

Kuraray Report 2024 Financial Section

For the year ended December 31,2023

Business Environment

In the fiscal year ended December 31, 2023 ("fiscal 2023"), the trend toward deceleration in the world economy strengthened in the latter half of the year due in part to economic stagnation caused by continued financial tightening in Europe, slowing growth caused mainly by stagnation in the real estate market in China, and geopolitical tensions in various places around the world.

Amid these circumstances, consolidated operating results for fiscal 2023, are as follows: net sales increased \(\frac{2}{2}4,562\) million (US\\$173,179\) thousand) (3.2\%) year on year to \(\frac{2}{7}80,938\) million (US\\$5,506,155\) thousand); operating income decreased \(\frac{2}{1}1,663\) million (US\\$82,232\) thousand) (13.4\%) year on year to \(\frac{2}{7}5,475\) million (US\\$532,151\) thousand); ordinary income decreased \(\frac{2}{1}15,035\) million (US\\$106,007\) thousand) (17.9\%) year on year to \(\frac{2}{9}6,025\) million (US\\$486,674\) thousand); and net income attributable to owners of the parent decreased \(\frac{2}{1}1,861\) million (US\\$83,628\) thousand) (21.8\%) year on year to \(\frac{2}{2}42,446\) million (US\\$299,274\) thousand).

The Kuraray Group (hereinafter "the Group") works to tackle the three challenges outlined in the medium-term management plan "PASSION 2026," which was launched in fiscal 2022: 1) Sustainability as an opportunity, 2) Innovations starting from networking, and 3) Transformation of people and organization. Through these efforts, the Group aims to achieve sustainable growth by contributing to customers, society, and the world.

Regarding the civil lawsuits related to the fire that occurred at a U.S. subsidiary in May 2018, we reached settlements with the remaining plaintiffs in April 2023, except for one for which a motion to dismiss was expected to be granted. Accordingly, in fiscal 2023, we recorded an extraordinary loss of ¥7,806 million (US\$55,038 thousand) as loss on litigation related to the lawsuits, etc. The motion to dismiss the individual's lawsuit was granted in July 2023. The lawsuits have therefore been resolved.

Sales

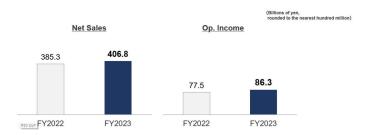
	(Billions of yen, rounded to the nearest hundred million)				
	Fiscal 2023	Fiscal 2022	Change		
Net Sales ····	¥780.9	¥756.4	+¥24.6		
Operating Income · · · · · · · · · · · · · · · · · · ·	75.5	87.1	-11.7		
Ordinary Income · · · · · · · · · · · · · · · · · · ·	69.0	84.1	-15.0		
Net Income Attributable to Owners of the Parent	42.4	54.3	-11.9		

Results by Business Segment

	(Billions of yen, rounded to the nearest hundred million)						
	Net :	Sales	Operatin	g Income			
	Fiscal 2023	Fiscal 2022	Fiscal 2023	Fiscal 2022			
Vinyl Acetate ·····	¥406.8	¥385.3	¥ 86.3	¥ 77.5			
Isoprene ·····	65.7	65.6	(10.9)	4.3			
Functional Materials · · · · · · · · · · · · · · · · · · ·	189.8	174.1	10.3	8.6			
Fibers and Textiles	61.9	66.9	1.8	6.7			
Trading · · · · · · · · · · · · · · · · · · ·	61.6	58.8	5.2	5.1			
Others · · · · · · · · · · · · · · · · · · ·	45.7	52.1	0.5	2.7			
Elimination & Corporate	(50.4)	(46.4)	(17.8)	(17.8)			
Total ·····	¥ 780.9	¥756.4	¥ 75.5	¥ 87.1			

Vinyl Acetate

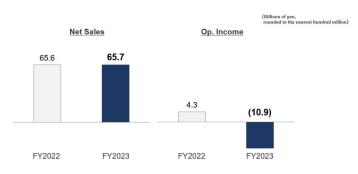
Sales in this segment were \(\pm\)406,771 million (US\(\pm\)2,868,018thousand) (up 5.6% year on year), and segment income was \(\pm\)8608,785 thousand) (up 11.3% year on year).



- (1) We further promoted a shift to high value-added products for PVOH resin. However, sales volume declined due to receding demand, especially in Europe and the United States. Shipments of optical-use poval film recovered in stages due to inventory adjustments for LCD panels returning to normal. As for Advanced Interlayer Solutions, although demand for PVB film showed signs of receding for construction applications, mainly in Europe, demand for automotive applications remained firm. Shipments of water-soluble PVOH film showed signs of recovery in the latter half of the year despite continued inflation-driven belt tightening and other effects.
- (2) As for EVALTM ethylene vinyl alcohol copolymer (EVOH resin), although sales for automotive applications remained firm, sales volume decreased due in part to a temporary drop in demand for food packaging applications in the latter half of the year.

Isoprene

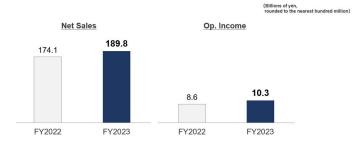
Sales in this segment were ¥65,683 million (US\$463,111 thousand) (up 0.1% year on year), and segment loss was ¥10,871 million (US\$76,648 thousand) (compared with segment income of ¥4,270 million (US\$30,106 thousand) in the previous fiscal year). In addition, a new plant in Thailand began operations in stages from February.



- Results for isoprene chemicals and elastomer were affected by intensifying competition in addition to stagnant demand.
- (2) Regarding GENESTAR™ heat-resistant polyamide resin, although demand for automotive applications was on a recovery track, there was a delay in the recovery of demand for electric and electronic device applications.

Functional Materials

Sales in this segment were \(\pm\)189,794 million (US\(\pm\)1,338,180 thousand) (up 9.0% year on year), and segment income was \(\pm\)10,323 million (US\(\pm\)72,784 thousand) (up 20.4% year on year).

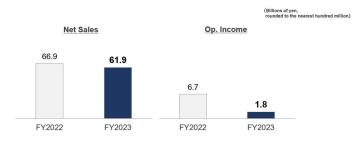


- (1) In the methacrylate business, results were affected by higher raw material and fuel prices in addition to a delay in the recovery of demand for electric and electronic devices.
- (2) In the medical business, sales of cosmetic dental materials, mainly in Europe and the United States, remained brisk.
- (3) In the environmental solutions business, despite the effects of economic deceleration in Europe, demand increased for drinking water

and other applications in North America, and sales of activated carbon remained steady.

Fibers and Textiles

Sales in this segment were ¥61,858 million (US\$436,142 thousand) (down 7.5% year on year), and segment income was ¥1,827 million (US\$12,882 thousand) (down 72.9% year on year).



- Shipments of CLARINOTM man-made leather decreased due to the lower demand for luxury applications despite a continued recovery in automotive and sports applications.
- (2) In fibers and industrial materials, sales of KURALONTM were weak in Europe, but we saw signs of recovery for automotive applications in the United States and other countries. In addition, sales of VECTRANTM remained stable, especially with regard to exports.
- (3) In consumer goods and materials, demand for KURAFLEX™ in the restaurant industry was weak.

Trading

Sales in this segment were ¥61,588 million (US\$434,238 thousand) (up

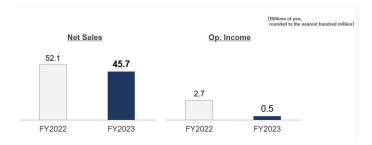
4.7% year on year), and segment income was \$5,183 million (US\$36,544 thousand) (up 1.2% year on year).



- (1) In fiber-related businesses, the materials business struggled, but sales of sportswear applications remained brisk.
- (2) Sales of resins and chemicals in Asia expanded in the latter half of the fiscal year.

Others

In Others, net sales were \(\frac{\pmathbf{45}}{45}\),672 million (US\\$322,019 thousand) (down 12.3\% year on year), and operating income was \(\frac{\pmathbf{506}}{506}\) million (US\\$3,568 thousand) (down 81.1\% year on year).



Outlook for the Fiscal Year Ending December 31, 2024

The outlook for the economic environment over the next year is expected to gradually head toward a recovery in the latter half of the year due to efforts to revise financial policies amid easing inflation pressure despite ongoing uncertainty, such as geopolitical risks in various places around the world and economic stagnation in China.

Amid this situation, the Group will continue to promote measures in line

with its medium-term management plan "PASSION 2026." In addition to the isoprene base in Thailand, we will swiftly begin stable operations of new activated carbon manufacturing equipment in the United States, optical-use poval film production facilities, and the new water soluble PVOH film plant in Poland, and connect these operations to profit expansion.

Financial Review

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2023

Based on these circumstances, the outlook for fiscal 2024 is as follows.

	(Billions of yen, rounded to the nearest hundred million)					
	Fiscal 2023	Forecast for Fiscal 2024	Change (Adjusted)			
Net Sales ····	¥780.9	¥830.0	6.3%			
Operating Income ·····	75.5	83.0	10.0%			
Ordinary Income ·····	69.0	77.0	11.6%			
Net Income Attributable to Owners of the Parent·····	42.4	47.0	10.7%			

For the forecast of operating results for fiscal 2024, we assume average exchange rates of \$145 to the U.S. dollar and \$160 to the euro, as well as a domestic naphtha price of \$75,000 per kiloliter.

[Reference] Forecast of Results by Segment for Fiscal 2024

	(Billions of yen, rounded to the nearest hundred million)						
	Net	Sales	Operation	ng Income			
	Fiscal 2023	Forecast for Fiscal 2024	Fiscal 2023	Forecast for Fiscal 2024			
Vinyl Acetate·····	¥406.8	¥416.0	¥86.3	¥84.0			
Isoprene ·····	65.7	76.0	(10.9)	(9.0)			
Functional Materials · · · · · · · · · · · · · · · · · · ·	189.8	210.0	10.3	13.5			
Fibers and Textiles	61.9	72.0	1.8	4.0			
Trading · · · · · · · · · · · · · · · · · · ·	61.6	66.0	5.2	5.5			
Others	45.7	43.0	0.5	2.0			
Elimination & Corporate	(50.4)	(53.0)	(17.8)	(17.0)			
Total ·····	¥ 780.9	¥ 830.0	¥ 75.5	¥ 83.0			

		Millio	ns of yen	Thousands of U.S. dollars
		Fiscal 2023 (December 31, 2023)	Fiscal 2022 (December 31, 2022)	Fiscal 2023 (December 31, 2023)
AS	SETS			
I	Current assets:			
	1 Cash and deposits	¥131,144	¥123,724	\$924,656
	2 Notes and accounts receivable—trade, and contract assets*1 and *8	161,904	157,016	1,141,536
	3 Short-term investment securities	3,478	4,852	24,522
	4 Merchandise and finished goods	146,924	145,851	1,035,916
	5 Work in process	17,502	19,078	123,401
	6 Raw materials and supplies	63,601	60,104	448,431
	7 Other	28,040	23,815	197,701
	8 Allowance for doubtful accounts	(869)	(510)	(6,127)
	Total current assets	551,727	533,933	3,890,059
П	Noncurrent assets:			
	1 Tangible fixed assets:			
	(1) Buildings and structures, net*7	110,214	94,745	777,085
	(2) Machinery, equipment and vehicles, net	270,408	219,200	1,906,564
	(3) Land*7	22,618	23,264	159,473
	(4) Construction in progress	80,344	137,424	566,481
	(5) Other, net	43,390	37,926	305,930
	Total tangible fixed assets*3	526,977	512,562	3,715,554
	2 Intangible fixed assets:			
	(1) Goodwill	55,386	56,058	390,510
	(2) Customer-related assets	29,149	30,432	205,521
	(3) Other	35,965	34,993	253,578
	Total intangible fixed assets	120,501	121,484	849,616
	3 Investments and other assets:			
	(1) Investment securities*4	23,966	23,194	168,977
	(2) Long-term loans receivable	140	97	987
	(3) Net defined benefit assets	3,227	2,104	22,753
	(4) Deferred tax assets	16,530	16,718	116,548
	(5) Other	11,509	11,458	81,146
	(6) Allowance for doubtful accounts	(95)	(20)	(670)
	Total investments and other assets	55,278	53,553	389,748
	Total noncurrent assets	702,757	687,600	4,954,925
	TOTAL ASSETS	¥1,254,485	¥1,221,533	\$8,844,990

		Millio	ns of yen	Thousands of U.S. dollars
		Fiscal 2023 (December 31, 2023)	Fiscal 2022 (December 31, 2022)	Fiscal 2023 (December 31, 2023)
LIA	ABILITIES			
I	Current liabilities:			
	1 Notes and accounts payable—trade*8	¥49,124	¥52,717	\$346,358
	2 Short-term borrowings*7	40,014	34,480	282,126
	3 Commercial paper	_	10,000	_
	4 Current portion of bonds payable	_	10,000	_
	5 Current portion of long-term borrowings	24,698	30,434	174,138
	6 Accrued expenses	16,734	21,075	117,986
	7 Income taxes payable	11,033	11,370	77,790
	8 Provision for bonuses	10,275	9,132	72,446
	9 Other*2 and *8	48,690	42,119	343,298
	Total current liabilities	200,571	221,330	1,414,165
П	Noncurrent liabilities:			
11	1 Bonds payable	60,000	60,000	423,042
	2 Long-term borrowings	157,312	179,491	1,109,159
	3 Deferred tax liabilities	18,754	17,279	132,229
	4 Net defined benefit liabilities	29,487	25,626	207,904
	5 Asset retirement obligations	6,338	5,303	44,687
		45,864	43,968	323,373
	6 Other	317,757	331,668	2,240,408
	TOTAL LIABILITIES	518,329	552,998	3,654,579
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NE	T ASSETS			
I	Shareholders' equity:			
	1 Capital stock	88,955	88,955	627,195
	2 Capital surplus	87,146	87,152	614,440
	3 Retained earnings	426,290	399,910	3,005,641
	4 Treasury stock	(25,654)	(25,735)	(180,879)
	Total shareholders' equity	576,737	550,282	4,066,396
II	Accumulated other comprehensive income:			
	1 Valuation difference on available-for-sale securities	6,856	5,769	48,340
	2 Deferred gains or losses on hedges	(53)	611	(374)
	3 Foreign currency translation adjustment	131,269	90,555	925,538
	4 Remeasurements of defined benefit plans	(524)	(468)	(3,695)
	Total accumulated other comprehensive income	137,548	96,467	969,809
Ш	Subscription rights to shares	341	341	2,404
IV	Non-controlling interests	21,529	21,443	151,794
	TOTAL NET ASSETS	736,156	668,534	5,190,411
TO	TAL LIABILITIES AND NET ASSETS	¥1,254,485	¥1,221,533	\$8,844,990

Consolidated Statement of Income and Consolidated Statement of Comprehensive Income

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2023

Consolidated Statement of Income	M211:	o of von	Thousands of
	Fiscal 2023 (January 1, 2023 to December 31, 2023)	Fiscal 2022 (January 1, 2022 to December 31, 2022)	U.S. dollars Fiscal 2023 (January 1, 2023 to December 31, 2023)
I Net sales*1	¥780,938	¥756,376	\$5,506,155
II Cost of sales*3	540,956	514,713	3,814,115
Gross profit	239,982	241,663	1,692,040
III Selling, general and administrative expenses:			
1 Selling expenses	42,137	46,678	297,095
2 General and administrative expenses*3	122,369	107,845	862,786
Total selling, general and administrative expenses*2	164,506	154,524	1,159,882
Operating income	75,475	87,139	532,151
IV Non-operating income:			
1 Interest income	1,841	450	12,980
2 Dividend income	779	714	5,492
3 Share of profit of entities accounted for using equity method	200	271	1,410
4 Other	930	2,091	6,557
Total non-operating income	3,751	3,527	26,447
V Non-operating expenses:		-,,-	
1 Interest expenses	2,815	1,457	19,848
2 Foreign exchange losses	2,611	1,021	18,409
3 Other	4,774	4,127	33,660
Total non-operating expenses	10,202	6,606	71,931
Ordinary income	69,025	84,060	486,674
VI Extraordinary income:	07,023	01,000	400,074
1 Insurance claim income*4	2,781	1,415	19,608
2 Compensation income	1,216	- 1,413	8,574
3 Gain on sale of investment securities	891	2,614	6,282
4 Gain on sale of shares of subsidiaries and associates	715	2,014	5,041
		4.020	39,512
Total extraordinary income	5,604	4,030	39,312
1 Loss on litigation*5	7.906	1 010	<i>55</i> 020
2 Impairment loss*6	7,806	1,819	55,038
3 Loss on disposal of tangible non-current assets*7	4,390	1,385	30,953
4 Costs related to the suspension of operations*8	1,159	450	8,172
•	_	5,785	_
5 Loss on disaster	12.256	653	94,169
Total extraordinary loss	13,356	10,094	
Income before income taxes	61,273	77,997	432,017
Income taxes—current.	18,079	21,232	127,470
Income taxes—deferred	908	1,155	6,402
Total income taxes	18,987	22,388	133,872
Net income	42,285	55,608	298,139
Net income (loss) attributable to non-controlling interests	(160)	1,300	(1,128)
Net income attributable to owners of the parent	¥42,446	¥54,307	\$299,274

Consolidated Statement of Income and Consolidated Statement of Comprehensive Income

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2023

Co	onsolidated Statement of Comprehensive Income	Million	Thousands of U.S. dollars	
		Fiscal 2023 (January 1, 2023 to December 31, 2023)	Fiscal 2022 (January 1, 2022 to December 31, 2022)	Fiscal 2023 (January 1, 2023 to December 31, 2023)
I	Net income	¥42,285	¥55,608	\$298,139
П	Other comprehensive income:			
	1 Valuation difference on available-for-sale securities	1,087	(1,504)	7,664
	2 Deferred gains or losses on hedges	(676)	645	(4,766)
	3 Foreign currency translation adjustment	41,326	56,638	291,377
	4 Remeasurements of defined benefit plans	(55)	1,822	(388)
	5 Share of other comprehensive income of entities accounted for using equity method	166	160	1,170
	Total other comprehensive income*1	41,848	57,762	295,057
Ш	Comprehensive income	¥84,134	¥113,371	\$593,203
	Comprehensive income attributable to			
	1 Owners of the parent	¥83,527	¥110,925	\$588,923
	2 Non-controlling interests	606	2,446	4,273

The accompanying notes are an integral part of the financial information.

