6,471)
Negotiable certificate of deposit with terms in excess of 3 months	(2,000)	(2,000)
Cash and cash equivalents	44,839	47,636

(Lease Transactions)

1. Finance leases (lessee)

Finance lease transactions that do not transfer ownership

1) Leased assets

Property, plant and equipment

Consists of buildings and structures, machinery, equipment and other, and tools, furniture and fixtures

2) Depreciation of leased assets

As described in "4. Accounting policies (2) Depreciation and amortization of major depreciable and amortizable assets."

2. Operating leases

Future minimum lease payments under noncancelable operating leases:

(Millions of yen)

December 31,	2022	2023
Due within one year	16	17
Due after one year	—	—
Total	16	17

(Financial Instruments)

1. Matters related to the status of financial instruments

(1) Policies on financial instruments
When managing surplus funds, the Group limits the application of such funds to highly secure financial assets, mainly short-term bank deposits, and it procures funds mainly through bank borrowings. Derivative transactions are used to hedge interest fluctuation risk present in borrowings, but are not used for speculative or trading purposes.

(2) Description of financial instruments and associated risks
Notes and accounts receivable, which represent trade receivables, are exposed to client-based credit risk. Furthermore, foreign currency denominated trade receivables are also subject to exchange rate fluctuation risks. In order to counter such risk, foreign currency borrowings are used when necessary as a means of hedging the net position of foreign currency denominated trade payables. Securities and investment securities are primarily negotiable certificate of deposits and shares related to businesses, and are thus exposed to risk stemming from fluctuations in market value.
Notes and accounts payable, which represent trade payables, are due within one year. A portion of these are foreign currency denominated items related to payment for raw material imports, which are subject to exchange rate fluctuation risk. These are constantly maintained within the balance of receivables denominated in the same foreign currencies. Borrowings are used to procure funds necessary for operational transactions and capital expenditures. A portion of these borrowings bearing variable interest rates are exposed to interest rate fluctuation risk. Derivative transactions (interest rate swap transactions) are used as when necessary a means of hedging.

(3) Risk management systems related to financial instruments

1) Management of credit risk (risk associated with non-performance of a contract by a business partner etc.)
The departments in charge of Company operations regularly monitor the trade receivable status of all business partners in accordance with the Regulations on Selling in order to identify business partner-based credit risk associated with the deterioration of financial circumstances or other causes at an early stage and reduce it. In case of the consolidated subsidiaries, their divisions or accounting departments also manage the financial and credit status of their business partners pursuant to their own regulations. Derivative transactions are entered into only with highly rated financial institutions.
The maximum credit risk value as of the date of closing of consolidated accounts for the current term is expressed by the value of financial assets in the consolidated balance sheet which are subject to credit risk.

2) Management of market risk (risk associated with exchange rate and interest rate fluctuations)
When necessary, the Company uses borrowings denominated in foreign currencies to hedge its foreign currency denominated trade receivables and trade payables. Interest rate swaps are used when necessary to reduce risk associated with fluctuations in interest expenses related to borrowings.
The Company regularly confirms the fair value of securities and investment securities and the financial condition of the issuers (its business partners) and continually reviews its shareholdings with a view to maintaining and strengthening comprehensive relations with its business partners and in consideration of the economic rationality of holding their shares.
Derivative transactions are executed and managed in accordance with internal regulations that stipulate transaction authority.

3) Management of liquidity risk associated with procuring funds (the risk of being unable to execute a payment on the due date)
The Company and its consolidated subsidiaries have formulated cash flow management plans and manage liquidity risk by, for example, keeping a certain amount of cash reserves on hand.

(4) Supplementary information regarding the fair value of financial instruments
Variable factors are incorporated into the calculations of the fair value of financial instruments, and different fair values are possible depending on the differing assumptions used.

2. Fair value of financial instruments

The fair value and carrying value of financial instruments and the difference between both values are shown below. In addition, “cash and deposits,” “notes and accounts receivable,” “notes and accounts payable,” and “short-term bank loans” are cash, and as they are settled within a short span of time, the fair value is virtually identical to the carrying value. Therefore, notes are omitted.

(Millions of yen)

December 31, 2022	Carrying value	Fair value	Difference
(1) Securities and investment securities: Available-for-sale securities	43,056	43,056	—
Total assets	43,056	43,056	—
(1) Long-term debt	8,590	8,551	(38)
Total liabilities	8,590	8,551	(38)

Shares, etc. that do not have a market price, are not included in the table above. (Please refer to Note 1.)

