

# Kuraray Report 2020 **Financial Section**

For the year ended December 31, 2019

## Business Environment

In the fiscal year ended December 31, 2019 (“fiscal 2019”), the prolonged trade war between the United States and China and emerging geopolitical risks across the globe fostered a stronger sense of uncertainty with each passing period. Due to these factors, a clear decelerating trend emerged in the world economy. Consequently, consolidated operating results for fiscal 2019 are as follows: net sales decreased by ¥27,188 million, or 4.5%, compared with the previous fiscal year to ¥575,807 million; operating income fell by ¥11,620 million, or 17.7%, to ¥54,173 million; ordinary income decreased by ¥12,896 million, or 21.1%, to ¥48,271 million; and net loss attributable to owners of the parent totaled

¥1,956 million (compared with net income attributable to owners of the parent of ¥33,560 million in the previous fiscal year). In fiscal 2019, Kuraray has recognized a loss of ¥50,590 million, including a settlement in connection with a fire in May 2018 at a group subsidiary in the United States. Based on a reasonable estimate of damages, the settlement was paid to the plaintiffs and, along with other expenses, has been classified as an extraordinary loss.

Kuraray also recognized insurance income totaling ¥10,360 million as part of extraordinary income.

## Sales

(Billions of yen, rounded to the nearest hundred million)			
	Fiscal 2019	Fiscal 2018	Change
Net Sales	¥575.8	¥603.0	-27.2
Operating Income	54.2	65.8	-11.6
Ordinary Income	48.3	61.2	-12.9
Net Income Attributable to Owners of the Parent	(2.0)	33.6	-35.6

The Kuraray Group launched the medium-term management plan “PROUD 2020” from fiscal 2018. In fiscal 2020, the final year of the plan, the Group aims to achieve its long-term vision of becoming a “Specialty Chemical Company, growing sustainably by incorporating new foundational platforms into its own technologies.” We will steadily take specific measures related to the key management strategies underlined in the plan. We will also continue working to establish a new business portfolio from a

medium- to long-term perspective.

In addition, Kuraray has adopted ASBJ Statement No. 28 Partial Amendments to Accounting Standard for Tax Effect Accounting (issued February 16, 2018) from January 1, 2019. Regarding the Company’s financial position, these accounting standards have been retroactively applied to the numbers used for comparison and analysis with the previous fiscal year.

## Results by Business Segment

(Billions of yen, rounded to the nearest hundred million)				
	Net Sales		Operating Income	
	Fiscal 2019	Fiscal 2018	Fiscal 2019	Fiscal 2018
Vinyl Acetate	¥266.1	¥279.4	¥47.4	¥54.7
Isoprene	53.3	57.2	4.2	7.3
Functional Materials	126.0	131.5	3.8	4.4
Fibers and Textiles	64.5	64.7	5.7	6.3
Trading	130.9	138.8	4.2	4.2
Other Business	51.1	58.0	0.6	1.2
Elimination & Corporate	(116.1)	(126.7)	(11.8)	(12.3)
Total	¥575.8	¥603.0	¥54.2	¥65.8

### Vinyl Acetate

Sales in this segment decreased by 4.8% year on year to ¥266,105 million, and segment income fell by 13.5% year on year to ¥47,368 million.

(1) The sales volume of PVA resin declined due to decelerating economic conditions. Shipments of optical-use PVA film decreased due to an LCD panel inventory adjustment. We completed an expansion of

facilities at the Kurashiki Plant in the fourth quarter. In addition, the performance of PVB film for automotive use struggled despite growing demand for ionomer interlayer for glass lamination SentryGlas™ for construction use. However, sales of water-soluble PVA film expanded for use in unit dose detergent packets.

- (2) Sales of EVAL™ ethylene vinyl alcohol copolymer (EVOH resin) for gas tank applications was affected by the decline in the production number of vehicles. The sales volume for food packaging applications declined despite a gradual recovery in sales from the third quarter onward.

## Isoprene

Sales in this segment decreased by 6.9% year on year to ¥53,276 million, and segment income fell by 41.8% year on year to ¥4,232 million.

- (1) The sales volume of SEPTON™ thermoplastic elastomer declined due to economic deceleration.
- (2) The sales of GENESTAR™ heat-resistant polyamide resin fell due to sluggish demand for electric and electronic devices. However, demand for connectors for automotive devices grew.

## Functional Materials

Sales in this segment decreased by 4.2% year on year to ¥125,982 million, and segment income decreased by 12.7% year on year to ¥3,836 million.

- (1) The methacrylate business was affected by worsening market conditions, which, in turn, caused sales of methacrylic resins to decrease.
- (2) In the medical business, sales were steady, especially for esthetic and restorative dentistry products.
- (3) As for Calgon Carbon, demand held steady in North America, whereas results in Europe were sluggish due to stagnant demand. In the Carbon Materials business, sales of high value-added products increased.

## Fibers and Textiles

Sales in this segment edged down by 0.3% year on year to ¥64,513 million while segment income fell by 9.9% year on year to ¥5,654 million.

- (1) Sales of CLARINO™ man-made leather for luxury product applications remained stable. However, results struggled for use in shoes.
- (2) In fibers and industrial materials, the performance of KURALON™ for cement reinforcement use remained weak. Sales of products used in reinforcing rubber were negatively affected by a decline in vehicle production. However, the results of VECTRAN™ were firm, mainly for exports.
- (3) In consumer goods and materials, sales of KURAFLEX™ for commodity use decreased, however, sales of high-value-added products increased.

## Trading

In fiber-related businesses, sales of sewn products remained firm, including sportswear-use products, and exports of functional fiber and yarn increased. However, exports of resins and chemicals struggled, especially those to China. As a result, segment sales decreased by 5.7% year on year to ¥130,911 million, and segment income rose by 0.2% to ¥4,224 million.

## Other Business

In other businesses, due to weak sales of domestic affiliates, segment sales declined by 11.9% year on year to ¥51,128 million, and segment income fell by 44.9% to ¥649 million.

## Outlook for the Fiscal Year Ending December 31, 2020

In the next year, the global economy is expected to see an increase in risks around the world due mainly to volatility in raw material and fuel costs accompanying the changing situation in the Middle East as well as the continued protectionist policies of the United States and the outcome of the presidential election. This is despite the fact that the European and Chinese economies expected to bottom out with the affirmation of BREXIT and an initial trade deal between the United States and China. Based on these circumstances, the forecast of operating results for fiscal

2020 is as shown below. The impact of the novel coronavirus, which is continuing to spread, has not been taken into account in the forecast. Furthermore, although we recorded an extraordinary loss in fiscal 2019 related to the litigation over the fire at the U.S. subsidiary, potential losses that may be incurred going forward have not been included because it is difficult to reasonably estimate their specific amounts. We will continue working toward a quick resolution.

(Billions of yen, rounded to the nearest hundred million)			
	Fiscal 2019	Forecast for Fiscal 2020	Change
Net Sales .....	¥575.8	¥590.0	+2.5%
Operating Income .....	54.2	60.0	+10.8%
Ordinary Income .....	48.3	56.0	+16.0%
Net Income Attributable to Owners of the Parent .....	(2.0)	35.0	—

For the forecast of operating results for fiscal 2020, we assume average exchange rates of ¥105 to the U.S. dollar and ¥120 to the euro, as well as a domestic naphtha price of ¥43,000 per kiloliter.

[Reference] Forecast of Results by Segment for Fiscal 2020

(Billions of yen, rounded to the nearest hundred million)				
	Net Sales		Operating Income	
	Fiscal 2019	Forecast for Fiscal 2020	Fiscal 2019	Forecast for Fiscal 2020
Vinyl Acetate .....	¥266.1	¥278.0	¥47.4	¥50.5
Isoprene .....	53.3	55.0	4.2	5.0
Functional Materials .....	126.0	131.0	3.8	5.0
Fibers and Textiles .....	64.5	67.0	5.7	6.0
Trading .....	130.9	135.0	4.2	4.5
Other Business .....	51.1	51.0	0.6	1.0
Elimination & Corporate .....	(116.1)	(127.0)	(11.8)	(12.0)
Total .....	¥575.8	¥590.0	¥54.2	¥60.0

# Consolidated Balance Sheet

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2019

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019 (December 31, 2019)	Fiscal 2018 (December 31, 2018)	Fiscal 2019 (December 31, 2019)
<b>ASSETS</b>			
<b>I Current assets:</b>			
1 Cash and deposits .....	¥ 72,014	¥ 67,022	\$ 657,302
2 Notes and accounts receivable—trade*8 .....	121,166	128,107	1,105,933
3 Short-term investment securities .....	33,341	32,921	304,317
4 Merchandise and finished goods .....	101,628	101,081	927,601
5 Work-in-process .....	15,679	15,221	143,109
6 Raw materials and supplies .....	34,696	36,667	316,685
7 Other .....	16,661	14,315	152,072
8 Allowance for doubtful accounts .....	(455)	(426)	(4,153)
<b>Total current assets .....</b>	<b>394,732</b>	<b>394,910</b>	<b>3,602,884</b>
<b>II Noncurrent assets:</b>			
<b>1 Tangible fixed assets:</b>			
(1) Buildings and structures, net*2 and 7 .....	79,629	74,182	726,807
(2) Machinery, equipment and vehicles, net*2 .....	205,974	204,215	1,880,011
(3) Land*2 and 7 .....	22,062	22,707	201,369
(4) Construction in progress .....	82,071	49,468	749,096
(5) Other, net*2 .....	25,055	6,837	228,687
<b>Total tangible fixed assets*1 .....</b>	<b>414,793</b>	<b>357,411</b>	<b>3,785,989</b>
<b>2 Intangible fixed assets:</b>			
(1) Goodwill .....	61,357	66,485	560,031
(2) Customer-related assets .....	33,062	36,263	301,771
(3) Other .....	35,514	41,400	324,151
<b>Total intangible fixed assets .....</b>	<b>129,934</b>	<b>144,150</b>	<b>1,185,962</b>
<b>3 Investments and other assets:</b>			
(1) Investment securities*3 and 7 .....	28,770	29,509	262,596
(2) Long-term loans receivable .....	189	218	1,725
(3) Net defined benefit assets .....	1,977	1,101	18,045
(4) Deferred tax assets .....	13,506	12,993	123,275
(5) Other .....	7,272	6,840	66,375
(6) Allowance for doubtful accounts .....	(28)	(40)	(256)
<b>Total investments and other assets .....</b>	<b>51,688</b>	<b>50,622</b>	<b>471,778</b>
<b>Total noncurrent assets .....</b>	<b>596,416</b>	<b>552,184</b>	<b>5,443,739</b>
<b>TOTAL ASSETS .....</b>	<b>¥ 991,149</b>	<b>¥ 947,095</b>	<b>\$9,046,632</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, 2019

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019 (December 31, 2019)	Fiscal 2018 (December 31, 2018)	Fiscal 2019 (December 31, 2019)
<b>LIABILITIES</b>			
<b>I Current liabilities:</b>			
1 Notes and accounts payable—trade <sup>*8</sup> .....	¥ 39,883	¥ 45,408	\$ 364,029
2 Short-term loans payable <sup>*7</sup> .....	34,864	46,540	318,218
3 Commercial paper .....	24,000	—	219,058
4 Accrued expenses .....	50,491	12,201	460,853
5 Income taxes payable .....	4,307	8,474	39,312
6 Provision for bonuses .....	6,578	6,681	60,040
7 Other provisions .....	226	266	2,063
8 Other <sup>*8</sup> .....	41,317	25,212	377,118
<b>Total current liabilities</b> .....	<b>201,670</b>	<b>144,785</b>	<b>1,840,727</b>
<b>II Noncurrent liabilities:</b>			
1 Bonds payable .....	50,000	50,000	456,371
2 Long-term loans payable .....	128,001	120,049	1,168,319
3 Deferred tax liabilities .....	13,743	24,951	125,438
4 Provision for directors' retirement benefits .....	347	237	3,167
5 Provision for environmental measures .....	3,692	5,716	33,698
6 Net defined benefit liabilities .....	22,203	18,065	202,656
7 Asset retirement obligations .....	4,671	5,070	42,634
8 Other .....	28,273	11,185	258,060
<b>Total noncurrent liabilities</b> .....	<b>250,933</b>	<b>235,276</b>	<b>2,290,371</b>
<b>TOTAL LIABILITIES</b> .....	<b>452,604</b>	<b>380,062</b>	<b>4,131,106</b>
<b>NET ASSETS</b>			
<b>I Shareholders' equity:</b>			
1 Capital stock .....	88,955	88,955	811,930
2 Capital surplus .....	87,197	87,207	795,884
3 Retained earnings .....	348,289	364,841	3,178,980
4 Treasury stock .....	(16,286)	(9,746)	(148,649)
<b>Total shareholders' equity</b> .....	<b>508,156</b>	<b>531,257</b>	<b>4,638,153</b>
<b>II Accumulated other comprehensive income:</b>			
1 Valuation difference on available-for-sale securities .....	7,922	7,822	72,307
2 Deferred gains or losses on hedges .....	(263)	1	(2,401)
3 Foreign currency translation adjustment .....	14,575	20,382	133,032
4 Remeasurements of defined benefit plans .....	(5,238)	(4,025)	(47,809)
<b>Total accumulated other comprehensive income</b> .....	<b>16,995</b>	<b>24,181</b>	<b>155,120</b>
<b>III Subscription rights to shares</b> .....	<b>663</b>	<b>587</b>	<b>6,051</b>
<b>IV Noncontrolling interests</b> .....	<b>12,729</b>	<b>11,007</b>	<b>116,183</b>
<b>TOTAL NET ASSETS</b> .....	<b>538,545</b>	<b>567,033</b>	<b>4,915,526</b>
<b>TOTAL LIABILITIES AND NET ASSETS</b> .....	<b>¥ 991,149</b>	<b>¥ 947,095</b>	<b>\$ 9,046,632</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, 2019