Consolidated Statement of Changes in Net Assets

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2023

		Millions of yen Shareholders' equity						
Fiscal 2023 (January 1, 2023 to December 31, 2023)	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity			
Balance at January 1, 2023	¥88,955	¥87,152	¥399,910	¥(25,735)	¥550,282			
Changes of items during the period								
Cash dividends			(16,066)		(16,066)			
Net income attributable to owners								
of the parent			42,446		42,446			
Purchase of treasury stock				(4)	(4)			
Disposal of treasury stock		(6)		85	79			
Net changes of items other than								
shareholders' equity								
Total changes of items during the period	_	(6)	26,379	80	26,454			
Balance at December 31, 2023	¥88,955	¥87,146	¥426,290	¥(25,654)	¥576,737			

				Millions	of yen			
		Accumulate	d other compr	ehensive income	•	=		
	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Subscription rights to shares	Non-controlling interests	Total net assets
Balance at January 1, 2023	¥5,769	¥611	¥90,555	¥(468)	¥96,467	¥341	¥21,443	¥668,534
Changes of items during the period								
Cash dividends								(16,066)
Net income attributable to								
owners of the parent								42,446
Purchase of treasury stock								(4)
Disposal of treasury stock								79
Net changes of items other than								
shareholders' equity	1,087	(664)	40,714	(55)	41,081	_	86	41,167
Total changes of items during the								
period	1,087	(664)	40,714	(55)	41,081	_	86	67,621
Balance at December 31, 2023	¥6,856	¥(53)	¥131,269	¥(524)	¥137,548	¥341	¥21,529	¥736,156

Consolidated Statement of Changes in Net Assets

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2023

		,	Thousands of U.S. do	ollars			
	Shareholders' equity						
Fiscal 2023 (January 1, 2023 to December 31, 2023)	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity		
Balance at January 1, 2023	\$627,195	\$614,482	\$2,819,643	\$(181,450)	\$3,879,870		
Changes of items during the period							
Cash dividends			(113,276)		(113,276)		
Net income attributable to owners							
of the parent			299,274		299,274		
Purchase of treasury stock				(28)	(28)		
Disposal of treasury stock		(42)		599	557		
Net changes of items other than							
shareholders' equity							
Total changes of items during the period	_	(42)	185,990	564	186,519		
Balance at December 31, 2023	\$627,195	\$614,440	\$3,005,641	\$(180,879)	\$4,066,396		

		Accumulated	other comprehe	nsive income			n Non-controlling interests	
	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Subscription rights to shares		Total net assets
Balance at January 1, 2023	\$40,675	\$4,308	\$638,476	\$(3,300)	\$680,159	\$2,404	\$151,188	\$4,713,629
Changes of items during the period								
Cash dividends								(113,276)
Net income attributable to								
owners of the parent								299,274
Purchase of treasury stock								(28)
Disposal of treasury stock								557
Net changes of items other than								
shareholders' equity	7,664	(4,682)	287,062	(388)	289,650	_	606	290,256
Total changes of items during the								
period	7,664	(4,682)	287,062	(388)	289,650	_	606	476,775
Balance at December 31, 2023	\$48,340	\$(374)	\$925,538	\$(3,695)	\$969,809	\$2,404	\$151,794	\$5,190,411

Consolidated Statement of Changes in Net Assets

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2023

	Millions of yen Shareholders' equity				
Fiscal 2022 (January 1, 2022 to December 31, 2022)	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Balance at January 1, 2022	¥88,955	¥87,166	¥359,898	¥(15,885)	¥520,134
Cumulative effects of changes in accounting					
policies			(388)		(388)
Restated balance	¥88,955	¥87,166	¥359,509	¥(15,885)	¥519,745
Changes of items during the period					
Cash dividends			(13,908)		(13,908)
Net income attributable to owners					
of the parent			54,307		54,307
Changes resulting from inclusion of					
subsidiaries in consolidation			2		2
Purchase of treasury stock				(10,002)	(10,002)
Disposal of treasury stock		(14)		152	138
Net changes of items other than					
shareholders' equity					
Total changes of items during the period	_	(14)	40,401	(9,849)	30,537
Balance at December 31, 2022	¥88,955	¥87,152	¥399,910	¥(25,735)	¥550,282

				Millions	of yen			
- -		Accumulate	d other compr	ehensive income				
	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Subscription rights to shares	Non-controlling interests	Total net assets
Balance at January 1, 2022	¥7,273	¥219	¥34,648	¥(2,291)	¥39,850	¥414	¥19,203	¥579,602
Cumulative effects of changes								
in accounting policies								(388)
Restated balance	¥7,273	¥219	¥34,648	¥(2,291)	¥39,850	¥414	¥19,203	¥579,213
Changes of items during the period								
Cash dividends								(13,908)
Net income attributable to								
owners of the parent								54,307
Changes resulting from								
inclusion of subsidiaries in								
consolidation								2
Purchase of treasury stock								(10,002)
Disposal of treasury stock								138
Net changes of items other than								
shareholders' equity	(1,504)	392	55,906	1,822	56,617	(73)	2,240	58,783
Total changes of items during the								
period	(1,504)	392	55,906	1,822	56,617	(73)	2,240	89,321
Balance at December 31, 2022	¥5,769	¥611	¥90,555	¥(468)	¥96,467	¥341	¥21,443	¥668,534

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2023

		Million	s of ven	Thousands of U.S. dollars
		Fiscal 2023 (January 1, 2023 to December 31, 2023)	Fiscal 2022 (January 1, 2022 to December 31, 2022)	Fiscal 2023 (January 1, 2023 to December 31, 2023)
I	Net cash provided by (used in) operating activities:			
	1 Income before income taxes	¥61,273	¥77,997	\$432,017
	2 Depreciation and amortization	77,163	65,456	544,053
	3 Increase (decrease) in allowance for doubtful accounts	402	9	2,834
	4 Loss (gain) on sale of investment securities	(891)	(2,614)	(6,282)
	5 Loss on litigation	7,806	1,819	55,038
	6 Impairment loss	4,390	1,385	30,953
	7 Loss on disposal of tangible fixed assets	1,159	450	8,172
	8 Foreign exchange losses (gains)	(3,324)	(2,777)	(23,437)
	9 Interest and dividends income	(2,621)	(1,165)	(18,480)
	10 Interest expenses	2,815	1,457	19,848
	11 Decrease (increase) in notes and accounts receivable—trade	2,111	(12,500)	14,884
	12 Decrease (increase) in inventories	8,363	(54,716)	58,965
	13 Increase (decrease) in notes and accounts payable—trade	(5,122)	691	(36,114)
	14 Increase (decrease) in provision for bonuses	825	632	5,817
	15 Increase (decrease) in net defined benefit liabilities	1,751	678	12,346
	16 Decrease (increase) in net defined benefit assets	(274)	664	(1,932)
	17 Other, net	9,146	(4,771)	64,486
	Subtotal	164,976	72,696	1,163,195
	18 Interest and dividends income received	2,602	1,246	18,346
	19 Interest expenses paid	(2,257)	(1,186)	(15,913)
	20 Income taxes (paid) refund	(23,180)	(19,453)	(163,435)
	21 Payments for loss on litigation	(12,842)	(1,575)	(90,545)
	Net cash provided by (used in) operating activities	129,298	51,727	911,641
II	Net cash provided by (used in) investing activities:			
	1 Net decrease (increase) in time deposits	_	3,350	_
	2 Proceeds from sales and redemption of investment securities	1,907	3,336	13,446
	3 Purchase of tangible fixed assets and intangible fixed assets	(59,027)	(71,635)	(416,181)
	4 Payments for disposal of tangible fixed assets and intangible fixed assets	(1,524)	(1,022)	(10,745)
	5 Proceeds from sales of tangible fixed assets and intangible fixed assets	214	613	1,509
	6 Other, net	(4,720)	(3,266)	(33,279)
	Net cash provided by (used in) investing activities	(63,151)	(68,624)	(445,258)

Consolidated Statement of Cash Flows

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2023

		Million	Thousands of U.S. dollars	
		Fiscal 2023 (January 1, 2023 to December 31, 2023)	Fiscal 2022 (January 1, 2022 to December 31, 2022)	Fiscal 2023 (January 1, 2023 to December 31, 2023)
Ш	Net cash provided by (used in) financing activities:			
	1 Net increase (decrease) in short-term borrowings	5,413	_	38,165
	2 Net increase (decrease) in commercial paper	(10,000)	10,000	(70,507)
	3 Proceeds from long-term borrowings	_	49,375	_
	4 Repayment of long-term borrowings	(30,801)	(55,013)	(217,168)
	5 Proceeds from issuance of bonds	_	10,000	_
	6 Redemption of bonds	(10,000)	_	(70,507)
	7 Purchase of treasury stock	(4)	(10,002)	(28)
	8 Cash dividends paid	(16,066)	(13,908)	(113,276)
	9 Proceeds from stock issuance to non-controlling interests	_	502	_
	10 Cash dividends paid to non-controlling interests	(520)	(708)	(3,666)
	11 Other, net	(2,978)	(2,297)	(20,997)
	Net cash provided by (used in) financing activities	(64,959)	(12,053)	(458,006)
IV	Effect of exchange rate changes on cash and cash equivalents	4,858	4,943	34,252
\mathbf{V}	Net increase (decrease) in cash and cash equivalents	6,046	(24,006)	42,628
VI	Cash and cash equivalents, beginning of year	127,616	151,487	899,781
VII	Increase in cash and cash equivalents from newly consolidated subsidiaries	_	136	_
VIII	Cash and cash equivalents, end of year*1	¥133,663	¥127,616	\$942,417

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Significant Accounting Policies

1. Basis of presenting consolidated financial statements

The accompanying consolidated financial statements of Kuraray Co., Ltd. (hereinafter "the Company") and its consolidated subsidiaries are prepared on the basis of accounting principles generally accepted in Japan, which are different in certain respects as to application and disclosure requirements of International Financial Reporting Standards, and are filed with the Japanese Ministry of Finance (the "MOF") as required by the Financial Instruments Exchange Law of Japan. The accompanying consolidated financial statements are translations of those filed with the MOF.

Each amount in the consolidated financial statements and notes is rounded down to the nearest 1 million yen (and rounded to the nearest 1 thousand dollars in the case of the translation into the United States dollars).

The United States dollar amounts included herein are provided solely for the convenience of readers outside Japan and are stated at the rate of \$\frac{1}{41.8} = \$1\$, the approximate exchange rate prevailing on December 31, 2023. The translations should not be construed as representations that the Japanese yen amounts have been, could have been, or could in the future be, converted into the United States dollars at this or any other rate.

2. Scope of consolidation

(1) Number of consolidated subsidiaries

	Fiscal 2023	Fiscal 2022
Number of consolidated subsidiaries	76	77

(Major consolidated subsidiaries)

KURARAY TRADING Co., LTD., Kuraray Plastics Co., Ltd., KURARAY ENGINEERING CO., LTD., Kuraray Techno Co., Ltd., KURARAYKURAFLEX CO., LTD., KURARAY AQUA CO., LTD., TECHNO SOFT CO., LTD., Kuraray Travel Service Corporation, KURARAY SAIJO CO., LTD., KURARAY

TAMASHIMA COMPANY, LIMITED, KURASHIKI KOKUSAI HOTEL LTD., KURARAY FASTENING CO., LTD., Kuraray Noritake Dental Inc., Kuraray Okayama Spinning Co., Ltd., OKAYAMA RINKOH CO., LTD., Kuraray Holdings U.S.A., Inc., Kuraray America, Inc., MonoSol Holdings, Inc., MonoSol, LLC, Calgon Carbon Corporation, Kuraray Europe GmbH, EVAL Europe N.V., OOO TROSIFOL, Kuraray Asia Pacific Pte. Ltd., Kuraray Hong Kong Co., Ltd., Kuraray (Shanghai) Co., Ltd., Kuraray China Co., Ltd., Kuraray Methacrylate (Zhang Jia Gang) Co., Ltd., Kuraray Specialities (Thailand) Co., Ltd., Kuraray Advanced Chemicals (Thailand) Co., Ltd., Kuraray SC (Thailand) Co., Ltd., Kuraray GC Advanced Materials Co., Ltd. and 42 other consolidated subsidiaries.

In the fiscal year ended December 31, 2023 (fiscal 2023), former consolidated subsidiary Iruma Country Club Co., Ltd. was excluded from the scope of consolidation as all of its shares were transferred.

(2) Names of major unconsolidated subsidiaries

(Major unconsolidated subsidiaries)

Kuraray South America Ltda.

Kuraray India Private Limited

(Reasons for excluding from the scope of consolidation)

The total assets, total sales and net income and loss (amount corresponding to the owned interest) and retained earnings (amount corresponding to the owned interest) of the unconsolidated subsidiaries have no material effect on the consolidated financial statements.

3. Scope of application of equity method affiliates and subsidiaries

(1) Number of affiliates accounted for using the equity method

	Fiscal 2023	Fiscal 2022
Number of affiliates accounted for using the equity method	2	2

(Name of major affiliates, etc.)

Hexin Kuraray Micro Fiber Leather (Jiaxing) Co., Ltd. and the other

(2) Unconsolidated subsidiaries and affiliates (Kuraray South America Ltda. and Cenapro Chemical Corporation) have not been accounted for using the equity method, because their net income and loss and retained earnings (amount corresponding to the owned interest) have no material impact on the consolidated financial statements.

4. Fiscal years of consolidated subsidiaries

The closing date of the consolidated subsidiaries is the same as the consolidated closing date.

5. Accounting policies

- (1) Valuation standards and methods for significant assets
 - a) Investment securities

Available-for-sale securities other than shares, etc. that do not have a market price are stated at fair value at the year-end. (Net unrealized gains or losses on these securities are recorded as a separate component in "Net assets," net of tax amount. The cost of securities sold is determined based on the moving-average cost of all such securities held at the time of sale.) Shares, etc. that do not have a market price are stated at cost determined by the moving-average method.

- b) Derivative financial instruments
 All derivatives are stated at fair value.
- c) Inventories

Finished goods, raw materials, and work in process are principally stated at the lower of cost determined by the first-in, firstout method or net realizable value.

Supplies are principally stated at the lower of cost determined by the moving-average method or net realizable value.

- (2) Depreciation method of significant depreciable assets
 - a) Tangible fixed assets (excluding lease assets and right-of-use assets)

Depreciation is primarily computed using the straight-line method.

The estimated useful lives of assets are primarily as follows:

- Buildings and structures................................... 16 to 50 years
- Machinery, equipment and vehicles....... 4 to 10 years
- b) Intangible assets (excluding lease assets and right-of-use assets)
 Amortization is primarily computed using the straight-line method.
 The numbers of years for amortization are primarily as follows:
- c) Lease assets

Leased assets related to finance leases without transfer of ownership

Amortization is primarily computed using the straight-line method that adopts the lease terms as the useful lives with the residual value being zero.

d) Right-of-use assets

Overseas subsidiaries and affiliates either apply IFRS 16 "Leases" or ASC 842 "Leases" and adopt a depreciation method according to International Financial Reporting Standards or US GAAP.

All leases as a lessee related to right-of-use are in principle recognized as assets and liabilities on the consolidated balance sheets.

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2023

(3) Accounting for significant allowance

a) Allowance for doubtful accounts

The Company and its consolidated subsidiaries provide for
doubtful accounts principally at an amount computed based on
the historical bad debt ratio during a certain reference period
plus an estimated uncollectible amount based on the analysis
of certain individual accounts.

b) Provision for bonuses
Provision for bonuses is stated at the estimated amount of the bonuses to be paid to employees based on services provided for the fiscal year.

(4) Accounting treatment of retirement benefit plan

- a) Method for attributing estimated retirement benefits to individual periods of service
 In calculating benefit obligation, the benefit formula basis was used to attribute estimated retirement benefits to periods up to December 31, 2023.
- b) Calculation of net actuarial gain or loss and prior service cost

 Prior service cost is amortized on a straight-line basis over a

 certain period (mainly 15 years), which falls within the

 average remaining years of service of the eligible employees.

 Actuarial gains or losses are amortized on a straight-line basis

 over a certain period (mainly 15 years), which falls within the

 average remaining years of service of the eligible employees,

 allocated proportionately commencing the year following the

 year in which each respective gain or loss occurred.
- c) Use of simplified method among small companies
 Certain consolidated subsidiaries calculate retirement benefit liabilities and expenses using the simplified method that assumes their benefit obligation is equal to the benefits payable if all employees voluntarily retired at fiscal year-end.

(5) Standards for recognizing revenues and expenses

The Group mainly engages in the sale of goods/products to its customers. Revenue from goods/product sales is recognized at the time of delivery, when the customer obtains control over the goods/product and the performance obligation is satisfied.

In the environmental solutions business and the environmental business under the Functional Materials segment, and the engineering business under the Others segment, the Group enters into construction contracts with customers. For such contracts, as the performance obligation is deemed to be satisfied over time, the Group, in principle, recognizes revenue based on the progress towards complete satisfaction of the performance obligation. The progress is estimated by the input method based on the cost incurred.

Revenue is calculated based on the consideration amount promised in the contract with the customer, less any rebates and the likes to the extent that it is probable that a significant reduction will not occur. For transactions in which the Group provides goods/products as an agent, revenue is recognized at the net amount received from customers less amounts paid to suppliers. There is no significant financing component to the consideration for these transactions, because the Group receives the consideration generally within one year after fulfilling the performance obligation.

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2023

(6) Significant hedge accounting

a) Hedge accounting

In principle, the Company and its consolidated subsidiaries adopt the method for hedging instruments whereby any gains or losses are deferred over the period of the hedging contract and are offset against the deferred losses or gains on the related hedged items. However, deferral hedge accounting is applied to some forward foreign exchange contracts, and when an interest rate swap contract meets certain conditions, the net amount to be paid or received under the contract is added to or deducted from the interest on the hedged items.

b) Hedging instruments and hedged items

Hedging instruments	Hedged items
Forward foreign exchange contracts	Foreign currency-denominated monetary receivables and payables (including forecast transactions)
Interest rate swap contracts	Interest expenses
Commodity swap contracts	Raw materials

c) Hedging policy

The Company and its consolidated subsidiaries use financial instruments to hedge interest rate fluctuation, exchange fluctuation risks and price fluctuation risks in accordance with their internal policies and procedures.

d) Assessment method for hedge accounting

The Company identifies and confirms the material conditions and measures the effectiveness of forward foreign exchange contracts associated with planned transactions denominated in foreign currencies, interest rate swaps and commodity swaps associated with raw materials.

Subsequent measurement of hedge effectiveness is not considered necessary for forward foreign exchange contracts that meet the requirements for deferral hedge accounting and interest rate swaps that meet the requirements for special accounting because the Company identifies and confirms the material conditions at the time of transaction.

Hedge accounting applying the "Practical Solution on Treatment of Hedge Accounting for Financial Instruments that Reference LIBOR"

Of the above-mentioned hedging relationships, the Company applies the exceptional treatment provided in the "Practical Solution on the Treatment of Hedge Accounting for Financial Instruments that Reference LIBOR" (ASBJ Practical Issues Task Force (PITF) No. 40, March 17, 2022) to all hedging relationships covered by the said PITF No. 40, the details of which are as follows:

Hedge accounting	Exceptional treatment for interest rate swaps
Hedging instruments	Interest rate swap contracts
Hedged items	Interest expenses
Type of hedge transaction	Those with fixed cash flows

(7) Amortization of goodwill

The Company amortizes goodwill using the straight-line method over the estimated period of benefit with the exception of minor amounts, which are charged or credited to income directly in the year of acquisition.

(8) Cash and cash equivalents

Cash and cash equivalents include all highly liquid investments with a maturity of three months or less, that are readily convertible to known amounts of cash which are subject to an insignificant risk of changes in value.

Significant Accounting Estimates

Assessment of whether indicators of impairment exist for goodwill recognized as a result of the acquisition of Calgon Carbon Corporation

(1) The amount recorded on the consolidated financial statements

	Million	Thousands of U.S. dollars	
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Goodwill recorded as a result of the acquisition of Calgon Carbon Corporation in the Functional Materials segment in fiscal 2018	¥40,347	¥40,446	\$284,474

- (2) Information on the nature of significant accounting estimates related to the identified items
 - a) Method for calculating the amount recorded on the
 consolidated financial statements for fiscal 2023
 Calgon Carbon Corporation expands their operations as a
 result of growth in the activated carbon market and measures
 in response to stricter environmental regulations. The
 Company recorded net operating income, including goodwill
 amortization since the previous fiscal year, despite the impact
 of rising raw material and fuel prices and logistics costs.

