



# Kuraray Report 2023 **Financial Section**

For the year ended December 31,2022

## Business Environment

In the fiscal year ended December 31, 2022 (“fiscal 2022”), the world economy continued to gradually recover as restrictions on economic activities were eased. However, the future remained unforeseeable as signs of economic deceleration appeared in the latter half of the year due in part to a rise in interest rates in various countries amid rapid inflation and the prolonged Russia-Ukraine crisis.

Amid these circumstances, the Kuraray Group (hereinafter “the Group”) worked to tackle the three challenges outlined in the medium-term management plan “PASSION 2026,” which was launched at the beginning of the year: 1) Sustainability as an opportunity, 2) Innovations starting from networking, and 3) Transformation of people and organization. In addition, we revised the prices of products that were affected by soaring raw material and fuel costs while focusing on ensuring a steady supply of high value-added products by leveraging the

global network we have constructed.

Consequently, consolidated operating results for fiscal 2022 are as follows: net sales were ¥756,376 million (US\$5,699,894 thousand) (¥629,370 million (US\$5,471,831 thousand) in the previous fiscal year); operating income was ¥87,139 million (US\$656,662 thousand) (¥72,256 million (US\$628,204 thousand) in the previous fiscal year); ordinary income was ¥84,060 million (US\$633,459 thousand) (¥68,765 million (US\$597,853 thousand) in the previous fiscal year); and net income attributable to owners of the parent was ¥54,307 million (US\$409,246 thousand) (¥37,262 million (US\$323,961 thousand) in the previous fiscal year). Furthermore, we recorded an extraordinary loss of ¥5,785 million (US\$43,595 thousand) as costs related to the suspension of operations due mainly to the suspension of some production facilities at a U.S. subsidiary.

## Sales

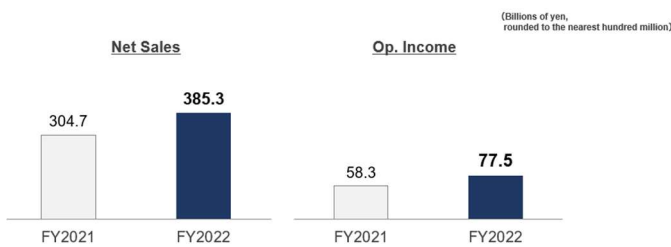
	(Billions of yen, rounded to the nearest hundred million)		
	Fiscal 2022	Fiscal 2021	Change
Net Sales	¥756.4	¥629.4	+¥127.0
Operating Income	87.1	72.3	+14.9
Ordinary Income	84.1	68.8	+15.3
Net Income Attributable to Owners of the Parent	54.3	37.3	+17.0

## Results by Business Segment

	(Billions of yen, rounded to the nearest hundred million)			
	Net Sales		Operating Income	
	Fiscal 2022	Fiscal 2021	Fiscal 2022	Fiscal 2021
Vinyl Acetate	¥385.3	¥304.7	¥77.5	¥58.3
Isoprene	65.6	61.9	4.3	6.1
Functional Materials	174.1	142.4	8.6	8.7
Fibers and Textiles	66.9	61.1	6.7	5.6
Trading	58.8	144.0	5.1	4.8
Other Business	52.1	44.3	2.7	1.2
Elimination & Corporate	(46.4)	(129.1)	(17.8)	(12.4)
Total	¥756.4	¥629.4	¥87.1	¥72.3

### Vinyl Acetate

Sales in this segment were ¥385,345 million (US\$2,903,881 thousand) (¥304,690 million (US\$2,296,081 thousand) in the previous fiscal year), and segment income was ¥77,547 million (US\$584,378 thousand) (¥58,255 million (US\$438,998 thousand) in the previous fiscal year).

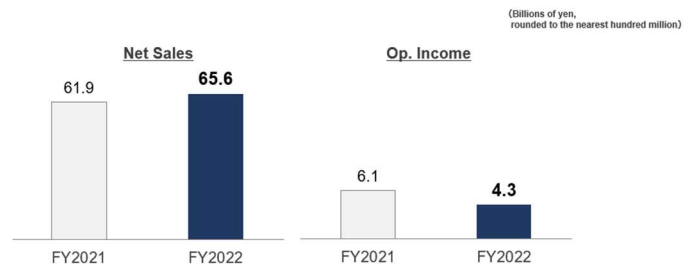


(1) The sales volume of PVOH resin decreased due to the suspension of some production facilities at a U.S. subsidiary and a contraction in demand in the latter half of the year. On the other hand, we continued shifting to high value-added products while revising prices amid soaring raw material and fuel prices. Shipments of optical-use poval film declined significantly from the middle of the year due to the impact of LCD panel inventory adjustments. In addition, to meet needs for larger TV panel sizes, we decided to make a capital investment at the Kurashiki Plant (slated to begin operating in mid 2024), announcing this intention on May 9, 2022. As for Advanced Interlayer Solutions, sales of PVB film, especially for use in construction applications in North America, held steady year on year. Sales of water-soluble PVOH film were firm for use in unit dose laundry detergent packets.

(2) As for EVAL™ ethylene vinyl alcohol copolymer (EVOH resin), the sales volume increased due to steady performance for use in food packaging applications as we revised product prices. In response to strong demand, we worked to improve productivity and decided to invest in production capacity expansion in Europe and the United States.

### Isoprene

Sales in this segment were ¥65,635 million (US\$494,612 thousand) (¥61,940 million (US\$466,767 thousand) in the previous fiscal year), and segment income was ¥4,270 million (US\$32,178 thousand) (¥6,080 million (US\$45,818 thousand) in the previous fiscal year).

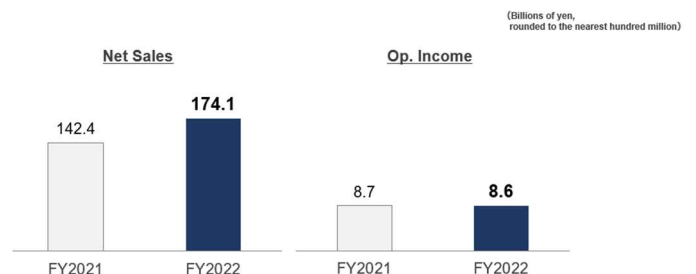


(1) Amid soaring raw material and fuel prices, we revised the prices of isoprene chemicals and elastomer. Nevertheless, the sales volume decreased due to a temporary difficulty in procuring raw materials and a contraction in demand in the latter half of the year.

(2) The sales volume of GENESTAR™ heat-resistant polyamide resin decreased due in part to inventory adjustments in automotive parts and electric and electronic devices.

### Functional Materials

Sales in this segment were ¥174,059 million (US\$1,311,673 thousand) (¥142,366 million (US\$1,072,841 thousand) in the previous fiscal year), and segment income was ¥8,574 million (US\$64,612 thousand) (¥8,673 million (US\$65,358 thousand) in the previous fiscal year).



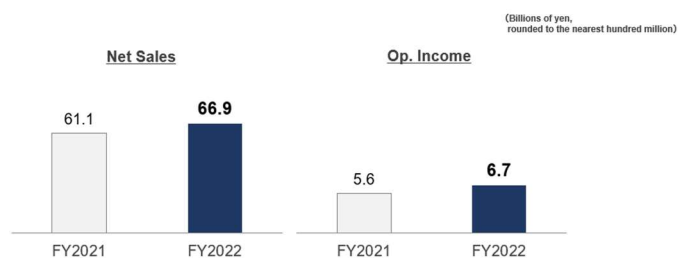
(1) In the methacrylate business, the sales volume decreased due in part

to electric and electronic device inventory adjustments. Soaring raw material prices and deteriorating market conditions also had a negative impact.

- (2) In the medical business, sales of cosmetic dental materials expanded in Japan and overseas.
- (3) In the environmental solutions business, demand for drinking water and water for industrial applications increased, especially in Europe and the United States, and sales of activated carbon expanded. In addition, we revised product prices due to soaring raw material and fuel prices.
- (4) In the aqua business, demand for hollow fiber membranes for water treatment remained steady.

## Fibers and Textiles

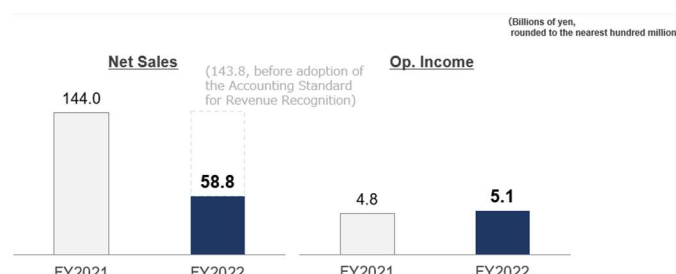
Sales in this segment were ¥66,859 million (US\$503,836 thousand) (¥61,082 million (US\$460,301 thousand) in the previous fiscal year), and segment income was ¥6,736 million (US\$50,761 thousand) (¥5,608 million (US\$42,261 thousand) in the previous fiscal year).



- (1) Sales of CLARINO™ man-made leather expanded for use in automotive and luxury products.
- (2) In fibers and industrial materials, KURALON™ was affected by a delayed recovery in the production of automobiles and an economic slowdown in the latter half of the year, while sales of VECTRAN™ remained favorable, especially for exports.
- (3) In consumer goods and materials, demand for KURAFLEX™ in the restaurant industry was weak despite an increase in shipments for hygienic applications.

## Trading

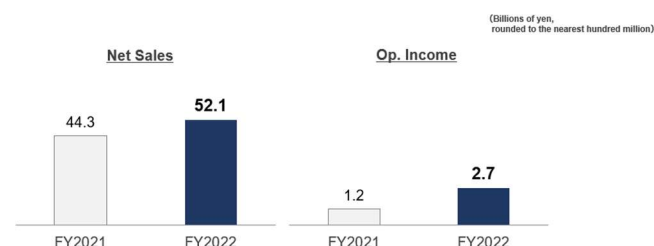
Sales in this segment were ¥58,844 million (US\$443,436 thousand) (¥144,027 million (US\$1,085,358 thousand) in the previous fiscal year), and segment income was ¥5,121 million (US\$38,591 thousand) (¥4,842 million (US\$36,488 thousand) in the previous fiscal year). In comparison with the previous methods, net sales decreased ¥84,985 million (US\$640,430 thousand) due to the adoption of the Accounting Standard for Revenue Recognition and other factors.



- (1) In fiber-related businesses, sales expanded, especially for wearables and other sportswear.
- (2) Although sales of resins and chemicals had been brisk in the Asian market in the first half of the year, sales were affected by the economic slowdown in the second half of the year.

## Other Business

In Other Business, domestic affiliates saw sales recover. As a result, segment sales were ¥52,051 million (US\$392,246 thousand) (¥44,327 million (US\$334,039 thousand) in the previous fiscal year), and segment income was ¥2,679 million (US\$20,188 thousand) (¥1,206 million (US\$9,088 thousand) in the previous fiscal year).



## Outlook for the Fiscal Year Ending December 31, 2023

The outlook for the economic environment over the next year is expected to shift toward a recovery trajectory in the latter half of the year despite lingering risks of an economic slowdown due to financial tightening, especially in Europe and the United States, in addition to geopolitical risks, including the Russia-Ukraine situation.

Amid this situation, the Group will continue to promote measures in line with its medium-term management plan “PASSION 2026” and

stably supply high value-added products by leveraging its comprehensive Group strengths while paying careful attention to trends in demand and the supply chain. In addition, we will safely set up activated carbon manufacturing equipment in the United States, the new water soluble poval film plant in Poland as well as an isoprene base in Thailand, and swiftly make them profitable.

Based on these circumstances, the outlook for fiscal 2023 is as follows:

(Billions of yen, rounded to the nearest hundred million)			
	Fiscal 2022	<b>Forecast for Fiscal 2023</b>	Change (Adjusted)
Net Sales	¥756.4	<b>¥830.0</b>	9.7%
Operating Income	87.1	<b>84.0</b>	(3.6)%
Ordinary Income	84.1	<b>79.0</b>	(6.0)%
Net Income Attributable to Owners of the Parent	54.3	<b>51.0</b>	(6.1)%

For the forecast of operating results for fiscal 2023, we assume average exchange rates of ¥130 to the U.S. dollar and ¥140 to the euro, as well as a domestic naphtha price of ¥69,000 per kiloliter.

