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* On Friday, February 17, 2023, we will hold a presentation for analysts and institutional investors. The materials presented at the meeting will be uploaded onto our website soon after the meeting is held.

1. Financial Performance

(1) Financial Performance During Fiscal 2022

During the period under review (January 1 to December 31, 2022), the global economy was impacted substantially from various fronts. The rising number of cases of the omicron variant of COVID-19 and Russia's military invasion of Ukraine resulted in supply chain disruptions. Additionally, economic sanctions against Russia have taken effect. The shortage of energy, food and mineral resources has caused historically high inflation, forcing countries around the world to tighten their monetary policy severely.

The Japanese economy experienced a rapid increase in prices of raw materials, fuels, and imported products due to the yen's depreciation caused by Japan's efforts to maintain monetary easing measures to escape deflationary pressures. Consequently, corporate earnings and household spending were constrained.

Against that backdrop, the Group hiked selling prices and promoted cost cutting efforts. Nevertheless, sales volumes were generally weaker because of ongoing production cuts in the automotive, smartphone, and their peripheral industries.

As a result, Toagosei Group recorded the following financial results for the period under review.

Net sales:	¥160,825 million (+2.9% YOY)
Operating income:	¥14,382 million (-18.6% YOY)
Ordinary income:	¥16,446 million (-13.4% YOY)
Net income attributable to owners of parent:	¥12,494 million (-9.3% YOY)

Furthermore, net sales declined by ¥7,940 million and operating income by ¥94 million due to the application of Accounting Standard for Revenue Recognition (ASBJ Statement No. 29).

Outlined below are the results for our reportable segments.

I. Commodity chemicals

Electrolysis products experienced a downturn in sales volume but selling prices were increased to cope with higher raw material and fuel prices, leading to increased sales revenue. Acrylic monomer products saw a downturn in sales volume, but price hikes based on higher raw material and fuel prices resulted in higher sales revenue. Industrial gases posted a decline in sales revenue on weaker sales volume, despite price hikes initiated in response to rising raw material and fuel prices. As a result of the above, this segment posted net sales of ¥74,225 million (+5.6% YOY). Furthermore, net sales declined by ¥2,246 million due to the application of Accounting Standard for Revenue Recognition (ASBJ Statement No. 29).

Operating income totaled ¥6,691 million (-16.3% YOY) due to diminished sales volume, despite upward revisions to selling prices based on rising raw material and fuel prices. Furthermore, operating income increased by ¥1 million due to the application of Accounting Standard for Revenue Recognition (ASBJ Statement No. 29).

II. Polymer & oligomer

Acrylic polymers saw a decline in sales revenue on lower sales volume of automotive related products. Acrylic oligomers recorded lower sales volume for displays and other products, but net sales remained on par with the previous year due to the weak yen. Polymer flocculants posted an increase in sales revenue overall including exports and saw increased sales revenue thanks in part to selling prices hiked in response to rising raw material and fuel prices. As a result of these factors, this segment posted net sales of ¥35,807 (+2.6% YOY). Furthermore, net sales declined by ¥2,150 million due to the application of Accounting Standard for Revenue Recognition (ASBJ Statement No. 29).

Operating income fell to ¥4,258 million (-19.3% YOY), impacted substantially by lower sales volume. Furthermore, operating income decreased by ¥130 million due to the application of Accounting Standard for Revenue Recognition (ASBJ Statement No. 29).

III. Adhesive material

Instant glues for consumers experienced a slight decline in sales volume due to the effects of diminished customer traffic at home improvement stores, etc., but the effects of the weaker yen contributed to an increase in sales revenue overall. Functional adhesives posted significantly lower sales volume amid the impacts of reduction production of smartphones, resulting in a decline in sales revenue. As a result, this segment posted net sales of ¥11,134 million (-1.8% YOY). Furthermore, net sales declined by ¥461 million due to the application of Accounting Standard for Revenue Recognition (ASBJ Statement No. 29).

The operating loss declined by ¥1,100 million compared to the previous fiscal year to ¥255 million owing to diminished sales volume of functional adhesives, depreciation, and rising advertising expenses and technological research costs overseas. Furthermore, operating loss increased by ¥5 million due to the application of Accounting Standard for Revenue Recognition (ASBJ Statement No. 29).

IV. Performance chemicals

High-purity inorganic chemicals recorded increased sales revenues amid higher sales volume of products for semiconductors. Inorganic functional materials saw an increase in sales revenue as sales volume of antimicrobial agents and deodorants increased, which offset the decrease in sales volume of ion-trapping agents to electronics components due to the reduced production of smartphones. As a result, this segment posted net sales of ¥10,466 million (+7.0% YOY). Furthermore, net sales increased by ¥103 million due to the application of Accounting Standard for Revenue Recognition (ASBJ Statement No. 29).

Operating income came to ¥2,361 million (-3.6% YOY) amid higher depreciation and technological research costs incurred in the healthcare and cellulose nanofiber domains. Furthermore, operating income increased by ¥42 million due to the application of Accounting Standard for Revenue Recognition (ASBJ Statement No. 29).

V. Plastics

Piping equipment posted increased sales revenue on price hikes in response to rising raw material and fuel prices. Nursing care products also saw higher sales revenue amid strong sales of new products including walkers, etc. Products for construction and civil engineering posted net sales on par with the previous fiscal year as diminished sales volume was largely offset by hikes to selling prices in response to rising raw material and fuel prices. Elastomer compounds recorded higher sales revenue on increased sales volume for automobile and medical applications. As a result, this segment posted net sales of ¥27,754 million (+6.2% YOY). Furthermore, net sales declined by ¥706 million due to the application of Accounting Standard for Revenue Recognition (ASBJ Statement No. 29).

Operating income totaled ¥1,759 million (+22.7% YOY) as a result of price hikes implemented in response to higher raw material and fuel prices along with sales of piping equipment placing greater emphasis on profits.

