Financial Factbook 2024

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 2024

During the fiscal year ended December 31, 2024 (the "fiscal year under review"), the global economy saw the U.S. economy remain strong, while the economy in Europe maintained its underlying strength despite concerns about an economic slowdown. In China, growth continued to slow partly due to the slump in the real estate market and sluggish growth in consumer spending.

In Japan, the economy has remained relatively strong despite continued rises of prices, and progress was made towards overcoming deflation. Under these circumstances, the Group strived to expand sales while making investments for future growth such as those for the establishment of research centers and overseas bases and the expansion of manufacturing facilities. As a result, the Group recorded the following financial results for the period under review.

Net sales: ¥167,594 million (+5.2% YOY)

Operating income: ¥14,233 million (+13.9% YOY)

Ordinary income: ¥15,993 million (+10.3% YOY)

Net income attributable to owners of parent: ¥11,877 million (-2.5% YOY)

Outlined below are the results for our reportable segments.

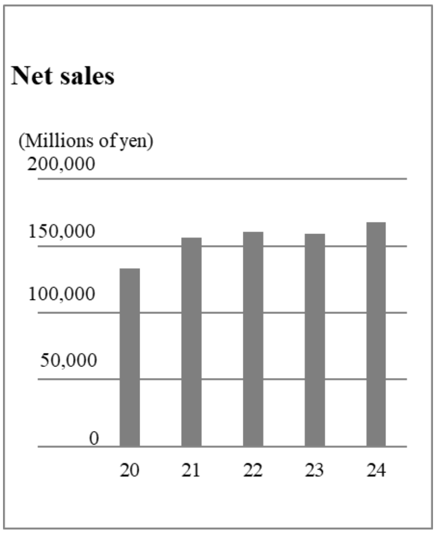
Sales by Segment

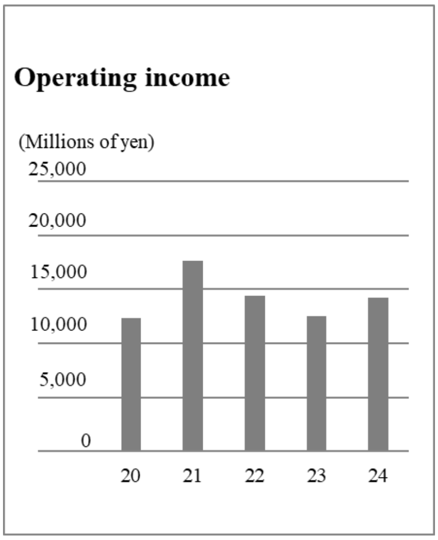
Commodity Chemicals

Electrolysis products recorded higher sales revenue due to increased overall sales volume. Acrylic monomer products saw an increase in sales revenue owing to increased sales volume and revisions to selling prices in response to higher raw material prices. Industrial gases posted higher sales revenue due to higher sales volume resulting from strong demand. As a result of the above, this segment posted net sales of ¥79,145 million (+7.7% YOY). Operating income totaled ¥8,501 million (+25.6% YOY) as sales volume increased in electrolysis and other products.

Polymer & Oligomer

Acrylic polymers saw higher sales revenue on stronger sales volume of products for automobile parts. Acrylic oligomers recorded higher sales revenue amid strong shipments and increased sales volume for displays. 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 ¥35,187 million (+4.2% YOY). Operating income fell to ¥3,779 million (+18.8% YOY), mainly due to increased sales volume of acrylic polymers and acrylic oligomers.


Net sales
(Millions of yen)
200,000
150,000
100,000
50,000
0
20
21
22
23
24


Operating income
(Millions of yen)
25,000
20,000
15,000
10,000
5,000
0
20
21
22
23
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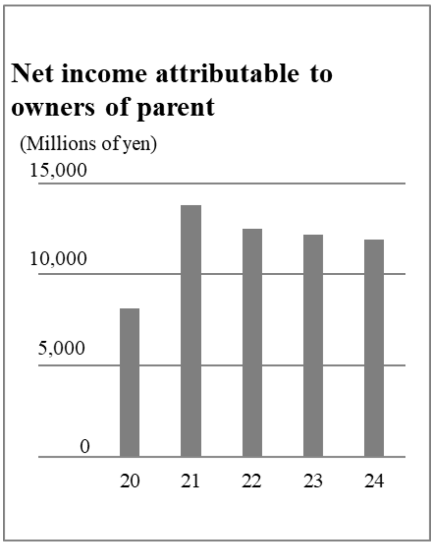
Net income attributable to owners of parent
(Millions of yen)
15,000
10,000
5,000
0
20
21
22
23
24

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Adhesive Material

For consumers, sales revenue increased owing to higher sales volume in Japan and the United States. Functional adhesives saw an increase in sales volume of adhesives for batteries for automotive applications and for electronic components for smartphones, resulting in an increase in sales revenue. As a result, this segment posted net sales of ¥13,344 million (+7.5% YOY). Operating income rose 13.3% year on year to ¥409 million mainly due to increased sales volume.

Performance Chemicals

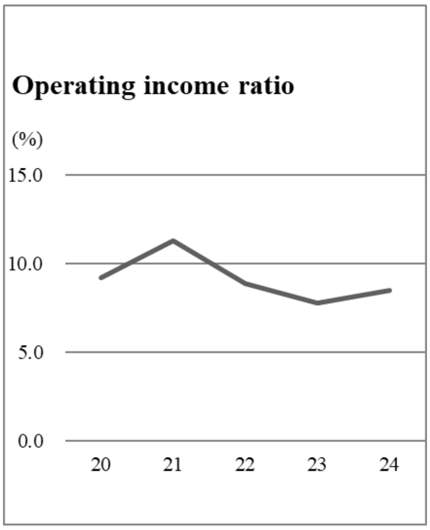
High-purity inorganic chemicals saw higher sales revenue due to increased sales volume resulting from strong shipments to overseas. Inorganic functional materials posted higher sales revenue amid increased sales volume of ion-trapping agents for electronics components. As for the development of new products, revenue declined due to diminished sales volume of samples for testing of medical care products. As a result, this segment posted net sales of ¥10,196 million (+2.5% YOY).
Operating income fell to ¥1,275 million (-17.6% YOY) resulting from an increase in depreciation incurred for high-purity inorganic chemicals and a decrease in sales volume of samples for testing of medical care products.