### [Reference] Forecast of Results by Segment for Fiscal 2023

(Billions of yen, rounded to the nearest hundred million)				
	Net Sales		Operating Income	
	Fiscal 2022	<b>Forecast for Fiscal 2023</b>	Fiscal 2022	<b>Forecast for Fiscal 2023</b>
Vinyl Acetate	¥385.3	<b>¥430.0</b>	¥77.5	<b>¥79.0</b>
Isoprene	65.6	<b>78.0</b>	4.3	<b>1.0</b>
Functional Materials	174.1	<b>195.0</b>	8.6	<b>9.0</b>
Fibers and Textiles	66.9	<b>72.0</b>	6.7	<b>5.5</b>
Trading	58.8	<b>63.0</b>	5.1	<b>5.2</b>
Other Business	52.1	<b>41.0</b>	2.7	<b>1.0</b>
Elimination & Corporate	(46.4)	<b>(49.0)</b>	(17.8)	<b>(16.7)</b>
Total	¥756.4	<b>¥830.0</b>	¥87.1	<b>¥84.0</b>

## Consolidated Balance Sheet

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2022

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022 (December 31, 2022)	Fiscal 2021 (December 31, 2021)	Fiscal 2022 (December 31, 2022)
<b>ASSETS</b>			
<b>I Current assets:</b>			
1 Cash and deposits .....	¥123,724	¥151,942	\$932,359
2 Notes and accounts receivable—trade* <sup>10</sup> .....	—	135,768	—
3 Notes and accounts receivable—trade, and contract assets* <sup>1</sup> and * <sup>10</sup> .....	157,016	—	1,183,240
4 Short-term investment securities .....	4,852	3,855	36,564
5 Merchandise and finished goods.....	145,851	103,505	1,099,103
6 Work in process .....	19,078	15,699	143,768
7 Raw materials and supplies .....	60,104	38,100	452,931
8 Other.....	23,815	21,745	179,465
9 Allowance for doubtful accounts .....	(510)	(443)	(3,843)
<b>Total current assets</b> .....	<b>533,933</b>	<b>470,174</b>	<b>4,023,610</b>
<b>II Noncurrent assets:</b>			
<b>1 Tangible fixed assets:</b>			
(1) Buildings and structures, net* <sup>4</sup> and * <sup>9</sup> .....	94,745	88,801	713,979
(2) Machinery, equipment and vehicles, net* <sup>4</sup> .....	219,200	200,500	1,651,846
(3) Land* <sup>4</sup> and * <sup>9</sup> .....	23,264	22,648	175,313
(4) Construction in progress .....	137,424	117,319	1,035,599
(5) Other, net* <sup>4</sup> .....	37,926	25,997	285,803
<b>Total tangible fixed assets</b> * <sup>3</sup> .....	<b>512,562</b>	<b>455,266</b>	<b>3,862,562</b>
<b>2 Intangible fixed assets:</b>			
(1) Goodwill.....	56,058	52,635	422,442
(2) Customer-related assets .....	30,432	29,176	229,329
(3) Other.....	34,993	32,243	263,700
<b>Total intangible fixed assets</b> .....	<b>121,484</b>	<b>114,055</b>	<b>915,479</b>
<b>3 Investments and other assets:</b>			
(1) Investment securities* <sup>5</sup> .....	23,194	25,689	174,785
(2) Long-term loans receivable .....	97	121	731
(3) Net defined benefit assets .....	2,104	3,066	15,855
(4) Deferred tax assets.....	16,718	13,980	125,983
(5) Other.....	11,458	8,686	86,345
(6) Allowance for doubtful accounts .....	(20)	(26)	(151)
<b>Total investments and other assets</b> .....	<b>53,553</b>	<b>51,517</b>	<b>403,564</b>
<b>Total noncurrent assets</b> .....	<b>687,600</b>	<b>620,839</b>	<b>5,181,613</b>
<b>TOTAL ASSETS</b> .....	<b>¥1,221,533</b>	<b>¥1,091,014</b>	<b>\$9,205,222</b>

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

## Consolidated Balance Sheet

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2022

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022 (December 31, 2022)	Fiscal 2021 (December 31, 2021)	Fiscal 2022 (December 31, 2022)
<b>LIABILITIES</b>			
<b>I Current liabilities:</b>			
1 Notes and accounts payable—trade* <sup>10</sup>	¥52,717	¥49,641	\$397,265
2 Short-term borrowings* <sup>9</sup>	34,480	34,480	259,834
3 Commercial paper	10,000	—	75,358
4 Current portion of bonds payable	10,000	—	75,358
5 Current portion of long-term borrowings	30,434	55,013	229,344
6 Accrued expenses	21,075	19,863	158,817
7 Income taxes payable	11,370	13,133	85,682
8 Provision for bonuses	9,132	7,996	68,817
9 Other provisions	111	89	836
10 Other* <sup>2</sup> and * <sup>10</sup>	42,008	39,246	316,564
<b>Total current liabilities</b>	<b>221,330</b>	<b>219,464</b>	<b>1,667,898</b>
<b>II Noncurrent liabilities:</b>			
1 Bonds payable	60,000	60,000	452,148
2 Long-term borrowings	179,491	157,945	1,352,607
3 Deferred tax liabilities	17,279	12,022	130,211
4 Provision for directors' retirement benefits	294	375	2,216
5 Provision for environmental measures	397	365	2,992
6 Net defined benefit liabilities	25,626	25,629	193,112
7 Asset retirement obligations	5,303	4,821	39,962
8 Other	43,275	30,787	326,112
<b>Total noncurrent liabilities</b>	<b>331,668</b>	<b>291,947</b>	<b>2,499,382</b>
<b>TOTAL LIABILITIES</b>	<b>552,998</b>	<b>511,411</b>	<b>4,167,280</b>
<b>NET ASSETS</b>			
<b>I Shareholders' equity:</b>			
1 Capital stock	88,955	88,955	670,347
2 Capital surplus	87,152	87,166	656,760
3 Retained earnings	399,910	359,898	3,013,640
4 Treasury stock	(25,735)	(15,885)	(193,934)
<b>Total shareholders' equity</b>	<b>550,282</b>	<b>520,134</b>	<b>4,146,812</b>
<b>II Accumulated other comprehensive income:</b>			
1 Valuation difference on available-for-sale securities	5,769	7,273	43,474
2 Deferred gains or losses on hedges	611	219	4,604
3 Foreign currency translation adjustment	90,555	34,648	682,404
4 Remeasurements of defined benefit plans	(468)	(2,291)	(3,527)
<b>Total accumulated other comprehensive income</b>	<b>96,467</b>	<b>39,850</b>	<b>726,956</b>
<b>III Subscription rights to shares</b>	<b>341</b>	<b>414</b>	<b>2,570</b>
<b>IV Noncontrolling interests</b>	<b>21,443</b>	<b>19,203</b>	<b>161,590</b>
<b>TOTAL NET ASSETS</b>	<b>668,534</b>	<b>579,602</b>	<b>5,037,935</b>
<b>TOTAL LIABILITIES AND NET ASSETS</b>	<b>¥1,221,533</b>	<b>¥1,091,014</b>	<b>\$9,205,222</b>

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

# Consolidated Statement of Income and Consolidated Statement of Comprehensive Income

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2022

Consolidated Statement of Income	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022 (January 1, 2022 to December 31, 2022)	Fiscal 2021 (January 1, 2021 to December 31, 2021)	Fiscal 2022 (January 1, 2022 to December 31, 2022)
<b>I Net sales</b> <sup>*1</sup> .....	¥756,376	¥629,370	\$5,699,894
<b>II Cost of sales</b> <sup>*3</sup> .....	514,713	425,234	3,878,772
<b>Gross profit</b> .....	241,663	204,136	1,821,123
<b>III Selling, general and administrative expenses:</b>			
1 Selling expenses.....	46,678	38,721	351,756
2 General and administrative expenses <sup>*3</sup> .....	107,845	93,157	812,698
<b>Total selling, general and administrative expenses</b> <sup>*2</sup> .....	154,524	131,879	1,164,461
<b>Operating income</b> .....	87,139	72,256	656,662
<b>IV Non-operating income:</b>			
1 Interest income.....	450	141	3,391
2 Dividend income.....	714	553	5,381
3 Equity in earnings of affiliates.....	271	261	2,042
4 Gain on investments in investment partnerships.....	382	79	2,879
5 Other.....	1,708	1,403	12,871
<b>Total non-operating income</b> .....	3,527	2,439	26,579
<b>V Non-operating expenses:</b>			
1 Interest expenses.....	1,457	1,627	10,980
2 Foreign exchange losses.....	1,021	188	7,694
3 Loss on disposal of tangible fixed assets.....	986	639	7,430
4 Other.....	3,140	3,475	23,662
<b>Total non-operating expenses</b> .....	6,606	5,930	49,781
<b>Ordinary income</b> .....	84,060	68,765	633,459
<b>VI Extraordinary income:</b>			
1 Gain on sale of investment securities.....	2,614	563	19,699
2 Insurance income <sup>*4</sup> .....	1,415	544	10,663
3 Subsidy income.....	—	510	—
4 Compensation for property transfer.....	—	422	—
<b>Total extraordinary income</b> .....	4,030	2,040	30,369
<b>VII Extraordinary loss:</b>			
1 Costs related to the suspension of operations <sup>*5</sup> .....	5,785	1,350	43,595
2 Loss on litigation <sup>*6</sup> .....	1,819	4,296	13,708
3 Impairment loss <sup>*7</sup> .....	1,385	1,569	10,437
4 Loss on disaster <sup>*8</sup> .....	653	3,284	4,921
5 Loss on disposal of tangible fixed assets <sup>*9</sup> .....	450	1,183	3,391
6 Loss on tax purpose reduction entry of non-current assets.....	—	423	—
<b>Total extraordinary loss</b> .....	10,094	12,108	76,066
<b>Income before income taxes</b> .....	77,997	58,697	587,769
Income taxes—current.....	21,232	19,718	160,000
Income taxes for prior periods <sup>*10</sup> .....	—	1,386	—
Income taxes—deferred.....	1,155	(767)	8,704
<b>Total income taxes</b> .....	22,388	20,336	168,711
<b>Net income</b> .....	55,608	38,360	419,050
<b>Net income attributable to noncontrolling interests</b> .....	1,300	1,098	9,797
<b>Net income attributable to owners of the parent</b> .....	¥54,307	¥37,262	\$409,246



# Consolidated Statement of Income and Consolidated Statement of Comprehensive Income

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2022

Consolidated Statement of Comprehensive Income	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022 (January 1, 2022 to December 31, 2022)	Fiscal 2021 (January 1, 2021 to December 31, 2021)	Fiscal 2022 (January 1, 2022 to December 31, 2022)
<b>I Net income</b> .....	<b>¥55,608</b>	¥38,360	<b>\$419,050</b>
<b>II Other comprehensive income:</b>			
1 Valuation difference on available-for-sale securities .....	<b>(1,504)</b>	426	<b>(11,334)</b>
2 Deferred gains or losses on hedges .....	<b>645</b>	793	<b>4,861</b>
3 Foreign currency translation adjustment .....	<b>56,798</b>	33,130	<b>428,018</b>
4 Remeasurements of defined benefit plans .....	<b>1,822</b>	3,030	<b>13,730</b>
<b>Total other comprehensive income</b> <sup>*1</sup> .....	<b>57,762</b>	37,380	<b>435,283</b>
<b>III Comprehensive income</b> .....	<b>¥113,371</b>	¥75,741	<b>\$854,341</b>
<b>Comprehensive income attributable to</b>			
1 Owners of the parent .....	<b>¥110,925</b>	¥74,491	<b>\$835,908</b>
2 Noncontrolling interests .....	<b>2,446</b>	1,249	<b>18,433</b>

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, 2022

Fiscal 2022 (January 1, 2022 to December 31, 2022)	Millions of yen				
	Shareholders' equity				
	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
<b>Balance at January 1, 2022</b> .....	¥88,955	¥87,166	¥359,898	¥(15,885)	¥520,134
Cumulative effects of changes in accounting policies.....			(388)		(388)
<b>Restated balance</b> .....	¥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
<b>Balance at December 31, 2022</b> .....	¥88,955	¥87,152	¥399,910	¥(25,735)	¥550,282

Fiscal 2022 (January 1, 2022 to December 31, 2022)	Millions of yen							
	Accumulated other comprehensive income					Subscription rights to shares	Noncontrolling interests	Total net assets
	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			
<b>Balance at January 1, 2022</b> .....	¥7,273	¥219	¥34,648	¥(2,291)	¥39,850	¥414	¥19,203	¥579,602
Cumulative effects of changes in accounting policies.....								(388)
<b>Restated balance</b> .....	¥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
<b>Balance at December 31, 2022</b> .....	¥5,769	¥611	¥90,555	¥(468)	¥96,467	¥341	¥21,443	¥668,534

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, 2022

	Thousands of U.S. dollars				
	Shareholders' equity				
Fiscal 2022 (January 1, 2022 to December 31, 2022)	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
<b>Balance at January 1, 2022</b> .....	\$670,347	\$656,865	\$2,712,118	\$(119,706)	\$3,919,623
Cumulative effects of changes in accounting policies.....			(2,924)		(2,924)
<b>Restated balance</b> .....	\$670,347	\$656,865	\$2,709,186	\$(119,706)	\$3,916,692
Changes of items during the period					
Cash dividends.....			(104,808)		(104,808)
Net income attributable to owners of the parent.....			409,246		409,246
Changes resulting from inclusion of subsidiaries in consolidation.....			15		15
Purchase of treasury stock.....				(75,373)	(75,373)
Disposal of treasury stock.....		(106)		1,145	1,040
Net changes of items other than shareholders' equity.....					
Total changes of items during the period.....	—	(106)	304,454	(74,220)	230,121
<b>Balance at December 31, 2022</b> .....	\$670,347	\$656,760	\$3,013,640	\$(193,934)	\$4,146,812

	Thousands of U.S. dollars							
	Accumulated other comprehensive income					Subscription rights to shares	Noncontrolling interests	Total net assets
	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			
<b>Balance at January 1, 2022</b> .....	\$54,808	\$1,650	\$261,100	\$(17,265)	\$300,301	\$3,120	\$144,710	\$4,367,762
Cumulative effects of changes in accounting policies.....								(2,924)
<b>Restated balance</b> .....	\$54,808	\$1,650	\$261,100	\$(17,265)	\$300,301	\$3,120	\$144,710	\$4,364,830
Changes of items during the period								
Cash dividends.....								(104,808)
Net income attributable to owners of the parent.....								409,246
Changes resulting from inclusion of subsidiaries in consolidation.....								15
Purchase of treasury stock.....								(75,373)
Disposal of treasury stock.....								1,040
Net changes of items other than shareholders' equity.....	(11,334)	2,954	421,296	13,730	426,654	(550)	16,880	442,977
Total changes of items during the period.....	(11,334)	2,954	421,296	13,730	426,654	(550)	16,880	673,105
<b>Balance at December 31, 2022</b> .....	\$43,474	\$4,604	\$682,404	\$(3,527)	\$726,956	\$2,570	\$161,590	\$5,037,935

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, 2022

	Millions of yen				
	Shareholders' equity				
Fiscal 2021 (January 1, 2021 to December 31, 2021)	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
<b>Balance at January 1, 2021</b> .....	¥88,955	¥87,178	¥336,050	¥(16,006)	¥496,177
Changes of items during the period					
Cash dividends .....			(13,414)		(13,414)
Net income attributable to owners of the parent .....			37,262		37,262
Purchase of treasury stock .....				(2)	(2)
Disposal of treasury stock .....		(12)		123	111
Net changes of items other than shareholders' equity .....					
<b>Total changes of items during the period</b> .....	—	(12)	23,847	120	23,956
<b>Balance at December 31, 2021</b> .....	¥88,955	¥87,166	¥359,898	¥(15,885)	¥520,134