Consolidated Statement of Income		Millions of yen		Thousands of U.S. dollars
		Fiscal 2019 (January 1, 2019 to December 31, 2019)	Fiscal 2018 (January 1, 2018 to December 31, 2018)	Fiscal 2019 (January 1, 2019 to December 31, 2019)
<b>I</b>	<b>Net sales</b> .....	¥ 575,807	¥ 602,996	\$ 5,255,632
<b>II</b>	<b>Cost of sales</b> <sup>*2</sup> .....	395,125	410,453	3,606,471
	Gross profit .....	180,682	192,542	1,649,160
<b>III</b>	<b>Selling, general and administrative expenses:</b>			
	1 Selling expenses .....	33,658	34,150	307,211
	2 General and administrative expenses <sup>*2</sup> .....	92,850	92,598	847,481
	<b>Total selling, general and administrative expenses</b> <sup>*1</sup> .....	126,508	126,748	1,154,691
	<b>Operating income</b> .....	54,173	65,794	494,460
<b>IV</b>	<b>Non-operating income:</b>			
	1 Interest income .....	346	388	3,158
	2 Dividend income .....	660	1,382	6,024
	3 Equity in earnings of affiliates .....	361	333	3,295
	4 Other .....	1,551	1,678	14,157
	<b>Total non-operating income</b> .....	2,919	3,783	26,643
<b>V</b>	<b>Non-operating expenses:</b>			
	1 Interest expenses .....	1,398	1,280	12,760
	2 Foreign exchange losses .....	2,090	2,139	19,076
	3 Loss on disposal of tangible fixed assets .....	1,012	1,038	9,237
	4 Other .....	4,320	3,951	39,430
	<b>Total non-operating expenses</b> .....	8,822	8,409	80,522
	<b>Ordinary income</b> .....	48,271	61,167	440,590
<b>VI</b>	<b>Extraordinary income:</b>			
	1 Insurance income <sup>*3</sup> .....	11,374	—	103,815
	2 Gain on sale of investment securities .....	1,723	—	15,727
	3 Reversal of provision for environmental measures .....	1,009	—	9,210
	4 Compensation income .....	—	336	—
	<b>Total extraordinary income</b> .....	14,107	336	128,760
<b>VII</b>	<b>Extraordinary loss:</b>			
	1 Loss on litigation <sup>*5</sup> .....	50,590	—	461,756
	2 Impairment loss <sup>*4</sup> .....	3,668	6,662	33,479
	3 Loss on disposal of tangible fixed assets <sup>*6</sup> .....	1,397	657	12,751
	4 Loss on liquidation of subsidiaries and associates <sup>*7</sup> .....	1,242	—	11,336
	5 Loss on disaster <sup>*8</sup> .....	1,003	1,877	9,155
	6 Loss on valuation of investment securities .....	860	—	7,850
	7 Costs related to the suspension of operations <sup>*9</sup> .....	722	1,224	6,590
	8 Acquisition related expenses .....	—	1,039	—
	<b>Total extraordinary loss</b> .....	59,484	11,461	542,935
	<b>Income before income taxes</b> .....	2,893	50,041	26,406
	Income taxes—current .....	15,054	19,361	137,404
	Income taxes—deferred .....	(11,243)	(3,919)	(102,620)
	<b>Total income taxes</b> .....	3,810	15,441	34,775
	<b>Net income (loss)</b> .....	(916)	34,599	(8,361)
	<b>Net income attributable to noncontrolling interests</b> .....	1,039	1,038	9,483
	<b>Net income (loss) attributable to owners of the parent</b> .....	¥ (1,956)	¥ 33,560	\$ (17,853)

# Consolidated Statement of Income and Consolidated Statement of Comprehensive Income |

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2019

## Consolidated Statement of Comprehensive Income

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019 (January 1, 2019 to December 31, 2019)	Fiscal 2018 (January 1, 2018 to December 31, 2018)	Fiscal 2019 (January 1, 2019 to December 31, 2019)
<b>I Net income (loss)</b> .....	¥ (916)	¥ 34,599	\$ (8,361)
<b>II Other comprehensive income:</b>			
1 Valuation difference on available-for-sale securities .....	100	(5,186)	913
2 Deferred gains or losses on hedges .....	(445)	604	(4,062)
3 Foreign currency translation adjustment .....	(5,661)	(13,544)	(51,670)
4 Remeasurements of defined benefit plans .....	(1,213)	(188)	(11,072)
<b>Total other comprehensive income</b> <sup>*1</sup> .....	(7,220)	(18,314)	(65,900)
<b>III Comprehensive income</b> .....	(8,137)	16,285	(74,270)
<b>Comprehensive income attributable to</b>			
1 Owners of the parent .....	(9,142)	15,247	(83,443)
2 Noncontrolling interests .....	1,004	1,037	9,164

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, 2019

	Millions of yen				
	Shareholders' equity				
	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
<b>Fiscal 2019</b> (January 1, 2019 to December 31, 2019)					
<b>Balance at January 1, 2019</b> .....	¥88,955	¥87,207	¥364,841	¥ (9,746)	¥531,257
Changes of items during the period					
Cash dividends .....			(14,595)		(14,595)
Net loss attributable to owners of the parent .....			(1,956)		(1,956)
Purchase of treasury stock .....				(6,617)	(6,617)
Disposal of treasury stock .....		(9)		78	68
Other .....		(0)			(0)
Net changes of items other than shareholders' equity .....					—
<b>Total changes of items during the period</b> .....	—	(9)	(16,551)	(6,539)	(23,101)
<b>Balance at December 31, 2019</b> .....	¥88,955	¥87,197	¥348,289	¥(16,286)	¥508,156

	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, 2019</b> .....	¥7,822	¥ 1	¥ 20,382	¥(4,025)	¥24,181	¥587	¥11,007	¥567,033
Changes of items during the period								
Cash dividends .....					—			(14,595)
Net loss attributable to owners of the parent .....					—			(1,956)
Purchase of treasury stock ...					—			(6,617)
Disposal of treasury stock ...					—			68
Other .....					—			(0)
Net changes of items other than shareholders' equity....	99	(265)	(5,806)	(1,213)	(7,185)	76	1,722	(5,386)
<b>Total changes of items during the period</b> .....	99	(265)	(5,806)	(1,213)	(7,185)	76	1,722	(28,488)
<b>Balance at December 31, 2019</b> ....	¥7,922	¥(263)	¥14,575	¥(5,238)	¥16,995	¥663	¥12,729	¥538,545

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, 2019

	Thousands of U.S. dollars				
	Shareholders' equity				
	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
<b>Fiscal 2019</b> (January 1, 2019 to December 31, 2019)					
<b>Balance at January 1, 2019</b> .....	<b>\$ 811,930</b>	<b>\$ 795,975</b>	<b>\$ 3,330,057</b>	<b>\$ (88,956)</b>	<b>\$ 4,849,005</b>
Changes of items during the period					
Cash dividends .....			(133,215)		(133,215)
Net loss attributable to owners of the parent .....			(17,853)		(17,853)
Purchase of treasury stock .....				(60,396)	(60,396)
Disposal of treasury stock .....		(82)		712	621
Other .....		(0)			(0)
Net changes of items other than shareholders' equity .....					—
<b>Total changes of items during the period</b> .....	<b>—</b>	<b>(82)</b>	<b>(151,068)</b>	<b>(59,684)</b>	<b>(210,853)</b>
<b>Balance at December 31, 2019</b> .....	<b>\$ 811,930</b>	<b>\$ 795,884</b>	<b>\$ 3,178,980</b>	<b>\$ (148,649)</b>	<b>\$ 4,638,153</b>

	Thousands of U.S. dollars							
	Accumulated other comprehensive income							
	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Subscription rights to shares	Noncontrolling interests	Total net assets
<b>Balance at January 1, 2019</b> .....	<b>\$ 71,395</b>	<b>\$ 9</b>	<b>\$ 186,035</b>	<b>\$ (36,738)</b>	<b>\$ 220,710</b>	<b>\$ 5,358</b>	<b>\$ 100,465</b>	<b>\$ 5,175,548</b>
Changes of items during the period								
Cash dividends .....					—			(133,215)
Net loss attributable to owners of the parent .....					—			(17,853)
Purchase of treasury stock .....					—			(60,396)
Disposal of treasury stock .....					—			621
Other .....					—			(0)
Net changes of items other than shareholders' equity .....	904	(2,419)	(52,994)	(11,072)	(65,581)	694	15,717	(49,160)
<b>Total changes of items during the period</b> .....	<b>904</b>	<b>(2,419)</b>	<b>(52,994)</b>	<b>(11,072)</b>	<b>(65,581)</b>	<b>694</b>	<b>15,717</b>	<b>(260,022)</b>
<b>Balance at December 31, 2019</b> .....	<b>\$ 72,307</b>	<b>\$ (2,401)</b>	<b>\$ 133,032</b>	<b>\$ (47,809)</b>	<b>\$ 155,120</b>	<b>\$ 6,051</b>	<b>\$ 116,183</b>	<b>\$ 4,915,526</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, 2019

	Millions of yen				
	Shareholders' equity				
	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
<b>Fiscal 2018</b> (January 1, 2018 to December 31, 2018)					
<b>Balance at January 1, 2018</b> .....	¥ 88,955	¥ 87,219	¥ 344,653	¥ (6,110)	¥ 514,718
Changes of items during the period					
Cash dividends .....			(14,691)		(14,691)
Net income attributable to owners of the parent .....			33,560		33,560
Changes resulting from newly consolidated subsidiaries .....			14		14
Changes in scope of equity method .....			1,303		1,303
Purchase of treasury stock .....				(3,735)	(3,735)
Disposal of treasury stock .....		(12)		98	86
Other .....		(0)			(0)
Net changes of items other than shareholders' equity .....					—
<b>Total changes of items during the period</b> .....	—	(12)	20,187	(3,636)	16,539
<b>Balance at December 31, 2018</b> .....	¥ 88,955	¥ 87,207	¥ 364,841	¥ (9,746)	¥ 531,257

	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, 2018</b> .....	¥ 13,007	¥ (603)	¥ 33,681	¥ (3,836)	¥ 42,248	¥ 539	¥ 7,980	¥ 565,487
Changes of items during the period								
Cash dividends .....					—			(14,691)
Net income attributable to owners of the parent .....					—			33,560
Changes resulting from newly consolidated subsidiaries .....					—			14
Changes in scope of equity method .....					—			1,303
Purchase of treasury stock .....					—			(3,735)
Disposal of treasury stock .....					—			86
Other .....					—			(0)
Net changes of items other than shareholders' equity .....	(5,184)	604	(13,299)	(188)	(18,067)	47	3,026	(14,993)
<b>Total changes of items during the period</b> .....	(5,184)	604	(13,299)	(188)	(18,067)	47	3,026	1,545
<b>Balance at December 31, 2018</b> ....	¥ 7,822	¥ 1	¥ 20,382	¥ (4,025)	¥ 24,181	¥ 587	¥ 11,007	¥ 567,033