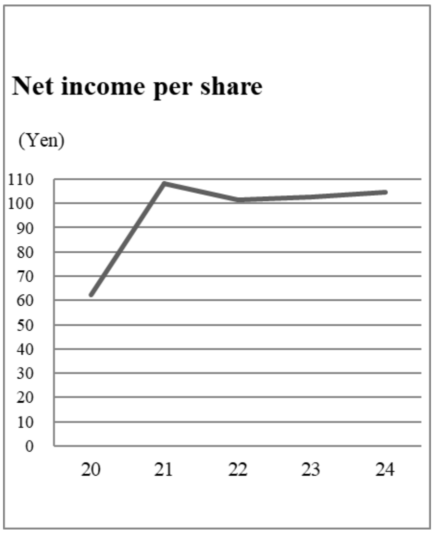
Plastics

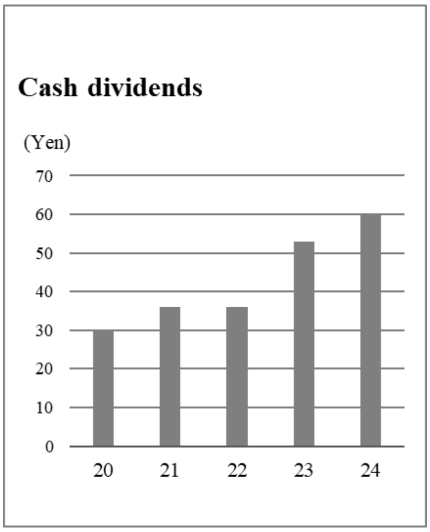
Environment & infrastructure system (formerly, piping equipment) saw sales revenue fall due to a focus on sales based on profitability. Nursing care products posted a decline in sales revenue as a result of diminished sales volume caused by intensifying competition in the nursing care products market. Ecological materials (formerly, elastomer compounds) recorded higher sales revenue due to an increase in sales volume of products for automotive parts and home appliance parts. As a result, this segment posted net sales of ¥27,702 million (-0.6% YOY).
Operating income totaled ¥1,761 million (+19.5% YOY) thanks to growth in sales of products for infrastructure aging countermeasures in the environment & infrastructure system business and improved earnings from the ecological materials business.

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 ¥2,018 million (+6.4% YOY). Operating loss totaled ¥1,471 million, compared to an operating loss of 854 million in the same period of the previous fiscal year, partly because of the costs for opening the Kawasaki Frontience R&D Center.







Cash Flows

Cash and cash equivalents at end of the year stood at ¥40,433 million, a decrease of ¥7,202 million from the previous term-end.

Net cash provided by operating activities totaled ¥20,183 million, a decrease of ¥1,455 million compared to the previous fiscal year, resulting from a decrease in "Income before income taxes" and an increase in working capital.

Net cash used in investing activities totaled ¥13,594 million, an increase of ¥10,066 million compared to the previous fiscal year. This was attributable to an increase in expenditures for "Purchase of property, plant and equipment."

Net cash used in financing activities totaled ¥14,507 million, a decrease of ¥1,016 million compared to the previous fiscal year. This result reflected a decrease in expenditures for "Dividends paid to non-controlling interests" and "Purchase of shares of subsidiaries not resulting in change in scope of consolidation."

Business Performance Prospects for Fiscal 2025

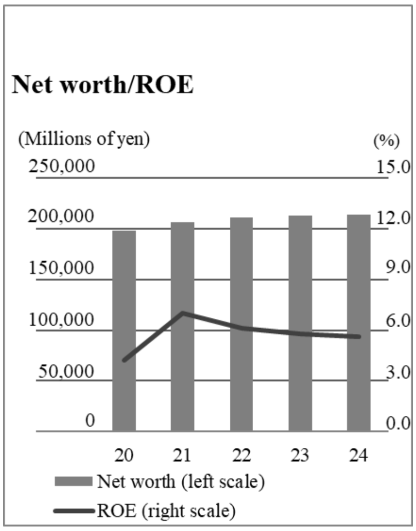
For the current term ending December 31, 2025, we forecast net sales of ¥165.0 billion, operating income of ¥15.0 billion, and net income attributable to owners of parent of ¥13.0 billion.

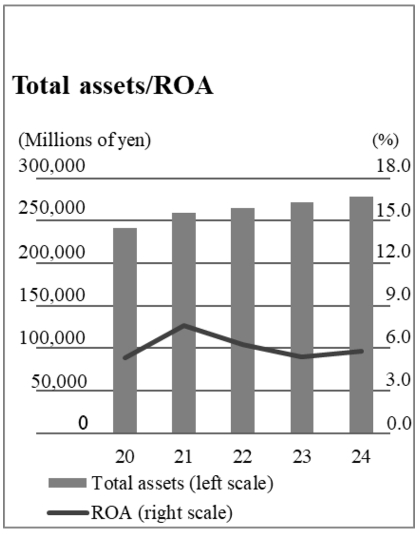
Economic Prospects for Fiscal 2025

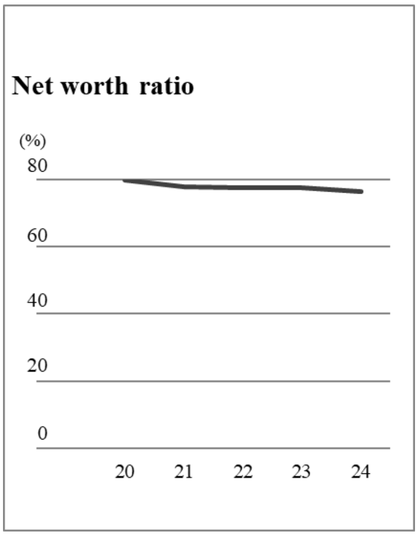
As for the future outlook, a highly uncertain situation is forecast to persist because of the uncertainty over the impact on the global economy as a whole of the tariff hike policy and other measures taken by the second Trump administration in the United States and the timing of a recovery in the Chinese economy, which has continued to stagnate.

Basic Policy on Shareholder Returns and Dividends for Fiscal 2024 and 2025

We made an announcement of our policy of setting 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.







Management's Discussion & Analysis

Dividend for fiscal 2024: The year-end dividend for fiscal 2024 will be ¥30 per share. In fiscal 2024, we paid an ordinary dividend of ¥30 per share as an interim dividend; thus, the annual dividend per share will be ¥60 (dividend payout ratio of 57.4%). In addition, we acquired ¥6,999 million (4,511,700 shares) of treasury stock during fiscal 2024, resulting in a total return ratio of 116.1%, including share buybacks. In December 2024, the Company cancelled 4,100,000 treasury shares (3.5% of the total number of issued shares before cancellation).

Dividend for fiscal 2025: The Company plans to pay an annual dividend of ¥65 per share in fiscal 2025 (dividend payout ratio of 54.6%, comprising an interim dividend of ¥32.5 per share and year-end dividend of ¥32.5 per share). Furthermore, in order to further return profits to shareholders, improve capital efficiency and enhance corporate value, the Company has decided to buy back ¥7.0 billion of its own shares. As a result, the total return ratio is expected to be 108.2%.