Based on Calgon Carbon Corporation's business plan, the Group has concluded that there are no indicators of impairment related to goodwill as performance continues to be stable and net operating income, including goodwill amortization, is projected in the following fiscal year.

 b) Key assumptions used in calculating the amount recorded on the consolidated financial statements for fiscal 2023
 Calgon Carbon Corporation's business plan assumes increases in revenue due to increasing demand for capital investments

- by customers and measures in response to stricter environmental regulations, as well as the impact of future trends in raw material and fuel prices.
- c) Impact on the consolidated financial statements for the following fiscal year Impairment loss may be recorded on the consolidated financial statements for the subsequent fiscal years in the event that unpredictable changes in future market conditions require revisions to the estimate or the assumptions concerned.

Recognition of impairment related to tangible fixed assets

(1) The amount recorded on the consolidated financial statements

	Million	s of yen	Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Tangible fixed assets	¥526,977	¥512,562	\$3,715,554

- (2) Information on the nature of significant accounting estimates related to the identified items
 - a) Method for calculating the amount recorded on the consolidated financial statements for fiscal 2023 With regard to the grouping of assets, business assets are grouped based on classifications under management accounting, for which profit or loss is consistently monitored. Assets for rental, idle assets, assets for which business has been decided to be discontinued or reorganized, and assets scheduled to be suspended are treated individually, while other head office and research facilities are grouped as assets for common use.

When impairment needs to be recognized in an asset group, the carrying amount of the group's assets are written down to their recoverable amount, and the reduced amount is

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2023

recorded as an impairment loss. The recoverable amount is estimated by value in use or net realizable value, whichever is the higher. For value in use, we use the future cash flows expected to be generated from the asset group.

 b) Key assumptions used in calculating the amount recorded on the consolidated financial statements for fiscal 2023
 Future cash flows are estimated based on business plans and forecast in consideration of estimated future incomes, etc.

c) Impact on the consolidated financial statements for the following fiscal year Judgements of impairment on tangible fixed assets are based on future cash flows, net realizable value, and other assumptions. Therefore, an impairment loss may be recorded in the event of changes in the assumptions.

Accounting Standards Issued but Not Yet Applied

The Company and its domestic subsidiaries and affiliates

- "Accounting Standard for Current Income Taxes" (ASBJ Statement No. 27, October 28, 2022)
- "Accounting Standard for Presentation of Comprehensive Income"
 (ASBJ Statement No. 25, October 28, 2022)
- "Guidance on Accounting Standard for Tax Effect Accounting" (ASBJ Guidance No. 28, October 28, 2022)
- (1) Outline

This stipulates the classification of income taxes when applied to other comprehensive income and the treatment of tax effects related to the sale of shares in subsidiaries when the group tax sharing system is applied.

- (2) Expected Application Date Scheduled to be introduced from the beginning of the fiscal year ending December 31, 2025.
- (3) Effect of Applying the Accounting Standard
 The impact is being evaluated at the time of preparation of these consolidated financial statements.

4 Changes in Presentation

Changes in Consolidated Balance Sheet

"Other provisions," which had been presented separately under current liabilities in fiscal 2022, is included in "other" from fiscal 2023 due to the insignificance of the amount. The consolidated balance sheet for fiscal 2022 has been restated to reflect this change in presentation.

As a result, "other provisions" of ¥111 million and "other" of ¥42,008 million under current liabilities in the consolidated balance sheet for fiscal 2022, has been reclassified as "other" of ¥42,119 million.

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"Provision for directors' retirement benefits" and "provision for environmental measures," which had been presented separately under noncurrent liabilities in fiscal 2022, are included in "other" from fiscal 2023 due to the insignificance of the amounts. The consolidated balance sheet for fiscal 2022 has been restated to reflect these changes in presentation.

As a result, "provision for directors' retirement benefits" of ¥294 million, "provision for environmental measures" of ¥397 million and "other" of ¥43,275 million under noncurrent liabilities in the consolidated balance sheet for fiscal 2022, has been reclassified as "other" of ¥43,968 million.

Changes in Consolidated Statement of Income

"Gain on investments in investment partnerships," which had been presented separately under non-operating income in fiscal 2022 but turned to "loss on investments in investment partnerships" under non-operating expenses in fiscal 2023, is included in "other" from fiscal 2023 due to the insignificance of the amounts. The consolidated statement of income for fiscal 2022 has been restated to reflect this change in presentation.

As a result, "gain on investments in investment partnerships" of ¥382 million and "other" of ¥1,708 million under non-operating income in the consolidated statement of income for fiscal 2022, has been reclassified as "other" of ¥2.091 million.

"Loss on disposal of tangible fixed assets," which had been presented separately under non-operating expenses in fiscal 2022, is included in "other" from fiscal 2023 due to the insignificance of the amounts. The consolidated statement of income for fiscal 2022 has been restated to reflect this change in presentation.

As a result, "loss on disposal of tangible fixed assets" of ¥986 million and "other" of ¥3,140 million under non-operating expenses in the consolidated statement of income for fiscal 2022, has been reclassified as "other" of ¥4,127 million.

Changes in Consolidated Statement of Cash Flows

"Proceeds from sales of treasury stock," which had been presented separately under net cash provided by (used in) financing activities in fiscal 2022, is included in "other, net" from fiscal 2023 due to the insignificance of the amounts. The consolidated statement of cash flows for fiscal 2022 has been restated to reflect this change in presentation.

As a result, "proceeds from sales of treasury stock" of \$0 million and "other, net" of \$(2,297) million under net cash provided by (used in) financing activities in the consolidated statement of cash flows for fiscal 2022, has been reclassified as "other, net" of \$(2,297) million.

Additional Information

Resolution of Civil Lawsuits Related to the Fire at a U.S. Subsidiary

Regarding the civil lawsuits related to the fire that occurred at a U.S. subsidiary in May 2018, we reached settlements with the remaining plaintiffs in April 2023, except for one for which a motion to dismiss was expected to be granted. Accordingly, we recorded an extraordinary loss

of ¥7,806 million (US\$55,038 thousand) as loss on litigation related to the lawsuits, etc., in the Consolidated Statement of Income for fiscal 2023. The motion to dismiss the individual's lawsuit was granted in July 2023. The lawsuits have therefore been resolved.

Notes to Consolidated Balance Sheet

*1. Receivables and contract assets from contracts with customers, included in notes and accounts receivable—trade, and contract assets are as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Notes receivable—trade	¥16,968	¥14,762	\$119,636
Accounts receivable—trade	143,793	136,741	1,013,841
Contract assets	1,142	5,511	8,052

*2. Contract liabilities, included in other, is as follows:

	Million	Thousands of U.S. dollars	
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Contract liabilities	¥9,248	¥5,982	\$65,205

*3. Accumulated depreciation of tangible fixed assets

	Million	ns of yen	Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Accumulated depreciation of tangible fixed assets	¥1,071,781	¥986,951	\$7,556,800

*4. Investments in unconsolidated subsidiaries and affiliates

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Investment securities (equity)	¥6,409	¥6,161	\$45,188

*5. Commitments and contingencies

The Company is contingently liable for guarantees for bank loans of unconsolidated subsidiaries, affiliates, and others.

The company name and the guarantees of its liabilities are as follows:

	Million	as of yen	Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Social welfare corporation Ishii Kinen Aizenen	¥131	¥263	\$924

*6. Claim for damages in relation to manufacturing and sales of activated carbon

In connection with the violations of the Antimonopoly Act in the manufacture and sale of certain activated carbon, several companies including the Company and its subsidiaries have received claims for payment for damages jointly and severally from several local governments. In addition, some of these local governments have filed lawsuits demanding payment for damages and losses on delays. It is difficult at the present time to reasonably estimate the amount for which the Group is liable.

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*7. Assets pledged as collateral and secured liabilities

	Million	s of yen	Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Buildings	¥1,103	¥1,173	\$7,777
Land	1,001	1,001	7,058
Total	¥2,104	¥2,175	\$14,835

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Collateral for short-term borrowings	¥170	¥170	\$1,199

*8. Accounting for notes with maturity dates at fiscal year-end

Notes with maturity dates at fiscal year-end and fixed-date cash settlements (a method of cash settlement on the same terms as notes) are accounted for and settled as of the date of maturity. As the last day of the fiscal year fell on a bank holiday, the following amounts of notes and accounts receivable and payable with maturity dates at fiscal year-end were accounted for and settled as of the date of maturity.

_	Million	s of yen	Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Notes and accounts receivable—trade	¥3,361	¥3,991	\$23,697
Notes and accounts payable—trade	5,658	4,837	39,893
Other (Current liabilities)	699	522	4,928

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2023

Notes to Consolidated Statement of Income

*1. Revenue from contracts with customers

With regard to net sales, revenue from contracts with customers and revenue from other sources are not stated separately because the amount of revenue other than revenue from contracts with customers is immaterial.

*2. Major items and the amounts under "Selling, general and administrative expenses" are as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Freight and storage	¥29,791	¥35,274	\$210,047
Research and development	23,065	21,050	162,624
Salaries and legal welfare expense.	37,184	32,945	262,173
Provision for bonuses	9,651	8,404	68,046
Retirement benefit expenses	1,865	2,203	13,150

*3. Research and development expenses included in general, administrative and current manufacturing expenses

Million	s of yen	Thousands of U.S. dollars
 Fiscal 2023	Fiscal 2022	Fiscal 2023
¥24,434	¥22,653	\$172,277

*4. Insurance income

The insurance income in fiscal 2023 is mainly the insurance received for the costs related to the suspension of operations.

The insurance income in fiscal 2022 is mainly the insurance received for the loss on litigation.

*5. Loss on litigation

The loss on litigation in fiscal 2023 is mainly the settlement relating to the fire accident that occurred in May 2018 at the Company's subsidiary in the United States.

The loss on litigation in fiscal 2022 is mainly the settlement relating to a vehicular accident that occurred at a subsidiary and the settlement relating to the fire accident that occurred in May 2018 at the Company's subsidiary in the United States.

*6. Impairment loss

The main impairment loss recorded by the Group is as follows:

Fiscal 2023

				Impairment loss	
Location	Assets	Usage	Type	Millions of yen	Thousands of U.S. dollars
Kamisu city, Ibaraki Saijo city, Ehime	Business assets	Assets related to the Vecstar business	Machinery, etc.	¥2,376	\$16,752

Fiscal 2022

				Impairment loss
Location	Assets	Usage	Type	Millions of yen
Australia	Business assets	Assets related to biomass-derived film	Machinery, etc.	¥955

(Identifying the cash-generating unit to which an asset belongs)

As a minimum unit for generating cash flows, business assets are grouped into sections used for management accounting.

(Method for calculating the recoverable amount)

Businesses with consecutive operating losses are individually examined for indication of impairment, and those whose recoverable amount is less than their carrying amount are written down to their recoverable amount. The recoverable amount is estimated by value in use or net realizable value, whichever is higher. Value in use is calculated by discounting future cash flows using a rate of 4% applicable to the current period.

(Recognition of impairment related to fixed assets of the Vecstar)

The business manufactures Vecstar, a liquid crystal polymer film used primarily in circuit board materials for smartphones and automobiles. The Group regards the Vecstar business as the smallest unit that generates independent cash flows.

The Vecstar business is expanding its manufacturing capacity to meet demand for high-frequency substrates, which is expected to grow in the future due to the spread of the next generation telecommunications standard millimeter wave 5G. On the other hand, the Vecstar business has been stagnant due to delays in the penetration of millimeter wave 5G in the global marketplace, and operating incomes have been continuously negative in the previous and the current fiscal years. Based on the circumstances, the Group determined that there were indicators of impairment for the asset group related to the Vecstar and performed the assessment of impairment loss recognition. As a result of estimating the business future cash flows with consideration of future uncertainty, the Group concludes the difficulty to recover \(\frac{x}{2}\),376 million (US\\$16,752 thousand) of fixed assets of the Vecstar and hence recognized impairment loss.

The future cash flows used in determining the recognition of impairment losses are estimated based on the business plan for the Vecstar business with consideration of future uncertainty. In estimating future cash flows, the Group considers the performance of the Vecstar business by acquiring customers through the expansion of millimeter wave 5G and increasing its market-share in the liquid crystal polymer market.

*7. Loss on disposal of tangible fixed assets

Mainly expense for removing equipment rendered unnecessary by business closure.

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*8. Costs related to the suspension of operations

The costs related to the suspension of operations are mainly the amounts equivalent to fixed costs during the period of the suspension of production.

Notes to Consolidated Statement of Comprehensive Income

Reclassification adjustments and tax effect adjustments relating to other comprehensive income (loss) for the fiscal years ended December 31, 2023 and December 31, 2022, are as follows:

	Millions of yen		Thousands of U.S. dollars	
	Fiscal 2023	Fiscal 2022	Fiscal 2023	
Valuation difference on available-for-sale securities				
Amount recorded during the period	¥2,429	¥(4,791)	\$17,126	
Reclassification adjustments	(878)	2,614	(6,191)	
Before tax effect adjustments	1,550	(2,176)	10,929	
Tax effect	(463)	672	(3,264)	
Valuation difference on available-for-sale securities	1,087	(1,504)	7,664	
Deferred gains or losses on hedges				
Amount recorded during the period	(827)	1,074	(5,831)	
Reclassification adjustments	(63)	(330)	(444)	
Adjustments to cost of assets acquired		(3)	`	
Before tax effect adjustments	(890)	740	(6,275)	
Tax effect	213	(94)	1,502	
Deferred gains or losses on hedges	(676)	645	(4,766)	
Foreign currency translation adjustment				
Amount recorded during the period	41,326	56,638	291,377	
Reclassification adjustments		´—	´—	
Before tax effect adjustments	41,326	56,638	291,377	
Tax effect		_	· —	
Foreign currency translation adjustment	41,326	56,638	291,377	
Remeasurements of defined benefit plans	•	· ·	*	
Amount recorded during the period	(517)	1,466	(3,645)	
Reclassification adjustments	441	959	3,109	
Before tax effect adjustments	(76)	2,426	(536)	
Tax effect	21	(604)	148	
Remeasurements of defined benefit plans	(55)	1,822	(388)	
Shares of other comprehensive income of entities accounted for using		·		
equity method				
Amount recorded during the period	166	160	1,170	
Reclassification adjustments	_	_	_	
Shares of other comprehensive income of entities accounted for				
using equity method	166	160	1,170	
Total other comprehensive income	¥41,848	¥57,762	\$295,057	

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Notes to Consolidated Statement of Changes in Net Assets

Fiscal 2023

1. Type and number of issued shares of common stock and treasury stock

	Number of thousands of shares				
	As of January 1, 2023	Increase	Decrease	As of December 31, 2023	
Issued shares					
Common stock	354,863	_	_	354,863	
Total	354,863	_	_	354,863	
Treasury stock					
Common stock (Notes 1, 2)	20,171	3	67	20,107	
Total	20,171	3	67	20,107	

Notes: 1. The increase in treasury stock (common stock) of 3 thousand shares is attributable to the purchase of shares less than one unit (3 thousand shares).

2. Subscription rights to shares

The Company granted its directors and executive officers subscription rights to the Company shares as stock options. The balance of the subscription rights to shares as of December 31, 2023 is ¥341 million (US\$2,404 thousand).

3. Dividends

(1) Amount of dividends paid

		Amount of dividends	Dividend per share		E.C
Resolution	Type of share	(Millions of yen)	(Yen)	Record date	Effective date
General shareholders' meeting held on March 29, 2023	Common stock	¥7,697 (US\$54,269 thousand)	¥23.00 (US\$0.16)	December 31, 2022	March 30, 2023
Board of directors' meeting held on August 9, 2023	Common stock	¥8,368 (US\$59,000 thousand)	¥25.00 (US\$0.18)	June 30, 2023	September 1, 2023

(2) Dividends whose effective date is after the end of Fiscal 2023 and record date is included in Fiscal 2023.

		Source of	Amount of dividends	Dividend per share		
Resolution	Type of share	dividends	(Millions of yen)	(Yen)	Record date	Effective date
General shareholders'						
meeting held on March 27,		Retained	¥8,368	¥25.00	December 31,	March 28,
2024	Common stock	earnings	(US\$59,000 thousand)	(US\$0.18)	2023	2024

^{2.} The decrease in treasury stock (common stock) of 67 thousand shares is attributable to the disposal of treasury stock as restricted stock compensation (67 thousand shares) and the sale of shares less than one unit by the shareholders (0 thousand shares).

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Fiscal 2022

1. Type and number of issued shares of common stock and treasury stock

	Number of thousands of shares				
	As of January 1, 2022	Increase	Decrease	As of December 31, 2022	
Issued shares					
Common stock	354,863	_	_	354,863	
Total	354,863	_	_	354,863	
Treasury stock					
Common stock (Notes 1, 2)	10,858	9,427	114	20,171	
Total	10,858	9,427	114	20,171	

Notes: 1. The increase in treasury stock (common stock) of 9,427 thousand shares is attributable to the acquisition of treasury stock by resolution of the Board of Directors (9,424 thousand shares) and the purchase of shares less than one unit (2 thousand shares).

2. Subscription rights to shares

The Company granted its directors and executive officers subscription rights to the Company shares as stock options. The balance of the subscription rights to shares as of December 31, 2022 is ¥341 million.

3. Dividends

(1) Amount of dividends paid

Resolution	Type of share	Amount of dividends (Millions of yen)	Dividend per share (Yen)	Record date	Effective date
General shareholders' meeting held on March 24, 2022	Common stock	¥6,880	¥20.00	December 31, 2021	March 25, 2022
Board of directors' meeting held on August 10, 2022	Common stock	¥7,028	¥21.00	June 30, 2022	September 1, 2022

(2) Dividends whose effective date is after the end of Fiscal 2022 and record date is included in Fiscal 2022.

			Source of	Amount of dividends	Dividend per share		
	Resolution	Type of share	dividends	(Millions of yen)	(Yen)	Record date	Effective date
	General shareholders'						
	meeting held on March 29,		Retained			December 31,	March 30,
_	2023	Common stock	earnings	¥7,697	¥23.00	2022	2023

^{2.} The decrease in treasury stock (common stock) of 114 thousand shares is attributable to a transfer of shares upon the exercise of subscription rights (53 thousand shares), the disposal of treasury stock as restricted stock compensation (61 thousand shares), and the sale of shares less than one unit by the shareholders (0 thousand shares).

Notes to Consolidated Statement of Cash Flows

*1. Cash and cash equivalents at December 31, 2023 and December 31, 2022 are reconciled to the accounts reported in the consolidated balance sheet as follows:

_	Millions	of yen	Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Cash on hand and in banks	¥131,144	¥123,724	\$924,656
Time deposits with a deposit period of 3 months or more	(960)	(960)	(6,769)
Marketable securities with original maturities of 3 months or less	3,478	4,852	24,522
Total	¥133,663	¥127,616	\$942,417

11 Leases

1. Finance lease transactions

Lease transactions as a lessee:

Finance leases without transfer of ownership

- 1) Details of lease assets
 - · Tangible fixed assets

Mainly vehicles used at plants including forklifts, buildings and equipment, etc., related to manufacturing ("Machinery, equipment and vehicles", "Buildings and structures"), OA equipment, including personal computers and printers, and servers ("Other").

2) Depreciation method of lease assets

As described in the basis of presenting consolidated financial statements "1. Significant Accounting Policies, 5. Accounting policies (2) Depreciation method of significant depreciable assets."