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, 2019

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019 (January 1, 2019 to December 31, 2019)	Fiscal 2018 (January 1, 2018 to December 31, 2018)	Fiscal 2019 (January 1, 2019 to December 31, 2019)
<b>I Net cash provided by (used in) operating activities:</b>			
1 Income before income taxes .....	¥ 2,893	¥ 50,041	\$ 26,406
2 Depreciation and amortization .....	58,158	56,698	530,832
3 Increase (decrease) in allowance for doubtful accounts .....	22	(207)	201
4 Insurance income .....	(11,374)	—	(103,815)
5 Loss (gain) on sale of investment securities .....	(1,723)	—	(15,727)
6 Loss on litigation .....	50,590	—	461,756
7 Impairment loss .....	3,668	6,662	33,479
8 Loss on disposal of tangible fixed assets .....	1,397	657	12,751
9 Loss (gain) on valuation of investment securities .....	860	—	7,850
10 Foreign exchange losses (gains) .....	513	704	4,682
11 Interest and dividends income .....	(1,006)	(1,771)	(9,182)
12 Interest expenses .....	1,398	1,280	12,760
13 Decrease (increase) in notes and accounts receivable—trade .....	5,724	(1,001)	52,245
14 Decrease (increase) in inventories .....	(781)	(9,096)	(7,129)
15 Increase (decrease) in notes and accounts payable—trade .....	(5,182)	(2,082)	(47,298)
16 Increase (decrease) in provision for bonuses .....	(76)	181	(694)
17 Increase (decrease) in net defined benefit liabilities .....	2,201	(737)	20,089
18 Decrease (increase) in net defined benefit assets .....	(524)	(259)	(4,783)
19 Other, net .....	8,183	(4,831)	74,690
<b>Subtotal .....</b>	<b>114,943</b>	<b>96,238</b>	<b>1,049,133</b>
20 Interest and dividends income received .....	1,158	1,936	10,570
21 Interest expenses paid .....	(1,396)	(1,199)	(12,742)
22 Income taxes (paid) refund .....	(19,308)	(21,804)	(176,232)
23 Proceeds from insurance income .....	11,374	—	103,815
24 Payments for loss on litigation .....	(11,195)	—	(102,181)
<b>Net cash provided by (used in) operating activities .....</b>	<b>95,577</b>	<b>75,171</b>	<b>872,371</b>
<b>II Net cash provided by (used in) investment activities:</b>			
1 Net decrease (increase) in time deposits .....	(4,984)	1,709	(45,491)
2 Net decrease (increase) in short-term investment securities .....	4,176	(1,345)	38,116
3 Purchase of investment securities .....	(956)	(150)	(8,726)
4 Proceeds from sales and redemption of investment securities .....	2,658	625	24,261
5 Purchase of tangible fixed assets and intangible fixed assets .....	(87,105)	(65,957)	(795,044)
6 Payments for disposal of tangible fixed assets and intangible fixed assets .....	(1,838)	(1,525)	(16,776)
7 Proceeds from sales of tangible fixed assets and intangible fixed assets .....	587	99	5,358
8 Purchase of stocks of subsidiaries resulting in change in scope of consolidation <sup>72</sup> .....	—	(119,814)	—
9 Payments for sales of shares of subsidiaries resulting in change in scope of consolidation .....	(134)	—	(1,223)
10 Other, net .....	(1,773)	(624)	(16,183)
<b>Net cash provided by (used in) investment activities .....</b>	<b>(89,369)</b>	<b>(186,982)</b>	<b>(815,708)</b>

## Consolidated Statement of Cash Flows

Kuraray Co., Ltd. and its consolidated subsidiaries / Year ended December 31, 2019

		Millions of yen		Thousands of U.S. dollars
		Fiscal 2019 (January 1, 2019 to December 31, 2019)	Fiscal 2018 (January 1, 2018 to December 31, 2018)	Fiscal 2019 (January 1, 2019 to December 31, 2019)
<b>III</b>	<b>Net cash provided by (used in) financing activities:</b>			
	1 Net increase (decrease) in short-term loans payable .....	490	26,715	4,472
	2 Net increase (decrease) in commercial paper .....	24,000	—	219,058
	3 Proceeds from long-term loans payable .....	7,744	90,000	70,683
	4 Repayment of long-term loans payable .....	(12,050)	(25,860)	(109,985)
	5 Proceeds from issuance of bonds .....	—	40,000	—
	6 Purchase of treasury stock .....	(6,617)	(3,735)	(60,396)
	7 Proceeds from sales of treasury stock .....	55	59	502
	8 Cash dividends paid .....	(14,595)	(14,691)	(133,215)
	9 Proceeds from stock issuance to noncontrolling interests .....	1,017	2,254	9,283
	10 Cash dividends paid to noncontrolling interests .....	(300)	(265)	(2,738)
	11 Other, net .....	(1,260)	(388)	(11,501)
	<b>Net cash provided by (used in) financing activities .....</b>	<b>(1,517)</b>	<b>114,088</b>	<b>(13,846)</b>
<b>IV</b>	<b>Effect of exchange rate changes on cash and cash equivalents .....</b>	<b>(70)</b>	<b>(1,210)</b>	<b>(639)</b>
<b>V</b>	<b>Net increase (decrease) in cash and cash equivalents .....</b>	<b>4,620</b>	<b>1,065</b>	<b>42,169</b>
<b>VI</b>	<b>Cash and cash equivalents, beginning of year .....</b>	<b>71,345</b>	<b>70,234</b>	<b>651,196</b>
<b>VII</b>	<b>Increase in cash and cash equivalents from newly consolidated subsidiaries ...</b>	<b>1</b>	<b>45</b>	<b>9</b>
<b>VIII</b>	<b>Cash and cash equivalents, end of year*1 .....</b>	<b>¥ 75,967</b>	<b>¥ 71,345</b>	<b>\$ 693,383</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. (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 ¥110 = \$1, the approximate exchange rate prevailing on December 31, 2019. 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 2019	Fiscal 2018
Number of consolidated subsidiaries	77	77

#### (Major consolidated subsidiaries)

KURARAY TRADING Co., LTD., Kuraray Plastics Co., Ltd., KURARAY ENGINEERING CO., LTD., Kuraray Techno Co., Ltd., KURARAYKURAFLEX CO., LTD., KURARAY AQUA CO., LTD., TECHNO SOFT CO., LTD., Kuraray Travel Service Corporation, KURARAY SAIJO CO., LTD., KURARAY TAMASHIMA COMPANY, LIMITED, 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. and 44 other consolidated subsidiaries.

In the fiscal year ended December 31, 2019 (fiscal 2019), Kuraray Okayama Spinning Co., Ltd., which previously was an equity method affiliate, was removed from the scope of application of equity method and added to the scope of consolidation due to its increased significance.

In the fiscal 2019, the Company transferred all shares of its consolidated subsidiary Kuraray Chemical (Ningxia) Environmental Industry Co., Ltd., which was removed from the scope of consolidation.

#### (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 unconsolidated subsidiaries accounted for using the equity method

	Fiscal 2019	Fiscal 2018
Number of unconsolidated subsidiaries accounted for using the equity method	0	1

In the fiscal 2019, Kuraray Okayama Spinning Co., Ltd., which previously was an equity method affiliate, was removed from the scope of application of equity method and added to the scope of consolidation due to its increased significance.

- (2) Number of affiliates accounted for using the equity method

	Fiscal 2019	Fiscal 2018
Number of affiliates accounted for using the equity method	2	2

(Name of major unconsolidated subsidiaries, etc.)

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

- (3) 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 for which a market price is available 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.) Other securities for which a market price is not available 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..... 31 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

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

Depreciation is primarily computed using the straight-line method based on the shorter of the useful lives of assets and lease terms.

As described later in the Changes in Accounting Policies section, some overseas affiliates prepare their financial statements based on International Financial Reporting Standards, and they have applied IFRS 16 “Leases” from fiscal 2019. As a result, in principle, all leases for a borrower are recognized as assets and liabilities on 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, 2019.

### 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) 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 loans Future transactions in foreign currency
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.

## (6) 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.

## (7) 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.

## (8) Other accounting policies

Accounting for consumption tax

Consumption tax and local consumption tax on goods and services are not included in the revenue and expenses amounts.

## 2 Changes in Accounting Policies

### Changes in accounting policies following revisions to accounting standards

Since fiscal 2019, the Company has applied IFRS 16 "Leases" for some overseas affiliates. Accordingly, regarding operating leases (borrower) covered by IAS No. 17, the Company recognizes right-of-use assets and lease liabilities on the date of adoption. Regarding the adoption of this accounting standard, the Group adopted a method regarded as a transitory measure whereby the cumulative effect is recognized on the date of adoption.

As a result, in the fiscal 2019 consolidated balance sheet,

under tangible fixed assets, other increased ¥17,920 million (US\$163,563 thousand); under current liabilities, other increased ¥1,161 million (US\$10,597 thousand); and, under noncurrent liabilities, other increased ¥17,025 million (US\$155,394 thousand).

The effect of this change on fiscal 2019 profit (loss) and per share information is minor.

In addition, in the Consolidated Statement of Cash Flows, cash provided by operating activities increased ¥884 million (US\$8,069 thousand), and cash provided by (used in) financing activities declined by the same amount.

## 3 Accounting Standards Issued but Not Yet Applied

### The Company and its domestic subsidiaries and affiliates

- “Accounting Standard for Revenue Recognition” (ASBJ Statement No. 29, March 30, 2018)

- “Implementation Guidance on Accounting Standard for Revenue Recognition” (ASBJ Guidance No. 30, March 30, 2018)

#### (1) Outline

These are comprehensive accounting standards for revenue recognition. Revenue is recognized by applying the following five steps:

Step 1: Identify the contract with a customer.

Step 2: Identify the performance obligations in the contract.

Step 3: Determine the transaction price.

Step 4: Allocate the transaction price to the performance obligations in the contract.

Step 5: Recognize revenue when or immediately after the entity satisfies each performance obligation.

#### (2) Expected Application Date

The timing of introduction is currently under consideration.

#### (3) Effect of Applying the Accounting Standard

The impact is being evaluated at the time of preparation of these consolidated financial statements.

- “Accounting Standard for Fair Value Measurement” (ASBJ Statement No. 30, July 4, 2019)
- “Implementation Guidance on Accounting Standard for Fair Value Measurement” (ASBJ Guidance No. 31, July 4, 2019)
- “Accounting Standard for Measurement of Inventories” (ASBJ Statement No. 9, July 4, 2019)
- “Accounting Standard for Financial Instruments” (ASBJ Statement No. 10, July 4, 2019)

#### (1) Outline

In order to improve the comparability between the international accounting standards and Japanese accounting standards, ASBJ has developed the “Accounting Standard for Fair Value Measurement” and the “Implementation Guidance on Accounting Standard for Fair Value Measurement” (hereinafter “Fair Value Measurement Accounting Standard, etc.”), and has prescribed the guidance, etc. on the method of fair value measurement. The Fair Value Measurement Accounting Standard, etc. is applied to the fair values of the following items:

- Financial instruments in the “Accounting Standard for Financial Instruments”
- Inventories held for trading purposes in the “Accounting Standard for Measurement of Inventories”

#### (2) Expected Application Date

The timing of introduction is currently under consideration.

#### (3) Effect of Applying the Accounting Standard

The impact is being evaluated at the time of preparation of these consolidated financial statements.

### Overseas subsidiaries and affiliates

Newly established or amended major accounting standards that were announced before December 31, 2019 and not applied, are as follows. The impact on the consolidated financial statements from the application of these accounting standards, etc. is being evaluated at the time of preparation of these consolidated financial statements.

Name of accounting standard	Outline	Expected application date
“Leases” (FASB ASU 2016-02)	Revised accounting treatments of lease accounting	To be applied from the fiscal year ending December 31, 2021

## 4 Changes in Presentation

### Changes following the adoption of “Partial Amendments to Accounting Standard for Tax Effect Accounting”

The Company adopted the “Partial Amendments to Accounting Standard for Tax Effect Accounting” (ASBJ Statement No. 28, February 16, 2018; hereinafter “Tax Effect Accounting Partial Amendments”) from the beginning of fiscal 2019. Accordingly, deferred tax assets are presented under investments and other assets while deferred tax liabilities are presented under noncurrent liabilities.

As a result, in the consolidated balance sheet for the previous fiscal year, ¥3,794 million (US\$34,629 thousand) in deferred tax assets previously included in current assets and ¥20 million (US\$183 thousand) in deferred tax liabilities previously included in noncurrent liabilities are both included in deferred tax assets of ¥12,993 million (US\$118,593 thousand) presented under investments and other assets while deferred

tax liabilities of ¥24,951 million (US\$227,738 thousand) are presented under noncurrent liabilities.

Moreover, the main line item of deferred tax assets is offset by deferred tax liabilities before being stated, and total assets decreased ¥20 million (US\$183 thousand) compared with what they would have been before the change.

In addition, the details specified in Note 8 (excluding the total amount of valuation allowance) and Note 9 of “Accounting Standard for Tax Effect Accounting,” as prescribed in Paragraphs 3 through 5 of the Tax Effect Accounting Partial Amendments, have been added to the notes to income taxes.

Among such details, those relating to the previous fiscal year have been omitted in accordance with transitional provisions as prescribed in Paragraph 7 of the Tax Effect Accounting Partial Amendments.

## 5 Changes of Accounting Estimates

### Provision for environmental measures

To prepare for expenses related to the disposal of polychlorinated biphenyl (PCB) waste, which had been kept in storage and removed from noncurrent assets, the Company has recorded estimated disposal expenses as a provision for environmental measures. However, as the Company made progress in disposing of the waste, the Company was able to make

a more detailed assessment and revise its estimate. The difference between the original and new estimates is listed as a reversal of provision for environmental measures under extraordinary income in fiscal 2019.

As a result, fiscal 2019 income before income taxes increased ¥1,009 million (US\$9,210 thousand).