VI. Other businesses

This segment covers goods transportation and trading-house operations. The segment posted net sales of ¥1,436 million (-62.7% YOY). Furthermore, net sales declined by ¥2,478 million due to the application of Accounting Standard for Revenue Recognition (ASBJ Statement No. 29).

Operating loss totaled ¥434 million. Furthermore, operating loss increased by ¥2 million due to the application of Accounting Standard for Revenue Recognition (ASBJ Statement No. 29).

(2) Financial Position During Fiscal 2022

Total assets: Total assets amounted to ¥6,179 million, up ¥265,135 million (2.4%) from the previous fiscal year-end. This was because “cash and deposits” decreased and “land” and “inventories” increased.

Total liabilities: Total liabilities amounted to ¥54,328 million, up ¥1,985 million (3.8%) from the previous fiscal year-end, as “other current liabilities” in “current liabilities” increased due to higher accounts payable other, which offset a decrease in accrued income taxes.

Total net assets: Total net assets amounted to ¥210,807 million, up ¥4,194 million (2.0%) from the previous fiscal year-end. This increase was attributable to an increase in “retained earnings” following the recognition of net income attributable to owners of parent.

Net worth ratio: Net worth ratio amounted to 77.7%.

(3) Cash Flows During Fiscal 2022

At the end of fiscal 2022, cash and cash equivalents amounted to ¥44,839 million, down ¥1,664 million from the previous year-end.

Cash flows from operating activities: Operating activities generated ¥10,988 million of income, as expenditures compared to the previous fiscal year increased by ¥10,230 million because of increases in “inventories” and “income taxes paid” and a decrease in “income before income taxes.”

Cash flows from investing activities: Investing activities used ¥3,579 million, ¥6,659 million less than they did in the previous fiscal year. This was attributable to a decrease in “assets under management due to time deposits,” despite an increase in “purchase of property, plant and equipment.”

Cash flows from financing activities: Financing activities used ¥9,464 million, ¥819 million more than they did in the previous fiscal year. This result reflected an increase in “cash dividends to shareholders” and “purchase of treasury stock.”

(Reference) Three-year comparison of cash flow

	Fiscal 2020	Fiscal 2021	Fiscal 2022
Net worth ratio (%)	79.8	77.9	77.7
Net worth ratio at fair value (%)	64.1	55.8	50.8
Interest-bearing debt to cash flow ratio (years to repay debt)	0.6	0.5	1.0
Interest coverage ratio (times company can pay interest expenses)	225.5	218.8	112.4

Notes:

1. The above table uses the following formulae, with each indicator stated on a consolidated basis.
   Net worth ratio = Total shareholder equity / Total assets
   Net worth ratio at fair value = Fair value of all outstanding shares / Total assets
   Interest-bearing debt to cash flow ratio = Interest-bearing debt / Operating cash flow
   Interest coverage ratio = Operating cash flow / Interest expense
2. Fair value of all outstanding shares = Year-end share price × Total outstanding shares as of year-end
3. “Interest-bearing debt” covers all interest-bearing debt reported on the consolidated balance sheet except for lease obligations.
4. For “operating cash flow” and “interest expense” (in the formula in Note 1), we used the respective figures for “cash flows from operating activities” and “interest paid” in the statement of cash flows.

(4) Outlook for Fiscal 2023

All forward-looking statements herein represent assumptions that we considered reasonable as of the day this document was published.

As for the future outlook, a highly uncertain situation is forecast to persist due to the war in Ukraine, COVID-19 variants, inflation, and interest rate trends.

Under this operating environment, Toagosei Group launched the new three-year Medium-Term Management Plan 2025 (“Leap Forward to the Next 2025”) spanning from 2023 to 2025. We will further strengthen our research and development capabilities and production base by investing additional management resources in research and development and capital investment, which were focal points of the previous medium-term management plan. As a result, we will seek to expand unique and high value-added businesses as well as build a business base resilient in the face of any type of change in operating environment.

*For more information on the medium-term management plan, see “3. Strategy, (2) Business Strategies, Targets, and Tasks for the Medium to Long Term.”

Consolidated forecasts for fiscal 2023 (full-year: January 1 to December 31, 2023)

(Millions of yen)

	Fiscal 2022	Fiscal 2023	Change	% change
Net sales	160,825	178,800	17,975	11.2%
Operating income	14,382	14,000	(382)	(2.7%)
Ordinary profit	16,446	14,800	(1,646)	(10.0%)
Net income attributable to owners of parent	12,494	10,600	(1,894)	(15.2%)

(5) Shareholder Returns: Basic Policy, Dividends for Fiscal Years 2022 and 2023

Basic policy on shareholder returns: We aim for sustainable dividends that deliver growth in consolidated total shareholder returns. Our benchmark for consolidated payout ratio is 30%, and our benchmark for consolidated total shareholder returns is 50%. Shareholder returns will be determined based on a comprehensive review of investment in growth and sustainable management and internal reserves in preparation for sudden changes in the external environment or operational risks.

Dividend for fiscal 2022: For fiscal 2022, the full-year dividend will amount to ¥36 per share (payout ratio: 35.5%). This is the sum of the forecasted year-end dividend of ¥18 per share and the already-paid interim dividend of ¥18 per share. Consolidated total shareholder return will amount to 69.7%. This figure reflects the impact of a share buyback in fiscal 2022: Specifically, in that period, we bought back 3,978,700 shares at a total price of ¥4,299 million and retired 3,100,000 of them.

Share buyback: Under Medium-Term Management Plan 2025 (“Leap Forward to the Next 2025,” fiscal 2023–2025), we have set aside ¥20 billion for buying back shares. The purpose of this buyback program is to improve consolidated payout ratio and EPS.

Dividend for fiscal 2023: In accordance with the above policy, for fiscal 2023, we will pay a full-year dividend of ¥36 per share (payout ratio of 40.3%, interim dividend of ¥18 per share, year-end dividend of ¥18 per share). Consolidated total shareholder return will amount to 96.4%. This figure reflects our plan to buy back ¥6,000 million worth of shares. The buyback will help us improve shareholders returns, improve our capital efficiency, and improve our enterprise value.