(Millions of yen)

December 31, 2023	Carrying value	Fair value	Difference
(1) Securities and investment securities: Available-for-sale securities	46,421	46,421	—
Total assets	46,421	46,421	—
(1) Long-term debt	8,595	8,604	8
Total liabilities	8,595	8,604	8

Shares, etc. that do not have a market price, are not included in the table above. (Please refer to Note 1.)

(Note 1)
The following items are not included in "Assets: (1) Securities and investment securities."

Shares, etc. that do not have a market price

	(Millions of yen)
December 31, 2022	Carrying value
Investments in subsidiaries and affiliates	
Investments in unconsolidated subsidiaries and affiliates	1,624
Available-for-sale securities:	
Unlisted securities	1,209
Investment limited partnership	581
Total	3,415

Shares, etc. that do not have a market price

	(Millions of yen)
December 31, 2023	Carrying value
Investments in subsidiaries and affiliates	
Investments in unconsolidated subsidiaries and affiliates	1,640
Available-for-sale securities:	
Unlisted securities	1,057
Investment limited partnership	793
Total	3,490

* For investments in investment business limited partnerships, market value disclosure is not required based on paragraphs 24-16 of the "Implementation Guidance on Accounting Standard for Fair Value Measurement" (ASBJ Guidance No. 31 issued on June 17, 2021; hereinafter, "Guidance on Fair Value Measurement Standard")

(Note 2)
The redemption schedule for monetary claims, held-to-maturity securities and available-for-sale securities with maturities subsequent to the consolidated balance sheet date:

(Millions of yen)

December 31, 2022	1 year or less	Over 1 year to 5 years	Over 5 years to 10 years	Over 10 years
Deposits	40,364	—	—	—
Notes and accounts receivable	49,848	—	—	—
Securities and investment securities:				
Available-for-sale securities with maturities (negotiable certificate of deposit)	18,000	—	—	—
Total	108,213	—	—	—

(Millions of yen)

December 31, 2023	1 year or less	Over 1 year to 5 years	Over 5 years to 10 years	Over 10 years
Deposits	39,106	—	—	—
Notes and accounts receivable	51,102	—	—	—
Securities and investment securities:				
Available-for-sale securities with maturities (negotiable certificate of deposit)	17,000	—	—	—
Total	107,208	—	—	—

(Note 3)
The repayment schedule for long-term debt, lease obligations, and other interest-bearing debt subsequent to the consolidated balance sheet date:

(Millions of yen)

December 31, 2022	1 year or less	Over 1 year to 2 years	Over 2 years to 3 years	Over 3 years to 4 years	Over 4 years to 5 years	Over 5 years
Short-term bank loans	2,335	—	—	—	—	—
Long-term debt	140	140	3,840	4,540	70	—
Lease obligations	173	157	136	131	121	591
Total	2,649	297	3,976	4,671	191	591

(Millions of yen)

December 31, 2023	1 year or less	Over 1 year to 2 years	Over 2 years to 3 years	Over 3 years to 4 years	Over 4 years to 5 years	Over 5 years
Short-term bank loans	2,335	—	—	—	—	—
Long-term debt	164	3,864	4,564	94	24	48
Lease obligations	174	153	148	136	128	510
Total	2,673	4,018	4,712	230	152	558

3. Fair value information by level within the fair value of financial instruments

The fair value of financial instruments is classified into the following three levels according to the observability and materiality of inputs used to measure fair value.

Level 1 fair value: Fair value measured using observable inputs, i.e. quoted prices in active markets for assets or liabilities that are the subject of the measurement

Level 2 fair value: Fair value measured using observable inputs other than Level 1 inputs

Level 3 fair value: Fair value measured using unobservable inputs

If multiple inputs are used that are significant to the fair value measurement, the fair value measurement is classified in its entirety in the level of the lowest level input that is significant to the entire measurement.