2. Operating leases

Lease transactions as a lessee:

Future lease payment obligations under operating leases at December 31, 2023 and December 31, 2022 are as follows:

	Million	Thousands of U.S. dollars	
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Due within one year	¥1,724	¥1,724	\$12,155
Due after one year	2,442	4,167	17,218
Total	¥4,167	¥5,891	\$29,380

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Financial Instruments

1. Outline of financial instruments

(1) Policy for financial instruments

The Group raises funds necessary to conduct its business mainly through bank loans or issuance of bonds. Temporary cash surpluses, if any, are invested in low-risk financial assets. Derivatives are used, not for speculative purposes, but to manage exposure to financial risks as described below.

(2) Nature and extent of risks arising from financial instruments Receivables such as notes and accounts receivable—trade are exposed to customer credit risk. Trade receivables denominated in foreign currencies are exposed to foreign currency exchange fluctuation risk.

Short-term investment securities and investment securities, mainly consisting of bonds, certificates of deposit and stocks in companies with which the Company has a business relationship are exposed to the risk of market price fluctuations.

Payment terms of payables, such as notes and accounts payable trade, are mostly less than one year. Payables in foreign currencies incurred mainly from import of raw materials are exposed to foreign currency exchange fluctuation risk. Loans, commercial paper, bonds, and lease obligations, used to raise funds for working capital and capital expenditures, and lease liabilities, to which some overseas affiliates have applied IFRS 16 "Leases" or ASC 842 "Leases" have maturities of at the longest 90 years from the balance sheet date. The debts bearing floating interest rates are exposed to interest rate fluctuation risk, although a part of the exposure is hedged through use of derivatives (interest rate swaps).

Derivative transactions include forward foreign currency contracts for the purpose of hedging foreign currency exchange fluctuation risk resulting from receivables and payables denominated in foreign currencies, interest rate swaps for the purpose of hedging interest rate fluctuation risk resulting from variable interest expenses on debts, forward foreign currency contracts and currency swaps for the purpose of hedging foreign currency exchange fluctuation risk resulting from loans receivable and payable denominated in foreign currencies and commodity swaps for the purpose of hedging price fluctuation risk resulting from raw materials. Please refer to "(6) Significant hedge accounting" under "1. Significant Accounting Policies, 5. Accounting policies" for a description of the Company's accounting policy relating to hedging activities.

(3) Risk management for financial instruments

a. Credit Risk Management (customers' default risk)

The Company manages and mitigates customer credit risk from trade receivables on the basis of internal rules concerning credit management, which include monitoring of payment terms and balances of customers to identify default risk at an early stage.

With respect to loan receivables and liability guarantee agreements, the Company manages its exposure to credit risk by periodically identifying the financial position of the debtors.

With respect to financial assets, the Company's credit risk is minimal as the investments are limited to issuers with high credit ratings in accordance with internal rules concerning fund management.

The Company enters into derivative transactions only with financial institutions that have high credit ratings in order to mitigate counterparty risks.

b. Market Risk Management (foreign currency exchange and interest rate fluctuation risks)

The Group principally uses forward foreign exchange contracts to hedge against fluctuation risks in foreign currency exchange rates, which are relevant to trade receivables and payables and are analyzed by currency and settlement month. Depending on foreign currency exchange rate conditions, trade receivables and payables denominated in foreign currencies that are expected to be generated based on export and import forecasts are hedged using forward foreign exchange contracts. The Group also hedges certain scheduled nontrading transactions denominated in foreign currencies that it expects to generate.

In addition, the Group uses currency swap and interest rate

swap contracts to mitigate foreign currency exchange fluctuation risk exposure in connection with long-term loans receivable in foreign currencies and interest rate fluctuation risk exposure in connection with long-term borrowings. Some consolidated subsidiaries use commodity swaps to control price fluctuation risks in connection with raw materials.

With respect to short-term investment securities and investment securities, the Group periodically monitors fair values or financial status of the related issuers. With respect to stocks in companies with which the Group has a business relationship, the Group continuously checks the necessity for holding them, taking into account the business relationship.

The Group manages derivative transactions in accordance with internal rules that regulate delegation of authority concerning derivative transactions.

- c. Liquidity Risk Management on Fund Raising

 Liquidity risk comprises the risk that the Group cannot meet its

 contractual obligations in full at the respective maturity dates. The

 Group manages its liquidity risk by diversifying its fund raising
 instruments, obtaining commitment lines from several financial
 institutions and adjusting short-term and long-term funding
 balances in consideration of market environments.
- (4) Supplementary explanation concerning fair values of financial instruments

Fair values of financial instruments may vary depending on the different assumptions since variable factors are incorporated in computing the relevant fair values. The notional amounts and other information described in Note 14. "Derivative Financial Instruments" are not indicative of market risk exposure to derivative transactions.

2. Fair values of financial instruments

Carrying amount, fair value and unrealized gain/loss of the financial instruments as of December 31, 2023 and December 31, 2022 are as follows:

Fiscal 2023

		Millions of yen	
	Carrying amount	Fair value	Unrealized gain (loss)
(1) Investment securities:			
Available-for-sale securities	¥14,965	¥14,965	¥—
Total assets	¥14,965	¥14,965	¥—
(1) Bonds	¥60,000	¥59,371	¥(628)
(2) Long-term borrowings (*1)	182,011	180,675	(1,336)
Total liabilities	¥242,011	¥240,046	¥(1,964)
Derivative transactions (*2)	¥242	¥242	¥—

		Thousands of U.S. dollars	
	Carrying amount	Fair value	Unrealized gain (loss)
(1) Investment securities:			
Available-for-sale securities	\$105,514	\$105,514	\$ —
Total assets	\$105,514	\$105,514	\$ —
(1) Bonds	\$423,042	\$418,607	\$(4,428)
(2) Long-term borrowings (*1)	1,283,304	1,273,884	(9,420)
Total liabilities	\$1,706,346	\$1,692,491	\$(13,848)
Derivative transactions (*2)	\$1,706	\$1,706	\$ —

^(*1) Long-term borrowings include the current portion of long-term borrowings.

- (*2) Receivables and payables incurred as a result of derivative transactions are presented on a net basis. Net payables are presented in parentheses.
- (*3) Notes have been omitted for cash and deposits; notes and accounts receivable—trade, and contract assets; short-term investment securities; and notes and accounts payable—trade because they are cash or their fair value approximates their book value due to their short maturities.
- (*4) Shares, etc. that do not have a market price are not included in available-for-sale securities under (1) Investment securities. The carrying amounts of such financial instruments in the consolidated balance sheets are as follows:

_	Millions of yen	Thousands of U.S. dollars
Category	Carrying amount	Carrying amount
Unlisted equity securities	¥7,681	\$54,156

(*5) Investments in partnerships or similar entities for which the amounts corresponding to equity interests are recorded on the consolidated balance sheet on a net basis are not included in available-for-sale securities under (1) Investment securities. The carrying amounts of such investments in the consolidated balance sheet are as follows:

	Millions of yen	Thousands of U.S. dollars	
Category	Carrying amount	Carrying amount	
Investment limited partnership, etc.	¥1,319	\$9,300	

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Fiscal 2022

_		Millions of yen	
	Carrying amount	Fair value	Unrealized gain (loss)
(1) Investment securities:			
Available-for-sale securities	¥14,057	¥14,057	¥0
Total assets	¥14,057	¥14,057	¥0
(1) Bonds (*1)	¥70,000	¥68,890	¥(1,109)
(2) Long-term borrowings (*2)	209,925	206,604	(3,320)
Total liabilities	¥279,925	¥275,495	¥(4,430)
Derivative transactions (*3)	¥1,776	¥1,776	¥—

- (*1) Bonds include the current portion of bonds payable.
- (*2) Long-term borrowings include the current portion of long-term borrowings.
- (*3) Receivables and payables incurred as a result of derivative transactions are presented on a net basis. Net payables are presented in parentheses.
- (*4) Notes have been omitted for cash and deposits; notes and accounts receivable—trade, and contract assets; short-term investment securities; and notes and accounts payable—trade because they are cash or their fair value approximates their book value due to their short maturities.
- (*5) Shares, etc. that do not have a market price are not included in available-for-sale securities under (1) Investment securities. The carrying amounts of such financial instruments in the consolidated balance sheets are as follows:

	Millions of yen
Category	Carrying amount
Unlisted equity securities	¥7,766

(*6) Investments in partnerships or similar entities for which the amounts corresponding to equity interests are recorded on the consolidated balance sheet on a net basis are not included in available-for-sale securities under (1) Investment securities. The carrying amounts of such investments in the consolidated balance sheet are as follows:

	Millions of yen
Category	Carrying amount
Investment limited partnership, etc	¥1,371

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2023

Notes: 1. Redemption schedule of monetary assets and securities with contractual maturities

Fiscal 2023

	Millions of yen					
	Within one year	One to five years	Five to ten years	Over ten years		
Cash and deposits	¥131,144	¥—	¥—	¥—		
Notes and accounts receivable—trade	160,762	_	_	_		
Short-term investment securities and investment securities: Available-for-sale securities with contractual maturities:						
Others	3,478	_	_	_		
Total	¥295,385	¥—	¥—	¥—		

	Thousands of U.S. dollars					
_	Within one year	One to five years	Five to ten years	Over ten years		
Cash and deposits	\$924,656	\$ —	\$ —	\$ —		
Notes and accounts receivable—trade	1,133,484	_	_	_		
Others	24,522	_	_	_		
Total	\$2,082,669	\$ —	\$ —	\$ —		

Fiscal 2022

	Millions of yen					
	Within one year	One to five years	Five to ten years	Over ten years		
Cash and deposits	¥123,724	¥—	¥—	¥—		
Notes and accounts receivable—trade	151,504	_	_	_		
Others	4,852	_	_	_		
Total	¥280,081	¥—	¥—	¥—		

2. Redemption schedule of bonds, long-term borrowings, lease obligations and lease liabilities after the balance sheet date:

Fiscal 2023

	Millions of yen									
_	Within one	Within one One to two Two to three Three to four Four to five						hin one One to two Two to three Three to four Four to five	e One to two Two to three Three to four Four	Over five
	year	years	years	years	years	years				
Bonds	¥-	¥10,000	¥	¥10,000	¥10,000	¥30,000				
Long-term borrowings	24,698	17,365	31,325	16,310	22,310	70,000				
Lease obligations	523	427	290	131	54	584				
Lease liabilities	4,527	3,651	3,203	2,974	2,738	19,091				
Total	¥29,749	¥31,444	¥34,820	¥29,416	¥35,103	¥119,675				

	Thousands of U.S. dollars					
·	Within one	One to two	Four to five	Over five		
	year	years	years	years	years	years
Bonds	\$ -	\$70,507	\$ -	\$70,507	\$70,507	\$211,521
Long-term borrowings	174,138	122,435	220,863	114,997	157,301	493,549
Lease obligations	3,688	3,011	2,045	924	381	4,118
Lease liabilities	31,918	25,742	22,583	20,969	19,305	134,605
Total	\$209,751	\$221,702	\$245,505	\$207,403	\$247,501	\$843,792

Fiscal 2022

	Millions of yen								
_	Within one One to t	Within one One to two Two to three Three to four Four to five					Vithin one One to two Two to three Three to four Four to fiv	One to two	Over five
	year	years	years	years	years	years			
Bonds	¥10,000	¥-	¥10,000	¥-	¥10,000	¥40,000			
Long-term borrowings	30,434	24,188	16,855	30,815	15,815	91,815			
Lease obligations	513	414	317	181	44	118			
Lease liabilities	3,814	3,301	2,797	2,390	2,101	17,123			
Total	¥44,763	¥27,904	¥29,970	¥33,387	¥27,961	¥149,057			

3. Fair value information by level within the fair value hierarchy

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 categorized in its entirety in the level of the lowest level input that is significant to the entire measurement.

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2023

(1) Financial instruments recorded on the consolidated balance sheet at fair value

Fiscal 2023

	Millions of yen Fair value					
Category	Level 1	Level 2	Level 3	Total		
Investment securities:						
Available-for-sale securities:						
Equity securities	¥14,965	¥—	¥—	¥14,965		
Derivative transactions:						
Currencies	_	191	_	191		
Interest rate	_	273	_	273		
Fotal assets	¥14,965	¥465	¥—	¥15,430		
Derivative transactions:						
Commodity	¥—	¥222	¥—	¥222		
Total liabilities	¥—	¥222	¥—	¥222		

	Thousands of U.S. dollars Fair value					
_						
Category	Level 1	Level 2	Level 3	Total		
nvestment securities:						
Available-for-sale securities:						
Equity securities	\$105,514	\$ —	\$ —	\$105,514		
Derivative transactions:						
Currencies	_	1,347	_	1,347		
Interest rate	_	1,925	_	1,925		
Total assets	\$105,514	\$3,279	\$ —	\$108,792		
Derivative transactions:						
Commodity	\$ —	\$1,565	\$ —	\$1,565		
Total liabilities	\$ —	\$1,565	\$ —	\$1,565		

Fiscal 2022

		Million	s of yen			
_	Fair value					
Category	Level 1	Level 2	Level 3	Total		
Investment securities:						
Available-for-sale securities:						
Equity securities	¥14,056	¥—	¥—	¥14,056		
Derivative transactions:						
Currencies	_	1,079	_	1,079		
Interest rate	_	302	_	302		
Commodity	_	394	_	394		
Total assets	¥14,056	¥1,776	¥—	¥15,833		

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2023

(2) Financial instruments other than those listed on the consolidated balance sheet at fair value

Fiscal 2023

	Millions of yen				
_		Fair v	value		
Category	Level 1	Level 2	Level 3	Total	
Bonds	¥—	¥59,371	¥—	¥59,371	
Long-term borrowings	_	180,675	_	180,675	
Total liabilities	¥—	¥240,046	¥—	¥240,046	

	Thousands of U.S. dollars				
		Fair	value		
Category	Level 1	Level 2	Level 3	Total	
Bonds	\$ —	\$418,607	\$ —	\$418,607	
Long-term borrowings	_	1,273,884	_	1,273,884	
Total liabilities	\$ —	\$1,692,491	\$ —	\$1,692,491	

Fiscal 2022

	Millions of yen					
		Fair v	value			
Category	Level 1	Level 2	Level 3	Total		
Investment securities:						
Available-for-sale securities:						
Golf club memberships	¥—	¥0	¥—	¥0		
Total assets	¥—	¥0	¥—	¥0		
Bonds	¥—	¥68,890	¥—	¥68,890		
Long-term borrowings	_	206,604	_	206,604		
Total liabilities	¥—	¥275,495	¥—	¥275,495		

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

Investment securities

The fair values of listed stocks and golf club memberships are valued using quoted prices. As listed stocks are traded in active markets, their fair value is classified as Level 1. On the other hand, the fair value of golf club memberships is classified as Level 2 because they are not traded frequently in the market and therefore not considered to have quoted prices in active markets.

Derivative transactions

The fair values of forward foreign exchange contracts, interest rate swaps, and commodity swaps are measured based on forward exchange rates and prices quoted by counterparty financial institutions, etc. and are classified as Level 2. The fair value of interest rate swaps that qualify for the exceptional treatment are accounted for as an integral part of long-term loans payable that are hedged, and is therefore included in the fair value of the relevant long-term loans payable.

Bonds

The fair value of bonds issued by the Company is determined at the present value that is calculated by discounting the aggregated values of the principal and interest using an interest rate reflecting the remaining terms of the Company's bonds and the credit risk, and are classified as Level 2.

Long-term borrowings

The fair values of long-term loans payable are calculated by discounting the aggregated values of the principal and interest using an assumed interest rate based on the interest rate that would be applied to a new loan of a similar nature, and are classified as Level 2. Certain long-term loans payable bearing floating interest rates are hedged using interest rate swap contracts and the fair values of these loans payable are determined by discounting the aggregated values of the principal and interest accounted for together with the related interest rate swap contracts using a reasonably estimated interest rate based on the interest rate that would be applied to a new loan of a similar nature.

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2023

13 Securities

1. Available-for-sale securities with market value

Fiscal 2023

	Million	s of yen		Thousands of U.S. dollars			
	Book value			Book value			
	(estimated fair value)	Cost	Net	(estimated fair value)	Cost	Net	
Securities with book value							
exceeding their acquisition cost:							
Equity securities	¥14,782	¥5,519	¥9,263	\$104,223	\$38,913	\$65,311	
Bonds:							
Government and municipal				_	_		
Corporate	_				_		
Others				_	_		
Others				_	_		
Subtotal	14,782	5,519	9,263	104,223	38,913	65,311	
Securities with book value							
not exceeding their acquisition cost:							
Equity securities	182	185	(2)	1,283	1,304	(14)	
Bonds:							
Government and municipal				_	_		
Corporate					_		
Others	_				_		
Others	3,478	3,478	<u> </u>	24,522	24,522	<u> </u>	
Subtotal	3,661	3,664	(2)	25,813	25,834	(14)	
Total	¥18,444	¥9,183	¥9,260	\$130,043	\$64,747	\$65,289	

Notes: 1. Unlisted equity securities amounting to ¥1,272 million (US\$ 8,968 thousand) are excluded from the above table, because they are shares, etc. that do not have a market price.

^{2.} Investments in partnerships or similar entities for which the amounts corresponding to equity interests are recorded on the consolidated balance sheet on a net basis (amounting to ¥1,319 million (US\$ 9,300 thousand)) are not included in available-for sale securities in the above table.

Fiscal 2022

	Million	ns of yen	
	Book value		
	(estimated fair value)	Cost	Net
Securities with book value			
exceeding their acquisition cost:			
Equity securities	¥13,883	¥6,140	¥7,742
Bonds:			
Government and municipal	_		_
Corporate	_		_
Others	_		
Others	_		_
Subtotal	13,883	6,140	7,742
Securities with book value			
not exceeding their acquisition cost:			
Equity securities	173	192	(18)
Bonds:			
Government and municipal	_		
Corporate	_		
Others	_		
Others	4,852	4,852	_
Subtotal	5,026	5,045	(18)
Total	¥18,909	¥11,185	¥7,723

Note: Unlisted equity securities amounting to \(\frac{\pmathbf{\text{\text{\general}}}}{2,975}\) million are excluded from the above table, because they are shares, etc. that do not have a market price.

2. Available-for-sale securities sold during the fiscal year

Fiscal 2023

	Millions of yen			Thousands of U.S. dollars			
	Proceeds from sales	Total gain Total loss Proceed		Proceeds from sales	Total gain	Total loss	
Equity securities	¥1,520	¥893	¥	\$10,717	\$6,296	\$ —	
Others (Note 1)	0	0	0	0 0		0	
Total	¥1,520	¥893	¥0	\$10,717 \$6,296		\$0	

Notes: 1. Attributable to golf club memberships.

2. Shares, etc. that do not have a market price are excluded from the above table.

Fiscal 2022

	Millions of yen						
	Proceeds from sales	Total gain	Total loss				
Others (Note 1)	¥3,267	¥2,614	¥0				
Total	¥3,267	¥2,614	¥0				

Notes: 1. Attributable to sale of stock.

2. Shares, etc. that do not have a market price are excluded from the above table.

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2023

3. Impairment loss on securities

The Company recognized impairment loss on securities of ¥13 million (US\$92 thousand) in fiscal 2023 and ¥14 million in fiscal 2022.

As for the available-for-sale securities other than shares, etc. that do not have a market price, the Company recognizes impairment loss when the fair value of such securities as of the fiscal year-end declines to less than 50% of acquisition cost. When the fair value declines to between 30% and 50% of the acquisition cost, the Company considers the recoverability of each security and recognizes impairment for the amount deemed necessary. As for the available-for-sale securities which shares, etc. that do not have a market price the Company recognizes impairment loss in the amount deemed necessary when the fair value of such securities declines significantly.