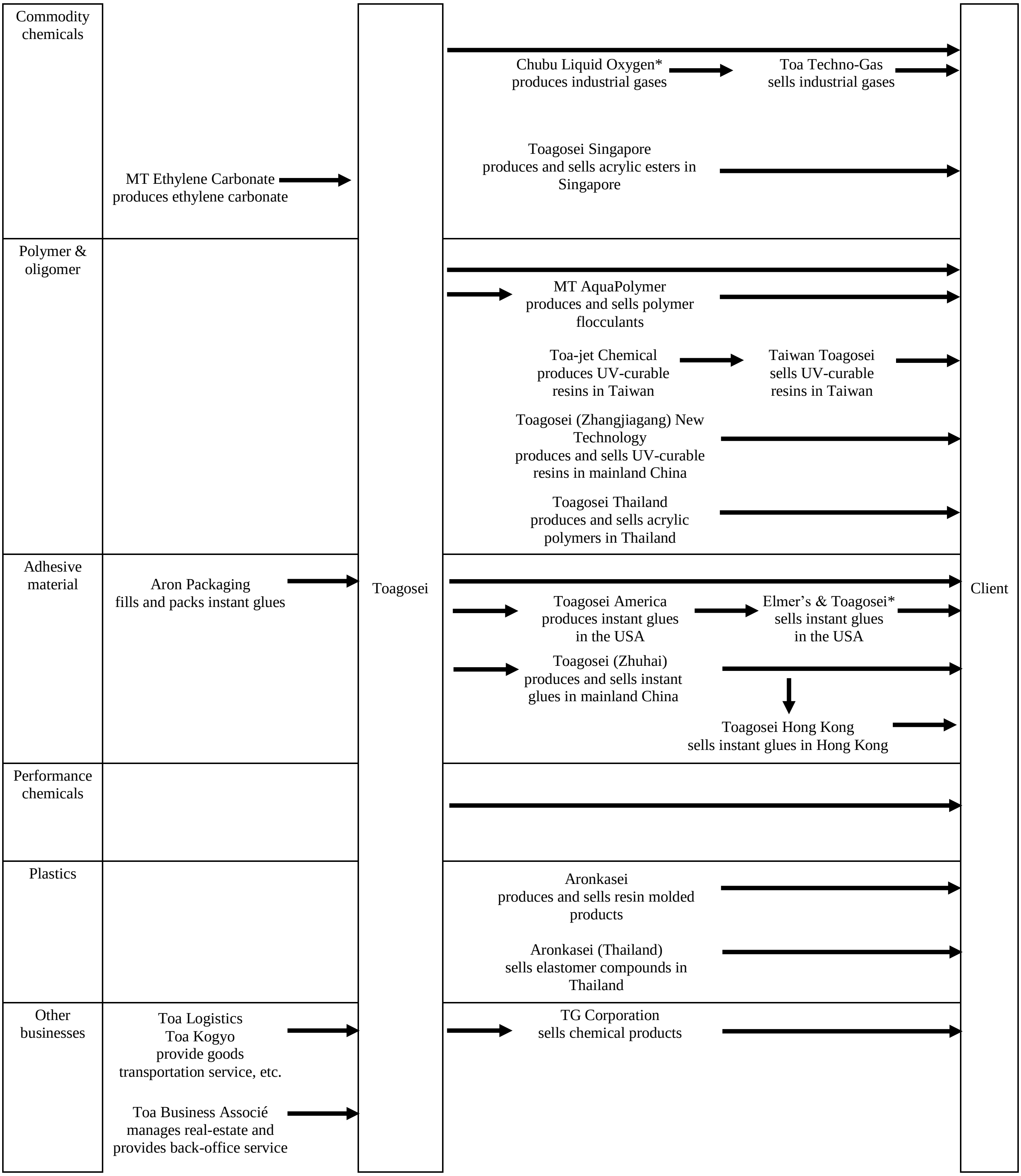
2. Information About the Corporate Group

Our corporate group encompasses 21 subsidiaries and 12 associates. The following table shows the relationship between the main group companies and our reportable business segments.

Segment	Main businesses	Main group companies
Commodity chemicals	Production and sale of electrolysis products (caustic soda, caustic potash, sodium hypochlorite) and acrylic monomers (sulfuric acid, industrial gases, acrylic acid, acrylic esters)	Toa Techno-Gas Co., Ltd. Toagosei Singapore Pte Ltd. MT Ethylene Carbonate Co., Ltd. Chubu Liquid Oxygen Co., Ltd. Six affiliates
Polymer & oligomer	Production and sale of acrylic polymers, polymer flocculants, and acrylic oligomers (including UV-curable resins)	MT AquaPolymer, Inc. Toa-jet Chemical Co., Ltd. Taiwan Toagosei Co., Ltd. Toagosei (Zhangjiagang) New Technology Co., Ltd. Toagosei (Thailand) Co., Ltd.
Adhesive material	Production and sale of instant glues and functional adhesives	Aron Packaging Co., Ltd. Toagosei America Inc. Elmer’s & Toagosei Co. Toagosei (Zhuhai) Limited Toagosei Hong Kong Limited
Performance chemicals	Production and sale of high-purity inorganic chemicals and inorganic functional materials	One subsidiary One affiliate
Plastics	Production and sale of piping equipment, products for construction and civil engineering, nursing care products, and elastomer compounds	Aronkasei Co., Ltd. Aronkasei (Thailand) Co., Ltd. Two subsidiaries
Other businesses	Goods transportation and trading-house operations	Toa Logistics Co., Ltd. Toa Kogyo Co., Ltd. TG Corporation Toa Business Associé Co., Ltd. Three affiliates

Furthermore, Toa-Dic Zhangjiagang Chemical Co., Ltd. became the Company’s wholly-owned subsidiary on December 6, 2022 and subsequently changed its name to Toagosei (Zhangjiagang) New Technology Co., Ltd.