(1) Financial instruments measured at fair value in the consolidated balance sheet

December 31, 2022	Fair value (Millions of yen)			
	Level 1	Level 2	Level 3	Total
Securities and investment securities				
Available-for-sale securities				
Stocks	25,056	—	—	25,056
Total assets	25,056	—	—	25,056

December 31, 2023	Fair value (Millions of yen)			
	Level 1	Level 2	Level 3	Total
Securities and investment securities				
Available-for-sale securities				
Stocks	29,421	—	—	29,421
Total assets	29,421	—	—	29,421

(2) Financial instruments other than those measured at fair value in the consolidated balance sheet

December 31, 2022	Fair value (Millions of yen)			
	Level 1	Level 2	Level 3	Total
Securities and investment securities				
Available-for-sale securities				
Other	—	18,000	—	18,000
Total assets	—	18,000	—	18,000
Long-term debt	—	8,551	—	8,551
Total liabilities	—	8,551	—	8,551

December 31, 2023	Fair value (Millions of yen)			
	Level 1	Level 2	Level 3	Total
Securities and investment securities				
Available-for-sale securities				
Other	—	17,000	—	17,000
Total assets	—	17,000	—	17,000
Long-term debt	—	8,604	—	8,604
Total liabilities	—	8,604	—	8,604

(Note) A description of the valuation techniques and inputs used in the fair value measurements

Securities and investment securities

Listed shares are valued using quoted prices. As listed shares are traded in active markets, their fair value is classified as Level 1. In addition, negotiable certificates of deposit included in Other are classified as Level 2 because they are not traded frequently in the public market and are not considered to have quoted prices in active markets.

Long-term debt

The fair value of long-term debt is measured using the present value by discounting the sum of principal and interest by the interest rate assumed for new borrowings of the same type, and is classified as Level 2.

(Securities)

1. Marketable securities classified as available-for-sale securities:

(Millions of yen)

December 31, 2022	Type	Carrying value	Acquisition cost	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition cost	(1) Stock	23,236	9,061	14,174
Securities whose acquisition cost exceeds their carrying value or more	(1) Stock	1,820	2,293	(473)
	(2) Other	18,000	18,000	—
	Subtotal	19,820	20,293	(473)
Total		43,056	29,355	13,701

(Millions of yen)

December 31, 2023	Type	Carrying value	Acquisition cost	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition cost	(1) Stock	27,984	8,758	19,226
Securities whose acquisition cost exceeds their carrying value or more	(1) Stock	1,436	1,536	(99)
	(2) Other	17,000	17,000	—
	Subtotal	18,436	18,536	(99)
Total		46,421	27,294	19,127

2. Marketable securities classified as available-for-sale securities sold during the fiscal year ended:

December 31, 2022 (Millions of yen)

Classification	Sales amount	Total gain on sales	Total loss on sales
Stock	3,049	2,554	—

December 31, 2023 (Millions of yen)

Classification	Sales amount	Total gain on sales	Total loss on sales
Stock	5,228	4,079	2

3. Other securities for which impairment loss was recognized:

An impairment loss of investment securities in an amount of ¥91 million (marketable securities classified as available-for-sale securities of ¥91 million) was recognized for the previous fiscal year.

An impairment loss of investment securities in an amount of ¥3 million (other securities that do not have a market price of ¥3 million) was recognized for the current fiscal year.

In the accounting for impairment, an impairment loss is recognized for all securities of which the fair values as of the consolidated balance sheet date decline more than 50% from the acquisition cost, and at an amount deemed necessary for securities of which the fair values as of the same date decline between 30% and 50% in consideration of recoverability and other factors.

An impairment loss is recognized for other securities that do not have a market price of which the effective market values as of the consolidated balance sheet date decline more than 50% from the acquisition cost unless there is sufficient evidence of recoverability.

(Retirement Benefit Plans)

1. Outline of adopted retirement benefit plans for employees
   The Company and its consolidated subsidiaries adopt a defined benefit plan and a defined contribution plan, either funded or unfunded, to provide for retirement benefits for employees.
   Under defined benefit corporate pension plans (all the plans are funded), a lump-sum or annuity is paid based on accumulated points according to a qualification grade.
   Under defined contribution pension plans, a premium calculated by the qualification grade is expensed when contributed.
   Under retirement lump-sum payment plans (consisting of funded plans and unfunded plans), salaries and lump-sum payments based on length of service are paid as retirement benefits.
   In addition, under the retirement lump-sum payment plans adopted by some of the consolidated subsidiaries, net defined benefit liability and retirement benefit expenses are calculated in accordance with the simplified plan.