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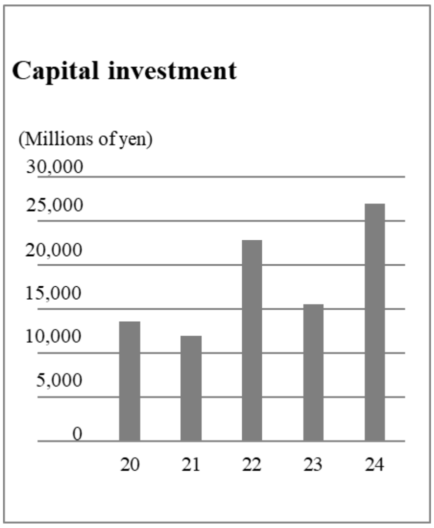
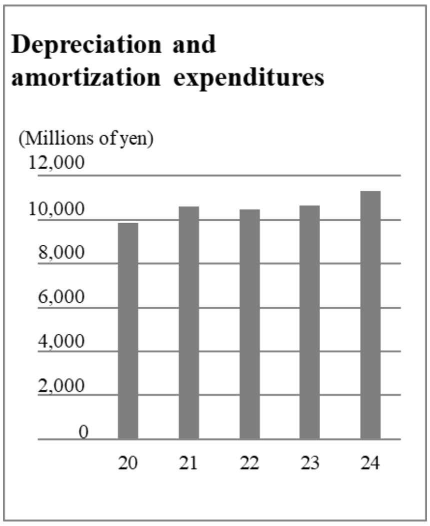
Business Risks

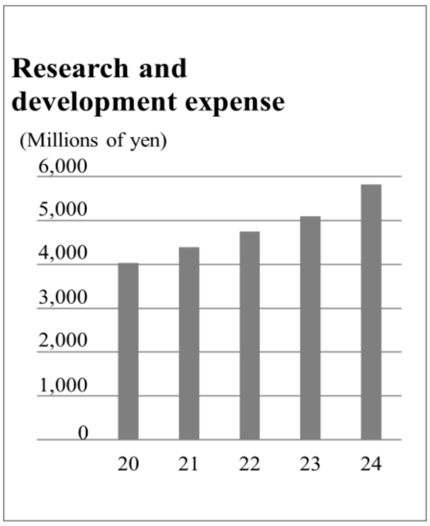
Of the matters concerning "Management's Discussion & Analysis," and "Consolidated Financial Statements and Others" contained in this report, major risks deemed to have the potential of significantly impacting the Group's financial position, business performance, and cash flows are stated below, provided, 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.







Management's Discussion & Analysis

(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, Vietnam, 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, 2024) and the Company's Non-consolidated Financial Statements for the current fiscal year (January 1 to December 31, 2024).

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,		2023		2024
Assets				
Current assets				
Cash and deposits		39,108		30,821
Notes and accounts receivable	*1, *7	42,237	*1, *7	42,359
Electronically recorded monetary claims	*1, *7	8,865	*1, *7	9,860
Securities		17,000		11,000
Inventories	*3	24,792	*3	24,734
Other current assets		2,904		4,026
Allowance for doubtful receivables		(47)		(52)
Total current assets		134,860		122,750
Fixed assets				
Property, plant and equipment				
Buildings and structures, net		26,998		39,664
Machinery, equipment and other, net		25,451		23,486
Tools, furniture and fixtures, net		3,242		4,103
Land		29,249		30,445
Leased assets, net		1,108		81
Construction in progress		10,482		14,070
Total property, plant and equipment	*5, *6	96,532	*5, *6	111,851
Intangible fixed assets		1,579		1,666
Investments and other assets				
Investment securities	*4	32,912	*4	34,023
Net defined benefit asset		3,736		5,014
Deferred tax assets		61		66
Other assets	*4	2,609	*4	2,653
Allowance for doubtful receivables		(6)		(6)
Total investments and other assets		39,313		41,751
Total fixed assets		137,425		155,270
Total assets		272,285		278,020

See accompanying notes to consolidated financial statements.

December 31,		2023		2024
				(Millions of yen)
Liabilities				
Current liabilities				
Notes and accounts payable	*7	19,091	*7	18,740
Short-term bank loans		2,499		6,209
Lease obligations		174		197
Accrued income taxes		2,281		2,762
Accrued bonuses for employees		14		11
Provision for product recalls		308		154
Other current liabilities	*2, *7	17,110	*2, *7	20,677
Total current liabilities		41,480		48,753
Long-term liabilities				
Long-term debt		8,595		4,834
Lease obligations		1,077		1,062
Deferred tax liabilities		4,721		5,675
Net defined benefit liability		119		122
Provision for share awards		145		284
Other long-term liabilities		3,627		3,619
Total long-term liabilities		18,287		15,598
Total liabilities		59,767		64,352
Net assets				
Shareholders' equity				
Common stock		20,886		20,886
Capital surplus		14,166		14,166
Retained earnings		159,562		157,874
Treasury stock		(786)		(1,375)
Total shareholders' equity		193,828		191,551
Accumulated other comprehensive income				
Unrealized holding gain on available-for-sale securities		13,319		14,537
Translation adjustments		3,992		5,260
Remeasurements of defined benefit plans		369		1,236
Total accumulated other comprehensive income		17,681		21,034
Non-controlling interests		1,008		1,082
Total net assets		212,518		213,668
Total liabilities and net assets		272,285		278,020

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,		2023		2024
Net sales	*1	159,371	*1	167,594
Cost of sales	*2	118,004	*2	121,881
Gross profit		41,367		45,712
Selling, general and administrative expenses				
Selling expenses	*3	15,641	*3	16,267
General and administrative expenses	*4, *5	13,225	*4, *5	15,210
Total selling, general and administrative expenses		28,867		31,478
Operating income		12,499		14,233
Non-operating income				
Interest income		259		344
Dividend income		1,061		1,299
Equity in earnings of affiliates		185		227
Foreign currency exchange gains		343		579
Rent income on non-current assets		174		91
Other		383		143
Total non-operating income		2,406		2,685
Non-operating expenses				
Interest expenses		131		152
Environment readiness fee		120		592
Loss on investments in partnerships		53		101
Inactive facilities expenses		13		10
Other		84		69
Total non-operating expenses		402		926
Ordinary profit		14,503		15,993
Extraordinary gains				
Gain on sale of non-current assets		—	*6	8
Gain on sales of investment securities		4,079		4,332
Subsidy income		84		80
Total extraordinary gains		4,163		4,421
Extraordinary losses				
Loss on disposal of non-current assets	*7	1,255	*7	1,930
Impairment loss		—	*8	1,487
Loss on disaster		—	*9	141
Loss on valuation of investment securities		3		302
Loss on sales of investment securities		2		—
Provision for product recalls	*10	311		—
Total extraordinary losses		1,572		3,862
Income before income taxes		17,094		16,553
Income taxes -- Current		4,851		4,580
Income taxes -- Deferred		10		8
Total income taxes		4,862		4,589
Net income		12,232		11,963
Net income attributable to non-controlling interests		52		86
Net income attributable to owners of parent		12,179		11,877

See accompanying notes to consolidated financial statements.

[Consolidated Statements of Comprehensive Income]

				(Millions of yen)
Years ended December 31,		2023		2024
Net income		12,232		11,963
Other comprehensive income				
Unrealized holding gain on available-for-sale securities		3,724		1,221
Translation adjustments		544		1,290
Remeasurements of defined benefit plans, net of tax		523		867
Total other comprehensive income	*1	4,792	*1	3,379
Comprehensive income		17,024		15,343
Comprehensive income attributable to:				
Owners of the parent		16,945		15,230
Non-controlling interests		79		112

See accompanying notes to consolidated financial statements.

iii) [Consolidated Statements of Changes in Net Assets]

(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
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
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.