The following table illustrates the roles group companies play in the supply chains.



In the above table, an asterisk indicates that the company is an equity-method affiliate. All other companies are consolidated subsidiaries.

3. Strategy

(1) Strategic Vision

Toagosei Group aims to achieve sustained growth by expanding existing businesses and creating new products and businesses set to become future earnings pillars, based on its corporate philosophy of *"through the endless possibilities of chemistry, we bring happiness created by highly functional materials."*

(2) Business Strategies, Targets, and Tasks for the Medium to Long Term

Under its new three-year Medium-Term Management Plan called Leap Forward to the Next 2025 spanning from 2023 to 2025 announced on January 31, 2023, Toagosei Group will invest additional management resources in R&D and capital investment to further reinforce its unique R&D capabilities and strengthen its production base. As a result, we will seek to expand further our unique and high value-added businesses as well as to build a business base resilient to intense changes in the operating environment.

1. Basic Policies of the Medium-Term Management Plan

(1) Strengthen development capabilities for new products and novel technologies

By further strengthening our R&D capabilities, we will continuously create innovative and competitive products and technologies mainly in mobility, electronic materials and medical care and establish a track record of new businesses paving the way toward the Group's future.

(2) Increase overseas net sales

We will expand production and sales activities in growth markets around the world and increase the market share of our high value-added products.

(3) Contribute to a sustainable society

In addition to our focus on reducing greenhouse gas (GHG) emissions within the Group, we will supply products and technologies that help to resolve environmental issues in our society, which will contribute to a sustainable society. We will steadily implement carefully planned measures to lower GHG emissions.

2. Key Initiatives

(1) Actively invest management resources in growth businesses and accelerate overseas expansion

We will invest management resources in a well-balanced manner across existing businesses that should be strengthened and new businesses. While maintaining initiatives from the previous MTP to boost market share, we will seek to quickly launch and establish cellulose nano fiber products and medical care products for the future. Additionally, overseas, by expanding our materials business structure for mobility, semiconductors, batteries and 5G in markets with strong demand centered on the United States, China and Southeast Asia, we will increase the overseas transaction volume of high value-added products, primarily in the Polymer & Oligomer, Adhesive Material, and Performance Chemicals businesses.

(2) Strengthen R&D capabilities

To accelerate business growth and new business development, we will actively invest management resources to strengthen our R&D capabilities. As part of this, we will also actively promote collaboration with start-up companies. In addition, we will establish a research hub in the Tokyo Metropolitan Area to speed up development by conducting user-centric research alongside customers.

(3) Penetrate and expand DX

We will promote digital transformation (DX) and strengthen the Group's competitiveness and structure by utilizing material informatics (MI) and molecular simulations, switching to smart factories, using AI, and fostering digital human resources.

(4) Secure and cultivate visionary human resources

We will implement a personnel system mindful of increasing motivation at work and actively hire specialized human resources. Furthermore, by promoting overseas human resources and planning/implementing a reskilling plan, we will seek to secure and develop a talent pool compatible with a diverse society.

(5) Promote sustainable management

To achieve our GHG reduction roadmap aimed at carbon neutrality by 2050, we will work not only to reduce energy consumption by improving production efficiency, but also implement such measures as introducing green energy power generation even in procurement. Additionally, we will promote development of eco-friendly products, and focus on providing products and technologies that contribute to solutions to environmental issues facing customers.

3. Quantitative Targets of Medium-Term Management Plan 2025 (“Leap Forward to the Next 2025”)

	Plan for 2025
Consolidated net sales	¥183.0 billion
Consolidated operating income (operating income to net sales ratio)	¥20.0 billion (11.0%)
EBITDA (Earnings before interest, taxes, depreciation and amortization)	¥32.0 billion
Capital investment (total between 2023 and 2025)	¥68.0 billion
High-value-added product to net sales ratio	48%
Increase in R&D spending (vs. to 2022)	+20%
Overseas net sales growth (vs. 2022)	+30%
GHG emissions reduction (vs. 2013)	−35%
Percentage of female managers	5%
Earnings per share (EPS)	¥153
Return on Assets (ROA)	8.2%
Return on Equity (ROE)	7.3%

(1) Capital Investment Plan
We plan total capital investment of 68 billion yen over three years from 2023 to 2025, focusing on increasing manufacturing facilities for high-value-added products, expanding research facilities, developing infrastructure for logistics, and investing in sustainability.

(2) Capital Policy
We will promote the following capital policies to further improve capital efficiency.
・Quickly introduce a business administration method focused on return on invested capital (ROIC) and promote business operations mindful of asset efficiency.
・In terms of shareholder returns, aim for a consolidated payout ratio of at least 30% and a consolidated total shareholder return of at least 50%. In addition, seek to increase share value and complete share buybacks totaling around 20 billion yen during Medium-Term Management Plan 2025.

4. Criteria for Choosing Accounting Policy

When preparing consolidated financial statements, we follow Japan’s Generally Accepted Accounting Principles (J-GAAP) on the basis that they aid inter-period and inter-company comparability. However, we do recognize the increasing use of International Financial Reporting Standards (IFRS), including in Japan, and we are mulling the possibility of adopting IFRS ourselves.