2. Defined benefit plan

(1) Reconciliation of opening and closing balance of retirement benefit obligation (excluding plans using the simplified method)

(Millions of yen)

Years ended December 31,	2022	2023
Balance of retirement benefit obligation at beginning of year	11,425	11,390
Service cost	548	547
Actuarial gain or loss	58	(74)
Retirement benefits paid	(642)	(578)
Balance of retirement benefit obligation at end of year	11,390	11,285

(2) Reconciliation of opening and closing balance of plan assets (excluding plans using the simplified method)

(Millions of yen)

Years ended December 31,	2022	2023
Balance of plan assets at beginning of year	14,590	14,095
Expected return on plan assets	146	135
Actuarial gain or loss	(686)	683
Contribution from employer	687	686
Retirement benefits paid	(642)	(578)
Balance of plan assets at end of year	14,095	15,021

(3) Reconciliation of opening and closing balance of net defined benefit liability under the plans using the simplified method

(Millions of yen)

Years ended December 31,	2022	2023
Balance of net defined benefit liability at beginning of year	140	117
Retirement benefit expenses	9	21
Retirement benefits paid	(25)	(12)
Contribution to plan	(5)	(5)
Other	(0)	(0)
Balance of net defined benefit liability at end of year	117	119

(4) Reconciliation of the ending balance of retirement benefit obligations and plan assets and the net defined benefit liability and the net defined benefit asset included in the consolidated balance sheets

(Millions of yen)

December 31,	2022	2023
Funded retirement benefit obligations	11,595	11,475
Plan assets	(14,209)	(15,123)
	(2,613)	(3,647)
Unfunded projected benefit obligations	26	30
Net amount of relevant liabilities and assets on the consolidated balance sheets	(2,587)	(3,617)
Net defined benefit liability	117	119
Net defined benefit asset	(2,704)	(3,736)
Net amount of relevant liabilities and assets on the consolidated balance sheets	(2,587)	(3,617)

(Note) Includes the plans using the simplified method.

(5) Retirement benefit expenses and components thereof

(Millions of yen)

Years ended December 31,	2022	2023
Service cost	548	547
Expected return on plan assets	(146)	(135)
Amortization of actuarial gain or loss	(59)	17
Amortization of prior service cost	(21)	(21)
Retirement benefit expenses calculated using the simplified method	9	21
Retirement benefit expenses related to the defined benefit plan	330	429

(6) Remeasurements of defined benefit plans, net of tax
The components of items (before tax) reported under remeasurements of the defined benefit plans, net of tax were as follows:

(Millions of yen)

Years ended December 31,	2022	2023
Prior service cost	(21)	(21)
Actuarial gain or loss	(804)	775
Total	(825)	753

(7) Remeasurements of defined benefit plans

The components of items (before tax) reported under remeasurements of the defined benefit plans were as follows:

(Millions of yen)

December 31,	2022	2023
Unrecognized prior service cost	(150)	(129)
Unrecognized actuarial gain or loss	373	(401)
Total	222	(531)

(8) Matters regarding plan assets

1) Major components of the plan assets

The percentages of the major asset types accounting for the total plan assets were as follows:

December 31,	2022	2023
Bonds	39.3%	38.6%
Stocks	18.5	21.0
General accounts of life insurance companies	37.7	36.1
Other	4.6	4.3
Total	100.0	100.0

2) Method for setting the long-term rate of the expected return on plan assets

To determine the long-term rate of the expected return on plan assets, we take into account the current and projected distribution of plan assets and the current and anticipated long-term yield rates of the various assets that constitute the plan assets.

(9) Matters regarding the assumptions for actuarial calculations

Key assumptions for actuarial calculations (representing weighted averages)

Years ended December 31,	2022	2023
Discount rate	0.0%	0.0%
Long-term rate of the expected return on plan assets	1.0	1.0

3. Defined contribution plan

The amounts required to be contributed by the Company and consolidated subsidiaries are ¥305 million for the previous fiscal year and ¥301 million for the current fiscal year.

(Stock Options, etc.)

Not applicable.

(Tax Effect Accounting)

1. Significant components of deferred tax assets and liabilities:

(Millions of yen)

December 31,	2022	2023
Deferred tax assets		
Elimination of unrealized profit	1,398	1,398
Net operating loss carry forwards	1,209	1,041
Depreciation	637	691
Impairment loss	719	662
Accrued costs of removing facilities	498	365
Valuation loss on inventories	141	202
Accrued enterprise tax	185	195
Expenses of soil pollution measures	189	180
Loss on valuation of investment securities	156	153
Provision for product recalls	—	94
Loss on valuation of golf club membership	41	44
Net defined benefit liability	35	35
Other	307	202
Gross deferred tax assets	5,521	5,267
Valuation allowance	(1,746)	(1,575)
Total deferred tax assets	3,774	3,692
Deferred tax liabilities		
Unrealized holding gain on available-for-sale securities	(4,134)	(5,794)
Net defined benefit asset	(825)	(1,140)
Reserve for reduction entry	(996)	(958)
Undistributed earnings of subsidiaries and affiliates	(369)	(255)
Securities returned from retirement benefit trust	(170)	(122)
Other	(62)	(79)
Total deferred tax liabilities	(6,558)	(8,351)
Net deferred tax assets (liability)	(2,784)	(4,659)