(Millions of yen)

Year ended December 31, 2024	Shareholders' equity				
	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Balance at beginning of the year	20,886	14,166	159,562	(786)	193,828
Changes during the year:					
Cash dividends			(7,271)		(7,271)
Net income attributable to owners of parent			11,877		11,877
Purchase of treasury stock				(7,004)	(7,004)
Gain on sales of treasury stock		3		118	121
Cancellation of treasury stock		(6,296)		6,296	—
Transfer from retained earnings to capital surplus		6,293	(6,293)		—
Change in ownership interest of parent due to transactions with non-controlling interests					—
Net changes in items other than shareholders' equity					
Total changes during the year	—	—	(1,688)	(589)	(2,277)
Balance at end of the year	20,886	14,166	157,874	(1,375)	191,551

Year ended December 31, 2024	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	13,319	3,992	369	17,681	1,008	212,518
Changes during the year:						
Cash dividends						(7,271)
Net income attributable to owners of parent						11,877
Purchase of treasury stock						(7,004)
Gain on sales of treasury stock						121
Cancellation of treasury stock						—
Transfer from retained earnings to capital surplus						—
Change in ownership interest of parent due to transactions with non-controlling interests						—
Net changes in items other than shareholders' equity	1,218	1,267	867	3,353	73	3,427
Total changes during the year	1,218	1,267	867	3,353	73	1,149
Balance at end of the year	14,537	5,260	1,236	21,034	1,082	213,668

See accompanying notes to consolidated financial statements.

iv) [Consolidated Statements of Cash Flows]

		(Millions of yen)
Years ended December 31,	2023	2024
Operating activities		
Income before income taxes	17,094	16,553
Depreciation and amortization	10,656	11,302
Impairment loss	—	1,487
Increase or decrease in allowance for doubtful receivables (Minus means decrease.)	(4)	4
Increase or decrease in provision for product recalls (Minus means decrease.)	308	(153)
Increase or decrease in provision for share awards (Minus means decrease.)	145	138
Increase or decrease in other provisions (Minus means decrease.)	(1)	(3)
Increase or decrease in net defined benefit asset (Minus means increase.)	(278)	(28)
Increase or decrease in net defined benefit liability (Minus means decrease.)	1	2
Interest and dividend income	(1,321)	(1,644)
Interest expense	131	152
Foreign currency exchange gains or losses (Minus means gains.)	(399)	(540)
Gain or loss on sales of investment securities (Minus means gain.)	(4,076)	(4,332)
Gain or loss on valuation of investment securities (Minus means gain.)	3	302
Gain or loss on disposal of non-current assets (Minus means gain.)	1,255	1,930
Gain or loss on sale of non-current assets (Minus means gain.)	—	(8)
Equity in earnings or losses of affiliates (Minus means earnings.)	(185)	(227)
Subsidy income	(84)	(80)
Increase or decrease in receivables (Minus means increase.)	(1,139)	(930)
Increase or decrease in inventories (Minus means increase.)	870	309
Increase or decrease in payables (Minus means decrease.)	(618)	(464)
Other	2,632	(1,315)
Subtotal	24,990	22,453
Interest and dividends received	1,367	1,900
Interest paid	(126)	(144)
Subsidy income received	84	80
Income taxes paid	(4,677)	(4,107)
Net cash provided by operating activities	21,638	20,183
Investing activities		
Increase or decrease in time deposits (Minus means increase.)	5,301	5,365
Increase or decrease in securities (Minus means increase.)	—	2,000
Purchases of investment securities	(290)	(770)
Proceeds from sales of investment securities	5,228	5,373
Purchases of property, plant and equipment	(11,660)	(22,043)
Proceeds from sale of property, plant and equipment	—	17
Other	(2,107)	(3,537)
Net cash used in investing activities	(3,528)	(13,594)

See accompanying notes to consolidated financial statements.

(Millions of yen)

Years ended December 31,		2023		2024
Financing activities				
Net increase or decrease in short-term borrowings (Minus means decrease.)		—		(10)
Proceeds from long-term borrowings		168		124
Repayment of long-term borrowings		(140)		(183)
Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation		(2,849)		—
Proceeds from sales of treasury stock		5		3
Purchases of treasury stock		(6,002)		(7,004)
Increase or decrease in deposits for purchases of treasury stock (Minus means increase.)		0		(0)
Repayment of lease obligations		(165)		(141)
Cash dividends paid		(4,553)		(7,257)
Cash dividends paid to non-controlling interests		(1,987)		(39)
Net cash used in financing activities		(15,524)		(14,507)
Effect of exchange rate changes on cash and cash equivalents		210		716
Net increase or decrease in cash and cash equivalents (Minus means decrease.)		2,796		(7,202)
Cash and cash equivalents at beginning of the year		44,839		47,636
Cash and cash equivalents at end of the year	*1	47,636	*1	40,433

See accompanying notes to consolidated financial statements.

[Notes]

(Basis for Preparation of Consolidated Financial Statements)

1. Scope of consolidation

(1) Consolidated subsidiaries: 20
Toagosei Vietnam 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, 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.

For the fiscal year ended December 31, 2024
Impairment of fixed assets
(1) Amounts recognized in the consolidated financial statements

	(Millions of yen)
Property, plant, and equipment	111,851
Intangible fixed assets	1,666
Impairment loss	1,487

(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.

(New Accounting Pronouncements)
"Accounting Standard for Leases" (ASBJ Statement No. 34 on September 13, 2024)
"Implementation Guidance on Accounting Standard for Leases" (ASBJ Guidance No. 33 on September 13, 2024)

(1) Outline
The standards, etc. primarily stipulate provisions in which assets and liabilities are recognized for all leases of lessees, as with international accounting standards. In line with the basic policy of the Accounting Standards Board of Japan in developing accounting standards for leases, the right-of-use model was adopted by which a lessee recognizes a right-of-use asset and a lease liability by interpreting that the right to use an underlying asset is transferred to the lessee, regardless of whether the lease is a finance lease or an operating lease, as with IFRS 16. Instead of adopting all the provisions of IFRS 16, only the main provisions have been adopted, resulting in simple and convenient accounting standards that stipulate alternative treatments to the extent that international comparability is not impaired significantly.
(2) Planned date of application
The Company plans to apply the above standards, etc. from the beginning of the year ending December 31, 2028.
(3) Effect of the application of the above standards, etc.
The Company is currently assessing the effects at the time of preparation of these consolidated financial statements.

(Changes in Presentation Method)
(Notes to Consolidated Balance Sheets)
"Electronically recorded monetary claims," which was included in "notes and accounts receivable" of "current assets" in the previous consolidated fiscal year, is stated as an independent item from fiscal 2024 because it increased in importance. In order to reflect this change in the presentation method, the consolidated financial statement for fiscal 2023 has been restated.
As a result, the ¥51,102 million presented in "notes and accounts receivable" of "current assets" in the consolidated statements of income for fiscal 2023 has been restated as "notes and accounts receivable" of ¥42,237 million and "electronically recorded monetary claims" of ¥8,865 million.

(Notes to Consolidated Statements of Income)
"Gain on sale of goods," which was stated as an independent item under "non-operating income," is included in "other" of "non-operating income" from fiscal 2024 because it decreased in importance. In order to reflect this change in the presentation method, the consolidated financial statement for fiscal 2023 has been restated.
As a result, the ¥107 million presented in "gain on sale of goods" of "non-operating income" and ¥275 million presented in "other" of "non-operating income" in the consolidated statement of income for fiscal 2023 have been restated as "other" of ¥383 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 ¥462 million and 376 thousand shares, respectively, at the end of the current fiscal year and ¥474 million and 386 thousand shares at the end of the previous fiscal year.