## 6 Notes to Consolidated Balance Sheet

### \*1. Accumulated depreciation of tangible fixed assets

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Accumulated depreciation of tangible fixed assets.....	¥794,669	¥795,391	\$7,253,277

### \*2. Accumulated amount of reduced-value entry as a result of receiving government subsidies, and so on that are subtracted from the acquisition price of tangible fixed assets

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Buildings and structures.....	¥2,384	¥2,394	\$21,760
Machinery, equipment and vehicles.....	1,666	1,675	15,206
Land.....	1,257	1,257	11,473
Other.....	22	22	201

### \*3. Investments in unconsolidated subsidiaries and affiliates

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Investment securities (equity).....	¥5,913	¥6,076	\$53,970

### \*4. 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 2019	Fiscal 2018	Fiscal 2019
Social welfare corporation Ishii Kinen Aizenen.....	¥657	¥789	\$5,997
Kurashiki Kaihatsu K.K. ....	50	—	456
Kuraray India Private Limited.....	—	47	—
Total.....	¥707	¥836	\$6,453

### \*5. Additional payment under share purchase agreement

The acquisition of Plantic Technologies Limited and subsidiaries includes an earn-out provision, whereby, based on specified performance targets, up to an additional \$86.7 million may be required to be paid.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

### \*6. Lawsuit due to a fire accident

In connection with a fire accident that occurred in May 2018 at the Company's subsidiary in the United States, a lawsuit to pay compensation for the damages was filed against several companies including the said subsidiary in the United States. Regarding the claims for the damages, etc., it is difficult to reasonably estimate the amount at the present time, excluding the ¥50,590 million (US\$461,756 thousand) recorded as loss on litigation in fiscal 2019, based on factors such as the settlement reached with some of the plaintiffs.

### \*7. Assets pledged as collateral and secured liabilities

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Investment securities <sup>Note</sup> .....	¥ —	¥ 46	\$ —
Buildings .....	1,446	682	13,198
Land .....	1,001	1,001	9,137
Total .....	¥2,448	¥1,730	\$22,344

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Collateral for short-term loans .....	¥170	¥170	\$1,552

Note: The above investment securities were provided as collateral for loans of Mizushima Eco-works Co., Ltd.

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

Notes with maturity dates at fiscal year-end and fixed-date cash settlements (a method of cash settlement on the same terms as notes) are accounted for and settled as of the date of maturity. As the 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 2019	Fiscal 2018	Fiscal 2019
Notes and accounts receivable—trade .....	¥5,763	¥6,455	\$52,601
Notes and accounts payable—trade .....	3,421	4,100	31,225
Other (Current liabilities) .....	1,998	521	18,237

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

### 7 Notes to Consolidated Statement of Income

\*1. Major items and the amounts under “Selling, general and administrative expenses” are as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Freight and storage .....	¥23,960	¥24,247	\$218,693
Research and development .....	19,729	19,833	180,075
Salaries and legal welfare expense .....	26,283	26,283	239,896
Provision for bonuses .....	6,673	6,195	60,907
Retirement benefit expenses .....	1,476	1,537	13,472
Provision for directors' retirement benefits .....	3	4	27

\*2. Research and development expenses included in general, administrative and current manufacturing expenses

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
	¥21,170	¥21,160	\$193,227

\*3. Insurance income

The insurance income is mainly the insurance received for the loss on litigation relating to the fire accident that occurred in May 2018 at the Company's subsidiary in the United States.

\*4. Impairment loss

The significant component of impairment loss is as follows:

#### Fiscal 2019

Location	Assets	Usage	Type	Impairment loss	
				Millions of yen	Thousands of U.S. dollars
U.S.A.	Business assets	Synthetic resin-related assets	Other intangible fixed assets, etc.	¥3,356	\$30,632

#### Fiscal 2018

Location	Assets	Usage	Type	Impairment loss	
				Millions of yen	Thousands of U.S. dollars
Australia	Business assets	Assets related to films using biomass	Goodwill, etc.	¥4,986	
U.S.A.	Business assets	Result of research and development activities related to industrial-use film	In-process research and development	1,325	

(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, and assets associated with discontinued or reorganized businesses are assessed individually. Other head office and research facilities are assessed as shared assets.

(Method for calculating the recoverable amount)

After separately examining the indications for impairment with respect to those businesses whose income from operations continues to be negative or assets that become subject to restructuring of production systems, for businesses, etc., whose recoverable amount falls short of the book value, the book value is to be reduced to the recoverable amount. The recoverable amount is measured based on the value in use, and is calculated by discounting expected future cash flows at a rate of 3%.

\*5. Loss on litigation

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

\*6. Loss on disposal of tangible fixed assets

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

\*7. Loss on liquidation of subsidiaries and associates

Losses incurred in conjunction with the transfer of shares of the Company's subsidiary in China

\*8. Loss on disaster

Disaster losses were due mainly to the fire accident in the United States.

\*9. 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.

## 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, 2019 and December 31, 2018, are as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Valuation difference on available-for-sale securities			
Amount recorded during the period .....	¥ (1,036)	¥ (7,554)	\$ (9,456)
Reclassification adjustments .....	1,186	316	10,825
Before tax effect adjustments .....	149	(7,238)	1,360
Tax effect .....	(48)	2,052	(438)
Valuation difference on available-for-sale securities .....	100	(5,186)	913
Deferred gains or losses on hedges			
Amount recorded during the period .....	(421)	245	(3,843)
Reclassification adjustments .....	(21)	636	(192)
Before tax effect adjustments .....	(443)	882	(4,043)
Tax effect .....	(1)	(277)	(9)
Deferred gains or losses on hedges .....	(445)	604	(4,062)
Foreign currency translation adjustment			
Amount recorded during the period .....	(5,606)	(13,544)	(51,168)
Reclassification adjustments .....	(54)	—	(493)
Before tax effect adjustments .....	(5,661)	(13,544)	(51,670)
Tax effect .....	—	—	—
Foreign currency translation adjustment .....	(5,661)	(13,544)	(51,670)
Remeasurements of defined benefit plans			
Amount recorded during the period .....	(2,108)	(1,077)	(19,241)
Reclassification adjustments .....	738	774	6,736
Before tax effect adjustments .....	(1,369)	(302)	(12,495)
Tax effect .....	156	114	1,424
Remeasurements of defined benefit plans .....	(1,213)	(188)	(11,072)
Total other comprehensive income .....	¥ (7,220)	¥ (18,314)	\$ (65,900)



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

### Fiscal 2019

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

	Number of shares as of December 31, 2018 (Thousands of shares)	Increase in the number of shares (Thousands of shares)	Decrease in the number of shares (Thousands of shares)	Number of shares as of December 31, 2019 (Thousands of shares)
Number of outstanding shares				
Common stock	354,863	—	—	354,863
Total	354,863	—	—	354,863
Number of outstanding shares				
Common stock (Notes 1, 2)	6,179	5,002	51	11,130
Total	6,179	5,002	51	11,130

Notes: 1. The increase in treasury stock (common stock) is attributable to the acquisition of treasury stock by resolution of the Board of Directors (5,000 thousand shares) and the purchase of less-than-one unit shares (2 thousand shares).

2. The decrease in treasury stock (common stock) is attributable to a transfer of shares upon the exercise of subscription rights (51 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, executive officers, employees, and directors and employees of its subsidiaries subscription rights to the Company shares as stock options. The balance of the subscription rights to shares as of December 31, 2019 is ¥663 million (US\$6,051 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 27, 2019	Common stock	¥7,671 (US\$70,016 thousand)	¥22.00 (US\$0.20)	December 31, 2018	March 28, 2019
Board of directors' meeting held on August 8, 2019	Common stock	¥6,924 (US\$63,198 thousand)	¥20.00 (US\$0.18)	June 30, 2019	September 2, 2019

##### (2) Dividends whose effective date is after the end of Fiscal 2019 and record date is included in Fiscal 2019.

Resolution	Type of share	Amount of dividends (Millions of yen)	Source of dividends	Dividend per share (Yen)	Record date	Effective date
General shareholders' meeting held on March 26, 2020	Common stock	¥7,562 (US\$69,022 thousand)	Retained earnings	¥22.00 (US\$0.20)	December 31, 2019	March 27, 2020

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

Fiscal 2018

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

	Number of shares as of December 31, 2017 (Thousands of shares)	Increase in the number of shares (Thousands of shares)	Decrease in the number of shares (Thousands of shares)	Number of shares as of December 31, 2018 (Thousands of shares)
Number of outstanding shares				
Common stock	354,863	—	—	354,863
Total	354,863	—	—	354,863
Number of outstanding shares				
Common stock <sup>(Notes 1, 2)</sup>	4,040	2,203	64	6,179
Total	4,040	2,203	64	6,179

Notes: 1. The increase in treasury stock (common stock) is attributable to the acquisition of treasury stock by resolution of the Board of Directors (2,200 thousand shares) and the purchase of less-than-one unit shares (3 thousand shares).

2. The decrease in treasury stock (common stock) is attributable to a transfer of shares upon the exercise of subscription rights (64 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, executive officers, employees, and directors and employees of its subsidiaries subscription rights to the Company shares as stock options. The balance of the subscription rights to shares as of December 31, 2018 is ¥587 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 23, 2018	Common stock	¥7,718	¥22.00	December 31, 2017	March 26, 2018
Board of directors' meeting held on August 9, 2018 and August 23, 2018	Common stock	¥6,973	¥20.00	June 30, 2018	September 3, 2018

#### (2) Dividends whose effective date is after the end of Fiscal 2018 and record date is included in Fiscal 2018.

Resolution	Type of share	Amount of dividends (Millions of yen)	Source of dividends	Dividend per share (Yen)	Record date	Effective date
General shareholders' meeting held on March 27, 2019	Common stock	¥7,671	Retained earnings	¥22.00	December 31, 2018	March 28, 2019

## 10 Notes to Consolidated Statement of Cash Flows

\*1. Cash and cash equivalents at December 31, 2019 and December 31, 2018 are reconciled to the accounts reported in the consolidated balance sheet as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Cash on hand and in banks .....	¥72,014	¥67,022	\$657,302
Time deposits with a deposit period of 3 months or more .....	(8,784)	(3,800)	(80,175)
Marketable securities with original maturities of 3 months or less .....	12,737	8,123	116,256
Total .....	¥75,967	¥71,345	\$693,383

\*2. Assets and liabilities of companies which newly became consolidated subsidiaries due to purchase of shares

### Fiscal 2019

Not applicable.

### Fiscal 2018

Described below are assets and liabilities at the time of consolidation due to consolidation of Calgon Carbon Corporation and its subsidiaries as a result of the purchase of shares and the relationship between the purchase price of the shares of Calgon Carbon Corporation and the expenditure for the purchase:

	Millions of yen
Current assets	¥ 39,420
Noncurrent assets	96,850
Goodwill	50,511
Current liabilities	(17,045)
Noncurrent liabilities	(46,240)
Purchase price	123,497
Cash and cash equivalents	(3,683)
Expenditure for the purchase	¥119,814

## 11 Leases

### 1. Finance lease transactions

#### (1) Lease transactions as a lessee

Finance leases without transfer of ownership

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

### 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”

### (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, 2019 and December 31, 2018 are as follows:

#### December 31, 2019

	Millions of yen		
	Acquisition cost	Accumulated depreciation	Net book value
Buildings and structures .....	¥197	¥112	¥85

  

	Thousands of U.S. dollars		
	Acquisition cost	Accumulated depreciation	Net book value
Buildings and structures .....	\$1,798	\$1,022	\$776

#### December 31, 2018

	Millions of yen		
	Acquisition cost	Accumulated depreciation	Net book value
Buildings and structures .....	¥197	¥108	¥88

2) Future lease payment obligations at December 31, 2019 and December 31, 2018 are as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Due within one year .....	¥13	¥13	\$119
Due after one year .....	15	29	137
Total .....	¥29	¥43	\$265

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, 2019 and December 31, 2018 are as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Lease revenue.....	¥13	¥13	\$119
Depreciation expense.....	3	3	27

## 2. Operating leases

Lease transactions as a lessee:

Future lease payment obligations under operating leases at December 31, 2019 and December 31, 2018 are as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Due within one year.....	¥ 2,348	¥ 3,131	\$21,431
Due after one year.....	8,344	13,126	76,159
Total .....	¥10,692	¥16,258	\$97,590

## 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 beneficiary securities on investment trusts, 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,” have maturities of at the longest 38 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 and currency swaps 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 and commodity swaps for the purpose of hedging

price fluctuation risk resulting from raw materials. Please refer to “(5) 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 loans payable.