	Millions of yen							
	Accumulated other comprehensive income					Subscription rights to shares	Noncontrolling interests	Total net assets
	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			
<b>Balance at January 1, 2021</b> .....	¥6,847	¥(376)	¥1,470	¥(5,321)	¥2,620	¥328	¥16,354	¥515,481
Changes of items during the period								
Cash dividends .....								(13,414)
Net income attributable to owners of the parent .....								37,262
Purchase of treasury stock .....								(2)
Disposal of treasury stock .....								111
Net changes of items other than shareholders' equity .....	426	595	33,178	3,030	37,229	86	2,848	40,165
<b>Total changes of items during the period</b> .....	426	595	33,178	3,030	37,229	86	2,848	64,121
<b>Balance at December 31, 2021</b> ..	¥7,273	¥219	¥34,648	¥(2,291)	¥39,850	¥414	¥19,203	¥579,602

The accompanying notes are an integral part of the financial information

## Consolidated Statement of Cash Flows

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2022

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022 (January 1, 2022 to December 31, 2022)	Fiscal 2021 (January 1, 2021 to December 31, 2021)	Fiscal 2022 (January 1, 2022 to December 31, 2022)
<b>I Net cash provided by (used in) operating activities:</b>			
1 Income before income taxes.....	¥77,997	¥58,697	\$587,769
2 Depreciation and amortization .....	65,456	59,003	493,263
3 Increase (decrease) in allowance for doubtful accounts .....	9	(29)	68
4 Loss (gain) on sale of investment securities .....	(2,614)	(563)	(19,699)
5 Loss on litigation.....	1,819	4,296	13,708
6 Impairment loss.....	1,385	1,569	10,437
7 Loss on disposal of tangible fixed assets .....	450	1,183	3,391
8 Foreign exchange losses (gains).....	(2,777)	(2,610)	(20,927)
9 Interest and dividends income.....	(1,165)	(694)	(8,779)
10 Interest expenses .....	1,457	1,627	10,980
11 Decrease (increase) in notes and accounts receivable—trade.....	(12,500)	(13,437)	(94,197)
12 Decrease (increase) in inventories.....	(54,716)	(17,537)	(412,329)
13 Increase (decrease) in notes and accounts payable—trade .....	691	12,244	5,207
14 Increase (decrease) in provision for bonuses.....	632	858	4,763
15 Increase (decrease) in net defined benefit liabilities.....	678	2,273	5,109
16 Decrease (increase) in net defined benefit assets.....	664	(624)	5,004
17 Other, net.....	(4,771)	10,899	(35,953)
<b>Subtotal.....</b>	<b>72,696</b>	<b>117,157</b>	<b>547,822</b>
18 Interest and dividends income received .....	1,246	833	9,390
19 Interest expenses paid .....	(1,186)	(1,537)	(8,937)
20 Income taxes (paid) refund.....	(19,453)	(14,127)	(146,594)
21 Payments for loss on litigation.....	(1,575)	(24,104)	(11,869)
<b>Net cash provided by (used in) operating activities.....</b>	<b>51,727</b>	<b>78,221</b>	<b>389,804</b>
<b>II Net cash provided by (used in) investing activities:</b>			
1 Net decrease (increase) in time deposits.....	3,350	(150)	25,245
2 Net decrease (increase) in short-term investment securities .....	—	6,000	—
3 Proceeds from sales and redemption of investment securities .....	3,336	1,647	25,139
4 Purchase of tangible fixed assets and intangible fixed assets .....	(71,635)	(68,408)	(539,827)
5 Payments for disposal of tangible fixed assets and intangible fixed assets.....	(1,022)	(1,774)	(7,702)
6 Proceeds from sales of tangible fixed assets and intangible fixed assets.....	613	92	4,619
7 Other, net.....	(3,266)	(3,000)	(24,612)
<b>Net cash provided by (used in) investing activities.....</b>	<b>(68,624)</b>	<b>(65,595)</b>	<b>(517,136)</b>

## Consolidated Statement of Cash Flows

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2022

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022 (January 1, 2022 to December 31, 2022)	Fiscal 2021 (January 1, 2021 to December 31, 2021)	Fiscal 2022 (January 1, 2022 to December 31, 2022)
<b>III Net cash provided by (used in) financing activities:</b>			
1 Net increase (decrease) in commercial paper .....	10,000	(20,000)	75,358
2 Proceeds from long-term borrowings .....	49,375	6,212	372,080
3 Repayment of long-term borrowings .....	(55,013)	(29)	(414,567)
4 Proceeds from issuance of bonds .....	10,000	—	75,358
5 Redemption of bonds .....	—	(20,000)	—
6 Purchase of treasury stock .....	(10,002)	(2)	(75,373)
7 Proceeds from sales of treasury stock .....	0	82	3
8 Cash dividends paid .....	(13,908)	(13,414)	(104,808)
9 Proceeds from stock issuance to noncontrolling interests .....	502	1,820	3,783
10 Cash dividends paid to noncontrolling interests .....	(708)	(220)	(5,335)
11 Other, net .....	(2,297)	(1,894)	(17,310)
<b>Net cash provided by (used in) financing activities .....</b>	<b>(12,053)</b>	<b>(47,447)</b>	<b>(90,829)</b>
<b>IV Effect of exchange rate changes on cash and cash equivalents .....</b>	<b>4,943</b>	<b>4,224</b>	<b>37,249</b>
<b>V Net increase (decrease) in cash and cash equivalents .....</b>	<b>(24,006)</b>	<b>(30,596)</b>	<b>(180,904)</b>
<b>VI Cash and cash equivalents, beginning of year .....</b>	<b>151,487</b>	<b>182,084</b>	<b>1,141,575</b>
<b>VII Increase in cash and cash equivalents from newly consolidated subsidiaries .....</b>	<b>136</b>	<b>—</b>	<b>1,025</b>
<b>VIII Cash and cash equivalents, end of year*1 .....</b>	<b>¥127,616</b>	<b>¥151,487</b>	<b>\$961,688</b>

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

## 1 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 (in the case of the translation into the United States dollars, they have been rounded to the nearest 1 thousand 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 ¥132.7 = \$1, the approximate exchange rate prevailing on December 31, 2022. 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 2022	Fiscal 2021
Number of consolidated subsidiaries	77	76

#### (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, Iruma Country Club Co., Ltd., 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 Korea Ltd., Plantic Technologies Limited, 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, 2022 (fiscal 2022), Kuraray Trading Vietnam Co., Ltd. has been included in the scope of consolidation due to an increase in its materiality.

#### (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 2022	Fiscal 2021
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 effect 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, first-

out 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:

- Goodwill..... 15 to 20 years
- Customer-related assets..... 9 to 20 years

However, all minor amounts are charged or credited to income directly in the year of acquisition.

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.



### (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.

#### c) Provision for directors' retirement benefits

Some of the consolidated subsidiaries accrue the liabilities for their retirement benefits for directors and corporate auditors, which is, in general, based upon the amounts required by the subsidiaries' internal regulations.

#### d) Provision for environmental measures

In order to provide for payments on disposal of polychlorinated biphenyl (PCB) wastes removed from the noncurrent assets and stored, and for expenditure on soil remediation work, a provision is made based on the estimated disposal cost.

### (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, 2022.

#### 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 Other Business 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. Progress is estimated by the input method based on the cost incurred.

Revenue is calculated at an amount equal to the consideration promised in the contract with the customer, less 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.

(6) Significant hedge accounting

a) Hedge accounting

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, which include forward foreign exchange contracts associated with planned transactions denominated in foreign currencies and commodity swaps associated with raw materials. 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.

## 2 Significant Accounting Estimates

### Estimated loss on litigation related to fire incident at U.S. subsidiary

(1) The amount recorded on the consolidated financial statements

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Loss on litigation	¥1,819	¥4,296	\$13,708

(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 2022

Several lawsuits have been filed that more than 160 contract workers and others suffered physical and/or psychological injuries as a result of a fire that occurred at one of the locations in the Group's U.S. subsidiary in May 2018. The Group has reached a settlement with certain plaintiffs to resolve some of these claims. The Group has made accruals for estimates of loss on litigation that is sufficient to cover the damages that are reasonably estimable as of the time of preparation of the consolidated financial statements. Additional losses and expenses recorded in the current fiscal year, in conjunction with settlements with plaintiffs reached during the current fiscal year and related legal fees, are included in ¥1,819 million (US\$13,708 thousand) of loss on litigation of extraordinary losses in the consolidated statements of income. Accruals of the estimated loss on litigation are recorded as a liability in the consolidated balance sheet.

b) Key assumptions used in calculating the amount recorded on the consolidated financial statements for fiscal 2022

In estimating such loss on litigation, the Group makes estimates of probable future losses based on available information regarding the extent of damages related to the fire based on the

views of external experts, and the Board of Directors' views with respect to the current status of litigation activity and any agreed-upon or pending settlements with counterparties.

c) Impact on the consolidated financial statements for the following fiscal year

Additional loss on litigation may be recorded on the consolidated financial statements for the following fiscal year or beyond due to circumstances such as that newly obtained information on the lawsuit entails revisions to the estimate or the assumptions concerned, or that settlements are reached with plaintiffs.

### 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

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Goodwill recorded as a result of the acquisition of Calgon Carbon Corporation in the Functional Materials segment in fiscal 2018	¥40,446	¥37,395	\$304,793

(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 2022

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 2022

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 higher raw material and fuel costs.

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 unpredictable changes in future market conditions require revisions to the estimate or the assumptions concerned.

### 3 Changes in Accounting Policies

#### **Application of the Accounting Standard for Revenue Recognition, etc.**

The Group has applied the "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29, March 31, 2020; hereinafter "Revenue Recognition Standard") and other standards from the beginning of fiscal 2022. The Group recognizes revenue when control of a promised good or service is transferred to a customer in an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods and services.

The major changes resulting from this application are as follows:

(1) In supply transactions with repurchase obligations, we changed the method by which the elimination of supplied goods is not recognized and recognize the consideration received from suppliers is recognized as liabilities related to supply transactions.

(2) When variable consideration is included in the consideration in a contract with a customer, the Group includes the amount of variable consideration in the transaction price only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. Furthermore, some variable consideration, previously recorded as selling, general and administrative expenses, is now deducted from net sales.

(3) For transactions in which the Group provides goods/products as an agent, revenue from transactions, previously recognized based on the total consideration received from the customer, is now calculated based on the net amount of consideration received from the customer less the amount to be paid to the suppliers.

The Group applies the Revenue Recognition Standard, etc. in accordance with the transitional treatment provided for in the proviso to Paragraph 84 of the Revenue Recognition Standard. The cumulative impact of retrospectively applying the new accounting policies to prior periods is adjusted to retained earnings at the beginning of fiscal 2022, with the new accounting policies applied from the beginning balance.

As a result of this change, net sales decreased by ¥4,651 million (US\$35,049 thousand) for fiscal 2022. The impact on other items in the consolidated financial statements was immaterial. In addition, the beginning balance of retained earnings decreased by ¥388 million (US\$ 2,924 thousand).

Due to the application of the Revenue Recognition Standard, etc., “notes and accounts receivable—trade”, which were included in current assets in the consolidated balance sheets in fiscal 2021, are included in “notes and accounts receivable—trade, and contract assets” from fiscal 2022. In accordance with the transitional treatment provided in Paragraph 89-2 of the Revenue Recognition Standard, the consolidated balance sheets in fiscal 2021 are not revised.

In addition, in accordance with the transitional treatment provided in Paragraph 89-3 of the Revenue Recognition Standard, the notes on “Notes to Consolidated Balance Sheet,” “Notes to Consolidated Statement of Income” and the notes on “Revenue Recognition” related to consolidated financial statements for fiscal 2021 are not included.

### **Application of the Accounting Standard for Fair Value Measurement, etc.**

The Group has applied the “Accounting Standard for Fair Value Measurement” (ASBJ Statement No. 30, July 4, 2019; hereinafter “Fair Value Measurement Standard”) and other standards from the beginning

of fiscal 2022, and will prospectively apply the new accounting policies stipulated by the Fair Value Measurement Standard, etc. in accordance with the transitional treatment provided in Paragraph 19 of the Fair Value Measurement Standard and Paragraph 44-2 of the “Accounting Standard for Financial Instruments” (ASBJ Statement No. 10, July 4, 2019). This application does not have any impact on the consolidated financial statements.

In addition, the Group has decided to include notes on fair value information by level within the fair value hierarchy in the notes on “Financial Instruments.” However, in accordance with the transitional treatment provided in Paragraph 7-4 of the “Implementation Guidance on Disclosures about Fair Value of Financial Instruments” (ASBJ Guidance No. 19, July 4, 2019), notes related to consolidated financial statements for fiscal 2021 are not included.

### **Application of accounting standards for leases in the United States**

Overseas subsidiaries and affiliates that apply US GAAP have applied ASC 842 “Leases” from fiscal 2022, and all operating leases (as lessees) under ASC 840 are in principle recognized as assets and liabilities on the consolidated balance sheets. The cumulative impact of applying the new accounting standard is recognized at the initial date of application in accordance with the transitional treatment.

As a result, in the consolidated balance sheets for fiscal 2022, “other, net” under tangible fixed assets, “other” under current liabilities, and “other” under noncurrent liabilities increased by ¥10,731 million (US\$80,867 thousand), ¥2,059 million (US\$15,516 thousand), and ¥9,206 million (US\$69,375 thousand), respectively.

## 4 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.

## 5 Changes in Presentation

### Changes in Consolidated Statement of Income

The “gain on investments in investment partnerships,” previously included in “other” under non-operating income, is listed as a separate line item from the year ended December 31, 2022 due to an increase in its financial significance. The consolidated statement of income for previous year has been restated to reflect this change in presentation.

As a result, “other” of ¥1,482 million under non-operating income in the consolidated statement of income for the previous fiscal year has been reclassified as “gain on investments in investment partnerships” of ¥79 million and “other” of ¥1,403 million.

### Changes in Consolidated Statement of Cash Flows

The “purchase of investment securities,” previously separately presented under net cash provided by (used in) investing activities in the previous fiscal year, is included in “other, net” due to a decrease in its materiality. The consolidated statement of cash flows for previous year has been restated to reflect this change in presentation.