5. Consolidated Financial Statements, Notes

(1) Consolidated Balance Sheet

(Millions of yen)

	Fiscal 2021 (as of December 31, 2021)	Fiscal 2022 (as of December 31, 2022)
Assets		
Current assets		
Cash and deposits	52,457	40,366
Notes and accounts receivable	48,456	49,848
Securities	23,000	18,000
Inventories	19,387	25,511
Other current assets	1,913	5,309
Allowance for doubtful receivables	(46)	(50)
Total current assets	145,168	138,985
Fixed assets		
Property, plant and equipment		
Buildings and structures, net	28,034	27,467
Machinery, equipment and other, net	26,392	24,399
Tools, furniture, and fixtures, net	3,076	2,908
Land	17,969	29,146
Leased assets, net	122	1,186
Construction in progress	2,599	5,666
Total property, plant and equipment	78,193	90,774
Intangible fixed assets	1,669	1,592
Investments and other assets		
Investment securities	28,722	28,472
Net defined benefit asset	3,165	2,704
Deferred tax assets	124	90
Other assets	1,920	2,522
Allowance for doubtful receivables	(8)	(6)
Total investments and other assets	33,924	33,782
Total fixed assets	113,787	126,150
Total assets	258,955	265,135

(Millions of yen)

(Millions of yen)

	Fiscal 2021 (as of December 31, 2021)	Fiscal 2022 (as of December 31, 2022)
Liabilities		
Current liabilities		
Notes and accounts payable	18,391	19,653
Short-term bank loans	2,477	2,475
Lease obligations	148	173
Accrued income taxes	3,728	2,176
Accrued bonuses for employees	13	16
Other current liabilities	11,977	13,296
Total current liabilities	36,737	37,792
Long-term liabilities		
Long-term debt	8,730	8,590
Lease obligations	140	1,137
Deferred tax liabilities	3,306	2,875
Net defined benefit liability	140	117
Other long-term liabilities	3,288	3,815
Total long-term liabilities	15,605	16,535
Total liabilities	52,343	54,328
Net assets		
Shareholders' equity		
Common stock	20,886	20,886
Capital surplus	15,046	15,095
Retained earnings	153,693	158,154
Treasury stock	(230)	(1,081)
Total shareholders' equity	189,396	193,053
Accumulated other comprehensive income		
Unrealized holding gain on available-for-sale securities	9,749	9,598
Translation adjustment	2,199	3,471
Remeasurements of defined benefit plans	419	(154)
Total accumulated other comprehensive income	12,367	12,915
Non-controlling interests	4,848	4,837
Total net assets	206,612	210,807
Total liabilities and net assets	258,955	265,135

(2) Consolidated Statements of Income and Comprehensive Income

(Consolidated Statement of Income)

(Millions of yen)

	Fiscal 2021 (January 1–December 31, 2021)	Fiscal 2022 (January 1–December 31, 2022)
Net sales	156,313	160,825
Cost of sales	110,974	117,891
Gross profit	45,339	42,933
Selling, general, and administrative expenses		
Selling expenses	16,023	15,911
General and administrative expenses	11,639	12,639
Total selling, general, and administrative expenses	27,663	28,551
Operating income	17,676	14,382
Non-operating income		
Interest income	32	68
Dividend income	962	1,020
Equity in earnings of affiliates	145	128
Foreign currency exchange gains	50	753
Rent income on non-current assets	245	182
Other	263	334
Total non-operating income	1,700	2,486
Non-operating expenses		
Interest expenses	94	100
Environment readiness fee	127	208
Inactive facilities expenses	33	25
Other	138	89
Total non-operating expenses	393	423
Ordinary profit	18,983	16,446
Extraordinary income		
Gain on sales of investment securities	1,706	2,554
Subsidy income	134	283
Total extraordinary gains	1,840	2,837
Extraordinary losses		
Loss on disposal of non-current assets	722	559
Impairment losses	1,032	959
Expenses of soil pollution measures	264	358
Loss on valuation of investment securities	3	91
Total extraordinary losses	2,022	1,968
Income before income taxes	18,801	17,314
Income taxes -current	5,286	4,679
Income taxes - deferred	(465)	(118)
Total income taxes	4,821	4,560
Net income	13,979	12,754
Net income attributable to non-controlling interests	208	260
Net income attributable to owners of parent	13,771	12,494

(Consolidated Statement of Comprehensive Income)

(Millions of yen)

	Fiscal 2021 (January 1–December 31, 2021)	Fiscal 2022 (January 1–December 31, 2022)
Net income	13,979	12,754
Other comprehensive income		
Unrealized holding gain on available-for-sale securities	1,858	(148)
Translation adjustments	978	1,304
Remeasurements of defined benefit plans, net of tax	333	(573)
Total other comprehensive income	3,170	581
Comprehensive income	17,150	13,336
Comprehensive income attributable to:		
Owners of parent	16,873	13,042
Non-controlling interests	276	293

(3) Consolidated Statement of Changes in Equity

Fiscal 2021 (January 1–December 31, 2021)

(Millions of yen)

	Shareholders' equity				
	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Balance at beginning of the year	20,886	15,046	147,893	(207)	183,619
Cumulative effect of accounting policy change					–
Balance at beginning of the year reflecting change in accounting policy	20,886	15,046	147,893	(207)	183,619
Changes during the year:					
Cash dividends			(4,100)		(4,100)
Net income attributable to owners of parent			13,771		13,771
Purchase of treasury stock				(4,006)	(4,006)
Disposal of treasury stock		20		92	112
Cancellation of treasury stock		(3,891)		3,891	–
Transfer from retained earnings to capital surplus		3,870	(3,870)		–
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		–	5,800	(22)	5,777
Balance at end of the year	20,886	15,046	153,693	(230)	189,396

	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 period	7,891	1,287	86	9,265	4,757	197,642
Cumulative effect of accounting policy change						–
Balance at beginning of the year reflecting change in accounting policy	7,891	1,287	86	9,265	4,757	197,642
Changes during period						
Cash dividends						(4,100)
Net income attributable to owners of parent						13,771
Purchase of treasury stock						(4,006)
Disposal of treasury stock						112
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	1,857	911	333	3,102	91	3,193
Total changes during the year	1,857	911	333	3,102	91	8,970
Balance at end of the year	9,749	2,199	419	12,367	4,848	206,612

Fiscal 2022 (January 1–December 31, 2022)

(Millions of yen)