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 comprise values determined based on market prices and values determined reasonably when there is no market price. Since variable factors are incorporated in computing the relevant fair values, such fair values may vary depending on the different assumptions. 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, 2019

### 2. Fair values of financial instruments

Carrying amount, fair value and unrealized gain/loss of the financial instruments as of December 31, 2019 and December 31, 2018 are as follows:

Financial instruments whose fair values are not readily determinable are excluded from the following table:

#### Fiscal 2019

	Millions of yen		
	Carrying amount	Fair value	Unrealized gain (loss)
(1) Cash and deposits.....	¥ 72,014	¥ 72,014	¥ —
(2) Notes and accounts receivable—trade.....	121,166		
Allowance for doubtful accounts.....	(455)		
	120,710	120,710	—
(3) Short-term investment securities and investment securities Available-for-sale securities.....	53,404	53,404	—
Total assets .....	246,129	246,129	—
(1) Notes and accounts payable—trade .....	39,883	39,883	—
(2) Bonds .....	50,000	50,375	375
(3) Long-term loans payable <sup>(*)</sup> .....	128,035	129,541	1,505
Total liabilities.....	217,919	219,800	1,881
Derivative transactions <sup>(*)2</sup> .....	(1,285)	(1,285)	—

	Thousands of U.S. dollars		
	Carrying amount	Fair value	Unrealized gain (loss)
(1) Cash and deposits.....	\$ 657,302	\$ 657,302	\$ —
(2) Notes and accounts receivable—trade.....	1,109,933		
Allowance for doubtful accounts.....	(4,153)		
	1,101,771	1,101,771	—
(3) Short-term investment securities and investment securities Available-for-sale securities.....	487,441	487,441	—
Total assets .....	2,246,522	2,246,522	—
(1) Notes and accounts payable—trade .....	364,029	364,029	—
(2) Bonds .....	456,371	459,794	3,423
(3) Long-term loans payable <sup>(*)</sup> .....	1,168,629	1,182,375	13,737
Total liabilities.....	1,989,038	2,006,207	17,169
Derivative transactions <sup>(*)2</sup> .....	(11,729)	(11,729)	—

# Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

Fiscal 2018

	Millions of yen		
	Carrying amount	Fair value	Unrealized gain (loss)
(1) Cash and deposits.....	¥ 67,022	¥ 67,022	¥ —
(2) Notes and accounts receivable—trade.....	128,107		
Allowance for doubtful accounts.....	(426)		
	127,681	127,681	—
(3) Short-term investment securities and investment securities			
Available-for-sale securities.....	53,710	53,710	—
Total assets .....	248,413	248,413	—
(1) Notes and accounts payable—trade .....	45,408	45,408	—
(2) Bonds .....	50,000	50,515	515
(3) Long-term loans payable <sup>(*)</sup> .....	132,099	133,820	1,720
Total liabilities.....	227,508	229,744	2,236
Derivative transactions <sup>(*)</sup> .....	708	708	—

(\*) Long-term loans payable include the current portion of long-term loans payable.

(\*) Receivables and payables incurred as a result of derivative transactions are presented on a net basis. Net payables are presented in parentheses.

Notes: 1. Calculation method of fair values of financial instruments and securities and derivative transactions

Assets:

(1) Cash and deposits and (2) Notes and accounts receivable—trade

These assets are recorded using book values because fair values approximate book values because of their short-term maturities.

(3) Short-term investment securities and investment securities

The fair values of these assets are determined using the quoted market price on applicable stock exchanges. Other instruments are determined using the quoted price obtained from financial institutions.

Liabilities:

(1) Notes and accounts payable—trade

These payables are recorded using book values because fair values approximate book values because of their short-term maturities.

(2) Bonds

The fair value of bonds 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.

(3) Long-term loans payable

The fair values of long-term loans payable are determined 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.

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.

Derivative financial instruments:

Please see Note 14. "Derivative Financial Instruments."



## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

### 2. Financial instruments whose fair values are not readily determinable

Category	Millions of yen		Thousands of U.S. dollars
	Carrying amount		Carrying amount
	Fiscal 2019 (December 31, 2019)	Fiscal 2018 (December 31, 2018)	Fiscal 2019
Unlisted equity securities .....	¥8,707	¥8,720	\$79,472

These items are not included in “(3) Short-term investment securities and investment securities,” because there is no market price, future cash flows cannot be estimated and it is very difficult to identify fair values.

### 3. Redemption schedule of monetary assets and securities with contractual maturities

#### Fiscal 2019

	Millions of yen			
	Within one year	One to five years	Five to ten years	Over ten years
Cash and deposits.....	¥ 72,014	¥—	¥—	¥—
Notes and accounts receivable—trade .....	121,166	—	—	—
Short-term investment securities and investment securities: o/w Securities with contractual maturities:				
(1) Bonds (Corporate).....	5,000	—	—	—
(2) Bonds (Others).....	4,800	—	—	—
(3) Others.....	23,537	—	—	—
Total.....	¥226,518	¥—	¥—	¥—

	Thousands of U.S. dollars			
	Within one year	One to five years	Five to ten years	Over ten years
Cash and deposits.....	\$ 657,302	\$—	\$—	\$—
Notes and accounts receivable—trade .....	1,105,933	—	—	—
Short-term investment securities and investment securities: o/w Securities with contractual maturities:				
(1) Bonds (Corporate).....	45,637	—	—	—
(2) Bonds (Others).....	43,812	—	—	—
(3) Others.....	214,832	—	—	—
Total.....	\$2,067,525	\$—	\$—	\$—

#### Fiscal 2018

	Millions of yen			
	Within one year	One to five years	Five to ten years	Over ten years
Cash and deposits.....	¥ 67,022	¥—	¥—	¥—
Notes and accounts receivable—trade .....	128,107	—	—	—
Short-term investment securities and investment securities: o/w Securities with contractual maturities:				
(1) Bonds (Corporate).....	7,800	—	—	—
(2) Bonds (Others).....	4,000	—	—	—
(3) Others.....	21,123	—	—	—
Total.....	¥228,052	¥—	¥—	¥—

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

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

#### Fiscal 2019

	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 .....	¥ —	¥20,000	¥ —	¥10,000	¥ —	¥20,000
Long-term loans payable.....	33	15	25,000	20,932	19,692	62,361
Lease obligations .....	473	396	321	238	154	289
Lease liabilities .....	1,161	1,361	949	921	918	12,874
Total.....	¥1,668	¥21,774	¥26,270	¥32,092	¥20,765	¥95,524

	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 .....	\$ —	\$182,548	\$ —	\$ 91,274	\$ —	\$182,548
Long-term loans payable.....	301	137	228,185	191,055	179,737	569,195
Lease obligations .....	4,317	3,614	2,930	2,172	1,406	2,638
Lease liabilities .....	10,597	12,422	8,662	8,406	8,379	117,506
Total.....	\$15,225	\$198,740	\$239,777	\$292,917	\$189,531	\$871,888

#### Fiscal 2018

	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 .....	¥ —	¥ —	¥20,000	¥ —	¥10,000	¥20,000
Long-term loans payable.....	12,050	33	15	25,000	19,600	75,400
Lease obligations .....	433	383	306	232	168	407
Lease liabilities .....	—	—	—	—	—	—
Total.....	¥12,483	¥416	¥20,322	¥25,232	¥29,768	¥95,807

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

### 13 Securities

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

##### Fiscal 2019

	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 .....	¥19,821	¥ 9,208	¥10,612	\$180,915	\$ 84,045	\$96,860
Bonds						
Government and municipal .....	—	—	—	—	—	—
Corporate .....	—	—	—	—	—	—
Others .....	—	—	—	—	—	—
Others .....	—	—	—	—	—	—
Subtotal .....	19,821	9,208	10,612	180,915	84,045	96,860
Securities with book value not exceeding their acquisition cost						
Equity securities .....	241	282	(41)	2,200	2,574	(374)
Bonds						
Government and municipal .....	—	—	—	—	—	—
Corporate .....	5,000	5,000	—	45,637	45,637	—
Others .....	4,803	4,804	(1)	43,839	43,848	(9)
Others .....	23,537	23,537	—	214,832	214,832	—
Subtotal .....	33,583	33,625	(42)	306,526	306,909	(383)
Total .....	¥53,404	¥42,834	¥10,570	\$487,441	\$390,964	\$96,477

Note: Unlisted equity securities amounting to ¥2,793 million (US\$25,493 thousand) are excluded from the above table, because there is no market price and it is very difficult to identify fair values.

##### Fiscal 2018

	Millions of yen		
	Book value (estimated fair value)	Cost	Net
Securities with book value exceeding their acquisition cost			
Equity securities .....	¥20,289	¥ 9,612	¥10,677
Bonds			
Government and municipal .....	—	—	—
Corporate .....	—	—	—
Others .....	3,000	2,999	0
Others .....	—	—	—
Subtotal .....	23,290	12,611	10,678
Securities with book value not exceeding their acquisition cost			
Equity securities .....	499	754	(254)
Bonds			
Government and municipal .....	—	—	—
Corporate .....	7,796	7,800	(3)
Others .....	1,001	1,002	(1)
Others .....	21,123	21,123	—
Subtotal .....	30,420	30,679	(259)
Total .....	¥53,710	¥43,291	¥10,418

Note: Unlisted equity securities amounting to ¥2,644 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, 2019

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

#### Fiscal 2019

	Millions of yen			Thousands of U.S. dollars		
	Proceeds from sales	Total gain	Total loss	Proceeds from sales	Total gain	Total loss
Others .....	¥2,082	¥1,406	¥(221)	\$19,003	\$12,833	\$(2,017)
Total .....	¥2,082	¥1,406	¥(221)	\$19,003	\$12,833	\$(2,017)

Notes: 1. Attributable to sale of stock.

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

#### Fiscal 2018

	Millions of yen		
	Proceeds from sales	Total gain	Total loss
Others.....	¥403	¥316	¥(0)
Total .....	¥403	¥316	¥(0)

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 ¥860 million (US\$7,850 thousand) in fiscal 2019 and ¥155 million in fiscal 2018.

As for the available-for-sale securities for which market prices are available, 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 for which market prices are not available, 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, 2019

## 14 Derivative Financial Instruments

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

#### (1) Currencies

#### Fiscal 2019

		Millions of yen			
Category	Classification	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 .....	¥15,131	¥—	¥(357)	¥(357)
	Receipts in Yen/Payments in Euro .....	3,742	—	(68)	(68)
	Receipts in Yen/Payments in Australian dollar.....	4,883	—	(148)	(148)
	Other.....	4,448	—	(12)	(12)
	Non-deliverable forward foreign exchange transaction:				
	Receipts in Yen/Payments in Won .....	4,673	—	(129)	(129)
Total .....		¥32,879	¥—	¥(716)	¥(716)

		Thousands of U.S. dollars			
Category	Classification	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 .....	\$138,107	\$—	\$(3,258)	\$(3,258)
	Receipts in Yen/Payments in Euro .....	34,155	—	(621)	(621)
	Receipts in Yen/Payments in Australian dollar.....	44,569	—	(1,351)	(1,351)
	Other.....	40,599	—	(110)	(110)
	Non-deliverable forward foreign exchange transaction:				
	Receipts in Yen/Payments in Won .....	42,652	—	(1,177)	(1,177)
Total .....		\$300,100	\$—	\$(6,535)	\$(6,535)

Notes: 1. Market values of forward foreign exchange contracts and non-deliverable forward foreign exchange transaction at the end of the fiscal year are calculated using forward exchange rates.

2. 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, 2019

Fiscal 2018

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 .....	¥66,763	¥—	¥260	¥260
	Receipts in Yen/Payments in Euro .....	14,666	—	201	201
	Receipts in Yen/Payments in Australian dollar .....	5,417	—	240	240
	Receipts in U.S. dollar/Payments in Yuan....	1,208	—	4	4
	Receipts in Euro/Payments in U.S. dollar ...	1,472	—	(11)	(11)
	Receipts in Singapore dollar/Payments in U.S. dollar.....	1,168	—	(8)	(8)
	Other.....	2,015	—	3	3
	Non-deliverable forward foreign exchange transaction:				
	Receipts in Yen/Payments in Won.....	4,413	—	1	1
Total .....		¥97,125	¥—	¥692	¥692

Notes: 1. Market values of forward foreign exchange contracts and non-deliverable forward foreign exchange transaction at the end of the fiscal year are calculated using forward exchange rates.

2. 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.

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

(1) Currencies

Fiscal 2019

			Fiscal 2019 (As of December 31, 2019)					
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	¥464	¥—	Note	\$4,235	\$—	Note
	Receipts in Yen/Payments in Baht	Loans receivable	199	—	Note	1,816	—	Note
	Receipts in U.S. dollar/Payments in Yen	Accounts payable—trade	116	—	Note	1,059	—	Note
	Receipts in Yen/Payments in Yuan	Accounts receivable—trade	107	—	Note	977	—	Note
	Other	Accounts payable—trade	13	—	Note	119	—	Note
	Total .....		¥901	¥—		\$8,224	\$—	

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.

# Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

			Fiscal 2019 (As of December 31, 2019)					
			Millions of yen			Thousands of U.S. dollars		
Hedge accounting method	Classification	Major hedged items	Nominal amount	Nominal amount over one year	Market value	Nominal amount	Nominal amount over one year	Market value
Deferred hedge method	Forward foreign exchange contracts:							
	Receipts in Yen/ Payments in U.S. dollar	Forecasted transactions in foreign currencies	¥ 3,395	¥ —	¥ (0)	\$ 30,988	\$ —	\$ (0)
	Receipts in Yen/ Payments in Euro	Forecasted transactions in foreign currencies	1,506	—	(9)	13,746	—	(82)
	Receipts in U.S. dollar/ Payments in Euro	Forecasted transactions in foreign currencies	1,161	175	0	10,597	1,597	0
	Receipts in U.S. dollar/ Payments in Baht	Forecasted transactions in foreign currencies	8,912	409	(63)	81,344	3,733	(575)
	Receipts in Euro/ Payments in Baht	Forecasted transactions in foreign currencies	1,557	24	7	14,211	219	64
	Receipts in Yen/ Payments in Baht	Forecasted transactions in foreign currencies	10,969	2,483	(187)	100,119	22,663	(1,707)
	Other	Forecasted transactions in foreign currencies	918	—	13	8,379	—	119
Total .....			¥28,421	¥3,093	¥(240)	\$259,410	\$28,231	\$ (2,191)

Note: Market values of forward foreign exchange contracts at the end of the fiscal year are calculated using forward exchange rates.

## Fiscal 2018

			Fiscal 2018 (As of December 31, 2018)		
			Millions of yen		
Hedge accounting method	Classification	Major hedged items	Nominal amount	Nominal amount over one year	Market value
Allocation method	Forward foreign exchange contracts:				
	Receipts in Yen/ Payments in U.S. dollar	Accounts receivable—trade	¥528	¥—	Note
	Receipts in Yen/ Payments in Baht	Loans receivable	153	—	Note
	Receipts in U.S. dollar/ Payments in Yen	Accounts payable—trade	115	—	Note
	Other	Accounts receivable—trade	35	—	Note
Total .....			¥833	¥—	

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.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

Hedge accounting method	Classification	Major hedged items	Fiscal 2018 (As of December 31, 2018)		
			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	¥2,381	¥ —	¥ 1
	Receipts in Yen/ Payments in Euro	Forecasted transactions in foreign currencies	1,286	—	0
	Receipts in U.S. dollar/Payments in Euro	Forecasted transactions in foreign currencies	1,176	177	32
	Other	Forecasted transactions in foreign currencies	1,010	—	(11)
Total .....			¥5,854	¥177	¥ 22

Note: Market values of forward foreign exchange contracts at the end of the fiscal year are calculated using forward exchange rates.



## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

### (2) Interest rate

#### Fiscal 2019

Hedge accounting method	Classification	Major hedged items	Millions of yen		
			Nominal amount	Nominal amount over one year	Market value
Special treatment For interest rate swaps	Interest rate swaps: Floating rate into fixed rate	Long-term loans payable	¥26,000	¥26,000	Note

Hedge accounting method	Classification	Major hedged items	Thousands of U.S. dollars		
			Nominal amount	Nominal amount over one year	Market value
Special treatment For interest rate swaps	Interest rate swaps: Floating rate into fixed rate	Long-term loans payable	\$237,313	\$237,313	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 loans payable, since they are used for recording long-term loans payable 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	Interest rate swaps: Floating rate into fixed rate	Long-term loans payable	¥7,986	¥7,986	¥(238)

Hedge accounting method	Classification	Major hedged items	Thousands of U.S. dollars		
			Nominal amount	Nominal amount over one year	Market value
Deferred hedge method	Interest rate swaps: Floating rate into fixed rate	Long-term loans payable	\$72,892	\$72,892	\$(2,172)

Note: Market values are calculated based on the prices provided by financial institutions the Company entered into the contracts with.

#### Fiscal 2018

Hedge accounting method	Classification	Major hedged items	Millions of yen		
			Nominal amount	Nominal amount over one year	Market value
Special treatment For interest rate swaps	Interest rate swaps: Floating rate into fixed rate	Long-term loans payable	¥26,000	¥26,000	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 loans payable, since they are used for recording long-term loans payable as hedged items.

### (3) Commodity

#### Fiscal 2019

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	¥739	¥425	¥(90)

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

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	\$6,745	\$3,879	\$(821)

Note: Market values are calculated based on the prices provided by financial institutions the Company entered into the contracts with.

Fiscal 2018

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	¥110	¥20	¥(6)

Note: Market values are calculated based on the prices provided by financial institutions the Company entered into the contracts with.

## 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.

### 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 2019	Fiscal 2018	Fiscal 2019
Retirement benefit obligations at beginning of year.....	¥63,096	¥46,270	\$575,904
Service costs.....	2,490	2,796	22,727
Interest costs.....	1,216	1,137	11,099
Actuarial gain or loss.....	3,697	(1,957)	33,744
Prior service costs recorded during the period.....	261	76	2,382
Benefits paid .....	(3,505)	(2,803)	(31,992)
Amount received from new consolidation.....	—	18,710	—
Decrease due to termination and transfer of retirement benefit plans.....	—	(380)	—
Other .....	(324)	(754)	(2,957)
Retirement benefit obligations at end of year.....	¥66,932	¥63,096	\$610,916

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 2019	Fiscal 2018	Fiscal 2019
Plan assets at beginning of year .....	¥47,889	¥35,296	\$437,103
Expected return on plan assets .....	1,308	1,529	11,939
Actuarial gain or loss.....	1,850	(2,958)	16,886
Contribution from entrepreneur.....	1,278	3,462	11,665
Benefits paid .....	(3,654)	(2,995)	(33,352)
Amount received from new consolidation.....	—	14,343	—
Decrease due to termination and transfer of retirement benefit plans.....	—	(328)	—
Other .....	(110)	(460)	(1,004)
Plan assets at end of year .....	¥48,562	¥47,889	\$443,246

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, 2019

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

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Net defined benefit liabilities at beginning of year.....	¥1,758	¥1,660	\$16,046
Retirement benefit expenses.....	250	369	2,282
Benefits paid.....	(136)	(126)	(1,241)
Contribution to plan assets .....	(106)	(138)	(968)
Amount received from new consolidation.....	102	—	931
Other .....	(11)	(7)	(100)
Net defined benefit liabilities at end of year.....	¥1,856	¥1,758	\$16,940

### (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 2019	Fiscal 2018	Fiscal 2019
Installment type retirement benefit obligation .....	¥59,572	¥57,160	\$543,739
Plan assets.....	(49,556)	(48,749)	(452,318)
	10,016	8,411	91,420
Non installment type retirement benefit obligation.....	10,209	8,553	93,182
Net amount of net defined benefit liabilities and net defined benefit assets recognized on the consolidated balance sheet .....	20,226	16,964	184,611
Net defined benefit liabilities.....	22,203	18,065	202,656
Net defined benefit assets .....	(1,977)	(1,101)	(18,045)
Net amount of net defined benefit liabilities and net defined benefit assets recognized on the consolidated balance sheet .....	¥20,226	¥16,964	\$184,611

Note: Includes plan that uses the simplified method.

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

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Service costs .....	¥2,490	¥2,796	\$22,727
Interest costs .....	1,216	1,137	11,099
Expected return on plan assets .....	(1,308)	(1,529)	(11,939)
Amortization of actuarial gains or losses .....	679	716	6,198
Amortization of prior service costs .....	59	58	539
Retirement benefit expenses calculated by simplified method.....	250	369	2,282
Other .....	(41)	—	(374)
Retirement benefit expense pertaining to defined benefit plan .....	3,346	3,548	30,540
Proceeds from termination of retirement benefit plans (Note).....	¥ —	¥ (52)	\$ —

Note: Recorded in Other (Non-operating income).

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

### (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 2019	Fiscal 2018	Fiscal 2019
Prior service costs .....	¥ (202)	¥ (18)	\$ (1,844)
Actuarial gain or loss .....	(1,167)	(284)	(10,652)
Total.....	¥(1,369)	¥(302)	\$(12,495)

### (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 2019	Fiscal 2018	Fiscal 2019
Unrecognized prior service costs .....	¥ (544)	¥ (342)	\$ (4,965)
Unrecognized actuarial gain or loss .....	(6,817)	(5,650)	(62,222)
Total.....	¥(7,362)	¥(5,992)	\$(67,196)

### (8) Plan assets

#### a. The components of plan assets

	Fiscal 2019	Fiscal 2018
Debt securities .....	45%	40%
Equity securities .....	15	14
Life insurance company general accounts (Note 1) .....	14	15
Cash and deposits .....	2	2
Other assets.....	24	29
Total (Note 2).....	100%	100%

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

2. Total retirement plan assets for the years ended December 31, 2019 and 2018 include 32% and 35%, 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 2019	Fiscal 2018
Discount rate.....	Mainly 0.7% to 4.3%	Mainly 0.7% to 4.3%
Long-term expected rate of return.....	Mainly 1.0% to 5.5%	Mainly 1.0% to 6.4%

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

### 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, 2019 and 2018 are as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Defined contribution plan .....	¥1,158	¥1,107	\$10,570

### 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, 2019 and 2018, totaled ¥76 million (US\$694 thousand) and ¥76 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 2019 (As of June 30, 2019)	Fiscal 2018 (As of June 30, 2018)	Fiscal 2019 (As of June 30, 2019)
Plan assets .....	¥55,495	¥54,374	\$506,526
Total of actuarial pension liabilities and plan's minimum reserve .....	56,238	56,801	513,308
Difference .....	¥ (742)	¥ (2,426)	\$ (6,773)

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

	Fiscal 2019 (As of June 30, 2019)	Fiscal 2018 (As of June 30, 2018)
	3.7%	3.5%

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 2019	Fiscal 2018	Fiscal 2019
Selling, general and administrative expenses .....	¥94	¥79	\$858

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

### 2. Details including size and changes of stock options

#### (1) Stock options plans

	Stock options October 2010	Stock options May 2011
Resolution date	June 24, 2010	April 27, 2011
Number of eligible persons by position	Directors, etc. of the Company: 25 Employees of the Company: 3,924 Directors or employees, etc. of the Company's subsidiaries: 2,010	Directors of the Company: 10 Executive officers of the Company (excluding those who concurrently serve as directors of the Company and those working overseas): 14
Total number and type of stocks granted	4,074,500 shares of common stock	89,500 shares of common stock
Grant date	October 1, 2010	May 19, 2011
Prerequisite to be vested	(Note 1)	No vesting conditions are set.
Required service period	From October 1, 2010 to June 24, 2012	There is no provision for a required service period.
Exercise period	From June 25, 2012 to June 24, 2020	From May 19, 2011 to May 18, 2026; 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 19, 2026, he/she may exercise his or her rights from the following business day to the date of expiration of the above exercise period of the subscription rights to shares.
Number of subscription rights to shares (units) (Note 4)	2,499 [2,471]	3
Type, content and number of shares subject to subscription rights to shares (Note 4)	1,249,500 [1,235,500] shares of common stock	1,500 shares of common stock
Amount paid at the time of exercise of subscription rights to shares (yen) (Note 4)	¥1,078/share (US\$9.84)	¥1/share (US\$0.01)
Issue price of shares and amount to be incorporated into stated capital when issuing shares through exercise of subscription rights to shares (yen) (Note 4)	Issue price: ¥1,078 (US\$9.84) Amount to be incorporated into stated capital (i) The amount of increase in capital stock in cases where shares are issued through exercise of subscription rights to shares shall be half of the maximum amount of increase in stated capital, which is 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. (ii) The amount of increase in capital in cases where shares are issued through exercise of subscription rights to shares shall be obtained by subtracting the amount of capital to be increased specified in (i) above from the maximum amount of increase in stated capital mentioned in (i) above.	Issue price: ¥1,175 (US\$10.72) Amount to be incorporated into stated capital: ¥588 (US\$5.37)
Conditions for exercising subscription rights to shares (Note 4)	(Note 1)	(Note 2)
Matters related to transfer of subscription rights to shares (Note 4)	Acquisition of 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 (Note 4)	—	(Note 3)

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

	Stock options May 2012	Stock options May 2013
Resolution date	April 26, 2012	April 25, 2013
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):13	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	86,500 shares of common stock	88,000 shares of common stock
Grant date	May 17, 2012	May 15, 2013
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 17, 2012 to May 16, 2027; 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 17, 2027, 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, 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.
Number of subscription rights to shares (units) (Note 4)	4	21
Type, content and number of shares subject to subscription rights to shares (Note 4)	2,000 shares of common stock	10,500 shares of common stock
Amount paid at the time of exercise of subscription rights to shares (yen) (Note 4)	¥1/share (US\$0.01)	¥1/share (US\$0.01)
Issue price of shares and amount to be incorporated into stated capital when issuing shares through exercise of subscription rights to shares (yen) (Note 4)	Issue price: ¥1,047 (US\$9.56) Amount to be incorporated into stated capital: ¥524 (US\$4.78)	Issue price: ¥1,483 (US\$13.54) Amount to be incorporated into stated capital: ¥742 (US\$6.77)
Conditions for exercising subscription rights to shares (Note 4)	(Note 2)	
Matters related to transfer of subscription rights to shares (Note 4)	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 (Note 4)	(Note 3)	



## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

	Stock options May 2014	Stock options February 2015
Resolution date	April 25, 2014	January 21, 2015
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: 12 Executive officers of the Company (excluding those who concurrently serve as directors of the Company and those working overseas): 11
Total number and type of stocks granted	78,500 shares of common stock	59,500 shares of common stock
Grant date	May 15, 2014	February 17, 2015
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, 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.	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.
Number of subscription rights to shares (units) (Note 4)	38	40
Type, content and number of shares subject to subscription rights to shares (Note 4)	19,000 shares of common stock	20,000 shares of common stock
Amount paid at the time of exercise of subscription rights to shares (yen) (Note 4)	¥1/share (US\$0.01)	¥1/share (US\$0.01)
Issue price of shares and amount to be incorporated into stated capital when issuing shares through exercise of subscription rights to shares (yen) (Note 4)	Issue price: ¥1,120 (US\$10.22) Amount to be incorporated into stated capital: ¥560 (US\$5.11)	Issue price: ¥1,353 (US\$12.35) Amount to be incorporated into stated capital: ¥677 (US\$6.18)
Conditions for exercising subscription rights to shares (Note 4)	(Note 2)	
Matters related to transfer of subscription rights to shares (Note 4)	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 (Note 4)	(Note 3)	

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

	Stock options February 2016	Stock options February 2017
Resolution date	January 20, 2016	January 18, 2017
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): 10	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
Total number and type of stocks granted	69,000 shares of common stock	75,500 shares of common stock
Grant date	February 10, 2016	February 9, 2017
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 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.	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.
Number of subscription rights to shares (units) (Note 4)	60	108
Type, content and number of shares subject to subscription rights to shares (Note 4)	30,000 shares of common stock	54,000 shares of common stock
Amount paid at the time of exercise of subscription rights to shares (yen) (Note 4)	¥1/share (US\$0.01)	¥1/share (US\$0.01)
Issue price of shares and amount to be incorporated into stated capital when issuing shares through exercise of subscription rights to shares (yen) (Note 4)	Issue price: ¥1,201 (US\$10.96) Amount to be incorporated into stated capital: ¥601 (US\$5.49)	Issue price: ¥1,539 (US\$14.05) Amount to be incorporated into stated capital: ¥770 (US\$7.03)
Conditions for exercising subscription rights to shares (Note 4)	(Note 2)	
Matters related to transfer of subscription rights to shares (Note 4)	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 (Note 4)	(Note 3)	

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

	Stock options February 2018	Stock options February 2019
Resolution date	January 17, 2018	January 16, 2019
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): 12	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
Total number and type of stocks granted	45,000 shares of common stock	64,500 shares of common stock
Grant date	February 15, 2018	February 14, 2019
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 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.	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.
Number of subscription rights to shares (units) (Note 4)	84	129
Class, content and number of shares subject to subscription rights to shares (Note 4)	42,000 shares of common stock	64,500 shares of common stock
Amount paid at the time of exercise of subscription rights to shares (yen) (Note 4)	¥1/share (US\$0.01)	¥1/share (US\$0.01)
Issue price of shares and amount to be incorporated into stated capital when issuing shares through exercise of subscription rights to shares (yen) (Note 4)	Issue price: ¥1,762 (US\$16.08) Amount to be incorporated into stated capital: ¥881 (US\$8.04)	Issue price: ¥1,467 (US\$13.39) Amount to be incorporated into stated capital: ¥734 (US\$6.70)
Conditions for exercising subscription rights to shares (Note 4)	(Note 2)	
Matters related to transfer of subscription rights to shares (Note 4)	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 (Note 4)	(Note 3)	

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

Stock options February 2020 (Note 5)	
Resolution date	January 22, 2020
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): 12
Total number and type of stocks granted	86,500 shares of common stock
Grant date	February 14, 2020
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 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) (Note 4)	173
Class, content and number of shares subject to subscription rights to shares (Note 4)	86,500 shares of common stock
Amount paid at the time of exercise of subscription rights to shares (yen) (Note 4)	¥1/share (US\$0.01)
Issue price of shares and amount to be incorporated into stated capital when issuing shares through exercise of subscription rights to shares (yen) (Note 4)	Issue price: ¥1,315 (US\$12.00) Amount to be incorporated into stated capital: ¥658 (US\$6.01)
Conditions for exercising subscription rights to shares (Note 4)	(Note 2)
Matters related to transfer of subscription rights to shares (Note 4)	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 (Note 4)	(Note 3)

Notes: 1. Prerequisite to be vested with and conditions for exercising subscription rights to shares

- (i) Eligible persons shall be directors, executive officers, counselors, full-time consultants or employees of the Company or the Companies' subsidiaries at the time of exercise. However, those who were directors, executive officers or associate executive officers of the Company or presidents of the significant subsidiaries of the Company (Kuraray Engineering Co., Ltd., Kuraray Chemical Co., Ltd., Kuraray Trading Co., Ltd., Kuraray Plastics Co., Ltd., Kuraray Techno Co., Ltd., Kuraray America, Inc., Kuraray Europe GmbH and EVAL Europe N.V.) can exercise even after retirement.
- (ii) Other conditions are prescribed in the "Contracts on Subscription Rights to Shares" to be entered between the Company and eligible persons

who were granted subscription rights to shares.

## 2. 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 2-1), 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.

2-1. 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.

## 3. 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.

(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 2-1 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 2) above.

4. Stated are details as of the end of fiscal 2019. For matters that were changed between the end of fiscal 2019 and the end of the month preceding the month that the filing date of the securities report belongs to (February 29, 2020), details as of the end of the previous month of the filing date are described in [ ]. For the others, there are no changes from the details as of the end of fiscal 2019.
5. The resolution on January 22, 2020 is the resolution to grant the subscription rights to shares after fiscal 2019, and the details described are as of the end of the month preceding the month that the filing date of the securities report belongs to (February 29, 2020).

## (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 October 2010	Stock options May 2011	Stock options May 2012	Stock options May 2013	Stock options May 2014
<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	1,322,000	1,500	2,000	10,500	19,000
Vested	—	—	—	—	—
Exercised	51,500	—	—	—	—
Forfeited	21,000	—	—	—	—
At the end of the fiscal year	1,249,500	1,500	2,000	10,500	19,000

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

	Stock options February 2015	Stock options February 2016	Stock options February 2017	Stock options February 2018	Stock options February 2019
<b>Unvested stock options (shares)</b>					
At the beginning of the fiscal year	—	—	—	—	—
Granted	—	—	—	—	64,500
Forfeited	—	—	—	—	—
Vested	—	—	—	—	64,500
At the end of the fiscal year	—	—	—	—	—
<b>Vested stock options (shares)</b>					
At the beginning of the fiscal year	20,000	30,000	54,000	42,000	—
Vested	—	—	—	—	64,500
Exercised	—	—	—	—	—
Forfeited	—	—	—	—	—
At the end of the fiscal year	20,000	30,000	54,000	42,000	64,500

### 2) Price information

	Yen				
	Stock options October 2010	Stock options May 2011	Stock options May 2012	Stock options May 2013	Stock options May 2014
Exercise prices	¥1,078	¥ 1	¥ 1	¥ 1	¥ 1
Weighted-average exercise date stock price	1,370	—	—	—	—
Fair value at the grant date	247	1,174	1,046	1,482	1,119

	Yen				
	Stock options February 2015	Stock options February 2016	Stock options February 2017	Stock options February 2018	Stock options February 2019
Exercise prices	¥ 1	¥ 1	¥ 1	¥ 1	¥ 1
Weighted-average exercise date stock price	—	—	—	—	—
Fair value at the grant date	1,352	1,200	1,538	1,761	1,466

	U.S. dollars				
	Stock options October 2010	Stock options May 2011	Stock options May 2012	Stock options May 2013	Stock options May 2014
Exercise prices	\$ 9.84	\$ 0.01	\$0.01	\$ 0.01	\$ 0.01
Weighted-average exercise date stock price	12.50	—	—	—	—
Fair value at the grant date	2.25	10.72	9.55	13.53	10.21

	U.S. dollars				
	Stock options February 2015	Stock options February 2016	Stock options February 2017	Stock options February 2018	Stock options February 2019
Exercise prices	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01
Weighted-average exercise date stock price	—	—	—	—	—
Fair value at the grant date	12.34	10.95	14.04	16.07	13.38

### 3. Method to estimate fair value of stock options

The fair value of the February 2019 stock options, which were granted in fiscal 2019 are estimated as follows:

(1) Valuing method: Black-Scholes model

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

### (2) Major basic figures and estimating method

	February 2019 stock options
Stock price volatility <sup>(Note 1)</sup>	26.0%
Expected remaining life <sup>(Note 2)</sup>	1.3 year
Expected dividend <sup>(Note 3)</sup>	¥42/share (US\$0.383)
Risk-free interest rate <sup>(Note 4)</sup>	-0.18%

Notes: 1. Calculated weekly based on the weekly stock price information over a period from the week that contains October 23, 2017 to the week that contains February 4, 2019.

2. Calculated by subtracting the average period of service of directors and executive officers who are currently in office as of the day of grant from the past average period of service of directors and executive officers.

3. Based on the dividend paid for the fiscal year ended December 2018.

4. Government bond yield over a period corresponding to the expected remaining life.

### 4. Method to estimate number of vested stock options

#### Stock options February 2019

The number of vested stock options is the same as the number of stock options granted, since the stock options were vested on the day following the day of the grant.

## 17 Income Taxes

### 1. Significant components of deferred tax assets and liabilities at December 31, 2019 and December 31, 2018

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Deferred tax assets:			
Net defined benefit liabilities	¥10,275	¥ 9,268	\$ 93,784
Impairment loss	3,313	2,439	30,239
Loss (gain) on valuation of investment securities	1,302	1,908	11,884
Provision for environmental measures	1,105	1,719	10,086
Unrealized gain on inventories	1,591	1,428	14,522
Depreciation and amortization	2,163	2,349	19,743
Provision for bonuses	1,139	1,128	10,396
Accrued expenses	10,807	1,761	98,640
Tax loss carry forward <sup>(Note)</sup>	4,773	4,554	43,565
Other	6,389	6,076	58,315
Subtotal deferred tax assets	42,862	32,636	391,219
Valuation allowance relating to tax loss carry forward <sup>(Note)</sup>	(4,609)	—	(42,068)
Valuation allowance for total deductible temporary differences	(5,942)	—	(54,235)
Subtotal valuation allowance	(10,552)	(10,152)	(96,313)
Total deferred tax assets	32,310	22,483	294,907



## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Deferred tax liabilities:			
Depreciation and amortization	(11,045)	(12,468)	(100,812)
Adjustment to book value of assets stated at fair value	(14,786)	(16,146)	(134,958)
Unrealized gain on revaluation of securities	(2,642)	(2,593)	(24,115)
Reserve for reduction entry	(1,090)	(1,139)	(9,949)
Other	(2,982)	(2,094)	(27,218)
Total deferred tax liabilities	(32,546)	(34,441)	(297,061)
Net deferred tax assets (liabilities)	¥ (236)	¥(11,957)	\$ (2,154)

Note: Amounts of tax loss carry forward and deferred tax assets according to the carryforward periods  
Fiscal 2019 (December 31, 2019)

	(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 (*)	¥5	¥44	¥83	¥35	¥83	¥4,521	¥4,773
Valuation allowance	(0)	(36)	(83)	(35)	(83)	(4,370)	(4,609)
Deferred tax assets	5	7	—	—	0	150	164

	(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 (*)	\$46	\$402	\$758	\$319	\$758	\$41,265	\$43,565
Valuation allowance	(0)	(329)	(758)	(319)	(758)	(39,887)	(42,068)
Deferred tax assets	46	64	—	—	0	1,369	1,497

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

## 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, 2019 and December 31, 2018

	Fiscal 2019	Fiscal 2018
Normal effective tax rate	30.4%	—
(Adjustment)		
Non-deductible expenses for income tax purposes	24.8	—
Tax credit primarily for research and development expenses	(89.2)	—
Changes in valuation allowance	15.3	—
Amortization of goodwill	38.0	—
Effect of income tax rates difference	117.4	—
Other	(5.0)	—
Income tax rate per the consolidated statement of income	131.7%	—

(Note) For fiscal 2018, the note is omitted as the difference between the normal effective tax rate and the income tax rate per the consolidated statement of income was not more than 5/100 of the normal effective tax rate.

## 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, excluding removal costs for aforementioned toxic substances incurred through the repair and maintenance activities in the normal service of the tangible fixed assets, 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 Company

The Company recognizes asset retirement obligations for tangible fixed assets planned to be removed or assets, which have been removed, but not scrapped yet. Tangible fixed assets planned to be removed mainly consist of assets, which are in use for the reason that they are still usable although useful lives have elapsed and assets, which need immaterial time to remove. Since the payment terms for disposal of these assets are considered to have matured, removal costs, which are reasonably estimated without discounting future cash flows, are recorded as asset retirement obligations.