2. Major reasons for which the effective tax rates reflected in the consolidated statements of income differ from the statutory tax rates:

December 31,	2022	2023
Statutory tax rate	30.53%	30.53%
Effect of:		
Permanent difference – entertainment expenses	0.16	0.21
Permanent difference – dividend income	(0.44)	(0.47)
Inhabitants' per capita taxes	0.43	0.43
Equity in earnings of affiliates	(0.19)	(0.33)
Valuation allowance	(0.67)	0.34
Different tax rates applied to income of foreign consolidated subsidiaries	(0.76)	0.54
Tax deduction of experiment and research expenses	(3.02)	(3.30)
Other, net	0.30	0.50
Effective tax rates.	26.34	28.44

(Asset Retirement Obligations)
Not applicable.

(Rental properties, etc.)
Disclosure on rental properties, etc. is not required because rental properties, etc. are not significant in the Group.

(Revenue Recognition)

1. Disaggregation of revenue from contracts with customers

The Group's net sales are mainly revenue recognized from contracts with customers. The breakdown of the Group's reportable segments by region is as follows.

Sustainability related businesses previously included in the Commodity Chemicals segment have been transferred to the Others segment from the current fiscal year. Segment information for the previous fiscal year has been prepared according to the reportable segment classification after the change.

Year ended December 31, 2022	Reportable segments						Others (Note 1)	Total
	Commodity Chemicals	Polymer & Oligomer	Adhesive Material	Performance Chemicals	Plastics	Total		
Net sales								
Japan	67,527	22,429	6,370	5,150	26,603	128,081	1,701	129,783
Asia	4,505	9,837	2,676	4,365	1,147	22,532	19	22,552
North America	1,152	1,536	1,897	531	0	5,119	7	5,126
Other	743	2,004	189	418	2	3,358	3	3,362
Sales to third parties	73,929	35,807	11,134	10,466	27,754	159,092	1,732	160,825

(Notes)

1. The Others segment includes business operations relative to research and development, transportation and trading firm business.
2. Net sales are classified into countries and regions based on geographic location of the customer.
3. Net sales consist almost entirely of revenue recognized from contracts with customers. Revenue recognized from other sources is not disaggregated as it is immaterial.

Year ended December 31, 2023	Reportable segments						Others (Note 1)	Total
	Commodity Chemicals	Polymer & Oligomer	Adhesive Material	Performance Chemicals	Plastics	Total		
Net sales								
Japan	68,935	21,904	7,853	5,467	26,698	130,858	1,841	132,700
Asia	3,139	8,341	2,234	3,667	1,138	18,522	35	18,557
North America	746	1,195	2,038	564	25	4,570	5	4,575
Other	666	2,323	284	244	5	3,523	14	3,537
Sales to third parties	73,488	33,765	12,410	9,943	27,867	157,475	1,896	159,371

(Notes)

1. The Others segment includes business operations relative to research and development, transportation and trading firm business.
2. Net sales are classified into countries and regions based on geographic location of the customer.
3. Net sales consist almost entirely of revenue recognized from contracts with customers. Revenue recognized from other sources is not disaggregated as it is immaterial.

2. Useful information in understanding revenue from contracts with customers

Useful information in understanding revenue is presented in (Basis for Preparation of Consolidated Financial Statements), 4. Accounting policies, (5) Revenue and expense recognition standards.

3. Reconciliation of satisfaction of performance obligations within contracts with customers and cash flows arising from such contracts, and the amount and timing of revenue arising from customers existing at the end of the current fiscal year expected to be recognized in and after the following fiscal year

(1) Balance of contract liabilities, etc.

Receivables and contract liabilities from contracts with customers are as follows.

(Millions of yen)

	Year ended December 31, 2022		Year ended December 31, 2023	
	Balance at beginning of the year	Balance at end of the year	Balance at beginning of the year	Balance at end of the year
Receivables from contracts with customers	48,456	49,848	49,898	51,102
Contract liabilities	45	49	49	37

Contract liabilities are mainly advances received from customers and are included in "Other current liabilities" under "Current liabilities" on the consolidated balance sheet.