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

	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 period	9,749	2,199	419	12,367	4,848	206,612
Cumulative effect of accounting policy change						(54)
Balance at beginning of the year reflecting change in accounting policy	9,749	2,199	419	12,367	4,848	206,557
Changes during period						
Cash dividends						(4,603)
Net income attributable to owners of parent						12,494
Purchase of treasury stock						(4,303)
Disposal of treasury stock						78
Cancellation of treasury stock						–
Transfer from retained earnings to capital surplus						–
Change in ownership interest of parent due to transactions with non-controlling interests						48
Net changes in items other than shareholders' equity	(151)	1,272	(573)	548	(10)	537
Total changes during the year	(151)	1,272	(573)	548	(10)	4,250
Balance at end of the year	9,598	3,471	(154)	12,915	4,837	210,807

(4) Consolidated Statement of Cash Flows

(Millions of yen)

	Fiscal 2021 (January 1–December 31, 2021)	Fiscal 2022 (January 1–December 31, 2022)
Operating activities		
Income before income taxes	18,801	17,314
Depreciation and amortization	10,623	10,457
Impairment losses	1,032	959
Increase or decrease in allowance for doubtful accounts (Minus means decrease.)	3	2
Increase or decrease in other provisions (Minus means decrease.)	(2)	3
Increase or decrease in net defined benefit asset (Minus means increase.)	(244)	(365)
Increase or decrease in net defined benefit liability(Minus means decrease.)	(11)	(23)
Interest and dividend income	(995)	(1,088)
Interest expense	94	100
Foreign currency exchange gains or losses (Minus means gains.)	(57)	(660)
Gain or loss on sale of investment securities (Minus means gain.)	(1,706)	(2,554)
Gain or loss on valuation of investment securities (Minus means gain.)	3	91
Equity in earnings or losses of affiliates (Minus means earnings.)	(145)	(128)
Subsidy income	(134)	(283)
Gain or Loss on disposal of non-current assets (Minus means gain.)	722	559
Increase or decrease in receivables (Minus means increase.)	(8,480)	(1,124)
Increase or decrease in inventories (Minus means increase.)	(2,125)	(5,795)
Increase or decrease in payables (Minus means decrease.)	6,143	1,138
Other, net	(113)	(2,863)
Subtotal	23,406	15,741
Interest and dividends received	1,192	1,190
Interest paid	(96)	(97)
Subsidies income received	19	398
Income taxes paid	(3,301)	(6,243)
Net cash provided by operating activities	21,219	10,988
Investing activities		
Increase or decrease in time deposits (Minus means increase.)	(890)	16,056
Net decrease (increase) in short-term investment securities	2,000	—
Purchase of investment securities	(438)	(623)
Proceeds from sales of investment securities	2,910	3,049
Purchase of property, plant and equipment	(11,516)	(20,295)
Other, net	(2,304)	(1,766)
Net cash used in investing activities	(10,239)	(3,579)

(Millions of yen)

	Fiscal 2021 (January 1–December 31, 2021)	Fiscal 2022 (January 1–December 31, 2022)
Financing activities		
Net increase or decrease in short-term debt (Minus means decrease.)	(10)	12
Proceeds from long-term debt	4,400	—
Repayments of long-term debt	(4,558)	(143)
Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation	—	(158)
Proceeds from sale of treasury stock	0	0
Purchase of treasury stock	(4,006)	(4,306)
Repayments of lease obligations	(185)	(171)
Cash dividends to shareholders	(4,098)	(4,599)
Dividends paid to non-controlling interests	(185)	(97)
Net cash used in financing activities	(8,644)	(9,464)
Effect of exchange rate change on cash and cash equivalents	368	390
Net increase or decrease in cash and cash equivalents (Minus means decrease.)	2,703	(1,664)
Cash and cash equivalents at beginning of the period	43,800	46,504
Cash and cash equivalents at end of the period	46,504	44,839

(5) Notes

(Notes on Going Concern Assumption)

None

(Changes in Accounting Policies)

(Application of Accounting Standard for Revenue Recognition [ASBJ Statement No. 29])

We have applied "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29, March 31, 2020) from the beginning of the consolidated period under review. As a result, we have decided to recognize revenue when the control of the promised goods or services is transferred to the customer by the amount expected to be received in exchange for said goods or services. The main changes made are as follows:

1. Revenue recognition related to export transactions

In the past, we have recognized the revenue of export transactions of the Company and our domestic consolidated subsidiaries based on shipping standards, but we have changed the method of recognizing revenue at the time the goods or services are transferred to customers and the performance obligations are satisfied.

2. Revenue recognition related to agency transactions

In the past, we have recognized the total amount of consideration received from customers with regard to the purchase and sale of goods or services in trading-house operations, but as a result of determining the role (person or agent) in providing goods or services to customers, for transactions that fall under an agent, we have changed to a method of recognizing revenue by the net amount minus the amount paid to the vendor from the amount received from the customer.

3. Revenue recognition related to chargeable transactions

In the past, we have recognized extinguishment of chargeable goods, but in case of an obligation to buy back chargeable goods, we have changed to a method that does not recognize the extinguishment of the chargeable goods

The application of Accounting Standard for Revenue Recognition (ASBJ Statement No. 29) follows the transitional treatment stipulated in the proviso to Paragraph 84 of the Accounting Standard for Revenue Recognition, and the cumulative impact of retroactively applying the new accounting policy prior to the beginning of the consolidated period under review has been applied to the new accounting policy from the balance of the beginning of the consolidated period under review after adjusting the retained earnings at the beginning of the fiscal year. However, the new accounting policy has not been retroactively applied to contracts that apply the method stipulated in Paragraph 86 of the Accounting Standard for Revenue Recognition and that recognize almost all amounts of revenue in accordance with the previous handling prior to the beginning of the consolidated period under review.

As a result, net sales for the consolidated period under review decreased by ¥7,940 million, cost of sales by ¥7,292 million, selling, general, and administrative expenses by ¥553 million, respectively, while operating income, ordinary profit, and income before income taxes decreased by ¥94 million, respectively. Retained earnings decreased by ¥54 million at the beginning of the fiscal year. Furthermore, in accordance with the transitional treatment stipulated in Paragraph 89-2 of the Accounting Standard for Revenue Recognition, we have not reorganized the previous consolidated fiscal year using a new presentation method.