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2023

14 Derivative Financial Instruments

1. Derivative transactions to which hedge accounting is not applied

(1) Currencies

Fiscal 2023

			Millions of	yen	
Category		Nominal amount	Nominal amount due after one year	Market value	Unrealized gain (loss)
Transactions other than	Forward foreign exchange contracts:				
market transactions	Receipts in Yen/Payments in U.S. dollar	¥9,387	¥—	¥349	¥349
	Receipts in Yen/Payments in Euro	5,586	_	38	38
	Receipts in Yen/Payments in Australian dollar Receipts in Yen/Payments in Baht Receipts in Yen/Payments in Zloty Receipts in Yen/Payments in Yuan	10,954 20,656 3,183		75 13 (205)	75 13 (205)
	Other	1,401 3,827	_	(11)	(11)
	Receipts in Yen/Payments in Won	7,116	_	(1)	(1)
Total		¥62,114	¥—	¥268	¥268

			Thousands of U.	S. dollars	
Category	Classification	Nominal Amount	Nominal amount due after one year	Market value	Unrealized gain (loss)
Transactions other than	Forward foreign exchange contracts:				
market transactions	Receipts in Yen/Payments in U.S. dollar	\$66,185	\$ —	\$2,461	\$2,461
	Receipts in Yen/Payments in Euro	39,385	_	268	268
	Receipts in Yen/Payments in Australian dollar	77,233	_	529	529
	Receipts in Yen/Payments in Baht	145,639	_	92	92
	Receipts in Yen/Payments in Zloty	22,442	_	(1,445)	(1,445)
	Receipts in Yen/Payments in Yuan	9,878	_	63	63
	Other	26,983	_	(78)	(78)
	Receipts in Yen/Payments in Won	50,173	_	(7)	(7)
Total		\$437,947	\$ —	\$1,890	\$1,890

Note: The forward foreign exchange contracts and non-deliverable forward foreign exchange transaction above are mainly those set with claims and liabilities to consolidated subsidiaries as the hedged items.

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2023

Fiscal 2022

			Millions of	yen	
Category	Classification	Nominal amount	Nominal amount due after one year	Market value	Unrealized gain (loss)
Transactions other than	Forward foreign exchange contracts:				
market transactions	Receipts in Yen/Payments in U.S. dollar	¥8,689	¥	¥635	¥635
	Receipts in Yen/Payments in Euro	12,085	_	110	110
	Receipts in Yen/Payments in Australian dollar	9,225 17,495 1,182 1,080	 	269 143 (61) 41	269 143 (61) 41
	Non-deliverable forward foreign exchange transaction:	3,697	_	(12)	(12)
	Receipts in Yen/Payments in Won		_	(28)	(28)
	Other	14	_	(0)	(0)
Total		¥59,527	¥—	¥1,097	¥1,097

Note: The forward foreign exchange contracts and non-deliverable forward foreign exchange transaction above are mainly those set with claims and liabilities to consolidated subsidiaries as the hedged items.

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2023

2. Derivative transactions to which hedge accounting is applied

(1) Currencies

Fiscal 2023

				Millions of yen		The	ousands of U.S. doll	ars
Hedge accounting method	Classification	Major hedged items	Nominal amount	Nominal amount over one year	Market value	Nominal amount	Nominal amount over one year	Market value
Allocation method	Forward foreign exchange contracts:							
	Receipts in Yen/ Payments in U.S. dollar	Accounts receivable—trade	¥796	¥—	Note	\$5,612	\$ —	Note
	Receipts in Yen/ Payments in Baht	Loans receivable	495	_	Note	3,490	_	Note
	Receipts in Yen/ Payments in Yuan	Accounts receivable—trade	335	_	Note	2,362	_	Note
	Receipts in U.S. dollar/ Payments in Yen	Accounts payable—trade	418	_	Note	2,947	_	Note
	Other	Accounts payable—trade	21	_	Note	148	_	Note
Total		·····	¥2,066	¥—		\$14,567	\$ —	

Note: With respect to forward foreign exchange contracts whose exchange rates are used for translating accounts receivable—trade, loans receivable or accounts payable—trade, market values of forward foreign exchange contracts are included in the market values of the relevant accounts receivable—trade, loans receivable—trade, since they are used for recording accounts receivable—trade, loans receivable or accounts payable-trade as hedged items.

				Millions of yen		Th	ousands of U.S. doll	ars
Hedge				Nominal			Nominal	
accounting			Nominal	amount over	Market	Nominal	amount over	Market
method	Classification	Major hedged items	amount	one year	value	amount	one year	value
Deferred hedge method	Forward foreign exchange contracts:							
	Receipts in Yen/ Payments in U.S. dollar	Forecasted transactions in foreign currencies	¥2,950	¥	¥18	\$20,800	\$ —	\$127
	Receipts in Yen/ Payments in Euro	Forecasted transactions in foreign currencies	2,005	_	4	14,137	_	28
	Receipts in U.S. dollar/ Payments in Euro	Forecasted transactions in foreign currencies	1,503	226	(58)	10,597	1,593	(409)
	Receipts in U.S. dollar/ Payments in Yen	Forecasted transactions in foreign currencies	1,254	_	(40)	8,842	_	(282)
	Other	Forecasted transactions in foreign currencies	362	_	(0)	2,552	_	(0)
Total			¥8,076	¥226	¥(76)	\$56,941	\$1,593	\$(536)

Fiscal 2022

				Millions of yen	
Hedge accounting method	Classification	Major hedged items	Nominal amount	Nominal amount over one year	Market value
Allocation method	Forward foreign exchange contracts:				
	Receipts in Yen/ Payments in U.S. dollar	Accounts receivable—trade	¥650	¥	Note
	Receipts in Yen/ Payments in Baht	Loans receivable	459	_	Note
	Receipts in Yen/ Payments in Yuan	Accounts receivable—trade	162	_	Note
	Receipts in U.S. dollar/ Payments in Yen	Accounts payable—trade	148	_	Note
	Other	Accounts payable—trade	14	_	Note
Total			¥1,434	¥—	

Note: With respect to forward foreign exchange contracts whose exchange rates are used for translating accounts receivable—trade, loans receivable or accounts payable—trade, market values of forward foreign exchange contracts are included in the market values of the relevant accounts receivable—trade, loans receivable—trade, since they are used for recording accounts receivable—trade, loans receivable or accounts payable-trade as hedged items.

				Millions of yen	
Hedge accounting			Nominal	Nominal amount over	Market
method	Classification	Major hedged items	amount	one year	value
Deferred hedge method	Forward foreign exchange contracts:				
	Receipts in Yen/ Payments in U.S. dollar	Forecasted transactions in foreign currencies	¥3,291	¥	¥35
	Receipts in Yen/ Payments in Euro	Forecasted transactions in foreign currencies	3,728	212	(14)
	Receipts in U.S. dollar/ Payments in Yen	Forecasted transactions in foreign currencies	2,222	_	(41)
	Other	Forecasted transactions in foreign currencies	279	_	2
Total			¥9,521	¥212	¥(18)

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(2) Interest rate

Fiscal 2023

1150012020					
				Millions of yen	
Hedge accounting				Nominal amount	
method	Classification	Major hedged items	Nominal amount	over one year	Market value
Special treatment	Interest rate swaps:				
For interest rate swaps	Floating rate into fixed rate	Long-term borrowings	¥6,000	¥	Note
				Thousands of U.S. dollars	
Hedge accounting				Nominal amount	
method	Classification	Major hedged items	Nominal amount	over one year	Market value
Special treatment	Interest rate swaps:	wajor neaged nems	1 volimiai amount	over one year	warket varae
For interest rate swaps	Floating rate into fixed rate	Long-term borrowings	\$42,304	s —	Note
	est rate swap contracts which mee			ate swan contracts are	
-	relevant long-term borrowings, si			•	included in the
market values of the	refevant long-term borrowings, si	mee they are used for record	ing long-term borrown	ngs as neugeu nems.	
				Millions of yen	
Hedge accounting				Nominal amount	
method	Classification	Major hedged items	Nominal amount	over one year	Market value
Deferred hedge method	Interest rate swaps: Floating rate into fixed rate	Long-term borrowings	¥16,861	¥13,485	¥273
				Thousands of U.S. dollars	
Hedge accounting method	Classification	Major hedged items	Nominal amount	Nominal amount	Market value
method	Interest rate swaps:	Major neuged nems	Nominal amount	over one year	Market value
Deferred hedge method	Floating rate into fixed rate	Long-term borrowings	\$118,882	\$95,079	\$1,925
Fiscal 2022					
				Millions of yen	
Hedge accounting				Nominal amount	
method	Classification	Major hedged items	Nominal amount	over one year	Market value
Special treatment For interest rate swaps	Interest rate swaps: Floating rate into fixed rate	Long-term borrowings	¥16,000	¥6,000	Note
Note: With respect to intere	est rate swap contracts which mee	t certain conditions, market	values of the interest ra	ate swap contracts are	included in the
	relevant long-term borrowings, si			-	
					_
				Millions of yen	
Hedge accounting				Nominal amount	
method	Classification	Major hedged items	Nominal amount	over one year	Market value
Deferred hedge method	Interest rate swaps:				
Deterred neage method	Floating rate into fixed rate	Long-term borrowings	¥18,620	¥18,620	¥302

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(3) Commodity

Fiscal 2023

				Millions of yen	
Hedge accounting				Nominal amount	
method	Classification	Major hedged items	Nominal amount	over one year	Market value
Deferred hedge method	Commodity swaps:				
——————————————————————————————————————	Floating rate into fixed rate	Raw material	¥1,638	¥951	¥(222)
				Thousands of U.S. dollars	
Hedge accounting				Nominal amount	
method	Classification	Major hedged items	Nominal amount	over one year	Market value
Deferred hedge method	Commodity swaps: Floating rate into fixed rate	Raw material	\$11,549	\$6,705	\$ (1,565)
Fiscal 2022					
1 10401 2022				Millions of yen	
Hedge accounting				Nominal amount	
method	Classification	Major hedged items	Nominal amount	over one year	Market value
Defermed hadge method	Commodity swaps:			•	
Deferred hedge method	Floating rate into fixed rate	Raw material	¥1,139	¥660	¥394

15 Retirement Benefits

1. Summary of retirement benefit plan

The Company and certain consolidated subsidiaries provide retirement benefits to employees with funded and unfunded defined benefits plans and a defined contribution plan. Certain consolidated subsidiaries participate in a multi-employer plan and account for their contributions to this fund as a retirement benefit expense because the plan assets that correspond to the contribution of each participant cannot be reasonably calculated.

The funded defined benefits plan provides a lump sum payment or a pension primarily based on qualifications and length of service. The Company and certain consolidated subsidiaries are introducing a cashbalance plan to the defined benefits plan. The cash-balance plan establishes hypothetical individual employee accounts representing each employee's

share of plan funding and assets. Interest credits based on money market rate movements and credits primarily based on qualifications and length of service accumulate in the hypothetical individual employee accounts.

The unfunded retirement benefit plan is a lump sum retirement plan. It functions as a retirement savings plan because the Company has established a retirement benefits trust for it. This plan provides lump sum retirement benefits primarily based on qualifications and length of service.

Certain consolidated subsidiaries use a simplified method to calculate liabilities and expenses associated with their defined benefit and lump sum plans.

2. Defined benefit plan

(1) Reconciliations of beginning and ending balance of retirement benefit plan (excluding simplified method)

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Retirement benefit obligations at beginning of year	¥63,252	¥69,334	\$445,971
Service costs	2,597	3,094	18,311
Interest costs	1,696	1,131	11,958
Actuarial gain or loss	2,035	(9,399)	14,348
Benefits paid	(4,400)	(4,950)	(31,023)
Other	2,289	4,041	16,139
Retirement benefit obligations at end of year	¥67,471	¥63,252	\$475,717

Note: "Other" mainly consists of foreign currency translation adjustment (change due to effects of foreign currency translation).

(2) Reconciliations of beginning and ending balance of plan assets (excluding simplified method)

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Plan assets at beginning of year	¥42,154	¥49,153	\$297,215
Expected return on plan assets	1,474	1,488	10,393
Actuarial gain or loss	1,518	(7,932)	10,703
Contribution from entrepreneur	1,454	1,490	10,252
Benefits paid	(4,509)	(5,050)	(31,792)
Other	1,442	3,003	10,167
Plan assets at end of year	¥43,534	¥42,154	\$306,945

Note: "Other" mainly consists of foreign currency translation adjustment (change due to effects of foreign currency translation).

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(3) Reconciliations of beginning and ending net defined benefit liabilities using the simplified method

_	Millions of yen		Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Net defined benefit liabilities at beginning of year	¥2,423	¥2,382	\$17,084
Retirement benefit expenses	421	495	2,968
Benefits paid	(224)	(197)	(1,579)
Contribution to plan assets	(244)	(261)	(1,720)
Other	(51)	3	(360)
Net defined benefit liabilities at end of year	¥2,323	¥2,423	\$16,379

(4) Reconciliations of net amount of retirement benefit liabilities and plan assets and net amount of net defined benefit liabilities and net defined benefit assets recognized on the consolidated balance sheet

	Millions of yen		Thousands of U.S. dollars	
	Fiscal 2023	Fiscal 2022	Fiscal 2023	
Installment type retirement benefit obligation	¥60,148	¥57,533	\$424,085	
Plan assets	(45,358)	(43,757)	(319,805)	
	14,790	13,775	104,280	
Non installment type retirement benefit obligation	11,469	9,745	80,864	
Net amount of net defined benefit liabilities and net defined benefit assets recognized on the consolidated balance sheet	¥26,259	¥23,521	\$185,144	
Net defined benefit liabilities	¥29,487 (3,227)	¥25,626 (2,104)	\$207,904 (22,753)	
Net amount of net defined benefit liabilities and net defined benefit				
assets recognized on the consolidated balance sheet	¥26,259	¥23,521	\$185,144	

Note: Includes plan that uses the simplified method.

(5) The components of retirement benefit expenses

_	Millions of yen		Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Service costs	¥2,597	¥3,094	\$18,311
Interest costs	1,696	1,131	11,958
Expected return on plan assets	(1,474)	(1,488)	(10,393)
Amortization of actuarial gains or losses	606	908	4,273
Amortization of prior service costs	(165)	51	(1,163)
Retirement benefit expenses calculated by simplified method	421	495	2,968
Other	294	434	2,073
Retirement benefit expense pertaining to defined benefit plan	¥3,976	¥4,628	\$28,034

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(6) Remeasurements of defined benefit plans (Consolidated comprehensive income)

The following is a breakdown of remeasurements of defined benefit plans (before deductions for the effect of income taxes)

	Million	s of yen	Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Prior service costs	¥(165)	¥51	\$(1,163)
Actuarial gain or loss	88	2,375	620
Total	¥(76)	¥2,426	\$(536)

(7) Remeasurements of defined benefit plans (Consolidated balance sheet)

The following is a breakdown of items recorded in cumulative remeasurements of defined benefit plans (before deductions for the effect of income taxes).

	Million	ns of yen	Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Unrecognized prior service costs	¥1,563	¥1,729	\$11,020
Unrecognized actuarial gain or loss	(3,017)	(3,105)	(21,272)
Total	¥(1,453)	¥(1,376)	\$(10,245)

(8) Plan assets

a. The components of plan assets

	Fiscal 2023	Fiscal 2022		
Debt securities	50%	49%		
Equity securities	20	16		
Life insurance company general accounts (Note 1)	12	15		
Cash and deposits	8	4		
Other assets	10	16		
Total (Note 2)	100%	100%		

Notes: 1. Life insurance companies manage the assets in, assume the asset management risk for, and guarantee a fixed return to policyholders for life insurance company general accounts.

2. Total retirement plan assets for the years ended December 31, 2023 and 2022 include 20% and 25%, respectively, of the retirement benefits trust established for the lump sum retirement plan.

b. Determination of long-term expected rate of return on plan assets

The long-term expected rate of return on plan assets is determined with due consideration of current and future distribution of plan assets and current and expected returns on the various types of plan assets.

(9) Actuarial assumptions

	Fiscal 2023	Fiscal 2022
Discount rate	Mainly 0.7% to 5.5%	Mainly 0.7% to 5.0%
Long-term expected rate of return	Mainly 1.0% to 5.7%	Mainly 1.0% to 5.5%

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3. Defined contribution plan

The amounts of required contribution to the defined contribution plan of the Company and its consolidated subsidiaries for the years ended December 31, 2023 and 2022 are as follows:

	Million	Thousands of U.S. dollars	
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Defined contribution plan	¥1,762	¥1,472	\$12,423

4. Multi-employer plan

The contribution to the multi-employer plan, which is accounted for in the same manner as the defined contribution plan for the years ended December 31, 2023 and 2022, totaled ¥110 million (US\$776 thousand) and ¥102 million, respectively.

Multi-employer plan in which overseas consolidated subsidiaries participate

(1) Accumulated funds for the plan

	Million	s of yen	Thousands of U.S. dollars
	Fiscal 2023 (As of June 30, 2023)	Fiscal 2022 (As of June 30, 2022)	Fiscal 2023 (As of June 30, 2023)
Plan assets	¥88,753	¥81,744	\$625,770
Total of actuarial pension liabilities and plan's minimum reserve	85,999	79,884	606,353
Difference	¥2,753	¥1,860	\$19,411

(2) Ratio of total salaries of the consolidated subsidiary to total funds of the plan

Fiscal 2023 (As of June 30, 2023)	Fiscal 2022 (As of June 30, 2022)	
3.4%	3.7%	

The ratio in the above (2) does not match with the ratio of the actual burden of the consolidated subsidiary.

Stock-Based Compensation Plans

1. Item and amount of expenses for stock options

Not applicable.