(Notes to Consolidated Balance Sheets)

*1 Amount of receivables arising from contracts with customers in notes and accounts receivable and electronically recorded monetary claims

(Millions of yen)

December 31,	2023	2024
Notes receivable - trade	2,780	1,698
Electronically recorded monetary claims	8,865	9,860
Accounts receivable - trade	39,456	40,660

*2 Amount of contract liabilities in other current liabilities

(Millions of yen)

December 31,	2023	2024
Contract liabilities	37	38

*3. Components of inventories:

(Millions of yen)

December 31,	2023	2024
Merchandise and finished products (including semi-finished products)	17,321	17,223
Work in process	567	584
Raw materials and supplies	6,903	6,926
Total	24,792	24,734

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

(Millions of yen)

December 31,	2023	2024
Investment securities (stocks)	1,640	1,663
Other (investments and other assets)	32	37

*5. Assets pledged as collateral:

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.

December 31, 2024

Assets pledged as collateral		
Classification	Book value (Millions of yen)	Type of security interests
Buildings and structures	18,364	Plant foundation
Machinery, equipment and other	14,246	ditto
Tools, furniture and fixtures	2,114	ditto
Land	4,454	ditto
Total	39,180	

(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,	2023	2024
	217,751	224,458

*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,	2023	2024
Notes and accounts receivable	5,731	5,146
Electronically recorded monetary claims	1,220	1,541
Notes and accounts payable	2,223	2,252
Other (Current liabilities)	696	619

8. Contingent liabilities and secured liabilities:

(Millions of yen)

December 31,		2023	2024
Employees	Guarantees against loans from financial institutions	15	3
Hokuriku Liquid Oxygen Co., Ltd.	ditto	46	34
Total		61	37

(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,	2023	2024
		(Millions of yen)
	215	43

*3. Major items of selling expenses:

Years ended December 31,	2023	2024
		(Millions of yen)
Transportation expenses	8,292	8,682
Salaries	2,195	2,279
Bonuses	835	883
Retirement benefit expenses	127	119
Depreciation and amortization	139	109

*4. Major items of general and administrative expenses:

Years ended December 31,	2023	2024
		(Millions of yen)
Salaries	2,776	3,048
Bonuses	1,269	1,504
Retirement benefit expenses	200	192
Depreciation and amortization	1,429	1,597

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

Years ended December 31,	2023	2024
		(Millions of yen)
	5,039	5,823

*6. Components of gain on sale of non-current assets:

Years ended December 31,	2023	2024
		(Millions of yen)
Land, etc.	—	8

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

Years ended December 31,	2023	2024
		(Millions of yen)
Machinery, equipment and other	50	10
Disposal costs	1,114	1,786
Buildings and structures, etc.	89	133

*8. Impairment loss:

Year ended December 31, 2023

Not applicable.

Year ended December 31, 2024

Impairment losses were recorded for the following assets or asset groups.

(Millions of yen)

Location	Use	Item	Amount
Singapore	Acrylic ester production facilities, etc.	Leased assets, machinery, equipment and other	1,412
Tsurumi-ku, Yokohama	Dormitory	Building and other	74

(Background and method of asset grouping)

The Company operates multiple businesses, and for business assets, the operating departments are the smallest asset groups in each segment of commodity chemicals, polymer & oligomer, adhesive material, and performance chemicals. In addition, consolidated subsidiaries mainly operate a single business, and the company unit is the smallest asset group.

In fiscal year ended December 31, 2024, the book value of acrylic ester production facilities, etc. that have become less profitable has been reduced to their recoverable value. In addition, the book value of the dormitory in Yokohama has been reduced to its recoverable value following the decision to stop using the dormitory and demolish the building. The amounts of these reductions have been recorded as impairment losses (1,487 million yen) under extraordinary losses.

(Breakdown of impairment losses)

The breakdown of impairment losses is as follows: ¥1,011 million for leased assets, ¥374 million for machinery and equipment, ¥74 million for buildings, and ¥26 million for other assets.

(Calculation method for recoverable value)

The recoverable value used to measure the impairment losses recorded in fiscal year ended December 31, 2024 is measured based on the value in use for acrylic ester production facilities, etc., and is evaluated as zero because the future cash flow is negative. Other fixed assets are evaluated based on the memorandum value.

*9. Loss on disaster:

Year ended December 31, 2023

Not applicable.

Year ended December 31, 2024

This is the amount of loss caused by the Noto Peninsula Earthquake that occurred in January 2024. The breakdown is as follows.

	(Millions of yen)
Restoration costs, etc.	112
Loss on non-current assets and inventory loss	29
Total	141

*10. Provision for product recalls:

Year ended December 31, 2023

In accordance with the decision by Aron Kasei Co., Ltd., a consolidated subsidiary of the Company, to voluntarily 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.

Year ended December 31, 2024

Not applicable.

(Notes to Consolidated Statements of Comprehensive Income)

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

Years ended December 31,	2023	2024
	(Millions of yen)	
Unrealized holding gain on available-for-sale securities		
Amount arising during the fiscal year	9,414	6,067
Reclassification adjustment	(4,076)	(4,332)
Amount before tax effect	5,337	1,735
Tax effect	(1,613)	(513)
Unrealized holding gain on available-for-sale securities	3,724	1,221
Translation adjustments		
Amount arising during the fiscal year	544	1,290
Amount before tax effect	544	1,290
Tax effect	—	—
Translation adjustments	544	1,290
Remeasurements of defined benefit plans, net of tax		
Amount arising during the fiscal year	757	1,297
Reclassification adjustment	(4)	(48)
Amount before tax effect	753	1,249
Tax effect	(230)	(381)
Remeasurements of defined benefit plans, net of tax	523	867
Total other comprehensive income	4,792	3,379

(Notes to Consolidated Statements of Changes in Net Assets)

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.

Year ended December 31, 2024

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)	117,100	—	4,100	113,000
Total	117,100	—	4,100	113,000
Treasury stock				
Common stock (Notes 2, 3, 4)	636	4,514	4,179	970
Total	636	4,514	4,179	970

(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 4,511 thousand shares due to treasury stock acquisition and the increase of 2 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 4,100 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 9 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 beginning of the year includes 386 thousand shares of the Company held by the employee share granting trust. The number of treasury stock (common stock) at end of the year includes 376 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 28, 2024 111th Annual Shareholders' Meeting	Common stock	3,856	33.00	December 31, 2023	March 29, 2024
July 31, 2024 Board of Directors	Common stock	3,415	30.00	June 30, 2024	September 5, 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. The total amount of dividends determined by resolution of the meeting of the Board of Directors held on July 31, 2024 includes ¥11 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, 2024 but whose effective date is in the year ending December 31, 2025

Resolution	Type of shares	Gross amount (Millions of yen)	Source of dividends	Dividend per share (Yen)	Record date	Effective date
March 28, 2025 112nd Annual Shareholders' Meeting	Common stock	3,372	Retained earnings	30.00	December 31, 2024	March 31, 2025

(Note) The total amount of dividends determined by resolution of the Annual Shareholders' Meeting held on March 28, 2025 includes ¥11 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,	2023	2024
Cash and deposits	39,108	30,821
Securities	17,000	11,000
Time deposits with terms in excess of 3 months	(6,471)	(1,387)
Negotiable certificate of deposit with terms in excess of 3 months	(2,000)	—
Cash and cash equivalents	47,636	40,433

(Lease Transactions)

1. Finance leases (lessee)

Finance lease transactions that do not transfer ownership

1) Leased assets

Property, plant and equipment

Consists of 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,	2023	2024
Due within one year	17	19
Due after one year	—	—
Total	17	19

(Impairment loss)

Impairment loss allocated to leased assets was ¥1,011 million for the year ended December 31, 2024.