(Application of Accounting Standard for Fair Value Measurement)

We applied “Accounting Standard for Fair Value Measurement” (ASBJ Statement No. 30, July 4, 2019) from the beginning of the consolidated period under review. In accordance with the transitional handling stipulated in Paragraph 19 of the Accounting Standard for Fair Value Measurement and Paragraph 44-2 of the Accounting Standard for Financial Instruments (ASBJ Statement No. 10, July 4, 2019), we have decided to apply the new accounting policy established by the Accounting Standard for Fair Value Measurement into the future. In the past, the market value method based on the average market price one month prior to the end of the fiscal year had been adopted for securities with market value among other securities, but from the consolidated period under review, we have changed to a market value method based on market price as of the end of the fiscal year.

(Notes on Consolidated Statements)

Impairment losses

Previous consolidated period (January 1 to December 31, 2021)

We recognized impairment in the following asset / asset group:

(Millions of yen)

Location	Use	Group	Impairment losses
Kawasaki-ku, Kawasaki-shi	Facility for producing synthetic resin	Machinery and equipment, etc.	1,032

Background to Impairment, How Assets are Grouped

The Company engages in multiple businesses. As for business assets, business units are considered the smallest asset group in each segment of the Company; namely, the commodity chemicals business, the polymer & oligomer business, adhesive material business, and performance chemicals business. In addition, consolidated subsidiaries primarily engage in a single business segment, and the company unit is considered the smallest asset group.

During the consolidated period under review, the book value of the above asset (facility for producing synthetic resin), which the Company can no longer forecast its future use, fell to the asset’s recoverable amount. Accordingly, we recognized, as an extraordinary loss, ¥1,032 million in impairment.

Impairment Breakdown

The impairment consisted of:

- ¥940 million in impairment of machinery
- ¥51 million in impairment of buildings
- ¥21 million in impairment of structures,
- ¥17 million in impairment of construction in progress, and
- ¥1 million in impairment of tools, furniture, and fixtures.

How Recoverable Amount was Determined

When determining impairment losses to be recognized in the consolidated period under review, we defined recoverable amount as the value-in-use, discounting 14.30% of the future expected cash flows from the asset.

Consolidated period under review (January 1 to December 31, 2022)

We recognized impairment in the following asset / asset group:

(Millions of yen)

Location	Use	Group	Impairment losses
Minami-ku, Yokohama-shi	Company-owned housing and dormitory	Land, buildings, etc.	728
Suita-shi, Osaka Prefecture	Dormitory	Land	231

Background to Impairment, How Assets are Grouped

The Company engages in multiple businesses. As for business assets, business units are considered the smallest asset group in each segment of the Company; namely, the commodity chemicals business, the polymer & oligomer business, adhesive material business, and performance chemicals business. In addition, consolidated subsidiaries primarily engage in a single business segment, and the company unit is considered the smallest asset group.

In the fiscal year under review, the Company made a decision to stop using the company-owned housing and dormitory located in Yokohama-shi and sell the land. It has also posted an extraordinary loss owing to the impairment loss (¥959 million) on the small amount resulting from reducing the book value of its dormitory in Osaka Prefecture to the recoverable amount following a substantial decline in the market value of the land.

Impairment Breakdown

The impairment consisted of:

- ¥640 million in impairment of land
- ¥163 million in impairment of buildings, and
- ¥155 million in impairment of others

How Recoverable Amount was Determined

When determining the recoverable amount of impairment losses to be recognized in the consolidated period under review, for land, the net selling price is measured again and the net selling price is calculated based on the appraised value. For all other fixed assets other than land, assessment is performed using the scrap value.

(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, etc.) ,sulfuric acid, industrial gases and acrylic monomers (acrylic acid, acrylic esters, etc.)
Polymer & oligomer	Acrylic polymers, polymer flocculants, and acrylic oligomers (UV-curable resins, etc.)
Adhesive material	Instant glues and functional adhesives
Performance chemicals	High-purity inorganic chemicals and inorganic functional materials
Plastics	Piping equipment, products for construction and civil engineering, nursing care products, and elastomer compounds

(3) Matters concerning changes in reportable segments

(Changes in reportable segment classification)

We have partially changed the classification of reportable segments from the consolidated period under review. Some of the developed products previously included in the Adhesive Material segment have been transferred to the Performance Chemicals segment. This change is in line with organizational changes aimed at promoting cross functional development activities and is intended to properly present the actual state of the Group's business management.

Furthermore, segment information for fiscal 2021 is prepared and presented according to the revised classification method.

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 we use for preparing consolidated financial statements.

Segment profit is stated as operating income.

Intersegment sales and transfers are generally stated at market value.

As described in "(Changes in Accounting Policies)," we applied Accounting Standard for Revenue Recognition

(ASBJ Statement No. 29) from the consolidated period under review and similarly we have changed the measurement method of profit and loss of reportable segments because of changes in the accounting treatment of revenue recognition.

Due to this change, net sales in the fiscal year under review for each reportable segment declined by ¥2,246 million for Commodity Chemicals, by ¥2,150 million for Polymer & Oligomer, by ¥461 million for Adhesive Material, by ¥706 million for Plastics and by ¥2,478 million for Other Businesses, and increased by ¥103 million for Performance Chemicals compared to the previous method.

Additionally, segment profit decreased by ¥130 million for Polymer & Oligomer and by ¥5 million for Adhesive Material and by ¥2 million for Other Businesses, while segment profit increased by ¥1 million for Commodity Chemicals and by ¥42 million for Performance Chemicals.