As a result, “purchase of investment securities” of ¥88 million and “other” of ¥2,912 million under net cash provided by (used in) investing activities in the consolidated statement of cash flows for the previous fiscal year, has been reclassified as “other” of ¥3,000 million.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

### 6 Notes to Consolidated Balance Sheet

\*1. Receivables and contract assets from contracts with customers, included in notes and accounts receivable—trade, and contract assets, at December 31, 2022 as follows:

	Millions of yen	Thousands of U.S. dollars
	<b>Fiscal 2022</b>	<b>Fiscal 2022</b>
Notes receivable—trade.....	<b>¥14,762</b>	<b>\$111,243</b>
Accounts receivable—trade.....	<b>136,741</b>	<b>1,030,452</b>
Contract assets.....	<b>5,511</b>	<b>41,530</b>

\*2. Contract liabilities, included in other, at December 31, 2022 as follows:

	Millions of yen	Thousands of U.S. dollars
	<b>Fiscal 2022</b>	<b>Fiscal 2022</b>
Contract liabilities.....	<b>¥5,982</b>	<b>\$45,079</b>

\*3. Accumulated depreciation of tangible fixed assets

	Millions of yen		Thousands of U.S. dollars
	<b>Fiscal 2022</b>	Fiscal 2021	<b>Fiscal 2022</b>
Accumulated depreciation of tangible fixed assets .....	<b>¥986,951</b>	¥906,213	<b>\$7,437,460</b>

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

\*4. Accumulated amount of reduced-value entry as a result of receiving government subsidies, and so on that are subtracted from the acquisition cost of tangible fixed assets

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Buildings and structures .....	¥1,397	¥2,737	\$10,528
(Deduction for this fiscal year) .....	(49)	(74)	(369)
Machinery, equipment and vehicles.....	665	2,082	5,011
(Deduction for this fiscal year) .....	(136)	(326)	(1,025)
Land.....	1,271	1,271	9,578
(Deduction for this fiscal year) .....	(—)	(13)	(—)
Other.....	176	36	1,326
(Deduction for this fiscal year) .....	(167)	(13)	(1,258)

\*5. Investments in unconsolidated subsidiaries and affiliates

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Investment securities (equity).....	¥6,161	¥6,070	\$46,428

\*6. Commitments and contingencies

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

The company names and the guarantees of their liabilities are as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Social welfare corporation Ishii Kinen Aizenen.....	¥263	¥394	\$1,982
Kurashiki Kaihatsu K.K.....	—	5	—
Total .....	¥263	¥399	\$1,982

\*7. Additional payment under share purchase agreement

The share purchase agreement with Gordon Merchant No.2 Pty Ltd. under which the Company acquired Plantic Technologies Limited and subsidiaries in April 2015 includes an earn-out provision, whereby, based on specified performance targets, up to an additional \$86.1 million may be required to be paid.



## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

### \*8. 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 seeking 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.

### \*9. Assets pledged as collateral and secured liabilities

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Buildings .....	¥1,173	¥1,263	\$8,839
Land.....	1,001	1,001	7,543
Total .....	¥2,175	¥2,265	\$16,390

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Collateral for short-term borrowings.....	¥170	¥170	\$1,281

### \*10. 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 fiscal year-end 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.

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Notes and accounts receivable—trade .....	¥3,991	¥4,999	\$30,075
Notes and accounts payable—trade .....	4,837	4,226	36,451
Other (Current liabilities).....	522	473	3,934

## 7 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 2022	Fiscal 2021	Fiscal 2022
Freight and storage .....	¥35,274	¥28,397	\$265,818
Research and development .....	21,050	19,543	158,628
Salaries and legal welfare expense.....	32,945	28,735	248,267
Provision for bonuses .....	8,404	7,180	63,331
Retirement benefit expenses .....	2,203	1,847	16,601
Provision for directors’ retirement benefits .....	0	1	0

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

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
	¥22,653	¥20,845	\$170,708

### \*4. Insurance income

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

The insurance income in fiscal 2021 is mainly the insurance received for disaster loss.

### \*5. 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.

### \*6. Loss on litigation

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.

The loss on litigation in fiscal 2021 is mainly the settlement relating to the fire accident that occurred in May 2018 at the Company’s subsidiary in the United States.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

### \*7. Impairment loss

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

#### Fiscal 2022

Location	Assets	Usage	Type	Impairment loss	
				Millions of yen	Thousands of U.S. dollars
Australia	Business assets	Assets related to biomass-derived film	Machinery, etc.	¥955	\$7,197

#### Fiscal 2021

Location	Assets	Usage	Type	Impairment loss
				Millions of yen
Kurashiki city, Okayama	Assets scheduled to be suspended (Determined to be suspended due to advanced deterioration)	Power equipment	Machinery, etc.	¥810

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

As a minimum unit for generating cash flow, business assets are grouped into sections used for management accounting, and leased assets, idle assets, assets associated with discontinued or reorganized businesses, and assets scheduled to be suspended are assessed individually. Other head office and research facilities are assessed as shared assets.

(Method for calculating the recoverable amount)

For assets scheduled to be suspended, the book value is reduced to the recoverable amount. The recoverable amount is measured based on the value in use, but the discount rate is not taken into consideration because the expected period of use is short.

For business assets, 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 measured by value in use, which is calculated by discounting future cash flows at a rate of 8%.

### \*8. Loss on disaster

Disaster losses were due to a cold wave that occurred in the United States.

### \*9. Loss on disposal of tangible fixed assets

Expense for removing equipment rendered unnecessary by business closure, etc.

\*10. Income Taxes for Prior Periods

Regarding the preferential tax programs in the Belgian tax code, which were applied to Kuraray's Belgian subsidiary in previous fiscal years, the ruling of the European General Court (which invalidated the European Commission's finding of a legal violation) was dismissed by the Court of Justice of the European Union and the case was sent back to the lower court for reassessment. Accordingly, the Company recorded as income taxes for fiscal 2021 the difference between the initial estimate and the potential additional tax of ¥2,785 million (EUR 21 million) imposed on the Belgian subsidiary.

8 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, 2022 and December 31, 2021, are as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Valuation difference on available-for-sale securities			
Amount recorded during the period.....	¥(4,791)	¥75	\$(36,104)
Reclassification adjustments .....	2,614	549	19,699
Before tax effect adjustments.....	(2,176)	625	(16,398)
Tax effect.....	672	(198)	5,064
Valuation difference on available-for-sale securities .....	(1,504)	426	(11,334)
Deferred gains or losses on hedges			
Amount recorded during the period.....	1,074	1,019	8,093
Reclassification adjustments.....	(330)	(58)	(2,487)
Adjustments to cost of assets acquired .....	(3)	(52)	(23)
Before tax effect adjustments.....	740	907	5,576
Tax effect.....	(94)	(114)	(708)
Deferred gains or losses on hedges .....	645	793	4,861
Foreign currency translation adjustment			
Amount recorded during the period.....	56,798	33,130	428,018
Reclassification adjustments.....	—	—	—
Before tax effect adjustments.....	56,798	33,130	428,018
Tax effect.....	—	—	—
Foreign currency translation adjustment .....	56,798	33,130	428,018
Remeasurements of defined benefit plans			
Amount recorded during the period.....	1,466	3,021	11,047
Reclassification adjustments.....	959	914	7,227
Before tax effect adjustments .....	2,426	3,936	18,282
Tax effect .....	(604)	(906)	(4,552)
Remeasurements of defined benefit plans .....	1,822	3,030	13,730
Total other comprehensive income .....	¥57,762	¥37,380	\$435,283

## 9 Notes to Consolidated Statement of Changes in Net Assets

## Fiscal 2022

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

	Number of thousands of shares			As of December 31, 2022
	As of January 1, 2022	Increase	Decrease	
Issued shares				
Common stock	354,863	—	—	354,863
Total	354,863	—	—	354,863
Treasury stock				
Common stock <sup>(Notes 1, 2)</sup>	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 less-than-one unit shares (2 thousand shares).

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 less-than-one unit shares by the shareholders (0 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 (US\$2,570 thousand).

## 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 (US\$51,846 thousand)	¥20.00 (US\$0.15)	December 31, 2021	March 25, 2022
Board of directors' meeting held on August 10, 2022	Common stock	¥7,028 (US\$52,962 thousand)	¥21.00 (US\$0.16)	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.

Resolution	Type of share	Source of dividends	Amount of dividends (Millions of yen)	Dividend per share (Yen)	Record date	Effective date
General shareholders' meeting held on March 29, 2023	Common stock	Retained earnings	¥7,697 (US\$58,003 thousand)	¥23.00 (US\$0.17)	December 31, 2022	March 30, 2023

Fiscal 2021

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

	Number of thousands of shares			As of December 31, 2021
	As of January 1, 2021	Increase	Decrease	
<b>Issued shares</b>				
Common stock	354,863	—	—	354,863
Total	354,863	—	—	354,863
<b>Treasury stock</b>				
Common stock <sup>(Notes 1, 2)</sup>	10,940	2	84	10,858
Total	10,940	2	84	10,858

Notes: 1. The increase in treasury stock (common stock) is attributable to the purchase of less-than-one unit shares (2 thousand shares).

2. The decrease in treasury stock (common stock) of 84 thousand shares is attributable to a transfer of shares upon the exercise of subscription rights (21 thousand shares), the disposal of treasury stock as restricted stock compensation (63 thousand shares), and the sale of less-than-one unit shares by the shareholders (0 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, 2021 is ¥414 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 25, 2021	Common stock	¥6,534	¥19.00	December 31, 2020	March 26, 2021
Board of directors' meeting held on August 12, 2021	Common stock	¥6,880	¥20.00	June 30, 2021	September 1, 2021

### (2) Dividends whose effective date is after the end of Fiscal 2021 and record date is included in Fiscal 2021.

Resolution	Type of share	Source of dividends	Amount of dividends (Millions of yen)	Dividend per share (Yen)	Record date	Effective date
General shareholders' meeting held on March 24, 2022	Common stock	Retained earnings	¥6,880	¥20.00	December 31, 2021	March 25, 2022

## 10 Notes to Consolidated Statement of Cash Flows

\*1. Cash and cash equivalents at December 31, 2022 and December 31, 2021 are reconciled to the accounts reported in the consolidated balance sheet as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Cash on hand and in banks .....	¥123,724	¥151,942	\$932,359
Time deposits with a deposit period of 3 months or more .....	(960)	(4,310)	(7,234)
Marketable securities with original maturities of 3 months or less .....	4,852	3,855	36,564
Total .....	¥127,616	¥151,487	\$961,688

## 11 Leases

### 1. Finance lease transactions

#### (1) 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 and Equipment”, “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”

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

### (2) Lease transactions as a lessor

Finance lease transactions without transfer of ownership that commenced on or before March 31, 2008 are accounted for on a basis similar to operating leases. The details of such transactions are as follows:

Disclosure of finance lease transactions which commenced on or after April 1, 2008 is omitted due to less materiality.

1) Lease acquisition costs, accumulated depreciation and net book value as of December 31, 2022 and December 31, 2021 are as follows:

#### December 31, 2022

	Millions of yen		
	Acquisition cost	Accumulated depreciation	Net book value
Buildings and structures.....	¥52	¥52	¥0

	Thousands of U.S. dollars		
	Acquisition cost	Accumulated depreciation	Net book value
Buildings and structures.....	\$392	\$392	\$0

#### December 31, 2021

	Millions of yen		
	Acquisition cost	Accumulated Depreciation	Net book value
Buildings and structures.....	¥52	¥51	¥0

2) Future lease payment obligations at December 31, 2022 and December 31, 2021 are as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Due within one year .....	¥1	¥1	\$8
Due after one year .....	—	1	—
Total.....	¥1	¥3	\$8

Note: As the proportion of total balance of future lease payment obligations and estimated residual value of leased property to the balance of notes and accounts receivables—trade at the balance sheet date is immaterial, interest income is included in the amount of future lease payment obligations.

3) Lease revenue and depreciation expense for the years ended December 31, 2022 and December 31, 2021 are as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Lease revenue.....	¥1	¥11	\$8
Depreciation expense .....	0	3	0



## 2. Operating leases

Lease transactions as a lessee:

Future lease payment obligations under operating leases at December 31, 2022 and December 31, 2021 are as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Due within one year .....	¥1,724	¥3,291	\$12,992
Due after one year .....	4,167	14,917	31,402
Total.....	¥5,891	¥18,208	\$44,393

Note: Overseas subsidiaries and affiliates that apply US GAAP have applied ASC 842 “Leases” from fiscal 2022. As a result, future lease payments related to the overseas subsidiaries and affiliates in question are not included in amounts for fiscal 2022.

## 12 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. Those risks are mostly offset by receivable balances denominated in the same foreign currency.

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 91 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, its credit risk is minimal because 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.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

### 2. Fair values of financial instruments

Carrying amount, fair value and unrealized gain/loss of the financial instruments as of December 31, 2022 and December 31, 2021 are as follows:

#### 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 <sup>(*)1</sup> .....	¥70,000	¥68,890	¥(1,109)
(2) Long-term borrowings <sup>(*)2</sup> .....	209,925	206,604	(3,320)
Total liabilities .....	¥279,925	¥275,495	¥(4,430)
Derivative transactions <sup>(*)3</sup> .....	¥1,776	¥1,776	¥—

	Thousands of U.S. dollars		
	Carrying amount	Fair value	Unrealized gain (loss)
(1) Investment securities:			
Available-for-sale securities .....	\$105,931	\$105,931	\$0
Total assets .....	\$105,931	\$105,931	\$0
(1) Bonds <sup>(*)1</sup> .....	\$527,506	\$519,141	\$(8,357)
(2) Long-term borrowings <sup>(*)2</sup> .....	1,581,952	1,556,925	(25,019)
Total liabilities .....	\$2,109,457	\$2,076,074	\$(33,384)
Derivative transactions <sup>(*)3</sup> .....	\$13,384	\$13,384	\$—

(\*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:

Category	Millions of yen	Thousands of U.S. dollars
	Carrying amount	Carrying amount
	Fiscal 2022	Fiscal 2022
Unlisted equity securities .....	¥7,766	\$58,523
Investment limited partnership, etc. ....	1,371	10,332

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

Fiscal 2021

	Millions of yen		
	Carrying amount	Fair value	Unrealized gain (loss)
(1) Investment securities:			
Available-for-sale securities .....	¥16,917	¥16,917	¥—
Total assets.....	¥16,917	¥16,917	¥—
(1) Bonds.....	¥60,000	¥60,129	¥129
(2) Long-term borrowings <sup>(*)1</sup> .....	212,958	213,715	756
Total liabilities .....	¥272,958	¥273,844	¥886
Derivative transactions <sup>(*)2</sup> .....	¥ (484)	¥ (484)	¥—

(\*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; 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) Financial instruments whose fair values are not readily determinable.