2. Details including size and changes of stock options

(1) Stock options plans

(1) Stock options plans			
	Stock options May 2013	Stock options May 2014	
Resolution date	April 25, 2013	April 25, 2014	
Number of eligible persons by position	Directors of the Company: 10 Executive officers of the Company (excluding those who concurrently serve as directors of the Company and those working overseas): 17	Directors of the Company: 10 Executive officers of the Company (excluding those who concurrently serve as directors of the Company and those working overseas): 17	
Total number and type of stocks granted	88,000 shares of common stock	78,500 shares of common stock	
Grant date	May 15, 2013	May 15, 2014	
Prerequisite to be vested	No vesting conditions are set.	No vesting conditions are set.	
Required service period	There is no provision for a required service period.	There is no provision for a required service period.	
Exercise period	From May 15, 2013 to May 14, 2028; provided that the final date of the exercise period is a holiday for the Company, the final date should be the business date immediately preceding the date. A holder of subscription rights to shares may exercise the subscription rights to shares within 10 days from one day after the day he/she loses his or her position as a director or an executive officer (the "Rights Commencement Date"). Notwithstanding the above, if the holder of subscription rights to shares fails to reach the Rights Commencement Date by April 15, 2028, he/she may exercise his or her rights from the following business day to the date of expiration of the above exercise period of the subscription rights to shares.	"Rights Commencement Date"). Notwithstanding the above, if the holder of subscription rights to shares fails to reach the Rights Commencement Date by April 15, 2029, he/she may	
Number of subscription rights to shares (units) (Note 3)	9	11	
Type, content and number of shares subject to subscription rights to shares (Note 3)	4,500 shares of common stock	5,500 shares of common stock	
Amount paid at the time of exercise of subscription rights to shares (yen) Note 3)	¥1/share (US\$0.01)	¥1/share (US\$0.01)	
Issue price of shares and amount to be incorporated into stated capital when issuing shares through exercise of subscription rights to shares (yen) (Note 3) Issue price: ¥1,483 (US\$10.46) Amount to be incorporated into stated capital: ¥7-0 (US\$5.23)		Issue price: ¥1,120 (US\$7.90) Amount to be incorporated into stated capital: ¥560 (US\$3.95)	
Conditions for exercising subscription rights to shares (Note 3)	,	te 1)	
Matters related to transfer of subscription rights to shares (Note 3)	Acquisition of the subscription rights to shares by tran Board of Directors of the Company.	sfer shall require the approval by resolution of the	
Matters related to delivery of subscription rights to shares in association with reorganization (Note 3)	(Note 2)		

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	Stock options February 2015	Stock options February 2016	
Resolution date	January 21, 2015	January 20, 2016	
Number of eligible persons by position	Directors of the Company: 12 Executive officers of the Company (excluding those who concurrently serve as directors of the Company and those working overseas): 11	Directors of the Company: 12 Executive officers of the Company (excluding those who concurrently serve as directors of the Company and those working overseas): 10	
Total number and type of stocks granted	59,500 shares of common stock	69,000 shares of common stock	
Grant date	February 17, 2015	February 10, 2016	
Prerequisite to be vested	No vesting conditions are set.	No vesting conditions are set.	
Required service period	There is no provision for a required service period.	There is no provision for a required service period.	
Exercise period	From February 17, 2015 to February 16, 2030; provided that the final date of the exercise period is a holiday for the Company, the final date should be the business date immediately preceding the date. A holder of subscription rights to shares may exercise the subscription rights to shares within 10 days from one day after the day he/she loses his or her position as a director or an executive officer (the "Rights Commencement Date"). Notwithstanding the above, if the holder of subscription rights to shares fails to reach the Rights Commencement Date by January 17, 2030, he/she may exercise his or her rights from the following business day to the date of expiration of the above exercise period of the subscription rights to shares.	From February 10, 2016 to February 9, 2031; provided that the final date of the exercise period is a holiday for the Company, the final date should be the business date immediately preceding the date. A holder of subscription rights to shares may exercise the subscription rights to shares within 10 days from one day after the day he/she loses his or her position as a director or an executive officer (the "Rights Commencement Date"). Notwithstanding the above, if the holder of subscription rights to shares fails to reach the Rights Commencement Date by January 10, 2031, he/she may exercise his or her rights from the following business day to the date of expiration of the above exercise period of the subscription rights to shares.	
Number of subscription rights to shares (units) (Note 3)	18	33	
Type, content and number of shares subject to subscription rights to shares (Note 3)	9,000 shares of common stock	16,500 shares of common stock	
Amount paid at the time of exercise of subscription rights to shares (yen) (Note 3)	¥1/share (US\$0.01)	¥1/share (US\$0.01)	
Issue price of shares and amount to be incorporated into stated capital when issuing shares through exercise of subscription rights to shares (yen) (Note 3)	Issue price: ¥1,353 (US\$9.54) Amount to be incorporated into stated capital: ¥677 (US\$4.77)	Issue price: ¥1,201 (US\$8.47) Amount to be incorporated into stated capital: ¥601 (US\$4.24)	
Conditions for exercising subscription rights to shares (Note 3)	(No	ote 1)	
Matters related to transfer of subscription rights to shares (Note 3)	Acquisition of the subscription rights to shares by tran Board of Directors of the Company.	sfer shall require the approval by resolution of the	
Matters related to delivery of subscription rights to shares in association with reorganization (Note 3)	(Note 2)		

	Stock options February 2017	Stock options February 2018		
Resolution date	January 18, 2017	January 17, 2018		
Number of eligible persons by position	Directors of the Company: 12 Executive officers of the Company (excluding those who concurrently serve as directors of the Company and those working overseas): 11	Directors of the Company: 10 Executive officers of the Company (excluding those who concurrently serve as directors of the Company and those working overseas): 12		
Total number and type of stocks granted	75,500 shares of common stock	45,000 shares of common stock		
Grant date	February 9, 2017	February 15, 2018		
Prerequisite to be vested	No vesting conditions are set.	No vesting conditions are set.		
Required service period	There is no provision for a required service period.	There is no provision for a required service period.		
Exercise period	From February 9, 2017 to February 8, 2032; provided that the final date of the exercise period is a holiday for the Company, the final date should be the business date immediately preceding the date. A holder of subscription rights to shares may exercise the subscription rights to shares within 10 days from one day after the day he/she loses his or her position as a director or an executive officer (the "Rights Commencement Date"). Notwithstanding the above, if the holder of subscription rights to shares fails to reach the Rights Commencement Date by January 9, 2032, he/she may exercise his or her rights from the following business day to the date of expiration of the above exercise period of the subscription rights to shares.	holiday for the Company, the final date should be the business date immediately preceding the date. A holder of subscription rights to shares may exercise the subscription rights to shares within 10 days from one day after the day he/she loses his or her position as a director or an executive officer (the "Rights Commencement Date"). Notwithstanding the above, if the holder of		
Number of subscription rights to shares (units) (Note 3)	57	42		
Type, content and number of shares subject to subscription rights to shares (Note 3)	28,500 shares of common stock	21,000 shares of common stock		
Amount paid at the time of exercise of subscription rights to shares (yen) (Note 3)	¥1/share (US\$0.01)	¥1/share (US\$0.01)		
Issue price of shares and amount to be incorporated into stated capital when issuing shares through exercise of subscription rights to shares (yen) (Note 3) Issue price: ¥1,539 (US\$10.85) Amount to be incorporated into stated capital: ¥770 (US\$5.43)		Issue price: ¥1,762 (US\$12.42) Amount to be incorporated into stated capital: ¥881 (US\$6.21)		
Conditions for exercising subscription rights to shares (Note 3)	(No	ote 1)		
Matters related to transfer of subscription rights to shares (Note 3)	Acquisition of the subscription rights to shares by tran Board of Directors of the Company.	sfer shall require the approval by resolution of the		
Matters related to delivery of subscription rights to shares in association with reorganization (Note 3)		ote 2)		

	Stock options February 2019	Stock options February 2020	
Resolution date	January 16, 2019	January 22, 2020	
Number of eligible persons by position	Directors of the Company: 9 Executive officers of the Company (excluding those who concurrently serve as directors of the Company and those working overseas): 13	Directors of the Company: 12 Executive officers of the Company (excluding those who concurrently serve as directors of the Company and those working overseas): 12	
Total number and type of stocks granted	64,500 shares of common stock	86,500 shares of common stock	
Grant date	February 14, 2019	February 14, 2020	
Prerequisite to be vested	No vesting conditions are set.	No vesting conditions are set.	
Required service period	There is no provision for a required service period.	There is no provision for a required service period.	
Exercise period	From February 14, 2019 to February 13, 2034; provided that the final date of the exercise period is a holiday for the Company, the final date should be the business date immediately preceding the date. A holder of subscription rights to shares may exercise the subscription rights to shares within 10 days from one day after the day he/she loses his or her position as a director or an executive officer (the "Rights Commencement Date"). Notwithstanding the above, if the holder of subscription rights to shares fails to reach the Rights Commencement Date by January 14, 2034, he/she may exercise his or her rights from the following business day to the date of expiration of the above exercise period of the subscription rights to shares.	holiday for the Company, the final date should be the business date immediately preceding the date. A holder of subscription rights to shares may exercise the subscription rights to shares within 10 days from one day after the day he/she loses his or her position as a director or an executive officer (the "Rights Commencement Date"). Notwithstanding the above, if the holder of	
Number of subscription rights to shares (units) (Note 3)	74	101	
Type, content and number of shares subject to subscription rights to shares (Note 3)	37,000 shares of common stock	50,500 shares of common stock	
Amount paid at the time of exercise of subscription rights to shares (yen) (Note 3)	¥1/share (US\$0.01)	¥1/share (US\$0.01)	
Issue price of shares and amount to be incorporated into stated capital when issuing shares through exercise of subscription rights to shares (yen) (Note 3) Issue price: \(\frac{\pmathbf{\text{\text{Y}}}}{1,467}\) (US\(\frac{\pmathbf{\text{\text{Y}}}}{10.34}\) Amount to be incorporated into stated capital: \(\frac{\pmathbf{\text{\text{Y}}}}{2.734}\) (US\(\frac{\pmathbf{\text{\text{\text{Y}}}}}{1.500}\) (US\(\pmathbf{\text{\tex{\tex		Issue price: ¥1,315 (US\$9.27) Amount to be incorporated into stated capital: ¥658 (US\$4.64)	
Conditions for exercising subscription rights to shares (Note 3)	(No	ote 1)	
Matters related to transfer of subscription rights to shares (Note 3)	Acquisition of the subscription rights to shares by tran Board of Directors of the Company.	sfer shall require the approval by resolution of the	
Matters related to delivery of subscription rights to shares in association with reorganization (Note 3)	(Note 2)		

D. 1.1.	Stock options February 2021
Resolution date	January 20, 2021
Number of eligible persons	Directors of the Company (excluding those working
by position	overseas): 11
	Executive officers of the Company (excluding those who concurrently serve as directors of the Company
	and those working overseas): 13
Total number and type of	and those working overseas). 13
stocks granted	98,500 shares of common stock
Grant date	February 12, 2021
Prerequisite to be vested	No vesting conditions are set.
Required service period	There is no provision for a required service period.
Exercise period	From February 12, 2021 to February 11, 2036;
	provided that the final date of the exercise period is a
	holiday for the Company, the final date should be the
	business date immediately preceding the date.
	A holder of subscription rights to shares may
	exercise the subscription rights to shares within 10
	days from one day after the day he/she loses his or
	her position as a director or an executive officer (the
	"Rights Commencement Date").
	Notwithstanding the above, if the holder of subscription rights to shares fails to reach the Rights
	Commencement Date by January 12, 2036, he/she
	may exercise his or her rights from the following
	business day to the date of expiration of the above
	exercise period of the subscription rights to shares.
Number of subscription rights to	
shares (units) (Note 3)	162
Type, content and number of shares	
subject to subscription rights to	81,000 shares of common stock
shares (Note 3)	
Amount paid at the time of exercise	
of subscription rights to shares (yen)	¥1/share (US\$0.01)
(Note 3)	
Issue price of shares and amount to	
be incorporated into stated capital	Issue price: ¥1,175 (US\$8.28)
when issuing shares through exercise	Amount to be incorporated into stated capital: ¥588
of subscription rights to shares (yen) (Note 3)	(US\$4.15)
Conditions for exercising subscription rights to shares (Note 3)	(Note 1)
Matters related to transfer of	Acquisition of the subscription rights to shares by
subscription rights to shares (Note 3)	transfer shall require the approval by resolution of
successive and regime to shares	the Board of Directors of the Company.
Matters related to delivery of	·p · / ·
subscription rights to shares in	(Note 2)
association with reorganization (Note 3)	, ,

Notes: 1. Conditions for exercising subscription rights to shares

- (i) If the Company decides to acquire the subscription rights to shares without contribution by resolution of a shareholders' meeting or a Board of Directors' meeting (Note 1-1), a holder of the subscription rights to shares may exercise the subscription rights to shares for a period that is prior to the date of such gratis acquisition and is separately determined by the Board of Directors.
- (ii) If a holder of the subscription rights to shares is deceased, his or her heir may exercise the subscription rights to shares pursuant to the conditions specified in the "Contracts on Subscription Rights to Shares" listed in (iii) below.

- (iii) The other exercise conditions are prescribed in the "Contracts on Subscription Rights to Shares" to be concluded between the Company and a holder of the subscription rights to shares.
- 1-1. If a proposal for approval of a merger agreement in which the Company will be a non-surviving company, an absorption-type split agreement or an incorporation-type company split plan in which the Company will be a split company, or a share exchange agreement or a share transfer plan in which the Company will be a wholly-owned subsidiary, is approved at the shareholders' meeting of the Company (if the resolution of the shareholders' meeting is not required, a resolution at the Board of Directors of the Company that approves these proposals), the Company may acquire all the remaining subscription rights to shares without consideration, as of the date separately determined by the Board of Directors.
- 2. Matters related to delivery of subscription rights to shares in association with reorganization

When the Company carries out a merger (only where the Company becomes a non-surviving company), absorption-type split, incorporation-type company split, share exchange or share transfer (collectively the "Reorganizational Acts"), the subscription rights to shares of a stock company listed in (a) to (e) in Paragraphs 1-8, Article 236 of the Companies Act ("Reorganized Company") shall be delivered to a holder of the subscription rights to shares who holds the remaining subscription rights to shares at the effective timing of the Reorganizational Acts ("Remaining Subscription Rights to Shares"), for each case, based on the conditions described below. In this case, Remaining Subscription Rights to Shares shall be extinguished, and the Reorganized Company shall newly deliver subscription rights to shares. However, the foregoing is limited to a case that a provision to deliver subscription rights to shares of the Reorganized Company pursuant to the following conditions is stipulated in an absorption-type merger agreement, an incorporation-type merger agreement, an absorption-type split agreement, an incorporation-type company split plan, a share exchange agreement or a share transfer plan.

- (i) Number of Reorganized Company's subscription rights to shares to be delivered The same number as that of Remaining Subscription Rights to Shares held by the holders of the subscription rights to shares shall be delivered, respectively.
- (ii) Type of shares of the Reorganized Company underlying the subscription rights to sharesCommon stock of the Reorganized Company.
- (iii) Number of shares of the Reorganized Company underlying the subscription rights to shares Determined in consideration for conditions of the Reorganizational Acts and other factors.
- (iv) Value of assets to be contributed upon exercise of the subscription rights to shares

 Post-reorganization paid-in amount shall be ¥1 per share of the Reorganized Company upon exercise of the subscription rights to shares. The value of assets to be contributed shall be calculated by multiplying the amount with the number of shares of the Reorganized Company determined according to (iii) above.
- (v) Exercise period of the subscription rights to shares
 From the starting day of the period for exercisable subscription rights to shares or the day when the Reorganization Action comes into effect, whichever comes later, to the expiration date of the exercise period of the subscription rights to shares above.
- (vi) Amount of capital to be increased when shares are issued upon exercise of the subscription rights to shares

 Half of the maximum amount of increase in stated capital calculated in accordance with Paragraph 1, Article 17 of the Regulation on

 Corporate Accounting, and any fraction of less than ¥1 resulting from the calculation shall be rounded up.

(vii) Restriction on acquisition of the subscription rights to shares by transfer

Acquisition of the subscription rights to shares by transfer requires the approval of the Board of Directors of the Reorganized Company.

(viii) Acquisition provision of the subscription rights to shares

Determined according to Note 1-1 above.

 $(ix) \quad \hbox{Other conditions for exercise of the subscription rights to shares} \\$

Determined according to "Exercise period of the subscription rights to shares" (v) and (Note 1) above.

3. Stated are details as of the end of fiscal 2023. As of the end of the month preceding the month that the filing date of the securities report belongs to (February 29, 2024), there are no changes from the details as of the end of fiscal 2023.

(2) Size and changes of stock options

Stock options that existed in current fiscal years were converted into shares.

1) Number of stock options

	Stock options May 2013	Stock options May 2014	Stock options February 2015	Stock options February 2016	Stock options February 2017	Stock options February 2018
***	2015	2014	2013	2010	2017	2016
Unvested stock options (shares)						
At the beginning of the fiscal year						
Granted	_	_	_	_	_	_
Forfeited	_	_	_	_	_	_
Vested	_	_	_	_	_	_
At the end of the fiscal year	_	_	_	_	_	_
Vested stock options (shares)						
At the beginning of the fiscal year	4,500	5,500	9,000	16,500	28,500	21,000
Vested	_	_	_	_	_	
Exercised	_	_	_	_	_	_
Forfeited	_	_	_	_	_	_
At the end of the fiscal year	4,500	5,500	9,000	16,500	28,500	21,000

	Stock options February 2019	Stock options February 2020	Stock options February 2021
Unvested stock options (shares)			
At the beginning of the fiscal year	_	_	_
Granted	_	_	_
Forfeited	_	_	_
Vested	_	_	_
At the end of the fiscal year	_	_	_
Vested stock options (shares)			
At the beginning of the fiscal year	37,000	50,500	81,000
Vested	_	_	_
Exercised	_	_	_
Forfeited	_	_	_
At the end of the fiscal year	37,000	50,500	81,000

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2) Price information

	Yen					
	Stock options May 2013	Stock options May 2014	Stock options February 2015	Stock options February 2016	Stock options February 2017	Stock options February 2018
Exercise prices	¥1	¥1	¥1	¥1	¥1	¥1
Weighted-average exercise date						
stock price	_	_	_	_	_	_
Fair value at the grant date	1,482	1,119	1,352	1,200	1,538	1,761

	Yen						
	Stock options February 2019	Stock options February 2020	Stock options February 2021				
Exercise prices	¥1	¥1	¥1				
Weighted-average exercise date							
stock price	_	_	_				
Fair value at the grant date	1,466	1,314	1,174				

	U.S. dollars								
	Stock options May 2013	Stock options May 2014	Stock options February 2015	Stock options February 2016	Stock options February 2017	Stock options February 2018			
Exercise prices	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01			
Weighted-average exercise date									
stock price	_	_	_	_	_	_			
Fair value at the grant date	10.45	7.89	9.53	8.46	10.84	12.42			

	U.S. dollars						
	Stock options February 2019	Stock options February 2020	Stock options February 2021				
Exercise prices	\$0.01	\$0.01	\$0.01				
Weighted-average exercise date							
stock price	_	_					
Fair value at the grant date	10.34	9.26	8.28				

3. Method to estimate number of vested stock options

The number of vested stock options is the same as the number of stock options granted, since no vesting conditions are set.

17 Income Taxes

1. Significant components of deferred tax assets and liabilities at December 31, 2023 and December 31, 2022

	Millions	of yen	Thousands of U.S. dollars
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Deferred tax assets:			
Net defined benefit liabilities	¥10,257	¥9,926	\$72,319
Impairment loss	4,521	3,220	31,876
Depreciation and amortization	3,543	1,603	24,981
Accrued expenses	3,155	3,264	22,245
Unrealized gain on inventories	2,498	3,409	17,613
Provision for bonuses	2,250	2,012	15,864
Tax credit carry forward of overseas subsidiaries	1,809	1,792	12,755
Tax loss carry forward (Note)	8,970	10,329	63,245
Other	6,135	8,106	43,256
Subtotal deferred tax assets	43,142	43,665	304,181
Valuation allowance relating to tax loss carry forward (Note)	(8,075)	(6,561)	(56,934)
Valuation allowance for total deductible temporary differences	(3,142)	(4,266)	(22,153)
Subtotal valuation allowance	(11,218)	(10,828)	(79,095)
Total deferred tax assets	31,924	32,837	225,086
Deferred tax liabilities:			
Depreciation and amortization	(13,839)	(13,128)	(97,575)
Adjustment to book value of assets stated at fair value	(10,878)	(11,948)	(76,697)
Unrealized gain on revaluation of securities	(2,449)	(1,985)	(17,267)
Retained earnings of overseas subsidiaries	(1,786)	(1,523)	(12,593)
Other	(5,195)	(4,812)	(36,628)
Total deferred tax liabilities	(34,148)	(33,398)	(240,767)
Net deferred tax assets (liabilities)	¥(2,224)	¥(560)	\$(15,681)

Note: Amounts of tax loss carry forward and deferred tax assets according to the carryforward periods

Fiscal 2023 (December 31, 2023)

							(Millions of yen)
	Within	One to two	Two to three	Three to four	Four to five	Over five	
	one year	years	years	years	years	years	Total
Tax loss carry forward (*)	¥126	¥237	¥291	¥269	¥138	¥7,905	¥8,970
Valuation allowance	(126)	(159)	(221)	(105)	(66)	(7,395)	(8,075)
Deferred tax assets	0	77	70	164	72	509	895

						(Thousand	s of U.S. dollars)
	Within	One to two	Two to three	Three to four	Four to five	Over five	
	one year	years	years	years	years	years	Total
Tax loss carry forward (*)	\$888	\$1,671	\$2,052	\$1,897	\$973	\$55,736	\$63,245
Valuation allowance	(888)	(1,121)	(1,558)	(740)	(465)	(52,140)	(56,934)
Deferred tax assets	0	543	494	1,156	508	3,589	6,310

^(*) Tax loss carry forward is the amount multiplied by the statutory effective tax rate.