(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, as well as electronically recorded monetary claims, 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,” “electronically recorded monetary claims,” “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, 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.)

(Millions of yen)

December 31, 2024	Carrying value	Fair value	Difference
(1) Securities and investment securities: Available-for-sale securities	41,124	41,124	—
Total assets	41,124	41,124	—
(1) Long-term debt	4,834	4,793	(40)
Total liabilities	4,834	4,793	(40)

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

December 31, 2023	Carrying value (Millions of yen)
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

Shares, etc. that do not have a market price

December 31, 2024	Carrying value (Millions of yen)
Investments in subsidiaries and affiliates	
Investments in unconsolidated subsidiaries and affiliates	1,663
Available-for-sale securities:	
Unlisted securities	1,255
Investment limited partnership	980
Total	3,899

* 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, 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	42,237	—	—	—
Electronically recorded monetary claims	8,865			
Securities and investment securities:				
Available-for-sale securities with maturities (negotiable certificate of deposit)	17,000	—	—	—
Total	107,208	—	—	—

(Millions of yen)

December 31, 2024	1 year or less	Over 1 year to 5 years	Over 5 years to 10 years	Over 10 years
Deposits	30,820	—	—	—
Notes and accounts receivable	42,359	—	—	—
Electronically recorded monetary claims	9,860			
Securities and investment securities:				
Available-for-sale securities with maturities (negotiable certificate of deposit)	11,000	—	—	—
Total	94,040	—	—	—

(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, 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

(Millions of yen)

December 31, 2024	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	2,325	—	—	—	—	—
Long-term debt	3,884	4,584	114	44	44	44
Lease obligations	197	182	165	157	152	405
Total	6,406	4,767	280	202	197	450

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, 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

December 31, 2024	Fair value (Millions of yen)			
	Level 1	Level 2	Level 3	Total
Securities and investment securities				
Available-for-sale securities				
Stocks	30,124	—	—	30,124
Total assets	30,124	—	—	30,124

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

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

December 31, 2024	Fair value (Millions of yen)			
	Level 1	Level 2	Level 3	Total
Securities and investment securities				
Available-for-sale securities				
Other	—	11,000	—	11,000
Total assets	—	11,000	—	11,000
Long-term debt	—	4,793	—	4,793
Total liabilities	—	4,793	—	4,793

(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, 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

(Millions of yen)

December 31, 2024	Type	Carrying value	Acquisition cost	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition cost	(1) Stock	28,635	7,597	21,038
Securities whose acquisition cost exceeds their carrying value or more	(1) Stock	1,488	1,666	(177)
	(2) Other	11,000	11,000	—
	Subtotal	12,488	12,666	(177)
Total		41,124	20,263	20,860

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

December 31, 2023 (Millions of yen)

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

December 31, 2024 (Millions of yen)

Classification	Sales amount	Total gain on sales	Total loss on sales
Stock	5,373	4,332	—

3. Other securities for which impairment loss was recognized:

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 previous fiscal year.

An impairment loss of investment securities in an amount of ¥302 million (other securities that do not have a market price of ¥302 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,	2023	2024
Balance of retirement benefit obligation at beginning of year	11,390	11,285
Service cost	547	542
Actuarial gain or loss	(74)	(822)
Retirement benefits paid	(578)	(733)
Balance of retirement benefit obligation at end of year	11,285	10,270

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

(Millions of yen)

Years ended December 31,	2023	2024
Balance of plan assets at beginning of year	14,095	15,021
Expected return on plan assets	135	150
Actuarial gain or loss	683	474
Contribution from employer	686	372
Retirement benefits paid	(578)	(733)
Balance of plan assets at end of year	15,021	15,285

(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,	2023	2024
Balance of net defined benefit liability at beginning of year	117	119
Retirement benefit expenses	21	17
Retirement benefits paid	(12)	(8)
Contribution to plan	(5)	(5)
Other	(0)	0
Balance of net defined benefit liability at end of year	119	122

(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,	2023	2024
Funded retirement benefit obligations	11,475	10,452
Plan assets	(15,123)	(15,381)
	(3,647)	(4,929)
Unfunded projected benefit obligations	30	37
Net amount of relevant liabilities and assets on the consolidated balance sheets	(3,617)	(4,891)
Net defined benefit liability	119	122
Net defined benefit asset	(3,736)	(5,014)
Net amount of relevant liabilities and assets on the consolidated balance sheets	(3,617)	(4,891)

(Note) Includes the plans using the simplified method.

(5) Retirement benefit expenses and components thereof

(Millions of yen)

Years ended December 31,	2023	2024
Service cost	547	542
Expected return on plan assets	(135)	(150)
Amortization of actuarial gain or loss	17	(26)
Amortization of prior service cost	(21)	(21)
Retirement benefit expenses calculated using the simplified method	21	17
Retirement benefit expenses related to the defined benefit plan	429	361

(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,	2023	2024
Prior service cost	(21)	(21)
Actuarial gain or loss	775	1,270
Total	753	1,249

(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,	2023	2024
Unrecognized prior service cost	(129)	(107)
Unrecognized actuarial gain or loss	(401)	(1,672)
Total	(531)	(1,780)

(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,	2023	2024
Bonds	38.6%	40.3%
Stocks	21.0	21.0
General accounts of life insurance companies	36.1	34.5
Other	4.3	4.2
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,	2023	2024
Discount rate	0.0%	1.0%
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 ¥301 million for the previous fiscal year and ¥297 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,	2023	2024
Deferred tax assets		
Elimination of unrealized profit	1,398	1,409
Net operating loss carry forwards	1,041	1,087
Impairment loss	662	823
Depreciation	691	728
Accrued costs of removing facilities	365	318
Loss on valuation of investment securities	153	240
Valuation loss on inventories	202	228
Accrued enterprise tax	195	199
Share-based remuneration expenses	125	188
Deferred consumption taxes, etc.	9	103
Expenses of soil pollution measures	180	53
Other	242	197
Gross deferred tax assets	5,267	5,572
Valuation allowance (Note)	(1,575)	(1,916)
Total deferred tax assets	3,692	3,656
Deferred tax liabilities		
Unrealized holding gain on available-for-sale securities	(5,794)	(6,308)
Net defined benefit asset	(1,140)	(1,530)
Reserve for reduction entry	(958)	(920)
Undistributed earnings of subsidiaries and affiliates	(255)	(324)
Securities returned from retirement benefit trust	(122)	(76)
Other	(79)	(103)
Total deferred tax liabilities	(8,351)	(9,265)
Net deferred tax assets (liability)	(4,660)	(5,608)

(Changes in Presentation Method)

“Share-based remuneration expenses” and “Deferred consumption taxes, etc.” which were included in “Other” under Deferred tax assets in the previous fiscal year, are presented separately from the current fiscal year due to their increased materiality. In addition, “Provision for product recalls,” “Loss on valuation of golf club membership” and “Net defined benefit liability” are included in “Other” from the current fiscal year due to their decreased materiality. In order to reflect these changes in presentation method, the notes for the previous fiscal year have been reclassified.