(2) Transaction price allocated to the remaining performance obligations

The Group does not have any significant transactions for which individual contract durations are expected to exceed one year. Therefore, the practical expedient is applied, and information regarding remaining performance obligations is omitted.

In addition, there are no significant amounts of consideration arising from contracts with customers that are not included in the transaction price.

(Segment Information, etc.)

[Segment Information]

1. Outline of Reportable Segments

(1) Methods for Determining Reportable Segments

The reportable segments of the Company and its consolidated subsidiaries are defined as operating segments for which discrete financial information is available and reviewed by the Board of Directors regularly in order to make decisions about resources to be allocated to individual segments and assess performance.

Group operating divisions are organized based on products and services and the operating divisions are responsible for comprehensive domestic and overseas comprehensive plans as to the products and services. The five reportable segments of the Company are “Commodity Chemicals,” “Polymer & Oligomer,” “Adhesive Material,” “Performance Chemicals,” and “Plastics” based on similarity of economic characteristics, and nature of products and services.

(2) Major products attributable to each reportable segment

Reportable segment	Major products
Commodity Chemicals	Caustic soda, caustic potash, sodium hypochlorite and other electrolytic products, sulfuric acid, industrial gases, acrylic acids, acrylate esters and other acrylic monomers
Polymer & Oligomer	Acrylic polymers, polymer flocculants, UV-Curable Resins and other acrylic oligomers, etc.
Adhesive Material	Instant glues, functional adhesives, etc.
Performance Chemicals	High purity inorganic chemicals, inorganic functional materials, etc.
Plastics	Piping equipment products, products for construction and civil engineering, nursing care products, elastomer compounds, etc.

(3) Matters related to changes in reportable segments

(Changes in reportable segment classification)

Following changes in the Company’s organizational structure and management classification effective January 1, 2023, sustainability related businesses previously included in the Commodity Chemicals segment have been transferred to the Other Businesses segment from the current fiscal year.

Segment information for the previous fiscal year has been prepared according to the reportable segment classification after the change.

2. Method of calculating net sales, income and loss, assets, liabilities and others

The accounting method applied to the reportable segments is the same as described in “Basis for Preparation of Consolidated Financial Statements.”

Segment income of the reportable segments is based on operating income.

Intersegment sales or transfer amounts are determined chiefly on the basis of market prices.

3. Information about the amounts of net sales, profit (loss), assets and other items for each reportable segment

(Millions of yen)

Year ended December 31, 2022	Reportable segments						Others (Note 1)	Total	Adjustments (Note 2)	Consolidated (Note 3)
	Commodity Chemicals	Polymer & Oligomer	Adhesive Material	Performance Chemicals	Plastics	Total				
Sales										
Sales to third parties	73,929	35,807	11,134	10,466	27,754	159,092	1,732	160,825	—	160,825
Intersegment sales	4,537	1,515	103	255	364	6,776	1,516	8,292	(8,292)	—
Net sales	78,466	37,322	11,237	10,722	28,118	165,868	3,249	169,118	(8,292)	160,825
Segment income (loss)	6,807	4,258	(255)	2,361	1,759	14,930	(550)	14,379	3	14,382
Segment assets	81,596	37,117	15,983	13,795	45,322	193,815	3,642	197,457	67,677	265,135
Other items										
Depreciation	3,332	1,988	758	1,153	1,738	8,971	417	9,388	1,068	10,457
Investment in associates accounted for using equity method	713	—	—	—	—	713	—	713	—	713
Increase in tangible and intangible fixed assets	17,028	835	841	1,734	748	21,188	277	21,466	1,378	22,844

(Notes)

1. The Others segment includes business operations relative to research and development, transportation and trading firm business.
2. "Adjustments" were as follows:
   (1) The adjustments to segment income (loss) include intersegment eliminations.
   (2) The adjustments to segment assets include corporate assets of ¥95,963 million that are not allocated to any reportable segments, and intersegment eliminations.
   (3) The adjustments to depreciation include mainly corporate expenses that are not allocated to any reportable segments.
   (4) The adjustments to increase in tangible and intangible fixed assets include mainly capital investment in corporate assets that are not allocated to any reportable segments.
3. Segment income (loss) is reconciled with operating income on the consolidated statements of income.
4. Depreciation in the table above includes amortization of long-term prepaid expense.