Category	Millions of yen
	Carrying amount
	Fiscal 2021
Unlisted equity securities.....	¥8,772

These items are not included in “(1) Investment securities,” because there is no market price, future cash flows cannot be estimated and it is very difficult to identify fair values.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

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

### 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	—	—	—
Short-term investment securities and investment securities: Available-for-sale securities with contractual maturities:				
(1) Bonds (Corporate) .....	—	—	—	—
(2) Bonds (Others).....	—	—	—	—
(3) Others .....	4,852	—	—	—
<b>Total .....</b>	<b>¥280,081</b>	<b>¥—</b>	<b>¥—</b>	<b>¥—</b>

	Thousands of U.S. dollars			
	Within one year	One to five years	Five to ten years	Over ten years
Cash and deposits .....	\$932,359	\$—	\$—	\$—
Notes and accounts receivable—trade .....	1,179,390	—	—	—
Short-term investment securities and investment securities: Available-for-sale securities with contractual maturities:				
(1) Bonds (Corporate).....	—	—	—	—
(2) Bonds (Others).....	—	—	—	—
(3) Others.....	36,564	—	—	—
<b>Total.....</b>	<b>\$2,148,320</b>	<b>\$—</b>	<b>\$—</b>	<b>\$—</b>

### Fiscal 2021

	Millions of yen			
	Within one year	One to five years	Five to ten years	Over ten years
Cash and deposits .....	¥151,942	¥—	¥—	¥—
Notes and accounts receivable—trade .....	135,768	—	—	—
Short-term investment securities and investment securities: Available-for-sale securities with contractual maturities:				
(1) Bonds (Corporate).....	—	—	—	—
(2) Bonds (Others).....	—	—	—	—
(3) Others.....	3,855	—	—	—
<b>Total.....</b>	<b>¥291,566</b>	<b>¥—</b>	<b>¥—</b>	<b>¥—</b>

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

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

#### Fiscal 2022

	Millions of yen					
	Within one year	One to two years	Two to three years	Three to four years	Four to five years	Over five 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
<b>Total .....</b>	<b>¥44,763</b>	<b>¥27,904</b>	<b>¥29,970</b>	<b>¥33,387</b>	<b>¥27,961</b>	<b>¥149,057</b>

	Thousands of U.S. dollars					
	Within one year	One to two years	Two to three years	Three to four years	Four to five years	Over five years
Bonds .....	\$75,358	\$—	\$75,358	\$—	\$75,358	\$301,432
Long-term borrowings.....	229,344	182,276	127,016	232,216	119,179	691,899
Lease obligations.....	3,866	3,120	2,389	1,364	332	889
Lease liabilities (*).....	28,742	24,876	21,078	18,011	15,833	129,035
<b>Total .....</b>	<b>\$337,325</b>	<b>\$210,279</b>	<b>\$225,848</b>	<b>\$251,598</b>	<b>\$210,708</b>	<b>\$1,123,263</b>

(\*) Overseas subsidiaries and affiliates that apply US GAAP have applied ASC 842 “Leases” from fiscal 2022. As a result, lease liabilities related to the overseas subsidiaries and affiliates in question are included in lease liabilities for fiscal 2022.

#### Fiscal 2021

	Millions of yen					
	Within one year	One to two years	Two to three years	Three to four years	Four to five years	Over five years
Bonds .....	¥—	¥10,000	¥—	¥10,000	¥—	¥40,000
Long-term borrowings.....	55,013	28,444	22,191	14,861	28,821	63,625
Lease obligations.....	487	404	304	207	89	126
Lease liabilities .....	1,438	1,443	1,331	1,211	1,089	11,962
<b>Total .....</b>	<b>¥56,938</b>	<b>¥40,292</b>	<b>¥23,827</b>	<b>¥26,281</b>	<b>¥30,001</b>	<b>¥115,714</b>

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

### 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.

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

#### Fiscal 2022

Category	Millions of yen			
	Fair value			
	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
<b>Total assets.....</b>	<b>¥14,056</b>	<b>¥1,776</b>	<b>¥—</b>	<b>¥15,833</b>

Category	Thousands of U.S. dollars			
	Fair value			
	Level 1	Level 2	Level 3	Total
Investment securities:				
Available-for-sale securities:				
Equity securities.....	\$105,923	\$—	\$—	\$105,923
Derivative transactions:				
Currencies.....	—	8,131	—	8,131
Interest rate.....	—	2,276	—	2,276
Commodity.....	—	2,969	—	2,969
<b>Total assets.....</b>	<b>\$105,923</b>	<b>\$13,384</b>	<b>\$—</b>	<b>\$119,314</b>

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

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

### Fiscal 2022

Category	Millions of yen			
	Fair value			Total
	Level 1	Level 2	Level 3	
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

Category	Thousands of U.S. dollars			
	Fair value			Total
	Level 1	Level 2	Level 3	
Investment securities:				
Available-for-sale securities:				
Golf club memberships.....	\$—	\$0	\$—	\$0
Total assets .....	\$—	\$0	\$—	\$0
Bonds.....	\$—	\$519,141	\$—	\$519,141
Long-term borrowings .....	—	1,556,925	—	1,556,925
Total liabilities.....	\$—	\$2,076,074	\$—	\$2,076,074



Notes: 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.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

### 13 Securities

#### 1. Available-for-sale securities with market value

##### Fiscal 2022

	Millions of yen			Thousands of U.S. dollars		
	Book value (estimated fair value)	Cost	Net	Book value (estimated fair value)	Cost	Net
Securities with book value exceeding their acquisition cost:						
Equity securities .....	¥13,883	¥6,140	¥7,742	\$104,619	\$46,270	\$58,342
Bonds:						
Government and municipal .....	—	—	—	—	—	—
Corporate .....	—	—	—	—	—	—
Others.....	—	—	—	—	—	—
Others.....	—	—	—	—	—	—
Subtotal .....	13,883	6,140	7,742	104,619	46,270	58,342
Securities with book value not exceeding their acquisition cost:						
Equity securities .....	173	192	(18)	1,304	1,447	(136)
Bonds:						
Government and municipal .....	—	—	—	—	—	—
Corporate .....	—	—	—	—	—	—
Others.....	—	—	—	—	—	—
Others.....	4,852	4,852	—	36,564	36,564	—
Subtotal .....	5,026	5,045	(18)	37,875	38,018	(136)
Total.....	¥18,909	¥11,185	¥7,723	\$142,494	\$84,288	\$58,199

Note: Unlisted equity securities amounting to ¥2,975 million (US\$ 22,419 thousand) are excluded from the above table, because they are shares, etc. that do not have a market price.

##### Fiscal 2021

	Millions of yen		
	Book value (estimated fair value)	Cost	Net
Securities with book value exceeding their acquisition cost:			
Equity securities .....	¥16,728	¥6,783	¥9,945
Bonds:			
Government and municipal .....	—	—	—
Corporate .....	—	—	—
Others.....	—	—	—
Others.....	—	—	—
Subtotal .....	16,728	6,783	9,945
Securities with book value not exceeding their acquisition cost:			
Equity securities .....	188	205	(17)
Bonds:			
Government and municipal .....	—	—	—
Corporate .....	—	—	—
Others.....	—	—	—
Others.....	3,855	3,855	—
Subtotal .....	4,043	4,061	(17)
Total.....	¥20,772	¥10,844	¥9,928

Note: Unlisted equity securities amounting to ¥2,702 million are excluded from the above table, because there is no market price and it is very difficult to identify fair values.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

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

#### Fiscal 2022

	Millions of yen			Thousands of U.S. dollars		
	Proceeds from sales	Total gain	Total loss	Proceeds from sales	Total gain	Total loss
Others <sup>(Note 1)</sup> .....	¥3,267	¥2,614	¥0	\$24,619	\$19,699	\$0
Total .....	¥3,267	¥2,614	¥0	\$24,619	\$19,699	\$0

Notes: 1. Attributable to sale of stock.

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

#### Fiscal 2021

	Millions of yen		
	Proceeds from sales	Total gain	Total loss
Others <sup>(Note 1)</sup> .....	¥1,359	¥558	¥—
Total .....	¥1,359	¥558	¥—

Notes: 1. Attributable to sale of stock.

2. Securities for which it is difficult to identify fair value are excluded from the above table.

### 3. Impairment loss on securities

The Company recognized impairment loss on securities of ¥14 million (US\$106 thousand) in fiscal 2022 and ¥8 million in fiscal 2021.

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.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

### 14 Derivative Financial Instruments

#### 1. Derivative transactions to which hedge accounting is not applied

##### (1) Currencies

##### Fiscal 2022

Category	Classification	Millions of yen			
		Nominal amount	Nominal amount due after one year	Market value	Unrealized gain (loss)
Transactions other than market transactions	Forward foreign exchange contracts:				
	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	—	269	269
	Receipts in Yen/Payments in Baht .....	17,495	—	143	143
	Receipts in Yen/Payments in Zloty .....	1,182	—	(61)	(61)
	Receipts in Yen/Payments in Yuan .....	1,080	—	41	41
	Other .....	3,697	—	(12)	(12)
	Non-deliverable forward foreign exchange transaction:				
	Receipts in Yen/Payments in Won .....	6,055	—	(28)	(28)
	Other .....	14	—	(0)	(0)
<b>Total .....</b>		<b>¥59,527</b>	<b>¥—</b>	<b>¥1,097</b>	<b>¥1,097</b>

Category	Classification	Thousands of U.S. dollars			
		Nominal amount	Nominal amount due after one year	Market value	Unrealized gain (loss)
Transactions other than market transactions	Forward foreign exchange contracts:				
	Receipts in Yen/Payments in U.S. dollar ..	\$65,479	\$—	\$4,785	\$4,785
	Receipts in Yen/Payments in Euro .....	91,070	—	829	829
	Receipts in Yen/Payments in Australian dollar .....	69,518	—	2,027	2,027
	Receipts in Yen/Payments in Baht .....	131,839	—	1,078	1,078
	Receipts in Yen/Payments in Zloty .....	8,907	—	(460)	(460)
	Receipts in Yen/Payments in Yuan .....	8,139	—	309	309
	Other .....	27,860	—	(90)	(90)
	Non-deliverable forward foreign exchange transaction:				
	Receipts in Yen/Payments in Won .....	45,629	—	(211)	(211)
	Other .....	106	—	(0)	(0)
<b>Total .....</b>		<b>\$448,583</b>	<b>\$—</b>	<b>\$8,267</b>	<b>\$8,267</b>

Notes: 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.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

Fiscal 2021

Category	Classification	Millions of yen				
		Nominal amount	Nominal amount due after one year	Market value	Unrealized gain (loss)	
Transactions other than market transactions	Forward foreign exchange contracts:					
		Receipts in Yen/Payments in U.S. dollar ..	¥8,521	¥—	¥(115)	¥(115)
		Receipts in Yen/Payments in Euro.....	5,058	—	(6)	(6)
		Receipts in Yen/Payments in Australian dollar .....	7,007	—	(133)	(133)
		Receipts in Yen/Payments in Baht .....	14,065	—	(90)	(90)
		Receipts in Yen/Payments in Zloty.....	1,102	—	11	11
		Receipts in U.S. dollar/Payments in Yen ..	1,346	—	15	15
		Other .....	2,964	—	(28)	(28)
		Non-deliverable forward foreign exchange transaction:				
		Receipts in Yen/Payments in Won.....	4,806	—	(94)	(94)
		Other .....	17	—	(0)	(0)
Total.....		¥44,891	¥—	¥(443)	¥(443)	

Notes: 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.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

### 2. Derivative transactions to which hedge accounting is applied

#### (1) Currencies

##### Fiscal 2022

Hedge accounting method	Classification	Major hedged items	Millions of yen			Thousands of U.S. dollars		
			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	¥650	¥—	Note	\$4,898	\$—	Note
	Receipts in Yen/ Payments in Baht	Loans receivable	459	—	Note	3,459	—	Note
	Receipts in Yen/ Payments in Yuan	Accounts receivable—trade	162	—	Note	1,221	—	Note
	Receipts in U.S. dollar/ Payments in Yen	Accounts payable—trade	148	—	Note	1,115	—	Note
	Other	Accounts payable—trade	14	—	Note	106	—	Note
<b>Total</b>			<b>¥1,434</b>	<b>¥—</b>		<b>\$10,806</b>	<b>\$—</b>	

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 or accounts payable—trade, since they are used for recording accounts receivable—trade, loans receivable or accounts payable—trade as hedged items.

Hedge accounting method	Classification	Major hedged items	Millions of yen			Thousands of U.S. dollars		
			Nominal amount	Nominal amount over one year	Market value	Nominal amount	Nominal amount over one year	Market value
Deferred hedge method	Forward foreign exchange contracts:							
	Receipts in Yen/ Payments in U.S. dollar	Forecasted transactions in foreign currencies	¥3,291	¥—	¥35	\$24,800	\$—	\$264
	Receipts in Yen/ Payments in Euro	Forecasted transactions in foreign currencies	3,728	212	(14)	28,093	1,598	(106)
	Receipts in U.S. dollar/ Payments in Yen	Forecasted transactions in foreign currencies	2,222	—	(41)	16,745	—	(309)
	Other	Forecasted transactions in foreign currencies	279	—	2	2,102	—	15
<b>Total</b>			<b>¥9,521</b>	<b>¥212</b>	<b>¥(18)</b>	<b>\$71,748</b>	<b>\$1,598</b>	<b>\$(136)</b>

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

Fiscal 2021

Hedge accounting method	Classification	Major hedged items	Millions of yen		
			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	¥383	¥—	Note
	Receipts in Yen/ Payments in Baht	Loans receivable	240	—	Note
	Other	Accounts payable—trade	100	—	Note
Total.....			¥724	¥—	

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 or accounts payable—trade, since they are used for recording accounts receivable—trade, loans receivable or accounts payable—trade as hedged items.