As a result, the ¥94 million shown in “Provision for product recalls,” the ¥44 million in shown in “Loss on valuation of golf club membership,” the ¥35 million shown in “Net defined benefit liability" and the ¥202 million shown in "Other" under Deferred tax assets in the previous fiscal year, have been reclassified as "Share-based remuneration expenses" of ¥125 million, "Deferred consumption taxes, etc." of ¥9 million and "Other" of ¥242 million.

(Note) Valuation allowance increased by ¥341 million. The main component of this increase is an increase of ¥248 million in valuation allowance for impairment loss at some consolidated subsidiaries.

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

December 31,	2023	2024
Statutory tax rate	30.53%	30.53%
Effect of:		
Permanent difference – entertainment expenses	0.21	0.20
Permanent difference – dividend income	(0.47)	(0.91)
Inhabitants' per capita taxes	0.43	0.43
Equity in earnings of affiliates	(0.33)	(0.42)
Valuation allowance	0.34	2.06
Different tax rates applied to income of foreign consolidated subsidiaries	0.54	1.15
Tax deduction of experiment and research expenses	(3.30)	(3.75)
Tax deduction due to wage increase promotion tax system	—	(1.38)
Other, net	0.50	(0.18)
Effective tax rates	28.44	27.72

(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.

Year ended December 31, 2023	Reportable segments						Other businesses (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. "Other businesses" is a miscellaneous segment covering businesses that do not belong to any reportable segment. It includes operations related to the research and development business for new products, goods transportation, and trading-house operations, among others.
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, 2024	Reportable segments						Other businesses (Note 1)	Total
	Commodity chemicals	Polymer & oligomer	Adhesive material	Performance chemicals	Plastics	Total		
Net sales								
Japan	73,804	22,729	8,550	5,357	26,225	136,666	1,971	138,638
Asia	3,447	8,518	2,098	4,003	1,405	19,473	34	19,508
North America	631	1,403	2,437	512	69	5,053	4	5,057
Other	1,262	2,535	258	323	2	4,381	8	4,389
Sales to third parties	79,145	35,187	13,344	10,196	27,702	165,575	2,018	167,594

(Notes)

1. "Other businesses" is a miscellaneous segment covering businesses that do not belong to any reportable segment. It includes operations related to the research and development business for new products, goods transportation, and trading-house operations, among others.
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, 2023		Year ended December 31, 2024	
	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	49,848	51,102	51,102	52,220
Contract liabilities	49	37	37	38

Contract liabilities are mainly advances received from customers and are included in "Other current liabilities" under "Current liabilities" on the consolidated balance sheet. The amount of revenue recognized in the current fiscal year that was included in the contract liabilities as of the beginning of the year is immaterial.

(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. General information

(1) Delineation of reportable segments

Our reportable segments are components of our business operations for which separate financial information is available. The Board of Directors regularly analyzes the reportable segments to determine how to allocate capital resources and to evaluate performance. Business operations across our corporate group are organized by product and service. For all products and services managed by our operating divisions and subsidiaries, we develop integrated strategies and business activities, covering both domestic and overseas markets.

We have five reportable segments, each encompassing a group of business operations that are similar in terms of economic aspects, product traits, and service traits. These are:

- commodity chemicals,
- polymer & oligomer,
- adhesive material,
- performance chemicals, and
- plastics.

(2) Main products in each reportable segment

Reportable segment	Main products
Commodity chemicals	Electrolysis products (caustic soda, caustic potash, sodium hypochlorite) , sulfuric acid, industrial gases and acrylic monomers (acrylic acid and acrylic esters)
Polymer & oligomer	Acrylic polymers, polymer flocculants, and acrylic oligomers (including UV-curable resins)
Adhesive material	Instant glues and functional adhesives
Performance chemicals	High-purity inorganic chemicals and inorganic functional materials
Plastics	Environment & infrastructure system (piping equipment, etc.), products for construction and civil engineering, nursing care products, etc. , and ecological materials (elastomer compounds), etc.

2. Determining segment sales, segment profit/loss, assets/liabilities, and other segment items

The accounting method we use for reportable segments is the same as that which is described in “Basis for Preparation of Consolidated Financial Statements.”

Segment profit is stated as operating income.

Intersegment sales and transfers are generally stated at market value.

3. Further information about segment sales, segment profit/loss, assets/liabilities, and other segment items

(Millions of yen)

Year ended December 31, 2023	Reportable segments						Other businesses (Note 1)	Total	Adjustment (Note 2)	Amount recorded in consolidated financial statements (Note 3)
	Commodity chemicals	Polymer & oligomer	Adhesive material	Performance chemicals	Plastics	Total				
Net sales										
External sales	73,488	33,765	12,410	9,943	27,867	157,475	1,896	159,371	—	159,371
Intersegment sales or transfers	3,566	1,641	136	280	729	6,353	1,549	7,902	(7,902)	—
Total	77,054	35,406	12,546	10,224	28,596	163,829	3,445	167,274	(7,902)	159,371
Segment profit (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 and amortization	3,426	1,911	863	1,249	1,810	9,262	350	9,612	1,043	10,656
Investments accounted for by equity method	729	—	32	—	—	762	—	762	—	762
Increase in property, plant, and equipment, or in intangible assets	3,282	2,377	1,166	3,765	735	11,327	2,145	13,472	2,024	15,496

(Notes)

1. "Other businesses" is a miscellaneous segment covering businesses that do not belong to any reportable segment. It includes operations related to the research and development business for new products, goods transportation, and trading-house operations, among others.
2. "Adjustment" includes the following four adjustments:
   (1) Segment profit or loss: We primarily eliminated intersegment transactions.
   (2) Segment assets: We included ¥98,674 million in company assets that belong to no reportable segment, and eliminated the relevant intersegment transactions.
   (3) Depreciation and amortization: We included depreciation of company assets that belong to no reportable segment.
   (4) Increase in property, plant, and equipment, or in intangible assets: We included the amount of general capital investment not specific to any reportable segment.
3. Segment profit or loss represents operating income as stated on the consolidated statement of income with the adjustment.
4. "Depreciation and amortization" includes amortization of long-term prepaid expenses.