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Fiscal 2022 (December 31, 2022)

							(Millions of yen)
	Within	One to two	Two to three	Three to four	Four to five	Over five	
	one year	years	years	years	years	years	Total
Tax loss carry forward (*)	¥51	¥116	¥129	¥73	¥360	¥9,598	¥10,329
Valuation allowance	(35)	(84)	(84)	(34)	(336)	(5,986)	(6,561)
Deferred tax assets	15	32	44	39	23	3,612	3,768

^(*) Tax loss carry forward is the amount multiplied by the statutory effective tax rate.

2. Reconciliation of the differences between the statutory effective tax rate and the income tax rate in the accompanying consolidated statement of income at December 31, 2023 and December 31, 2022

	Fiscal 2023	Fiscal 2022
Statutory effective tax rate	—%	30.4%
(Adjustment)		
Tax credit primarily for research and development expenses	_	(1.4)
Changes in valuation allowance	_	(0.9)
Amortization of goodwill	_	1.2
Effect of income tax rates difference	_	(3.0)
Retained earnings of overseas subsidiaries	_	0.4
Other	_	1.9
Income tax rate per the consolidated statement of income	—%	28.6%

Note: For fiscal 2023, the note is omitted as the difference between the statutory effective tax rate and the income tax rate per the consolidated statement of income was not more than 5/100 of the statutory effective tax rate.

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Asset Retirement Obligations

Asset retirement obligations recorded in the consolidated balance sheet are as follows:

Overview of asset retirement obligations

Some tangible fixed assets of the Company and certain consolidated subsidiaries include assets containing asbestos and PCB which must be treated in the manner stipulated by the laws and ordinances when they are scrapped or removed. Accordingly, asset retirement obligations are recognized based on the estimated disposal costs and based on recovery expenses on rental agreements, etc. The grounds laws, ordinances and agreements are as follows:

Disposal costs for asbestos	The Ordinance on Prevention of Asbestos Hazards
Disposal costs for equipment containing PCB	The Law concerning Special Measures for Promotion of Proper Treatment of PCB Wastes (PCB Special Measures Law)
Recovery expenses on rental properties, etc.	Rental agreements, etc.

Method for calculating the amounts of asset retirement obligations

The Group determines the amounts of asset retirement obligations using discount rates ranging from 0.9% to 4.7% for the net cash flows, estimating the period of use to be 18 to 70 years after acquisition.

Increase or decrease of the total amount of asset retirement obligations during the fiscal years ended December 31, 2023 and December 31, 2022:

	Million	Millions of yen		
	Fiscal 2023	Fiscal 2022	Fiscal 2023	
Beginning balance	¥5,525	¥4,821	\$38,955	
Adjustments due to the elapse of time	179	87	1,262	
Decrease due to payment for the obligations	(567)	(160)	(3,998)	
Other increase (decrease)	1,702	776	12,000	
Ending balance	¥6,841	¥5,525	\$48,234	

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Revenue Recognition

1. Breakdown of revenue from contracts with customers

Fiscal 2023

Breakdown of revenue by region

		Millions of yen							
			Reporting S						
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Trading	Total	Others (Note 2)	Total	
Japan	¥26,895	¥21,692	¥34,653	¥24,798	¥34,765	¥142,805	¥23,995	¥166,801	
United States	85,582	6,463	71,201	6,746	76	170,070	1,263	171,333	
China	59,120	6,971	10,780	7,505	20,451	104,829	406	105,235	
Europe	129,424	10,156	50,346	9,858	223	200,009	4,867	204,876	
Asia	52,749	6,883	10,786	8,055	4,344	82,818	1,413	84,232	
Other area	37,528	804	7,924	910	420	47,588	871	48,459	
Total	¥391,300	¥52,970	¥185,692	¥57,875	¥60,281	¥748,120	¥32,818	¥780,938	

			Reporting S	egments				
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Trading	Total	Others (Note 2)	Total
Japan	\$189,628	\$152,944	\$244,328	\$174,843	\$245,117	\$1,006,874	\$169,181	\$1,176,063
United States	603,413	45,569	502,016	47,564	536	1,199,112	8,905	1,208,017
China	416,837	49,150	76,006	52,915	144,194	739,117	2,863	741,980
Europe	912,529	71,607	354,974	69,506	1,572	1,410,202	34,316	1,444,518
Asia	371,917	48,530	76,049	56,793	30,628	583,924	9,963	593,894
Other area	264,598	5,669	55,870	6,416	2,961	335,528	6,141	341,670
Total	\$2,758,937	\$373,475	\$1,309,258	\$408,059	\$425,023	\$5,274,766	\$231,390	\$5,506,155

Notes: 1. Revenues by region are classified by country or area based on customer location.

^{2.} The "Others" category incorporates operations not included in business segment reporting, including the engineering business, etc.

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2023

Fiscal 2022

Breakdown of revenue by region

		Millions of yen								
_			Reporting S	egments						
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Trading	Total	Others (Note 2)	Total		
Japan	¥27,334	¥21,288	¥35,577	¥27,359	¥34,749	¥146,309	¥32,464	¥178,774		
United States	87,507	8,310	59,686	7,645	128	163,278	1,394	164,673		
China	47,404	6,926	11,260	6,640	17,130	89,362	665	90,028		
Europe	124,390	8,436	44,439	11,496	182	188,945	4,993	193,938		
Asia	52,020	6,638	11,247	8,990	4,610	83,506	1,467	84,974		
Other area	32,555	849	8,117	971	355	42,849	1,138	43,987		
Total	¥371,214	¥52,449	¥170,329	¥63,102	¥57,155	¥714,252	¥42,124	¥756,376		

Notes: 1. Revenues by region are classified by country or area based on customer location.

2. Basic information to understand revenues from contracts with customers

Basic information to understand revenues is described in "(5) Standards for recognizing revenues and expenses" under "1. Significant accounting policies, 5. Accounting policies."

^{2.} The "Others" category incorporates operations not included in business segment reporting, including the engineering business, etc.

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3. Information about the relationship between the satisfaction of performance obligations under contracts with customers and cash flows from such contracts, and the amount and timing of revenue expected to be recognized in subsequent fiscal years from contracts with customers existing at the end of the current fiscal year

(1) The balance of contract assets and liabilities, etc.

Fiscal 2023

	Millions	of yen	Thousands of U.S. dollars		
	Beginning balance	Ending balance	Beginning balance	Ending balance	
Receivables from contracts with customers	¥151,504	¥160,762	\$1,068,208	\$1,133,484	
Contract assets	5,511	1,142	38,856	8,052	
Contract liabilities	5,982	9,248	42,177	65,205	

Contract assets are related to the rights to consideration for construction contracts in progress. Contract liabilities are advances received from customers. The beginning balance of the contract liabilities was largely recognized as revenue in fiscal 2023.

Fiscal 2022

	Millions of yen				
	Beginning balance	Ending balance			
Receivables from contracts with customers	¥134,092	¥151,504			
Contract assets	1,675	5,511			
Contract liabilities	9,037	5,982			

Contract assets are related to the rights to consideration for construction contracts in progress. Contract liabilities are advances received from customers. The beginning balance of the contract liabilities was largely recognized as revenue in fiscal 2022.

(2) Transaction price allocated to the remaining performance obligations

In fiscal 2023, since there are no material contracts with an initial expected term of over one year, information on the remaining performance obligations is omitted, applying a practical expedient. There are no material amounts of consideration received from contracts with customers that are not included in the transaction price.

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Segment Information

Segment information

1. Segment overview

The business segments reported by Kuraray are the business units for which the Company is able to obtain respective financial information separately in order for the Board of Directors to conduct periodic investigations to determine distribution of management resources and evaluate their business results.

Kuraray adopts an in-house company system where each in-house company conducts business activities and establishes its own comprehensive strategy, both for Japan and for overseas markets, for the products it handles. In addition, among Kuraray subsidiaries, Kuraray Trading Co., Ltd. independently conducts propriety planning and sales activities, including the processing and sale of Kuraray Group products as well as other companies' products.

Consequently, Kuraray has created five business segments for reporting—"Vinyl Acetate," "Isoprene," "Functional Materials," "Fibers and Textiles" and "Trading"—categorized by product group based on the respective in-house companies and the Trading segment.

The Vinyl Acetate segment manufactures and markets functional

resins and film, including PVA, PVB and EVAL. The Isoprene segment manufactures and markets SEPTON thermoplastic elastomers, isoprene-related products and GENESTAR. The Functional Materials segment manufactures and markets methacrylic resin, medical products, and carbon materials. The Fibers and Textiles segment manufactures and sells synthetic fibers and textiles, CLARINO manmade leather, non-woven fabrics, and others. The Trading segment mainly processes and sells synthetic fibers and man-made leather, and conducts planning and marketing for other products produced by the Kuraray Group and other companies.

Methods for calculating reporting segment net sales, income and loss, assets, liabilities, and other items

The accounting method applied to reported business segments is the same as that stated in "Significant Accounting Policy That Form the Basis of Presenting Consolidated Financial statements." Income(loss) from reported segments is operating income(loss), and intersegment sales and transfers are based on the prevailing market prices.

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2023

3. Information on sales, income and loss, assets, liabilities, and other amounts by reporting segment

Fiscal 2023 (January 1, 2023 to December 31, 2023)

					Milli	ons of yen	ns of yen			
			Reporting	Segments			=			Consolidated Financial
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Trading	Total	Others (Notes 1,5)	Total	Adjustment (Notes 2,4)	Statements (Note 3)
Net sales										
(1) Outside customers	¥391,300	¥52,970	¥185,692	¥57,875	¥60,281	¥748,120	¥32,818	¥780,938	¥—	¥780,938
(2) Inter-segment sales and transfers	15,471	12,712	4,102	3,982	1,307	37,576	12,854	50,430	(50,430)	_
Total	406,771	65,683	189,794	61,858	61,588	785,697	45,672	831,369	(50,430)	780,938
Segment income (loss)	86,344	(10,871)	10,323	1,827	5,183	92,808	506	93,314	(17,839)	75,475
Segment assets	523,793	161,904	296,633	79,994	52,959	1,115,283	33,760	1,149,044	105,440	1,254,485
Other items										
Depreciation and amortization (other than goodwill)	39,469	9,076	14,191	5,073	216	68,028	1,142	69,170	3,284	72,455
Impairment loss	1,369	_	_	_	_	1,369	2,715	4,084	305	4,390
Amortization of goodwill	1,625	_	3,082	_	_	4,708	_	4,708	_	4,708
Balance of goodwill at end of current period	14,816	_	40,570	_	_	55,386	_	55,386	_	55,386
Investments in equity method affiliates	_	_	_	3,531	_	3,531	_	3,531	_	3,531
Increase in tangible fixed assets and intangible fixed assets	32,596	5,351	18,211	5,172	92	61,423	859	62,282	4,999	67,282

					Thousands	of U.S. dollars				
			Reporting S	Segments			_			Consolidated
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Trading	Total	Others (Notes 1,5)	Total	Adjustment (Notes 2,4)	Financial Statements (Note 3)
Net sales										
(1) Outside customers	\$2,758,937	\$373,475	\$1,309,258	\$408,059	\$425,023	\$5,274,766	\$231,390	\$5,506,155	\$ —	\$5,506,155
(2) Inter-segment sales and transfers	109,081	89,628	28,922	28,076	9,215	264,937	90,630	355,567	(355,567)	_
Total	2,868,018	463,111	1,338,180	436,142	434,238	5,539,710	322,019	5,861,729	(355,567)	5,506,155
Segment income (loss)	608,785	(76,648)	72,784	12,882	36,544	654,361	3,568	657,929	(125,777)	532,151
Segment assets	3,693,104	1,141,536	2,091,469	564,013	373,398	7,863,520	238,031	8,101,558	743,425	8,844,990
Other items										
Depreciation and amortization (other than goodwill)	278,284	63,992	100,056	35,768	1,523	479,645	8,052	487,697	23,154	510,858
Impairment loss	9,652	_	_	_	_	9,652	19,143	28,795	2,150	30,953
Amortization of goodwill	11,457	_	21,730	_	_	33,195	_	33,195	_	33,195
Balance of goodwill at end of current period	104,463	_	286,047	_	_	390,510	_	390,510	_	390,510
Investments in equity method affiliates	_	_	_	24,896	_	24,896	_	24,896	_	24,896
Increase in tangible fixed assets and intangible fixed assets	229,824	37,728	128,400	36,466	649	433,075	6,057	439,131	35,246	474,385

Notes: 1. The "Others" category incorporates operations not included in business segment reporting, including the engineering business, etc.

- 2. Adjustments of negative ¥17,839 million (negative US\$125,777 thousand) for segment income include the elimination of intersegment transactions of negative ¥250 million (negative US\$1,763 thousand) and unallocated corporate expenses of negative ¥17,588 million (negative US\$124,008 thousand). These corporate expenses mainly comprise the Company's basic research expenses.
- 3. Segment income is adjusted with operating income under the Consolidated Statement of Income.
- 4. Adjustments for segment assets amounting to ¥105,440 million (US\$743,425 thousand) include the elimination of intersegment transactions of negative ¥56,605 million (negative US\$399,105 thousand) and unallocated corporate assets of ¥162,046 million (US\$1,142,537 thousand).
 These corporate assets mainly comprise the Company's surplus funds, long-term investments and assets related to basic research and administrative divisions at headquarters.
- 5. Impairment loss of "Others" is related to the Vecstar businesses.

Fiscal 2022 (January 1, 2022 to December 31, 2022)

					Milli	ons of yen				
			Reporting	Segments						Consolidated
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Trading	Total	Others (Note 1)	Total	Adjustment (Notes 2,4)	Financial Statements (Note 3)
Net sales										
(1) Outside customers	¥371,214	¥52,449	¥170,329	¥63,102	¥57,155	¥714,252	¥42,124	¥756,376	¥—	¥756,376
(2) Inter-segment sales and transfers	14,130	13,186	3,730	3,756	1,689	36,493	9,927	46,420	(46,420)	_
Total	385,345	65,635	174,059	66,859	58,844	750,745	52,051	802,796	(46,420)	756,376
Segment income (loss)	77,547	4,270	8,574	6,736	5,121	102,251	2,679	104,931	(17,792)	87,139
Segment assets	487,392	158,821	284,016	82,638	51,058	1,063,926	51,246	1,115,173	106,360	1,221,533
Other items										
Depreciation and amortization (other than goodwill)	35,769	2,768	13,249	4,709	187	56,683	1,111	57,794	3,343	61,138
Impairment loss	1,036	_	291	18	_	1,346	_	1,346	39	1,385
Amortization of goodwill	1,508	_	2,809	_	_	4,318	_	4,318	_	4,318
Balance of goodwill at end of current period	15,272	_	40,786	_	_	56,058	_	56,058	_	56,058
Investments in equity method affiliates	_	_	_	3,298	_	3,298	_	3,298	_	3,298
Increase in tangible fixed assets and intangible fixed assets (Note 5)	22,303	13,978	24,981	4,879	219	66,362	934	67,297	5,302	72,599

Notes: 1. The "Others" category incorporates operations not included in business segment reporting, including the engineering business, etc.

- 2. Adjustments of negative ¥17,792 million for segment income include the elimination of intersegment transactions of negative ¥1,887 million and unallocated corporate expenses of negative ¥15,904 million. These corporate expenses mainly comprise the Company's basic research expenses.
- 3. Segment income is adjusted with operating income under the Consolidated Statement of Income.
- 4. Adjustments for segment assets amounting to ¥106,360 million include the elimination of intersegment transactions of negative ¥47,242 million and unallocated corporate assets of ¥153,602 million. These corporate assets mainly comprise the Company's surplus funds, long-term investments and assets related to basic research and administrative divisions at headquarters.
- 5. The increase in tangible fixed assets and intangible fixed assets does not include the increase attributable to the application of ASC 842 "Leases."

(Related Information)

Fiscal 2023 (January 1, 2023 to December 31, 2023)

1. Information about products and services

	Millions of yen						
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Others	Total	
Net sales to outside customers	¥400,476	¥65,664	¥188,620	¥88,419	¥37,757	¥780,938	
_			Thousands of				
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Others	Total	
Net sales to outside customers	\$2,823,634	\$462,977	\$1,329,902	\$623,415	\$266,213	\$5,506,155	

Note: Principal products of each segment are as follows:

Vinyl Acetate : PVA resin and film, PVB resin and film, EVAL resin and others

Isoprene : SEPTON thermoplastic elastomers, isoprene chemicals, GENESTAR heat-resistant polyamide resin and others

Functional Materials : Methacrylic resin, medical products, carbon materials, environmental business, and others

Fibers and Textiles : PVA fiber, CLARINO man-made leather, KURAFLEX non-woven fabrics, MAGIC TAPE hook and loop

fasteners, polyester, and others

Others : Engineering business and others

2. Performance by geographical segment

(1) Net sales

			Millions of yen			
Japan	United States	China	Europe	Asia	Other Area	Total
¥166,801	¥171,333	¥105,235	¥204,876	¥84,232	¥48,459	¥780,938
			Thousands of U.S. dollars	s		
Japan	United States	China	Europe	Asia	Other Area	Total
\$1,176,063	\$1,208,017	\$741,980	\$1,444,518	\$593,894	\$341,670	\$5,506,155

Note: Net sales are classified by country or area based on customer location.

(2) Tangible fixed assets

		Millions of yen				Tho	usands of U.S. do	llars	
	United		Other			United		Other	
Japan	States	Thailand	Overseas	Total	Japan	States	Thailand	Overseas	Total
¥188,417	¥162,401	¥79,434	¥96,723	¥526,977	\$1,328,471	\$1,145,040	\$560,065	\$681,964	\$3,715,554

3. Major customers

No information is available as there is no single outside customer accounting for 10% or more of the Group's total net sales.

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2023

Fiscal 2022 (January 1, 2022 to December 31, 2022)

1. Information about products and services

	Millions of yen						
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Others	Total	
Net sales to outside customers	¥378,334	¥64,847	¥172,838	¥93,484	¥46,871	¥756,376	

Note: Principal products of each segment are as follows:

Vinyl Acetate : PVA resin and film, PVB resin and film, EVAL resin and others

Isoprene : SEPTON thermoplastic elastomers, isoprene chemicals, GENESTAR heat-resistant polyamide resin and others

Functional Materials : Methacrylic resin, medical products, carbon materials, environmental business, and others

Fibers and Textiles : PVA fiber, CLARINO man-made leather, KURAFLEX non-woven fabrics, MAGIC TAPE hook and loop

fasteners, polyester, and others

Others : Engineering business and others

2. Performance by geographical segment

(1) Net sales

			Millions of yen			
Japan	United States	China	Europe	Asia	Other Area	Total
¥178,774	¥164,673	¥90,028	¥193,938	¥84,974	¥43,987	¥756,376

Note: Net sales are classified by country or area based on customer location.