Hedge accounting method	Classification	Major hedged items	Millions of yen		
			Nominal amount	Nominal amount over one year	Market value
Deferred hedge method	Forward foreign exchange contracts:				
	Receipts in Yen/ Payments in U.S. dollar	Forecasted transactions in foreign currencies	¥3,276	¥—	¥(7)
	Receipts in Yen/ Payments in Euro	Forecasted transactions in foreign currencies	1,788	—	(9)
	Receipts in U.S. dollar/ Payments in Yen	Forecasted transactions in foreign currencies	1,725	—	24
	Receipts in Yen/ Payments in Baht	Forecasted transactions in foreign currencies	1,431	—	(2)
	Other	Forecasted transactions in foreign currencies	415	—	(1)
Total.....			¥8,637	¥—	¥3

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

### (2) Interest rate

#### Fiscal 2022

Hedge accounting method	Classification	Major hedged items	Millions of yen		Market value
			Nominal amount	Nominal amount over one year	
Special treatment For interest rate swaps	Interest rate swaps: Floating rate into fixed rate	Long-term borrowings	¥16,000	¥6,000	Note

Hedge accounting method	Classification	Major hedged items	Thousands of U.S. dollars		Market value
			Nominal amount	Nominal amount over one year	
Special treatment For interest rate swaps	Interest rate swaps: Floating rate into fixed rate	Long-term borrowings	\$120,573	\$45,215	Note

Note: With respect to interest rate swap contracts which meet certain conditions, market values of the interest rate swap contracts are included in the market values of the relevant long-term borrowings, since they are used for recording long-term borrowings as hedged items.

Hedge accounting method	Classification	Major hedged items	Millions of yen		Market value
			Nominal amount	Nominal amount over one year	
Deferred hedge method	Interest rate swaps: Floating rate into fixed rate	Long-term borrowings	¥18,620	¥18,620	¥302

Hedge accounting method	Classification	Major hedged items	Thousands of U.S. dollars		Market value
			Nominal amount	Nominal amount over one year	
Deferred hedge method	Interest rate swaps: Floating rate into fixed rate	Long-term borrowings	\$140,317	\$140,317	\$2,276

#### Fiscal 2021

Hedge accounting method	Classification	Major hedged items	Millions of yen		Market value
			Nominal amount	Nominal amount over one year	
Special treatment For interest rate swaps	Interest rate swaps: Floating rate into fixed rate	Long-term borrowings	¥31,000	¥16,000	Note

Note: With respect to interest rate swap contracts which meet certain conditions, market values of the interest rate swap contracts are included in the market values of the relevant long-term borrowings, since they are used for recording long-term borrowings as hedged items.

Hedge accounting method	Classification	Major hedged items	Millions of yen		Market value
			Nominal amount	Nominal amount over one year	
Deferred hedge method	Interest rate swaps: Floating rate into fixed rate	Long-term borrowings	¥16,807	¥16,807	¥(331)



## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

### (3) Commodity

#### Fiscal 2022

Hedge accounting method	Classification	Major hedged items	Millions of yen		
			Nominal amount	Nominal amount over one year	Market value
Deferred hedge method	Commodity swaps: Floating rate into fixed rate	Raw material	¥1,139	¥660	¥394

Hedge accounting method	Classification	Major hedged items	Thousands of U.S. dollars		
			Nominal amount	Nominal amount over one year	Market value
Deferred hedge method	Commodity swaps: Floating rate into fixed rate	Raw material	\$8,583	\$4,974	\$2,969

#### Fiscal 2021

Hedge accounting method	Classification	Major hedged items	Millions of yen		
			Nominal amount	Nominal amount over one year	Market value
Deferred hedge method	Commodity swaps: Floating rate into fixed rate	Raw material	¥1,009	¥767	¥288

## 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 cash-balance 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.

In fiscal 2021, some consolidated subsidiaries revised their retirement benefit plans, resulting in prior service costs (a reduction in retirement benefit obligations).

**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 2022	Fiscal 2021	Fiscal 2022
Retirement benefit obligations at beginning of year .....	¥69,334	¥69,384	\$522,487
Service costs .....	3,094	3,065	23,316
Interest costs .....	1,131	931	8,523
Actuarial gain or loss .....	(9,399)	(967)	(70,829)
Prior service costs recorded during the period .....	—	(2,165)	—
Benefits paid .....	(4,950)	(3,553)	(37,302)
Other .....	4,041	2,638	30,452
Retirement benefit obligations at end of year .....	¥63,252	¥69,334	\$476,654

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 2022	Fiscal 2021	Fiscal 2022
Plan assets at beginning of year .....	¥49,153	¥48,203	\$370,407
Expected return on plan assets .....	1,488	1,401	11,213
Actuarial gain or loss .....	(7,932)	(110)	(59,774)
Contribution from entrepreneur .....	1,490	1,188	11,228
Benefits paid .....	(5,050)	(3,693)	(38,056)
Other .....	3,003	2,165	22,630
Plan assets at end of year .....	¥42,154	¥49,153	\$317,664

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

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

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

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Net defined benefit liabilities at beginning of year.....	¥2,382	¥2,170	\$17,950
Retirement benefit expenses.....	495	510	3,730
Benefits paid .....	(197)	(158)	(1,485)
Contribution to plan assets .....	(261)	(140)	(1,967)
Other .....	3	0	23
Net defined benefit liabilities at end of year.....	¥2,423	¥2,382	\$18,259

### (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 2022	Fiscal 2021	Fiscal 2022
Installment type retirement benefit obligation.....	¥57,533	¥62,460	\$433,557
Plan assets .....	(43,757)	(50,397)	(329,744)
	13,775	12,063	103,806
Non installment type retirement benefit obligation .....	9,745	10,499	73,436
Net amount of net defined benefit liabilities and net defined benefit assets recognized on the consolidated balance sheet.....	¥23,521	¥22,563	\$177,249
Net defined benefit liabilities .....	¥25,626	¥25,629	\$193,112
Net defined benefit assets.....	(2,104)	(3,066)	(15,855)
Net amount of net defined benefit liabilities and net defined benefit assets recognized on the consolidated balance sheet.....	¥23,521	¥22,563	\$177,249

Note: Includes plan that uses the simplified method.

### (5) The components of retirement benefit expenses

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Service costs.....	¥3,094	¥3,065	\$23,316
Interest costs.....	1,131	931	8,523
Expected return on plan assets .....	(1,488)	(1,401)	(11,213)
Amortization of actuarial gains or losses.....	908	927	6,843
Amortization of prior service costs .....	51	(12)	384
Retirement benefit expenses calculated by simplified method .....	495	510	3,730
Other .....	434	311	3,271
Retirement benefit expense pertaining to defined benefit plan.....	¥4,628	¥4,331	\$34,876

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

### (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)

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Prior service costs.....	¥51	¥2,152	\$384
Actuarial gain or loss.....	2,375	1,783	17,898
Total.....	¥2,426	¥3,936	\$18,282

### (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).

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Unrecognized prior service costs.....	¥1,729	¥1,677	\$13,029
Unrecognized actuarial gain or loss.....	(3,105)	(5,480)	(23,399)
Total.....	¥(1,376)	¥(3,803)	\$(10,369)

### (8) Plan assets

#### a. The components of plan assets

	Fiscal 2022	Fiscal 2021
Debt securities.....	49%	54%
Equity securities.....	16	14
Life insurance company general accounts <sup>(Note 1)</sup> .....	15	13
Cash and deposits.....	4	3
Other assets.....	16	16
Total <sup>(Note 2)</sup> .....	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 general accounts.

2. Total retirement plan assets for the years ended December 31, 2022 and 2021 include 25% and 26%, 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 2022	Fiscal 2021
Discount rate.....	Mainly 0.7% to 5.0%	Mainly 0.7% to 2.9%
Long-term expected rate of return.....	Mainly 1.0% to 5.5%	Mainly 1.0% to 5.5%

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

### 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, 2022 and 2021 are as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Defined contribution plan.....	¥1,472	¥1,419	\$11,093

### 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, 2022 and 2021, totaled ¥102 million (US\$769 thousand) and ¥83 million, respectively.

Multi-employer plan in which overseas consolidated subsidiaries participate

#### (1) Accumulated funds for the plan

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022 (As of June 30, 2022)	Fiscal 2021 (As of June 30, 2021)	Fiscal 2022 (As of June 30, 2022)
Plan assets.....	¥81,744	¥63,402	\$616,006
Total of actuarial pension liabilities and plan's minimum reserve..	79,884	60,850	601,989
Difference.....	¥1,860	¥2,551	\$14,017

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

	Fiscal 2022 (As of June 30, 2022)	Fiscal 2021 (As of June 30, 2021)
	3.7%	4.2%

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

## 16 Stock-Based Compensation Plans

### 1. Item and amount of expenses for stock options

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Selling, general and administrative expenses.....	¥—	¥115	\$—

2. Details including size and changes of stock options

(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, if 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.	From May 15, 2014 to May 14, 2029; provided that, if 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, 2029, 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) <sup>(Note 3)</sup>	9	11
Type, content and number of shares subject to subscription rights to shares <sup>(Note 3)</sup>	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) <sup>(Note 3)</sup>	¥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) <sup>(Note 3)</sup>	Issue price: ¥1,483 (US\$11.18) Amount to be incorporated into stated capital: ¥742 (US\$5.59)	Issue price: ¥1,120 (US\$8.44) Amount to be incorporated into stated capital: ¥560 (US\$4.22)
Conditions for exercising subscription rights to shares <sup>(Note 3)</sup>		(Note 1)
Matters related to transfer of subscription rights to shares <sup>(Note 3)</sup>	Acquisition of the subscription rights to shares by transfer shall require the approval by resolution of the Board of Directors of the Company.	
Matters related to delivery of subscription rights to shares in association with reorganization <sup>(Note 3)</sup>		(Note 2)

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

	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, if 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, if 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) <sup>(Note 3)</sup>	18	33
Type, content and number of shares subject to subscription rights to shares <sup>(Note 3)</sup>	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) <sup>(Note 3)</sup>	¥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) <sup>(Note 3)</sup>	Issue price: ¥1,353 (US\$10.20) Amount to be incorporated into stated capital: ¥677 (US\$5.10)	Issue price: ¥1,201 (US\$9.05) Amount to be incorporated into stated capital: ¥601 (US\$4.53)
Conditions for exercising subscription rights to shares <sup>(Note 3)</sup>		(Note 1)
Matters related to transfer of subscription rights to shares <sup>(Note 3)</sup>	Acquisition of the subscription rights to shares by transfer shall require the approval by resolution of the Board of Directors of the Company.	
Matters related to delivery of subscription rights to shares in association with reorganization <sup>(Note 3)</sup>		(Note 2)

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

	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, if 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.	From February 15, 2018 to February 14, 2033; provided that, if 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 15, 2033, 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) <sup>(Note 3)</sup>	57	42
Type, content and number of shares subject to subscription rights to shares <sup>(Note 3)</sup>	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) <sup>(Note 3)</sup>	¥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) <sup>(Note 3)</sup>	Issue price: ¥1,539 (US\$11.60) Amount to be incorporated into stated capital: ¥770 (US\$5.80)	Issue price: ¥1,762 (US\$13.28) Amount to be incorporated into stated capital: ¥881 (US\$6.64)
Conditions for exercising subscription rights to shares <sup>(Note 3)</sup>		(Note 1)
Matters related to transfer of subscription rights to shares <sup>(Note 3)</sup>	Acquisition of the subscription rights to shares by transfer shall require the approval by resolution of the Board of Directors of the Company.	
Matters related to delivery of subscription rights to shares in association with reorganization <sup>(Note 3)</sup>		(Note 2)



## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

	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, if 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.	From February 14, 2020 to February 13, 2035; provided that, if 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, 2035, 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) <sup>(Note 3)</sup>	74	101
Class, content and number of shares subject to subscription rights to shares <sup>(Note 3)</sup>	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) <sup>(Note 3)</sup>	¥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) <sup>(Note 3)</sup>	Issue price: ¥1,467 (US\$11.06) Amount to be incorporated into stated capital: ¥734 (US\$5.53)	Issue price: ¥1,315 (US\$9.91) Amount to be incorporated into stated capital: ¥658 (US\$4.96)
Conditions for exercising subscription rights to shares <sup>(Note 3)</sup>		(Note 1)
Matters related to transfer of subscription rights to shares <sup>(Note 3)</sup>	Acquisition of the subscription rights to shares by transfer shall require the approval by resolution of the Board of Directors of the Company.	
Matters related to delivery of subscription rights to shares in association with reorganization <sup>(Note 3)</sup>		(Note 2)

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

Stock options February 2021	
Resolution date	January 20, 2021
Number of eligible persons by position	Directors of the Company (excluding those working 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 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, if 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) <sup>(Note 3)</sup>	162
Class, content and number of shares subject to subscription rights to shares <sup>(Note 3)</sup>	81,000 shares of common stock
Amount paid at the time of exercise of subscription rights to shares (yen) <sup>(Note 3)</sup>	¥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) <sup>(Note 3)</sup>	Issue price: ¥1,175 (US\$8.85) Amount to be incorporated into stated capital: ¥588 (US\$4.43)
Conditions for exercising subscription rights to shares <sup>(Note 3)</sup>	(Note 1)
Matters related to transfer of subscription rights to shares <sup>(Note 3)</sup>	Acquisition of the subscription rights to shares by transfer shall require the approval by resolution of the Board of Directors of the Company.
Matters related to delivery of subscription rights to shares in association with reorganization <sup>(Note 3)</sup>	(Note 2)

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 shares

Common 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.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

(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) 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 2022. As of the end of the month preceding the month that the filing date of the securities report belongs to (February 28, 2023), there are no changes from the details as of the end of fiscal 2022.