3. Further Information about Segment Sales, Segment Profit/Loss, Assets/Liabilities, and Other Segment Items

Previous consolidated period (January 1 to December 31, 2021)

(Millions of yen)

	Reportable segment						Other businesses[1]	Total	Adjusted[2]	Consolidated book value[3]
	Commodity chemicals	Polymer & oligomer	Adhesive materials	Performance chemicals	Plastics	Total				
Net sales										
External sales	70,312	34,904	11,336	9,779	26,131	152,465	3,847	156,313	–	156,313
Intersegment sales or transfers	3,559	1,463	89	207	278	5,598	1,480	7,078	(7,078)	–
Total	73,872	36,367	11,426	9,986	26,410	158,063	5,328	163,391	(7,078)	156,313
Segment profit	7,992	5,276	844	2,449	1,433	17,996	(299)	17,696	(20)	17,676
Segment assets	63,083	33,379	16,025	12,866	44,591	169,930	1,521	171,452	87,503	258,955
Other items										
Depreciation and amortization	4,395	1,907	600	1,088	1,795	9,788	195	9,984	639	10,623
Investments accounted for by equity method	721	–	–	–	–	721	–	721	–	721
Increase in property, plant, and equipment, or in intangible assets	4,537	2,328	1,441	1,096	1,612	11,015	311	11,327	624	11,951

Notes:

1. "Other businesses" is a miscellaneous segment covering businesses that do not belong to any reportable segment. It includes operations related to product development, goods transportation, and trading-house operations.
2. "Adjusted" includes the following four adjustments:
   (1) Segment profit: We primarily eliminated intersegment transactions.
   (2) Segment assets: We included ¥115,766 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 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.

Consolidated period under review (January 1 to December 31, 2022)

(Millions of yen)

	Reportable segment						Other businesses[1]	Total	Adjusted[2]	Consolidated book value[3]
	Commodity chemicals	Polymer & oligomer	Adhesive materials	Performance chemicals	Plastics	Total				
Net sales										
External sales	74,225	35,807	11,134	10,466	27,754	159,388	1,436	160,825	—	160,825
Intersegment sales or transfers	4,537	1,515	103	255	364	6,776	1,516	8,292	(8,292)	—
Total	78,763	37,322	11,237	10,722	28,118	166,165	2,953	169,118	(8,292)	160,825
Segment profit (loss)	6,691	4,258	(255)	2,361	1,759	14,814	(434)	14,379	3	14,382
Segment assets	83,551	37,117	15,983	13,795	45,322	195,770	1,686	197,457	67,677	265,135
Other items										
Depreciation and amortization	3,528	2,024	758	1,153	1,738	9,204	220	9,424	1,068	10,493
Investments accounted for by equity method	713	—	—	—	—	713	—	713	—	713
Increase in property, plant, and equipment, or in intangible assets	17,141	835	841	1,734	748	21,301	164	21,466	1,378	22,844

Notes:

1. "Other businesses" is a miscellaneous segment covering businesses that do not belong to any reportable segment. It includes operations related to product development, goods transportation, and trading-house operations.
2. "Adjusted" includes the following four adjustments:
   (1) Segment profit or loss: We primarily eliminated intersegment transactions.
   (2) Segment assets: We included ¥95,963 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

Previous consolidated period (January 1 to December 31, 2021)

1. Regional breakdown

(1) Net sales

(Millions of yen)

Japan	Asia	North America	Other regions	Total
127,302	20,830	4,540	3,639	156,313

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.

Consolidated period under review (January 1 to December 31, 2022)

1. Regional breakdown

(1) Net sales

(Millions of yen)

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

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

Previous consolidated period (January 1 to December 31, 2021)

(Millions of yen)

	Commodity chemicals	Polymer & oligomer	Adhesive materials	Performance chemicals	Plastics	Other businesses	Company-wide / elimination	Total
Impairment losses	1,032	–	–	–	–	–	–	1,032

Consolidated period under review (January 1 to December 31, 2022)

(Millions of yen)

	Commodity chemicals	Polymer & oligomer	Adhesive materials	Performance chemicals	Plastics	Other businesses	Company-wide / elimination	Total
Impairment losses	–	–	–	–	–	–	959	959

Note: The impairment losses for company-wide/elimination of ¥959 million relates to the land and buildings of company-owned housing and dormitory.

(Per-Share Information)

	Previous consolidated period (January 1–December 31, 2021)	Consolidated period under review (January 1–December 31, 2022)
Net assets per share	¥1,613.90	¥1,700.75
Net income per share	¥108.14	¥101.31

Notes:

1. The above table does not show any adjustment for dilutive potential shares as we had no such shares.
2. We calculated earnings per share using the following data:

	Previous consolidated period (January 1–December 31, 2021)	Consolidated period under review (January 1–December 31, 2022)
Earnings per share		
Net income attributable to owners of parent (Millions of yen)	13,771	12,494
Net income not attributable to ordinary shareholders (Millions of yen)	–	–
Profit attributable to owners of parent available to common stock (Millions of yen)	13,771	12,494
Average number of shares of common stock during the period	127,347,000	123,329,000

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

	Previous consolidated period (January 1–December 31, 2021)	Consolidated period under review (January 1–December 31, 2022)
Total net assets (Millions of yen)	206,612	210,807
Amount deducted from total net assets (Millions of yen)	4,848	4,837
of which pertains to non-controlling interests (Millions of yen)	[4,848]	[4,837]
Closing balance of net assets pertaining to outstanding shares of common stock (Millions of yen)	201,764	205,969
Shares of common stock used in calculation of net assets per share	125,016,000	121,105,000

(Subsequent Events)

Purchase of treasury shares

On February 10, 2023, 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 6,000,000 (4.95% of all outstanding shares)
   (3) Acquisition price: No more than ¥6,000 million
   (4) Acquisition period: February 13 – December 31, 2023
   (5) Acquisition method: Open market purchases on the Tokyo Stock Exchange
   (discretionary investment contract and purchases during after-hours trading)

6. Other Disclosures

Personnel Changes in Senior Management

On Thursday, March 30, 2023, certain directors and executive officers will reach the end of their tenure, and their successors will be nominated. For more information, see the press release issued on Monday, November 21, 2022, titled “Notice concerning organizational changes and personnel changes in senior management” and the press release issued on Friday, February 10, 2023, titled “Notice concerning change of officer.”