(Millions of yen)

Year ended December 31, 2023	Reportable segments						Others (Note 1)	Total	Adjustments (Note 2)	Consolidated (Note 3)
	Commodity Chemicals	Polymer & Oligomer	Adhesive Material	Performance Chemicals	Plastics	Total				
Sales										
Sales to third parties	73,488	33,765	12,410	9,943	27,867	157,475	1,896	159,371	—	159,371
Intersegment sales	3,566	1,641	136	280	729	6,353	1,549	7,902	(7,902)	—
Net sales	77,054	35,406	12,546	10,224	28,596	163,829	3,445	167,274	(7,902)	159,371
Segment income (loss)	6,769	3,182	361	1,547	1,473	13,334	(854)	12,480	19	12,499
Segment assets	82,393	36,563	18,529	16,490	44,850	198,827	3,365	202,193	70,091	272,285
Other items										
Depreciation	3,426	1,911	863	1,249	1,810	9,262	350	9,612	1,043	10,656
Investment in associates accounted for using equity method	729	—	32	—	—	762	—	762	—	762
Increase in tangible and intangible fixed assets	3,282	2,377	1,166	3,765	735	11,327	2,145	13,472	2,024	15,496

(Notes)
1. The Others segment includes business operations relative to research and development, transportation and trading firm business.
2. “Adjustments” were as follows:
   (1) The adjustments to segment income (loss) include intersegment eliminations.
   (2) The adjustments to segment assets include corporate assets of ¥98,674 million that are not allocated to any reportable segments, and intersegment eliminations.
   (3) The adjustments to depreciation include mainly corporate expenses that are not allocated to any reportable segments.
   (4) The adjustments to increase in tangible and intangible fixed assets include mainly capital investment in corporate assets that are not allocated to any reportable segments.
3. Segment income (loss) is reconciled with operating income on the consolidated statements of income.
4. Depreciation in the table above includes amortization of long-term prepaid expense.

[Related Information]

Year ended December 31, 2022

1. Information related to geographic region

(1) Net sales

(Millions of yen)

Japan	Asia	North America	Other	Total
129,783	22,552	5,126	3,362	160,825

(Note) Net sales are classified into countries and regions based on geographic location of the customer.

(2) Information related to property, plant and equipment

This information is not required to be disclosed because the amount of property, plant and equipment in Japan exceeded 90% of the amount on the consolidated balance sheet.

2. Information on major customer

This information is not required to be disclosed because net sales to any particular customer are less than 10% of the net sales on the consolidated statements of income.

Year ended December 31, 2023

1. Information related to geographic region

(1) Net sales

(Millions of yen)

Japan	Asia	North America	Other	Total
132,700	18,557	4,575	3,537	159,371

(Note) Net sales are classified into countries and regions based on geographic location of the customer.

(2) Information related to property, plant and equipment

This information is not required to be disclosed because the amount of property, plant and equipment in Japan exceeded 90% of the amount on the consolidated balance sheet.

2. Information on major customer

This information is not required to be disclosed because net sales to any particular customer are less than 10% of the net sales on the consolidated statements of income.

[Impairment loss on non-current assets by reportable segment]

Year ended December 31, 2022 (Millions of yen)

Commodity Chemicals	Polymer & Oligomer	Adhesive Material	Performance Chemicals	Plastics	Others	Corporate	Total
—	—	—	—	—	—	959	959

(Note) Impairment loss of ¥959 million under Corporate is related to land and buildings for company housing and dormitories.

Year ended December 31, 2023

Not applicable.

[Balance of goodwill by reportable segment]

This information is not required to be disclosed due to its immateriality.

[Gain on negative goodwill by reportable segment]

Not applicable.

[Related party information]
Not applicable.

(Per Share Information)

Years ended December 31,	2022	2023
		(Yen)
Net assets per share	1,700.75	1,816.10
Net income per share	101.31	102.78

(Notes)

1. Diluted net income per share is not disclosed because no potential shares exist.
2. The basis for calculation of "net income per share" is as follows:

Years ended December 31,	2022	2023
Net income per share		
Net income attributable to owners of parent (Millions of yen)	12,494	12,179
Amounts not belonging to shareholders of common stock (Millions of yen)	—	—
Net income attributable to owners of parent relating to common stock (Millions of yen)	12,494	12,179
Average number of common shares during the fiscal year (Thousands of shares)	123,329	118,498

(Note) The shares of the Company held by the employee share granting trust, which are recorded as treasury stock under shareholders' equity, are included in the treasury stock that is deducted from the calculation of the average number of shares during the period when calculating net income per share. The average number of shares of treasury stock deducted during the period when calculating net income per share for the current fiscal year is 268 thousand shares.