(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
<b>Unvested stock options (shares)</b>						
At the beginning of the fiscal year	—	—	—	—	—	—
Granted	—	—	—	—	—	—
Forfeited	—	—	—	—	—	—
Vested	—	—	—	—	—	—
At the end of the fiscal year	—	—	—	—	—	—
<b>Vested stock options (shares)</b>						
At the beginning of the fiscal year	6,000	8,500	12,000	20,500	37,000	28,500
Vested	—	—	—	—	—	—
Exercised	1,500	3,000	3,000	4,000	8,500	7,500
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
<b>Unvested stock options (shares)</b>			
At the beginning of the fiscal year	—	—	—
Granted	—	—	—
Forfeited	—	—	—
Vested	—	—	—
At the end of the fiscal year	—	—	—
<b>Vested stock options (shares)</b>			
At the beginning of the fiscal year	43,500	58,500	92,000
Vested	—	—	—
Exercised	6,500	8,000	11,000
Forfeited	—	—	—
At the end of the fiscal year	37,000	50,500	81,000

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

### 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	1,031	1,031	1,031	1,031	1,031	1,031
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	1,031	1,031	1,031
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	7.77	7.77	7.77	7.77	7.77	7.77
Fair value at the grant date	11.17	8.43	10.19	9.04	11.59	13.27

	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	7.77	7.77	7.77
Fair value at the grant date	11.05	9.90	8.85

### 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, 2022 and December 31, 2021

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Deferred tax assets:			
Net defined benefit liabilities	¥9,926	¥10,566	\$74,800
Unrealized gain on inventories	3,409	2,245	25,690
Accrued expenses	3,264	3,229	24,597
Impairment loss	3,220	3,612	24,265
Provision for bonuses	2,012	1,614	15,162
Tax credit carry forward of overseas subsidiaries	1,792	1,670	13,504
Depreciation and amortization	1,603	2,182	12,080
Tax loss carry forward <sup>(Note)</sup>	10,329	13,860	77,837
Other	8,106	8,566	61,085
Subtotal deferred tax assets	43,665	47,549	329,050
Valuation allowance relating to tax loss carry forward <sup>(Note)</sup>	(6,561)	(6,099)	(49,442)
Valuation allowance for total deductible temporary differences	(4,266)	(5,898)	(32,148)
Subtotal valuation allowance	(10,828)	(11,997)	(81,598)
Total deferred tax assets	32,837	35,551	247,453
Deferred tax liabilities:			
Depreciation and amortization	(13,128)	(13,382)	(98,930)
Adjustment to book value of assets stated at fair value	(11,948)	(11,745)	(90,038)
Unrealized gain on revaluation of securities	(1,985)	(2,657)	(14,959)
Retained earnings of overseas subsidiaries	(1,523)	(1,192)	(11,477)
Other	(4,812)	(4,616)	(36,262)
Total deferred tax liabilities	(33,398)	(33,593)	(251,680)
Net deferred tax assets (liabilities)	¥(560)	¥1,958	\$(4,220)

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

## Fiscal 2022 (December 31, 2022)

(Millions of yen)

	Within one year	One to two years	Two to three years	Three to four years	Four to five years	Over five years	Total
Tax loss carry forward <sup>(*)</sup>	¥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	<sup>(*)</sup> 3,768

(Thousands of U.S. dollars)

	Within one year	One to two years	Two to three years	Three to four years	Four to five years	Over five years	Total
Tax loss carry forward <sup>(*)</sup>	\$384	\$874	\$972	\$550	\$2,713	\$72,329	\$77,837
Valuation allowance	(264)	(633)	(633)	(256)	(2,532)	(45,109)	(49,442)
Deferred tax assets	113	241	332	294	173	27,219	<sup>(*)</sup> 28,395

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

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

Fiscal 2021 (December 31, 2021)

(Millions of yen)

	Within one year	One to two years	Two to three years	Three to four years	Four to five years	Over five years	Total
Tax loss carry forward <sup>(*)</sup>	¥89	¥35	¥107	¥120	¥160	¥13,346	¥13,860
Valuation allowance	(83)	(35)	(81)	(84)	(111)	(5,702)	(6,099)
Deferred tax assets	6	—	26	35	49	7,644	<sup>(*)</sup> 7,761

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

(\*) With regard to the tax loss carry forward of ¥13,860 million (the amount multiplied by the normal effective tax rate), the amount recorded for deferred tax assets was ¥7,761 million. Deferred tax assets recorded under tax loss carry forward represent the amount deemed to be recoverable based on the estimation of future taxable profit and the adequacy of the taxable temporary difference.

### 2. Reconciliation of the differences between the normal effective tax rate and the income tax rate in the accompanying consolidated statement of income at December 31, 2022 and December 31, 2021

	Fiscal 2022	Fiscal 2021
Normal effective tax rate	30.4%	30.4%
(Adjustment)		
Tax credit primarily for research and development expenses	(1.4)	(3.0)
Changes in valuation allowance	(0.9)	1.2
Amortization of goodwill	1.2	1.4
Effect of income tax rates difference	(3.0)	0.5
Retained earnings of overseas subsidiaries	0.4	0.7
Income taxes for prior periods	—	2.4
Other	1.9	0.9
Income tax rate per the consolidated statement of income	28.6%	34.5%

18 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. 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	Rental agreements

**Calculation method for the amount 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, 2022 and December 31, 2021:**

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Beginning balance	¥4,821	¥4,718	\$36,330
Adjustments due to the elapse of time	87	54	656
Decrease due to payment for the obligations	(160)	(788)	(1,206)
Other increase (decrease)	776	836	5,848
Ending balance	¥5,525	¥4,821	\$41,635



## 19 Revenue Recognition

## 1. Disaggregation of revenue from contracts with customers

## Fiscal 2022

Disaggregation of revenue by region

	Millions of yen							Other Business (Note 2)	Total
	Reporting Segments					Total			
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Trading				
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	

	Thousands of U.S. dollars							Other Business (Note 2)	Total
	Reporting Segments					Total			
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Trading				
Japan .....	\$205,983	\$160,422	\$268,101	\$206,172	\$261,861	\$1,102,555	\$244,642	\$1,347,204	
United States .....	659,435	62,622	449,781	57,611	965	1,230,430	10,505	1,240,942	
China .....	357,227	52,193	84,853	50,038	129,088	673,414	5,011	678,433	
Europe .....	937,378	63,572	334,883	86,631	1,372	1,423,851	37,626	1,461,477	
Asia .....	392,012	50,023	84,755	67,747	34,740	629,284	11,055	640,347	
Other area .....	245,328	6,398	61,168	7,317	2,675	322,901	8,576	331,477	
Total .....	\$2,797,393	\$395,245	\$1,283,564	\$475,524	\$430,708	\$5,382,457	\$317,438	\$5,699,894	

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

2. The "Other Business" category incorporates operations not included in business segment reporting, including the engineering business, etc.

## 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 Note 1 "Significant accounting policies, 5. Accounting policies."

### 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.

	Millions of yen		Thousands of U.S. dollars	
	Fiscal 2022		Fiscal 2022	
	Beginning balance	Ending balance	Beginning balance	Ending balance
Receivables from contracts with customers	¥134,092	¥151,504	\$1,010,490	\$1,141,703
Contract assets	1,675	5,511	12,622	41,530
Contract liabilities	9,037	5,982	68,101	45,079

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

Contracts with an initial expected term of one year or less are not included in the scope of the notes, applying a practical expedient. Performance obligations with contract terms of more than one year mainly relate to construction contracts, and the total transaction price allocated to the remaining performance obligations and the period over which revenue is expected to be recognized at the end of fiscal 2022 are as follows. There are no material amounts of consideration received from contracts with customers that are not included in the transaction price.

	Millions of yen	Thousands of U.S. dollars
	Fiscal 2022	Fiscal 2022
Within one year.....	¥14,539	\$109,563
Over one year.....	26,251	197,822
Total.....	¥40,791	\$307,393

## 20 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 man-made 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.

## Change in reporting segments

Following in the organizational revision, we moved the environmental business from Other Business to Functional Materials from fiscal 2022.

Furthermore, segment information for fiscal 2021 has been restated to reflect the changes to the reporting segments.

## 2. 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.” Profits from reported segments are operating income, and intersegment sales and transfers are based on the prevailing market prices.

## Change in methods for calculating reporting segment net sales, income, and assets

As stated in “Change in Accounting Policies,” we apply profit recognition accounting standards from fiscal 2022 and accordingly changed the accounting treatment method related to profit recognition.

Similarly, the methods for calculating business segment net sales and profit have been changed.

Due to this change, compared with conventional methods, regarding net sales to outside customers in fiscal 2022, there was a ¥35,854 million (US\$270,188 thousand) increase in Vinyl Acetate, a ¥10,340 million (US\$77,920 thousand) increase in Isoprene, a ¥20,229 million (US\$152,442 thousand) increase in Functional Materials, a ¥10,889 million (US\$82,057 thousand) increase in Fibers and Textiles, a ¥82,536 million (US\$621,974 thousand) decrease in Trading, and a ¥570 million (US\$4,295 thousand) increase in Other Business.

In addition, regarding intersegment net sales and transfers, there was a decrease in ¥37,055 million (US\$279,239 thousand) in Vinyl Acetate, an ¥11,612 million (US\$87,506 thousand) decrease in Isoprene, a ¥20,438 million (US\$154,017 thousand) decrease in Functional Materials, an ¥11,808 million (US\$88,983 thousand) decrease in Fibers and Textiles, a ¥2,448 million (US\$18,448 thousand) decrease in Trading, a ¥844 million (US\$6,360 thousand) decrease in Other Business, and a ¥84,208 million (US\$634,574 thousand) increase in adjustment.

The impact of these changes on segment income and segment assets is minor.

In addition, overseas subsidiaries and affiliates that apply US GAAP have applied ASC 842 “Leases” from fiscal 2022. Due to this, regarding operating leases (as lessees) under ASC 840, right-to-use assets were recognized at the initial date of application.

In addition, from fiscal 2022, the Company has changed the method of allocation to each segment and to the entire corporation with respect to the elimination of certain profit through intersegment transaction. Furthermore, segment information for fiscal 2021 has been restated to reflect the changed allocation method.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

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

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

	Reporting Segments							Other Business (Note 1)	Adjustment (Note 2, 4)	Consolidated Financial Statements (Note 3)
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Trading	Total	Total			
Millions of yen										
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 to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

	Thousands of U.S. dollars									Consolidated Financial Statements (Note 3)
	Reporting Segments						Other Business (Note 1)	Total	Adjustment (Note 2,4)	
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Trading	Total				
Net sales										
(1) Outside customers .....	\$2,797,393	\$395,245	\$1,283,564	\$475,524	\$430,708	\$5,382,457	\$317,438	\$5,699,894	\$—	\$5,699,894
(2) Inter-segment sales and transfers .....	106,481	99,367	28,109	28,304	12,728	275,004	74,808	349,812	(349,812)	—
Total .....	2,903,881	494,612	1,311,673	503,836	443,436	5,657,460	392,246	6,049,706	(349,812)	5,699,894
Segment income (loss) .....	584,378	32,178	64,612	50,761	38,591	770,543	20,188	790,739	(134,077)	656,662
Segment assets .....	3,672,886	1,196,843	2,140,286	622,743	384,763	8,017,528	386,179	8,403,715	801,507	9,205,222
Other items										
Depreciation and amortization (other than goodwill) .....	269,548	20,859	99,842	35,486	1,409	427,151	8,372	435,524	25,192	460,723
Impairment loss .....	7,807	—	2,193	136	—	10,143	—	10,143	294	10,437
Amortization of goodwill	11,364	—	21,168	—	—	32,540	—	32,540	—	32,540
Balance of goodwill at end of current period .....	115,087	—	307,355	—	—	422,442	—	422,442	—	422,442
Investments in equity method affiliates .....	—	—	—	24,853	—	24,853	—	24,853	—	24,853
Increase in tangible fixed assets and intangible fixed assets (Note 5) .....	168,071	105,335	188,252	36,767	1,650	500,090	7,038	507,136	39,955	547,091

Notes: 1. The “Other Business” category incorporates operations not included in business segment reporting, including the engineering business, etc.

- Adjustments of negative ¥17,792 million (negative US\$134,077 thousand) for segment income include the elimination of intersegment transactions of negative ¥1,887 million (negative US\$14,220 thousand) and unallocated corporate expenses of negative ¥15,904 million (negative US\$119,849 thousand). These corporate expenses mainly comprise the Company’s basic research expenses.
- Segment income is adjusted with operating income under the Consolidated Statement of Income.
- Adjustments for segment assets amounting to ¥106,360 million (US\$801,507 thousand) include the elimination of intersegment transactions of negative ¥47,242 million (negative US\$356,006 thousand) and unallocated corporate assets of ¥153,602 million (US\$1,157,513 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.
- The increase in tangible fixed assets and intangible fixed assets does not include the increase attributable to the application of ASC 842 “Leases.”

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

Fiscal 2021 (January 1, 2021 to December 31, 2021)

	Millions of yen						Other Business (Note 1)	Total	Adjustment (Note 2, 4, 5)	Consolidated Financial Statements (Note 3)
	Reporting Segments					Total				
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Trading	Total				
Net sales										
(1) Outside customers .....	¥254,814	¥31,994	¥119,397	¥46,023	¥141,306	¥593,536	¥35,834	¥629,370	¥—	¥629,370
(2) Inter-segment sales and transfers .....	49,875	29,946	22,969	15,058	2,721	120,571	8,493	129,064	(129,064)	—
Total .....	304,690	61,940	142,366	61,082	144,027	714,108	44,327	758,435	(129,064)	629,370
Segment income (loss) .....	58,255	6,080	8,673	5,608	4,842	83,460	1,206	84,666	(12,409)	72,256
Segment assets .....	424,726	125,446	230,645	77,188	50,320	908,327	44,839	953,166	137,847	1,091,014
Other items										
Depreciation and amortization (other than goodwill) .....	32,618	2,487	11,573	4,300	86	51,066	1,083	52,150	3,194	55,344
Impairment loss .....	10	—	78	—	—	88	—	88	1,481	1,569
Amortization of goodwill	1,290	—	2,368	—	—	3,659	—	3,659	—	3,659
Balance of goodwill at end of current period.....	14,764	—	37,870	—	—	52,635	—	52,635	—	52,635
Investments in equity method affiliates .....	—	—	—	2,967	—	2,967	—	2,967	—	2,967
Increase in tangible fixed assets and intangible fixed assets .....	20,301	14,665	17,272	5,711	555	58,507	1,262	59,769	6,177	65,947

Notes: 1. The “Other Business” category incorporates operations not included in business segment reporting, including the engineering business.