(Millions of yen)

Year ended December 31, 2024	Reportable segments						Other businesses (Note 1)	Total	Adjustment (Note 2)	Amount recorded in consolidated financial statements (Note 3)
	Commodity chemicals	Polymer & oligomer	Adhesive material	Performance chemicals	Plastics	Total				
Net sales										
External sales	79,145	35,187	13,344	10,196	27,702	165,575	2,018	167,594	—	167,594
Intersegment sales or transfers	3,117	1,591	51	339	891	5,991	1,617	7,608	(7,608)	—
Total	82,262	36,778	13,396	10,535	28,594	171,567	3,635	175,203	(7,608)	167,594
Segment profit (loss)	8,501	3,779	409	1,275	1,761	15,727	(1,471)	14,256	(22)	14,233
Segment assets	83,045	42,946	17,635	18,228	45,499	207,355	10,717	218,073	59,946	278,020
Other items										
Depreciation and amortization	3,643	1,822	921	1,385	1,723	9,495	527	10,022	1,279	11,302
Investments accounted for by equity method	752	—	37	—	—	790	—	790	—	790
Increase in property, plant, and equipment, or in intangible assets	4,692	7,770	1,272	3,105	623	17,464	7,494	24,959	1,972	26,931

(Notes)

1. “Other businesses” is a miscellaneous segment covering businesses that do not belong to any reportable segment. It includes operations related to the research and development business for new products, goods transportation, and trading-house operations, among others.
2. “Adjustment” includes the following four adjustments:
   (1) Segment profit or loss: We primarily eliminated intersegment transactions.
   (2) Segment assets: We included ¥89,859 million in company assets that belong to no reportable segment, and eliminated the relevant intersegment transactions.
   (3) Depreciation and amortization: We included depreciation of company assets that belong to no reportable segment.
   (4) Increase in property, plant, and equipment, or in intangible assets: We included the amount of general capital investment not specific to any reportable segment.
3. Segment profit or loss represents operating income as stated on the consolidated statement of income with the adjustment.
4. “Depreciation and amortization” includes amortization of long-term prepaid expenses.

[Related information]

Year ended December 31, 2023
1. Regional breakdown
(1) Net sales

(Millions of yen)

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

(Note) The region of a sale is generally defined as the country or region of the client we sold to.

(2) Property, plant and equipment
We have omitted this information, as property, plant and equipment located in Japan account for more than 90% of total property, plant and equipment reported on the consolidated balance sheet.

2. Information about key clients
We have omitted this information, as no client accounts for more than 10% of net sales reported on the consolidated statements of income.

Year ended December 31, 2024
1. Regional breakdown
(1) Net sales

(Millions of yen)

Japan	Asia	North America	Other regions	Total
138,638	19,508	5,057	4,389	167,594

(Note) The region of a sale is generally defined as the country or region of the client we sold to.

(2) Property, plant and equipment
We have omitted this information, as property, plant and equipment located in Japan account for more than 90% of total property, plant and equipment reported on the consolidated balance sheet.

2. Information about key clients
We have omitted this information, as no client accounts for more than 10% of net sales reported on the consolidated statements of income.

[Impairment of fixed assets by reportable segment]

Year ended December 31, 2023
Not applicable.

Year ended December 31, 2024 (Millions of yen)

Commodity chemicals	Polymer & oligomer	Adhesive material	Performance chemicals	Plastics	Other businesses	Company-wide / elimination	Total
1,412	—	—	—	—	—	74	1,487

(Note) The impairment losses for company-wide/elimination of ¥74 million relates to the building of dormitory.

[Information on amortization of goodwill and undepreciated balances by reporting segment]
This information has been omitted due to lack of materiality.

[Information on gain on bargain purchase by reporting segment]
Not applicable.

[Related party information]
Not applicable.

(Per-share Information)

Years ended December 31,	2023	2024 (Yen)
Net assets per share	1,816.10	1,897.60
Net income per share	102.78	104.56

(Notes)

1. Diluted net income per share is not presented as the Company had no potential shares.
2. Basis for calculation of net income per share is as follows:

Years ended December 31,	2023	2024
Net income per share		
Net income attributable to owners of parent (Millions of yen)	12,179	11,877
Amount not attributable to common shareholders (Millions of yen)	—	—
Net income attributable to common shareholders of parent (Millions of yen)	12,179	11,877
Net income attributable to common shareholders of parent (Thousands of shares)	118,498	113,587

(Note) The Company's shares held by the employee share granting trust, which are recorded as treasury stock in shareholders' equity, are included in the treasury stock deducted for the calculation of net income per share and the calculation of the average number of shares during the period. The average number of shares of treasury stock deducted for the purpose of calculating net income per share was 268 thousand shares for the fiscal year ended December 31, 2023 and 381 thousand shares for the fiscal year ended December 31, 2024.

3. We calculated net assets per share using the following data:

December 31,	2023	2024
Total net assets (Millions of yen)	212,518	213,668
Amount deducted from total net assets (Millions of yen)	1,008	1,082
of which pertains to non-controlling interests	(1,008)	(1,082)
Closing balance of net assets pertaining to outstanding shares of common stock (Millions of yen)	211,509	212,586
Shares of common stock used in calculation of net assets per share (Thousands of shares)	116,463	112,029

(Note) The Company's shares held by the employee share granting trust, which are recorded as treasury stock in shareholders' equity, are included in the treasury stock deducted in the calculation of the number of shares issued at the end of the fiscal year in the calculation of the net asset value per share. The number of treasury shares at the end of the fiscal year after deduction for the calculation of net asset value per share was 386 thousand shares for the fiscal year ended December 31, 2023 and 376 thousand shares for the fiscal year ended December 31, 2024.

(Significant subsequent events)
Purchase of treasury shares
On February 13, 2025, the Board of Directors resolved to buy back shares pursuant to Article 156 of the Companies Act as applied with the necessary modifications stipulated in Article 165-3 of the Act.

1. Reason for buyback
The purpose of the buyback is to further improve shareholder returns, capital efficiency, and enterprise value, and to facilitate a dynamic capital strategy.

2. Terms of buyback

(1) Class of shares to be acquired:	Common stock
(2) Number of shares to be acquired:	No more than 5,800,000 (5.16% of all outstanding shares)
(3) Acquisition price:	No more than ¥7,000 million
(4) Acquisition period:	February 14 – December 31, 2025
(5) Acquisition method:	Open market purchases on the Tokyo Stock Exchange (discretionary investment contract and purchases during after-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	2,325	0.502	—
Long-term debt scheduled to be repaid within one year	164	3,884	0.547	—
Lease obligations scheduled to be repaid within one year	174	197	—	—
Long-term debt (excluding debt scheduled to be repaid within one year)	8,595	4,834	0.676	From 2026 to 2030
Lease obligations (excluding obligations scheduled to be repaid within one year)	1,077	1,062	—	From 2026 to 2032
Other interest-bearing debt	—	—	—	—
Total	12,347	12,303	—	—

(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	4,584	114	44	44
Lease obligations	182	165	157	152

[Schedule of asset retirement obligations]
Not applicable.

(2) [Other]

Quarterly data for the current fiscal year ended December 31, 2024

Cumulative periods	First quarter (From January 1 to March 31, 2024)	First half (From January 1 to June 30, 2024)	Third quarter (From January 1 to September 30, 2024)	Current fiscal year (From January 1 to December 31, 2024)
Net sales (Millions of yen)	39,014	81,571	123,363	167,594
Income before income taxes (Millions of yen)	3,666	9,651	14,536	16,553
Net income attributable to owners of parent (Millions of yen)	2,717	7,041	10,506	11,877
Net income per share (Yen)	23.60	61.52	92.15	104.56

Accounting period	First quarter (From January 1 to March 31, 2024)	Second quarter (From April 1 to June 30, 2024)	Third quarter (From July 1 to September 30, 2024)	Fourth quarter (From October 1 to December 31, 2024)
Net income per share (Yen)	23.60	38.06	30.64	12.20

(Note) Although a quarterly securities report for the third quarter period has not been submitted, the figures for the third quarter period presented are the quarterly information prepared in accordance with the rules prescribed by a financial instruments exchange, which did not undergo an interim review.