3. The basis for calculation of "net assets per share" is as follows:

December 31,	2022	2023
Total amount of net assets (Millions of yen)	210,807	212,518
Amount deducted from the total amount of net assets (Millions of yen)	4,837	1,008
(including non-controlling interests)	(4,837)	(1,008)
Amount of net assets at the end of the fiscal year attributable to common stock (Millions of yen)	205,969	211,509
Number of common shares used for calculating net assets per share (Thousands of shares)	121,105	116,463

(Note) The shares of the Company held by the employee share granting trust, which are recorded as treasury stock under shareholders' equity, are included in the treasury stock that is deducted from the calculation of the total number of issued shares at the end of the period when calculating net assets per share. The number of shares of treasury stock deducted at the end of the period when calculating net assets per share for the current fiscal year is 386 thousand shares.

(Subsequent Events)
Treasury stock acquisition
At the Board of Directors meeting held on February 13, 2024, the Company resolved to acquire its treasury stock, in accordance with the provisions of Article 156 of the Companies Act, as applied by replacing terms pursuant to the provisions of Article 165, Paragraph 3 of the said Act.

1. Reasons for treasury stock acquisition
To strengthen returns to shareholders, improve capital efficiency, raise the corporate value and implement flexible capital policies.

2. Acquisition details

(1) Type of stock to be acquired	Common stock of the Company
(2) Total number of shares that can be acquired	5,000,000 shares (maximum) (4.28% of total number of shares issued [excluding treasury stock])
(3) Total acquisition cost	¥6.0 billion (maximum)
(4) Acquisition period	February 14, 2024 to December 31, 2024
(5) Acquisition method	Market purchase on the Tokyo Stock Exchange (Based on a discretionary investment agreement and through share repurchase by extended-hours trading)

v) [Supplementary Financial Schedules]

[Schedule of bonds and debentures]
Not applicable.

[Schedule of borrowings, etc.]

Classification	Beginning balance (Millions of yen)	Ending balance (Millions of yen)	Average interest rate (%)	Due date of repayment
Short-term bank loans	2,335	2,335	0.477	—
Long-term debt scheduled to be repaid within one year	140	164	1.561	—
Lease obligations scheduled to be repaid within one year	173	174	—	—
Long-term debt (excluding debt scheduled to be repaid within one year)	8,590	8,595	0.497	From 2025 to 2030
Lease obligations (excluding obligations scheduled to be repaid within one year)	1,137	1,077	—	From 2025 to 2032
Other interest-bearing debt	—	—	—	—
Total	12,376	12,347	—	—

(Notes)
1. "Average interest rate" presents the weighted average interest rate against the term-end balance of borrowings.
2. "Average interest rate" for lease obligations is not required to be disclosed because lease obligations are stated in the consolidated balance sheets in the amount before deducting the amount equivalent to related interest expenses, which are included in the total lease payments.
3. The projected repayment amounts of long-term debt and lease obligations (excluding debt and obligations scheduled to be repaid within one year) within five years after the consolidated balance sheet date are as follows.

(Millions of yen)

	Over 1 year to 2 years	Over 2 years to 3 years	Over 3 years to 4 years	Over 4 years to 5 years
Long-term debt	3,864	4,564	94	24
Lease obligations	153	148	136	128

[Schedule of asset retirement obligations]
Not applicable.

(2) [Other]

Quarterly data for the current fiscal year ended December 31, 2023

Cumulative periods	First quarter (From January 1 to March 31, 2023)	Second quarter (From January 1 to June 30, 2023)	Third quarter (From January 1 to September 30, 2023)	Current fiscal year (From January 1 to December 31, 2023)
Net sales (Millions of yen)	38,198	76,947	116,149	159,371
Income before income taxes (Millions of yen)	3,003	7,595	11,580	17,094
Net income attributable to owners of parent (Millions of yen)	2,185	5,469	8,175	12,179
Net income per share (Yen)	18.18	45.71	68.66	102.78

Accounting period	First quarter (From January 1 to March 31, 2023)	Second quarter (From April 1 to June 30, 2023)	Third quarter (From July 1 to September 30, 2023)	Fourth quarter (From October 1 to December 31, 2023)
Net income per share (Yen)	18.18	27.60	22.95	34.29