- Adjustments of negative ¥12,409 million for segment income include the elimination of intersegment transactions of negative ¥218 million and unallocated corporate expenses of negative ¥12,191 million. These corporate expenses mainly comprise the Company’s basic research expenses.
- Segment income is adjusted with operating income under the Consolidated Statement of Income
- Adjustments for segment assets amounting to ¥137,847 million include the elimination of intersegment transactions of negative ¥39,170 million and unallocated corporate assets of ¥177,018 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..
- Adjustment of ¥1,481 million for impairment loss reflects an impairment loss related to corporate assets.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

### (Related Information)

#### 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	Other Business	Total
Net sales to outside customers .....	¥378,334	¥64,847	¥172,838	¥93,484	¥46,871	¥756,376

	Thousands of U.S. dollars					
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Other Business	Total
Net sales to outside customers .....	\$2,851,047	\$488,674	\$1,302,472	\$704,476	\$353,210	\$5,699,894

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
Other Business	: 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

Thousands of U.S. dollars						
Japan	United States	China	Europe	Asia	Other Area	Total
\$1,347,204	\$1,240,942	\$678,433	\$1,461,477	\$640,347	\$331,477	\$5,699,894

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

###### (2) Tangible fixed assets

Millions of yen					Thousands of U.S. dollars				
Japan	United States	Thailand	Other Overseas	Total	Japan	United States	Thailand	Other Overseas	Total
¥187,974	¥156,214	¥79,722	¥88,650	¥512,562	\$1,416,534	\$1,177,197	\$600,769	\$668,048	\$3,862,562

##### 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.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

Fiscal 2021 (January 1, 2021 to December 31, 2021)

### 1. Information about products and services

	Millions of yen					Total
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Other Business	
Net sales to outside customers .....	¥301,055	¥60,562	¥142,172	¥84,015	¥41,565	¥629,370

Notes: 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
Other Business	: Engineering business and others

As stated in “Segment Information, 1. Segment overview,” we moved the environmental business from Other Business to Functional Materials from fiscal 2022, and the figures for the fiscal 2021 reflect the changed segments.

### 2. Performance by geographical segment

#### (1) Net sales

Millions of yen						
Japan	United States	China	Europe	Asia	Other Area	Total
¥170,532	¥116,400	¥86,774	¥148,405	¥77,528	¥29,729	¥629,370

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

#### (2) Tangible fixed assets

Millions of yen				
Japan	United States	Thailand	Other Overseas	Total
¥185,489	¥124,469	¥62,640	¥82,667	¥455,266

### 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.



### Information about impairment loss of fixed assets by reporting segment

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

Fiscal 2021: 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 2022:** This information is omitted since similar information is disclosed in the segment information.

Fiscal 2021: This information is omitted since similar information is disclosed in the segment information.

### Information about gain on negative goodwill

**Fiscal 2022:** Not applicable.

Fiscal 2021: Not applicable.

## 21 Related Party Disclosures

**Fiscal 2022:** Not applicable

Fiscal 2021: Not applicable

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2022

### 22 Per Share Information

	Yen		U.S. dollars
	Fiscal 2022	Fiscal 2021	Fiscal 2022
Net assets per share .....	¥1,932.37	¥1,627.84	\$14.56
Basic net income per share.....	161.13	108.32	1.21
Diluted net income per share.....	161.00	108.23	1.21

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 2022	Fiscal 2021	Fiscal 2022
Basic net income per share			
Net income attributable to owners of the parent .....	¥54,307	¥37,262	\$409,246
Amount unallocated to common stock .....	—	—	—
Net income attributable to owners of the parent allocated to common stock.....	54,307	37,262	409,246
Average number of common stock outstanding during the fiscal year (thousand shares) .....	337,050	343,987	337,050
Diluted net income per share			
Adjustment made on net income attributable to owners of the parent.....	—	—	—
Increase of common stocks (thousand shares).....	266	295	266
(New subscription rights to shares (thousand shares)).....	(266)	(295)	(266)
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.....	—	—	—

# Annexed Consolidated Detailed Schedules

Kuraray Co., Ltd. and its consolidated subsidiaries

## 1 Detailed Schedule of Bonds

Company name	Issue	Date of issue	Millions of Yen		Thousands of U.S. dollars	Yield	Security	Date of redemption
			Balance as of January 1, 2022	Balance as of December 31, 2022	Balance as of December 31, 2022			
Kuraray Co., Ltd.	No. 6 Unsecured bonds	April 25, 2018	¥10,000	¥10,000 (¥10,000)	\$75,358 (\$75,358)	0.09%	None	April 25, 2023
	No. 7 Unsecured bonds	April 25, 2018	10,000	10,000	75,358	0.19%	None	April 25, 2025
	No. 8 Unsecured bonds	April 25, 2018	10,000	10,000	75,358	0.31%	None	April 25, 2028
	No. 9 Unsecured bonds	April 30, 2020	10,000	10,000	75,358	0.34%	None	April 30, 2027
	No. 10 Unsecured bonds	April 30, 2020	20,000	20,000	150,716	0.43%	None	April 30, 2030
	No. 11 Unsecured bonds	June 1, 2022	—	10,000	75,358	0.49%	None	June 1, 2032
	Total	—	¥60,000	¥70,000 (¥10,000)	\$527,506 (\$75,358)	—	—	—

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:

(Millions of yen)				
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	Four to five years
\$75,358	—	\$75,358	—	\$75,358

## Annexed Consolidated Detailed Schedules

Kuraray Co., Ltd. and its consolidated subsidiaries

### 2 Detailed Schedule of Loans Payable and Others

Category	Millions of Yen		Thousands of U.S. dollars	Average Interest rate (%)	Due date
	Balance as of January 1, 2022	Balance as of December 31, 2022	Balance as of December 31, 2022		
Short-term borrowings	¥34,480	¥34,480	\$259,834	0.3	—
Current portion of long-term borrowings due within one year	55,013	30,434	229,344	1.0	—
Current portion of lease obligations due within one year <sup>(Note 2)</sup>	487	513	3,866	—	—
Current portion of lease liabilities due within one year <sup>(Note 2, 3)</sup>	3,316	3,814	28,742	—	—
Long-term borrowings (Excluding current portion) <sup>(Note 4)</sup>	157,945	179,491	1,352,607	0.8	From January 2024 to October 2032
Lease obligations (Excluding current portion) <sup>(Notes 2, 4)</sup>	1,133	1,076	8,109	—	From January 2024 to September 2046
Lease liabilities (Excluding current portion) <sup>(Notes 2, 3, 4)</sup>	25,431	27,713	208,839	—	From January 2024 to May 2113
Other interest-bearing debts	—	10,000	75,358	—	—
Commercial papers (Current portion)	—	—	—	—	—
<b>Total</b>	<b>¥277,807</b>	<b>¥287,524</b>	<b>\$2,166,722</b>	<b>—</b>	<b>—</b>

Notes: 1. The average interest rate is calculated based on the interest rate and the ending balance.

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. Overseas subsidiaries and affiliates that apply US GAAP have applied ASC 842 “Leases” from fiscal 2022. Lease liabilities on operating leases that have been recognized due to the application of this accounting standard are included in the current portion of lease liabilities due within one year and in lease liabilities (excluding current portion) and recorded in the balance as of January 1, 2022 and the balance as of December 31, 2022. The impact on the current fiscal year is described in notes on “Changes in Accounting Policies.”

4. 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	(Millions of yen)			
	One to two years	Two to three years	Three to four years	Four to five years
Long-term borrowings	¥24,188	¥16,855	¥30,815	¥15,815
Lease obligations	414	317	181	44
Lease liabilities	3,301	2,797	2,390	2,101

Category	(Thousands of U.S. dollars)			
	One to two years	Two to three years	Three to four years	Four to five years
Long-term borrowings	\$182,276	\$127,016	\$232,216	\$119,179
Lease obligations	3,120	2,389	1,364	332
Lease liabilities	24,876	21,078	18,011	15,833

## Annexed Consolidated Detailed Schedules

Kuraray Co., Ltd. and its consolidated subsidiaries

### 3 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, 2022 and December 31, 2022.

### 4 Quarterly Information in Fiscal 2022

(Millions of yen)				
Accumulated	First quarter from January 1 to March 31, 2022	Second quarter from January 1 to June 30, 2022	Third quarter from January 1 to September 30, 2022	Fiscal 2022
Net sales.....	¥167,558	¥358,040	¥553,150	¥756,376
Income before income taxes.....	19,151	34,645	66,347	77,997
Net income attributable to owners of the parent.....	12,701	24,207	47,174	54,307
Net income per share (Yen).....	37.11	71.32	139.64	161.13

Quarterly	First quarter from January 1 to March 31, 2022	Second quarter from April 1 to June 30, 2022	Third quarter from July 1 to September 30, 2022	Fourth quarter from October 1 to December 31, 2022
Net income per share (Yen).....	¥37.11	¥34.19	¥68.62	¥21.31

(Thousands of U.S. dollars)				
Accumulated	First quarter from January 1 to March 31, 2022	Second quarter from January 1 to June 30, 2022	Third quarter from January 1 to September 30, 2022	Fiscal 2022
Net sales.....	\$1,262,683	\$2,698,116	\$4,168,425	\$5,699,894
Income before income taxes.....	144,318	261,078	499,977	587,769
Net income attributable to owners of the parent.....	95,712	182,419	355,494	409,246
Net income per share (U.S. dollars).....	0.28	0.54	1.05	1.21

Quarterly	First quarter from January 1 to March 31, 2022	Second quarter from April 1 to June 30, 2022	Third quarter from July 1 to September 30, 2022	Fourth quarter from October 1 to December 31, 2022
Net income per share (U.S. dollars).....	\$0.28	\$0.26	\$0.52	\$0.16



## Independent Auditor's Report

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

### Opinion

We have audited the consolidated financial statements of Kuraray Co., Ltd. (the Company) and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at December 31, 2022, and the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements.

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, 2022, 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.



Estimated loss on litigation related to fire incident at U.S. subsidiary	
Key audit matter description	How our audit addressed the key audit matter
<p>Several lawsuits have been filed that more than 160 contract workers and others suffered physical and/or psychological injuries as a result of a fire that occurred at one of the locations in the Company's U.S. subsidiary in May 2018. The Company has reached a settlement with certain plaintiffs to resolve some of these claims. As described in [Notes to Consolidated Financial Statements] (Significant Accounting Estimates), the Company has made accruals for estimates of loss on litigation that is sufficient to cover the damages that are reasonably estimable as of the time of preparation of the consolidated financial statements. Additional losses and expenses recorded in the current fiscal year, in conjunction with settlements with plaintiffs reached during the current fiscal year and related legal fees, are included in ¥1,819 million of loss on litigation of extraordinary losses in the consolidated statements of income. Accruals of the estimated loss on litigation are recorded as a liability in the consolidated balance sheet.</p> <p>In estimating such loss on litigation, the Company makes estimates of probable future losses based on available information regarding the extent of damages related to the fire based on the views of external experts and the Board of Directors' views with respect to the current status of litigation activity and any agreed-upon or pending settlements with counterparties. The estimation requires expert knowledge and subjective judgments by management. The amounts of loss on litigation are material to the consolidated financial statements.</p> <p>Given these factors, we determined that the estimate of loss on litigation for the fire incident at the U.S. subsidiary was a key audit matter.</p>	<p>We performed the following audit procedures over the estimate of loss on litigation for the fire at the U.S. subsidiary:</p> <ul style="list-style-type: none"> <li>· We evaluated the design and tested the operating effectiveness of internal controls related to accounting for and disclosure of loss on litigation.</li> <li>· We inspected the minutes of Board of Directors meetings to understand the policy for litigation and settlement.</li> <li>· We understood and reviewed the reasonableness of the estimation method of loss on litigation by inquiring with management, and inspecting relevant materials.</li> <li>· Regarding the settlement amount for the plaintiffs who agreed in the current consolidated fiscal year, we inspected the agreements with the plaintiffs and vouched payments made.</li> <li>· We compared amounts estimated in the previous fiscal year with the actual settlement amount to confirm any deviations are based on reasonable factors such as new facts being identified which were not known or knowable previously.</li> <li>· With respect to estimates of loss on litigation related to plaintiffs with which the Company has not yet reached a settlement, we considered whether losses expected to occur in the future are able to be reasonably estimated based on available information such as the extent of damages related to the fire incident as well as the change of an accounting estimate from the prior year.</li> <li>· Confirmation procedures were performed with the legal counsel assisting the Company with the legal proceedings and litigation.</li> <li>· We performed subsequent events procedures, including inspection of minutes of meetings of the Board of Directors held subsequent to the balance sheet date, as well as inquiring with management and others to determine if any events have occurred that would bear on the estimate of losses.</li> </ul>



Assessment of whether indicators of impairment exist for goodwill recognized as a result of the acquisition of Calgon Carbon Corporation	
Key audit matter description	How our audit addressed the key audit matter
<p>The goodwill balance of ¥56,058 million (4.6% of consolidated assets) recorded in the consolidated balance sheet for the current fiscal year includes goodwill of ¥40,446 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).</p> <p>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.</p> <p>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.</p> <p>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 higher raw material and fuel costs; these forecasts involve subjective 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 has a material impact on the consolidated financial statements.</p> <p>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.</p>	<p>We performed the following audit procedures over the assessment of whether indicators of impairment for goodwill recognized as a result of the acquisition of Calgon Carbon Corporation:</p> <ul style="list-style-type: none"> <li>· We evaluated the design and tested the operating effectiveness of internal controls related to the assessment of indicators of goodwill impairment.</li> <li>· 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.</li> <li>· We performed the following audit procedures to evaluate the reasonableness of Calgon Carbon Corporation's business plan. <ul style="list-style-type: none"> <li>- 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.</li> <li>- We examined the consistency by comparing the increase in sales in the activated carbon market forecasted with third-party market research.</li> <li>- 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.</li> <li>- We obtained the rationale for estimates in the business plan by discussing the impact of rising raw material and fuel prices with management and others, comparing them with market forecasts and available external data, and analysing trends in historical performance.</li> </ul> </li> </ul>





### **Other Information**

The other information comprises the information included in the Financial Section of Kuraray report, but does not include the consolidated financial statements and our auditor's report thereon. Management is responsible for the other information. In addition, those charged with governance are responsible for overseeing the Group's reporting process of 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 Those Charged with Governance 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.

Those charged with governance are responsible for overseeing 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 those charged with governance 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 those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, 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.

### **Convenience translation**

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



**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.

Hiroyuki Kawase  
Designated Engagement Partner  
Certified Public Accountant

Kazuaki Sekine  
Designated Engagement Partner  
Certified Public Accountant

PricewaterhouseCoopers Aarata LLC

April 14, 2023

Notes to the Reader of Independent Auditor's Report:

This is a copy of the Independent Auditor's Report and the original report is kept separately by the Company.