(2) Tangible fixed assets

		Millions of yen		
	United		Other	
Japan	States	Thailand	Overseas	Total
¥187,974	¥156,214	¥79,722	¥88,650	¥512,562

3. Major customers

No information is available as there is no single outside customer accounting for 10% or more of the Group's total net sales.

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2023

Information about impairment loss of fixed assets by reporting segment

Fiscal 2023: This information is omitted since similar information is disclosed in the segment information.

Fiscal 2022: This information is omitted since similar information is disclosed in the segment information.

Information about amortization of goodwill and unamortized balance of goodwill by reporting segment

Fiscal 2023: This information is omitted since similar information is disclosed in the segment information.

Fiscal 2022: This information is omitted since similar information is disclosed in the segment information.

Information about gain on negative goodwill

Fiscal 2023: Not applicable.

Fiscal 2022: Not applicable.

Related Party Disclosures

Fiscal 2023: Not applicable.

Fiscal 2022: Not applicable.

Per Share Information

	Ye	U.S. dollars	
	Fiscal 2023	Fiscal 2022	Fiscal 2023
Net assets per share	¥2,133.75	¥1,932.37	\$15.04
Basic net income per share	126.80	161.13	0.89
Diluted net income per share	126.71	161.00	0.89

Note: The basis for computation of basic and diluted net income per share is as follows:

	Millions of yen		Thousands of U.S. dollars	
	Fiscal 2023	Fiscal 2022	Fiscal 2023	
Basic net income per share				
Net income attributable to owners of the parent	¥42,446	¥54,307	\$299,274	
Amount unallocated to common stock	_	_	_	
Net income attributable to owners of the parent allocated to				
common stock	42,446	54,307	299,274	
Average number of common stock outstanding during the fiscal year				
(thousand shares)	334,741	337,050	334,741	
Diluted net income per share				
Adjustment made on net income attributable to owners of				
the parent	_	_	_	
Increase of common stocks (thousand shares)	253	266	253	
(New subscription rights to shares (thousand shares))	(253)	(266)	(253)	
Outline of the residual securities which were not included in the				
calculation of the diluted net income per share because there was				
no dilutive effect	_	_	_	

Detailed Schedule of Bonds

-			Millions of Yen		Thousands of U.S. dollars			
		-	Balance as of	Balance as of	Balance as of			Detect
Company name	Issue	Date of issue	January 1, 2023	December 31, 2023	December 31, 2023	Yield	Security	Date of redemption
	No. 6 Unsecured bonds	April 25, 2018	¥10,000 (¥10,000)	¥—	\$ —	0.09%	None	April 25, 2023
	No. 7 Unsecured bonds	April 25, 2018	10,000	10,000	70,507	0.19%	None	April 25, 2025
Vymanas Ca. I tal	No. 8 Unsecured bonds	April 25, 2018	10,000	10,000	70,507	0.31%	None	April 25, 2028
Kuraray Co., Ltd.	No. 9 Unsecured bonds	April 30, 2020	10,000	10,000	70,507	0.34%	None	April 30, 2027
	No. 10 Unsecured bonds	April 30, 2020	20,000	20,000	141,014	0.43%	None	April 30, 2030
	No. 11 Unsecured bonds	June 1, 2022	10,000	10,000	70,507	0.49%	None	June 1, 2032
	Total	_	¥70,000 (¥10,000)	¥60,000	\$423,042	_	_	_

Notes: 1. Figures in brackets represent current portion of bonds payable.

2. Total amount of corporate bonds to be redeemed each year within five years of the consolidated fiscal year-end:

Within One year	One to two years	Two to three years	Three to four years	Four to five years
_	¥10,000	_	¥10,000	¥10,000
				(Thousands of U.S. dollars)
Within One year	One to two years	Two to three years	Three to four years	(Thousands of U.S. dollars) Four to five years

Detailed Schedule of Loans Payable and Others

	Millions	of Yen	Thousands of U.S. dollars		
Category	Balance as of January 1, 2023	Balance as of December 31, 2023	Balance as of December 31, 2023	Average Interest rate (%)	Due date
Short-term borrowings	¥34,480	¥40,014	\$282,126	0.7	_
Current portion of long-term borrowings due within one year	30,434	24,698	174,138	1.3	_
Current portion of lease obligations due within one year (Note 2)	513	523	3,688	_	_
Current portion of lease liabilities due within one year (Note 2)	3,814	4,527	31,918	_	_
Long-term borrowings (Excluding current portion) (Note 3)	179,491	157,312	1,109,159	0.9	From March 2025 to October 2032
Lease obligations (Excluding current portion) (Notes 2, 3)	1,076	1,488	10,491	_	From January 2025 to November 2054
Lease liabilities (Excluding current portion) (Notes 2, 3)	27,713	31,659	223,218	_	From January 2025 to May 2113
Other interest-bearing debts Commercial papers (Current portion)	10,000	_	_	_	_
Total	¥287,524	¥260,224	\$1,834,760	_	_

Notes: 1. Interest rates shown are weighted average interest rates for the balance outstanding at December 31, 2023.

- 2. The average interest rates on lease obligations and lease liabilities are not reported, since interest payment equivalents included in total lease payments are allocated to each consolidated fiscal year using the straight-line method for some transactions.
- 3. Repayments of long-term borrowings, lease obligations and lease liabilities (excluding those due within one year) within five years after the consolidated balance sheet date are as follows:

Category	One to two years	Two to three years	Three to four years	Four to five years
Long-term borrowings	¥17,365	¥31,325	¥16,310	¥22,310
Lease obligations	427	290	131	54
Lease liabilities	3,651	3,203	2,974	2,738

				(Thousands of U.S. dollars)
Category	One to two years	Two to three years	Three to four years	Four to five years
Long-term borrowings	\$122,435	\$220,863	\$114,997	\$157,301
Lease obligations	3,011	2,045	924	381
Lease liabilities	25,742	22,583	20,969	19,305

Annexed Consolidated Detailed Schedules Kuraray Co., Ltd. and its consolidated subsidiaries

Detailed Schedule of Asset Retirement Obligations

The schedule of asset retirement obligations is omitted since the amount of asset retirement obligations is not more than one hundredth of total liabilities and net assets as of January 1, 2023 and December 31, 2023.

4 Quarterly Information in Fiscal 202	2			
4 Quarterly information in Fiscal 202	23			
	First quarter	Second quarter	Third quarter	(Millions of yen)
	from January 1	from January 1	from January 1	
Accumulated	to March 31, 2023	to June 30, 2023	to September 30, 2023	Fiscal 2023
Net sales	¥184,965	¥380,998	¥574,374	¥780,938
Income before income taxes	13,135	31,342	53,297	61,273
Net income attributable to owners				
of the parent	8,152	21,842	36,487	42,446
Net income per share (Yen)	24.36	65.26	109.00	126.80
	First quarter	Second quarter	Third quarter	Fourth quarter
	from January 1	from April 1	from July 1	from October 1
Quarterly	to March 31, 2023	to June 30, 2023	to September 30, 2023	to December 31, 2023
Net income per share (Yen)	¥24.36	¥40.90	¥43.75	¥17.80
				(Thousands of U.S. dollars)
	First quarter	Second quarter	Third quarter	(Thousands of C.S. donars
	from January 1	from January 1	from January 1	
Accumulated	to March 31, 2023	to June 30, 2023	to September 30, 2023	Fiscal 2023
Net sales	\$1,304,132	\$2,686,301	\$4,049,736	\$5,506,155
Income before income taxes	92,611	220,983	375,781	432,017
Net income attributable to owners				
of the parent	57,477	154,001	257,259	299,274
Net income per share (U.S. dollars)	0.17	0.46	0.77	0.89
	F:	C 1 .	TI: 1	ъ 4 .
	First quarter	Second quarter	Third quarter	Fourth quarter from October 1
Overterly	from January 1 to March 31, 2023	from April 1 to June 30, 2023	from July 1 to September 30, 2023	to December 31, 2023
Quarterly	10 March 31, 2023	to June 30, 2023	to september 30, 2023	to December 31, 2023
Net income per share (U.S. dollars)	\$0.17	\$0.29	\$0.31	\$0.13

Independent Auditor's Report on the Financial Statements and Internal Control Over Financial Reporting

[English Translation of the Independent Auditor's Report Originally Issued in the Japanese Language]

March 27, 2024

To the Board of Directors of Kuraray Co., Ltd.

PricewaterhouseCoopers Japan LLC Tokyo office

Hiroyuki Kawase, CPA Designated limited liability Partner Engagement Partner

Kazuaki Sekine, CPA Designated limited liability Partner Engagement Partner

THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Opinion

We have audited the accompanying consolidated financial statements of Kuraray Co., Ltd. (the Company) and its subsidiaries (the Group) for the fiscal year from January 1, 2023 to December 31, 2023 provided in the "Financial Information" section in the company's Annual Securities Report, which comprise the consolidated balance sheet as at December 31, 2023, and the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of changes in net assets and consolidated statement of cash flows for the year then ended, and a summary of significant accounting policies, other notes and annexed consolidated detailed schedules, in accordance with Article 193-2(1) of the Financial Instruments and Exchange Act of Japan.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2023, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in Japan. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Japan, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

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

In our audit of the consolidated financial statements for the previous fiscal year, we stated the following as key audit matters.

- · Estimated loss on litigation related to fire incident at a U.S. subsidiary
- · Assessment of whether indicators of impairment exist for goodwill recognized as a result of the acquisition of Calgon Carbon Corporation

In the audit of the consolidated financial statements for the current fiscal year, we examined the matters to be key audit matters from items communicated with corporate auditors and the board of corporate auditors, considering the changes in the areas of which significant risks or risks of material misstatement are high, significant judgments made by us in relation to the areas of the consolidated financial statements in which the Company made significant judgments, the impact of significant events or transactions that occurred during the current fiscal year on the audit, and relative materiality in our audit and matters specific to the Company.

As a consequence, the key audit matters in the audit of the consolidated financial statements for the current fiscal year are as follows, after adding "Recognition of impairment related to fixed assets of the Vecstar" and excluding "Estimated loss on litigation related to fire incident at U.S. subsidiary" from previous fiscal year.

- · Assessment of whether indicators of impairment exist for goodwill recognized as a result of the acquisition of Calgon Carbon Corporation
- · Recognition of impairment related to fixed assets of the Vecstar

Assessment of whether indicators of impairment exist for goodwill recognized as a result of the acquisition of Calgon Carbon Corporation

Key audit matter description

The goodwill balance of ¥55,386 million (4.4% of consolidated assets) recorded in the consolidated balance sheet for the current fiscal year includes goodwill of ¥40,347 million recorded as a result of the acquisition of Calgon Carbon Corporation in the Functional Materials segment in fiscal 2018 as described in [Notes to Consolidated Financial Statements] (Significant Accounting Estimates).

Calgon Carbon Corporation expands their operations as a result of growth in the activated carbon market and measures in response to stricter environmental regulations. The Company recorded net operating income, including goodwill amortization since the previous fiscal year, despite the impact of rising raw material and fuel prices and logistics costs.

Based on Calgon Carbon Corporation's business plan, the Company has concluded that there are no indicators of impairment related to goodwill as performance continues to be stable and net operating income, including goodwill amortization, is projected in the following fiscal year.

Calgon Carbon Corporation's business plan assumes increases in revenue due to the growth in the activated carbon market, the increasing demands for capital investments by customers, measures in response to stricter environmental regulations, as well as the impact of raw material and fuel costs; these forecasts involve subjective How our audit addressed the key audit matter
We performed the following audit procedures
over the assessment of whether indicators of
impairment exist for goodwill recognized as a
result of the acquisition of Calgon Carbon
Corporation:

- We evaluated the design and tested the operating effectiveness of internal controls related to the assessment of indicators of goodwill impairment.
- We understood Calgon Carbon Corporation's business environment, including the latest trends in the activated carbon market, by inquiring with management, and inspecting minutes of Board of Directors meetings.
- We performed the following audit procedures to evaluate the reasonableness of Calgon Carbon Corporation's business plan.
 - We compared the business plan and results for the previous and current fiscal years and examined the progress of the performance improvement incorporated into the business plan.
 - We inquired with management regarding the prospects for capital investment demand from customers and examined them by comparing them to the status of orders received from major customers.

judgments by management. In addition, as the goodwill balance related to the acquisition of Calgon Carbon Corporation is significant, the judgment whether indicators of impairment exist could have a material impact on the consolidated financial statements.

As such, we determined that the assessment of whether indicators of impairment exist related to goodwill recognized upon the acquisition of Calgon Carbon Corporation was a key audit matter.

- We obtained the rationale for estimates in the business plan by discussing the impact of future raw material and fuel prices with management and others, comparing them with market forecasts and available external data, and analyzing trends in historical performance.
- We instructed the component auditor of Calgon Carbon Corporation to perform a financial statement audit, and understood and evaluated the audit procedures and conclusion of the component auditor.

Recognition of impairment related to fixed assets of the Vecstar

Key audit matter description

The Company recognized ¥2,376 million of impairment related to fixed assets of the Vecstar under extraordinary loss, as described in [Notes to Consolidated Statement of Income] *6. Impairment loss.

The business manufactures Vecstar, a liquid crystal polymer film used primarily in circuit board materials for smartphones and automobiles. The Company regards the Vecstar business as the smallest unit that generates independent cash flows.

The Vecstar business is expanding its manufacturing capacity to meet demands for high-frequency substrates, which is expected to grow in the future due to the spread of the nextgeneration telecommunications standard millimeter wave 5G. On the other hand, the Vecstar business has been stagnant due to delays in the penetration of millimeter wave 5G in the global marketplace, and operating incomes have been continuously negative in the previous and the current fiscal year. Based on the circumstances, the Company determined that there were indicators of impairment for the asset group related to the Vecstar and performed the assessment of impairment loss recognition. As a result of estimating the business future cash flows with consideration of future uncertainty, the Company concludes the difficulty to recover ¥2,376 million of fixed assets of the Vecstar and hence recognized impairment loss.

The future cash flows used in determining the recognition of impairment losses are estimated based on the approved business plan for the Vecstar business with consideration of future uncertainty. In estimating future cash flows, the Company considers the performance of the Vecstar business by acquiring customers through the expansion of millimeter wave 5G and increasing its market-share in the liquid crystal polymer market. These business plans are estimated by considering information and sales strategies including external factors such as

How our audit addressed the key audit matter
We performed the following audit procedures over
the recognition of impairment related to fixed
assets of the Vecstar business:

- We evaluated the design and tested the operating effectiveness of internal controls related to the determination of recognition of impairment loss.
- We performed the following audit procedures to evaluate the reasonableness of the Vecstar business plan.
 - We understood the Vecstar business climate by inquiring with management and others, and inspecting minutes of Board of Directors meetings and others.
- We ensured the consistency between management's approved business plans and the estimates of undiscounted future cash flows of the Vecstar business.
- We inquired with management regarding the status of marketing of Vecstar to major customers and understood whether there would be any technical challenges that could prevent customers acceptance and progress of evaluations being made by customers, and examined the feasibility of the business plans.
- We examined the factors behind the discrepancy between the business plan and the actual results for the previous and current fiscal years and examined whether the discrepancy factors were appropriately reflected in the business plan.

market conditions and involve uncertainties and subjective judgments by management.	
As such, we determined that the recognition of impairment loss related to fixed assets of the	
Vecstar was a key audit matter.	

Other Information

The other information comprises the information included in the Annual Securities Report, but does not include the consolidated financial statements and our auditor's report thereon. Management is responsible for the preparation and presentation of the other information. In addition, corporate auditors and the board of corporate auditors are responsible for overseeing the directors' performance of their duties with regard to the design, implementation and maintenance of the reporting process for the other information.

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

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

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Responsibilities of Management and Corporate Auditors and the Board of Corporate Auditors for the Consolidated Financial Statements

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

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern and disclosing, as applicable, matters related to going concern in accordance with accounting principles generally accepted in Japan.

Corporate auditors and the board of corporate auditors are responsible for overseeing the directors' performance of their duties including the design, implementation and maintenance of the Group's financial reporting process.

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

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

As part of an audit in accordance with auditing standards generally accepted in Japan, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

• Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and

obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, while the purpose of the consolidated financial statement audit is not to express an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate whether the presentation and disclosures of the consolidated financial statements are in accordance with accounting principles generally accepted in Japan, the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with corporate auditors and the board of corporate auditors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide corporate auditors and the board of corporate auditors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

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

Report on the Audit of the Internal Control Report

Opinion

We have audited the accompanying internal control report of Kuraray Co., Ltd. as at December 31, 2023, in accordance with Article 193-2(2) of the Financial Instruments and Exchange Act of Japan.

In our opinion, the accompanying internal control report, which states that the internal control over financial reporting was effective as at December 31, 2023, presents fairly, in all material respects, the results of the assessments of internal control over financial reporting in accordance with assessment standards for internal control over financial reporting generally accepted in Japan.

Basis for Opinion

We conducted our audit of the internal control report in accordance with auditing standards for internal control over financial reporting generally accepted in Japan. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Internal Control Report section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the internal control report in Japan, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Corporate Auditors and the Board of Corporate Auditors for the Internal Control Report

Management is responsible for the design and operation of internal control over financial reporting and the preparation and fair presentation of the internal control report in accordance with assessment standards for internal control over financial reporting generally accepted in Japan.

Corporate auditors and the board of corporate auditors are responsible for overseeing and examining the design and operation of internal control over financial reporting. Internal control over financial reporting may not completely prevent or detect financial statement misstatements.

Auditor's Responsibilities for the Audit of the Internal Control Report

Our objectives are to obtain reasonable assurance about whether the internal control report is free from material misstatement based on our audit of the internal control report and to issue an auditor's report that includes our opinion.

As part of our audit in accordance with auditing standards for internal control over financial reporting generally accepted in Japan, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Perform procedures to obtain audit evidence about the results of the assessments of internal control
 over financial reporting in the internal control report. The procedures for the audit of the internal
 control report are selected and performed, depending on the auditor's judgment, based on
 significance of effect on the reliability of financial reporting.
- Evaluate the overall presentation of the internal control report, including the appropriateness of the scope, procedures and results of the assessments that management presents.
- Obtain sufficient appropriate audit evidence about the results of the assessments of internal control
 over financial reporting in the internal control report. We are responsible for the direction,
 supervision and performance of the audit of the internal control report. We remain solely responsible
 for our audit opinion.

We communicate with corporate auditors and the board of corporate auditors regarding, among other matters, the planned scope and timing of our audit of the internal control report, the results thereof, material weaknesses in internal control identified during our audit of internal control report, and those that were remediated.

We also provide corporate auditors and the board of corporate auditors with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

FEE-RELATED INFORMATION

The amounts of fees for the audit and the other services charged to Kuraray Co., Ltd. and its controlled entities by PricewaterhouseCoopers Japan LLC and other PwC Network firms are disclosed in "Status of corporate governance, etc. (3) Status of audit" included in the "Status of the Reporting Company" section.

Interest required to be disclosed by the Certified Public Accountants Act of Japan

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

Notes to the Readers of Independent Auditor's Report

The Independent Auditor's Report herein is the English translation of the Independent Auditor's Report as required by the Financial Instruments and Exchange Act of Japan. The Independent Auditor's Report on the consolidated financial statements and the internal control report are included in the Annual Securities Report (Yukashoken Hokokusho).

As described in "Notes to Consolidated Financial Statements, 1. Significant Accounting Policies", the U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended December 31, 2023 are presented solely for convenience of readers outside Japan. The audit by PricewaterhouseCoopers Japan LLC does not include the translation of Japanese yen amounts into U.S. dollar amounts.