#### Consolidated subsidiaries

Consolidated subsidiaries determine the amounts of asset retirement obligations using discount rates ranging from 0.9% to 5.0% for the net cash flows, estimating the period of use to be 19 to 40 years after acquisition.

### Increase or decrease of the total amount of asset retirement obligations during the fiscal years ended December 31, 2019 and December 31, 2018:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Beginning balance	¥5,189	¥4,474	\$47,362
Increase due to decisions to remove	195	462	1,780
Adjustments due to the elapse of time	60	72	548
Decrease due to payment for the obligations	(217)	(83)	(1,981)
Increase due to new consolidation	—	540	—
Other increase (decrease)	(556)	(277)	(5,075)
Ending balance	¥4,671	¥5,189	\$42,634

## 19 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.

#### 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 Matters That Form the Basis for Preparation of Consolidated Financial Statements." Profits from reported segments are operating income, and intersegment sales and transfers are based on the prevailing market prices.

#### Adoption of IFRS 16 "Leases"

As stated in Changes in Accounting Policies, the Company has applied IFRS 16 "Leases" for some overseas affiliates since fiscal 2019.

Accordingly, regarding operating leases (borrower) covered by IAS No. 17, the Company recognizes right-of-use assets on the date of adoption.

#### Changes following the adoption of "Partial Amendments to Accounting Standard for Tax Effect Accounting"

As stated in Changes in Presentation Methods, the Company adopted the "Partial Amendments to Accounting Standard for Tax Effect Accounting" (ASBJ Statement No. 28, February 16, 2018) from the beginning of fiscal 2019. Regarding segment assets for the previous fiscal year, the figures have been retroactively revised to reflect the new accounting standard.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

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

Fiscal 2019 (January 1, 2019 to December 31, 2019)

	Millions of yen								Adjustment (Note 2)	Consolidated Financial Statements (Note 3)
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Trading	Total	Other Business (Note 1)	Total		
Net sales										
(1) Outside customers .....	¥225,127	¥29,058	¥107,020	¥50,816	¥128,139	¥540,162	¥35,644	¥575,807	¥ —	¥575,807
(2) Inter-segment sales and transfers .....	40,978	24,217	18,961	13,697	2,772	100,626	15,484	116,110	(116,110)	—
Total .....	266,105	53,276	125,982	64,513	130,911	640,789	51,128	691,917	(116,110)	575,807
Segment income (loss) .....	47,368	4,232	3,836	5,654	4,224	65,317	649	65,967	(11,793)	54,173
Segment assets. ....	423,596	90,648	219,125	74,500	44,276	852,147	48,471	900,619	90,529	991,149
Other items										
Depreciation and amortization (other than goodwill) .....	32,361	2,779	11,883	3,125	93	50,242	931	51,174	2,819	53,993
Amortization of goodwill..	1,591	—	2,572	—	—	4,163	0	4,164	—	4,164
Impairment loss.....	3,356	170	—	—	—	3,526	60	3,586	81	3,668
Balance of goodwill at end of current period .....	16,536	—	44,821	—	—	61,357	—	61,357	—	61,357
Investments in equity method affiliates .....	—	—	—	2,302	—	2,302	—	2,302	—	2,302
Increase in tangible fixed assets and intangible fixed assets.....	41,467	25,692	11,460	10,729	526	89,875	2,512	92,387	4,978	97,366

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

Thousands of U.S. dollars										
	Reporting Segments						Other Business (Note 1)	Total	Adjustment (Note 2)	Consolidated Financial Statements (Note 3)
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Trading	Total				
Net sales										
(1) Outside customers.....	\$2,054,828	\$265,225	\$976,816	\$463,819	\$1,169,578	\$4,930,285	\$325,338	\$5,255,632	\$ —	\$5,255,632
(2) Inter-segment sales and transfers.....	374,023	221,039	173,065	125,018	25,301	918,456	141,329	1,059,785	(1,059,785)	—
Total .....	2,428,852	486,272	1,149,890	588,837	1,194,880	5,848,750	466,667	6,315,416	(1,059,785)	5,255,632
Segment income (loss).....	432,348	38,627	35,013	51,606	38,554	596,176	5,924	602,108	(107,640)	494,460
Segment assets.....	3,866,338	827,382	2,000,046	679,993	404,126	7,777,903	442,415	8,220,327	826,296	9,046,632
Other items										
Depreciation and amortization (other than goodwill).....	295,372	25,365	108,461	28,523	849	458,580	8,498	467,087	25,730	492,817
Amortization of goodwill .....	14,522	—	23,476	—	—	37,997	0	38,007	—	38,007
Impairment loss .....	30,632	1,552	—	—	—	32,183	548	32,731	739	33,479
Balance of goodwill at end of current period.....	150,931	—	409,100	—	—	560,031	—	560,031	—	560,031
Investments in equity method affiliates .....	—	—	—	21,011	—	21,011	—	21,011	—	21,011
Increase in tangible fixed assets and intangible fixed assets .....	378,487	234,502	104,600	97,928	4,801	820,327	22,928	843,255	45,436	888,700

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

2. Adjustments are as follows:

- Adjustments of negative ¥11,793 million (negative US\$107,640 thousand) for segment income include the elimination of intersegment transactions of ¥1,888 million (US\$17,233 thousand) and unallocated corporate expenses of negative ¥13,682 million (negative US\$124,881 thousand). These corporate expenses mainly comprise the Company’s basic research expenses.
- Adjustments for segment assets amounting to ¥90,529 million (US\$826,296 thousand) include the elimination of intersegment transactions of negative ¥36,506 million (negative US\$333,206 thousand) and unallocated corporate assets of ¥127,036 million (US\$1,159,511 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.

3. Segment income is adjusted with operating income under the Consolidated Statement of Income.

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

Fiscal 2018 (January 1, 2018 to December 31, 2018)

	Millions of yen								Adjustment (Note 2)	Consolidated Financial Statements (Note 3)
	Vinyl Acetate	Isoprene	Reporting Segments		Trading	Total	Other Business (Note 1)	Total		
			Functional Materials	Fibers and Textiles						
Net sales										
(1) Outside customers .....	¥233,214	¥30,144	¥111,969	¥47,287	¥136,109	¥558,726	¥44,269	¥602,996	¥ —	¥602,996
(2) Inter-segment sales and transfers .....	46,164	27,062	19,563	17,429	2,739	112,959	13,755	126,714	(126,714)	—
Total .....	279,379	57,207	131,533	64,716	138,848	671,685	58,025	729,710	(126,714)	602,996
Segment income (loss) .....	54,739	7,272	4,396	6,279	4,215	76,904	1,178	78,082	(12,288)	65,794
Segment assets .....	416,191	62,682	226,542	67,035	46,282	818,733	42,643	861,376	85,718	947,095
Other items										
Depreciation and amortization (other than goodwill) .....	31,477	2,506	12,563	2,584	58	49,190	892	50,082	2,204	52,287
Amortization of goodwill ..	1,804	—	2,603	—	—	4,408	2	4,410	—	4,410
Impairment loss .....	6,311	—	189	—	—	6,500	161	6,662	—	6,662
Balance of goodwill at end of current period .....	18,468	—	48,016	—	—	66,485	0	66,485	—	66,485
Investments in equity method affiliates .....	—	—	—	2,290	—	2,290	—	2,290	—	2,290
Increase in tangible fixed assets and intangible fixed assets .....	38,034	4,038	7,341	7,633	53	57,102	2,890	59,993	6,832	66,825

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

2. Adjustments are as follows:

(a) Adjustments of negative ¥12,288 million for segment income include the elimination of intersegment transactions of ¥1,622 million and unallocated corporate expenses of negative ¥13,910 million. These corporate expenses mainly comprise the Company’s basic research expenses.

(b) Adjustments for segment assets amounting to ¥85,718 million include the elimination of intersegment transactions of negative ¥39,349 million and unallocated corporate assets of ¥125,068 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.

3. Segment income is adjusted with operating income under the Consolidated Statement of Income.

### (Related Information)

#### Fiscal 2019 (January 1, 2019 to December 31, 2019)

##### 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 .....	¥261,241	¥53,244	¥125,301	¥92,986	¥43,032
					¥575,807

## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

	Thousands of U.S. dollars					Total
	Vinyl Acetate	Isoprene	Functional Materials	Fibers and Textiles	Other Business	
Net sales to outside customers .....	\$2,384,456	\$485,980	\$1,143,675	\$848,722	\$392,771	\$5,255,632

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 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: Environmental 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
¥184,491	¥98,776	¥68,161	¥127,299	¥70,913	¥26,164	¥575,807

  

Thousands of U.S. dollars						
Japan	United States	China	Europe	Asia	Other Area	Total
\$1,683,927	\$901,570	\$622,134	\$1,161,911	\$647,253	\$238,810	\$5,255,632

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	Other Overseas	Total	Japan	United States	Other Overseas	Total
¥176,998	¥127,875	¥109,919	¥414,793	\$1,615,535	\$1,167,169	\$1,003,277	\$3,785,989

### 3. Major customers

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

Fiscal 2018 (January 1, 2018 to December 31, 2018)

#### 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 .....	¥273,307	¥53,255	¥130,951	¥88,930	¥56,551	¥602,996

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 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: Environmental 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
¥192,940	¥100,736	¥70,528	¥136,122	¥75,144	¥27,524	¥602,996

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

### (2) Tangible fixed assets

Millions of yen			
Japan	United States	Other Overseas	Total
¥146,011	¥133,303	¥78,096	¥357,411

## 3. Major customers

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

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

**Fiscal 2019:** This information is omitted since similar information is disclosed in the segment information.

Fiscal 2018: 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 2019:** This information is omitted since similar information is disclosed in the segment information.

Fiscal 2018: This information is omitted since similar information is disclosed in the segment information.

### Information about gain on negative goodwill

**Fiscal 2019:** Not applicable.

Fiscal 2018: Not applicable.



## Notes to Consolidated Financial Statements

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

### 20 Related Party Disclosures

**Fiscal 2019:** Not applicable

**Fiscal 2018:** Not applicable

### 21 Per Share Information

	Yen		U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Net assets per share.....	¥1,527.79	¥1,592.96	\$13.94
Basic net income (loss) per share.....	(5.66)	96.05	(0.05)
Diluted net income per share .....	—	95.86	—

Notes: 1. Although there were residual securities in fiscal 2019, the diluted net income per share is not stated for the fiscal year because basic net loss per share was recorded.

2. The basis for computation of basic and diluted net income (loss) per share is as follows:

	Millions of yen		Thousands of U.S. dollars
	Fiscal 2019	Fiscal 2018	Fiscal 2019
Basic net income (loss) per share			
Net income (loss) attributable to owners of the parent.....	¥ (1,956)	¥ 33,560	\$(17,853)
Amount unallocated to common stock .....	—	—	—
Net income (loss) attributable to owners of the parent allocated to common stock .....	(1,956)	33,560	(17,853)
Average number of common stock outstanding during the fiscal year (thousand shares).....	345,819	349,424	
Diluted net income per share			
Adjustment made on net income attributable to owners of the parent .....	—	—	—
Increase of common stocks (thousand shares) .....	513	677	
(New subscription rights to shares (thousand shares)) .....	(513)	(677)	
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 / Year ended December 31, 2019

### 1 Detailed Schedule of Bonds

							(Millions of yen)
Company name	Issue	Date of issue	Balance at beginning of period	Balance at end of period	Yield	Security	Date of redemption
Kuraray Co., Ltd.	No. 4 Unsecured bonds	December 9, 2011	¥10,000 (US\$91,274 thousand)	¥10,000 (US\$91,274 thousand)	1.24%	None	December 9, 2021
	No. 5 Unsecured bonds	April 25, 2018	¥10,000 (US\$91,274 thousand)	¥10,000 (US\$91,274 thousand)	0.01%	None	April 23, 2021
	No. 6 Unsecured bonds	April 25, 2018	¥10,000 (US\$91,274 thousand)	¥10,000 (US\$91,274 thousand)	0.09%	None	April 25, 2023
	No. 7 Unsecured bonds	April 25, 2018	¥10,000 (US\$91,274 thousand)	¥10,000 (US\$91,274 thousand)	0.19%	None	April 25, 2025
	No. 8 Unsecured bonds	April 25, 2018	¥10,000 (US\$91,274 thousand)	¥10,000 (US\$91,274 thousand)	0.31%	None	April 25, 2028
	Total	—	¥50,000 (US\$456,371 thousand)	¥50,000 (US\$456,371 thousand)	—	—	—

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

					(Millions of yen)
Due within 1 year	Due in 1-2 years	Due in 2-3 years	Due in 3-4 years	Due in 4-5 years	
—	¥20,000 (US\$182,548 thousand)	—	¥10,000 (US\$91,274 thousand)	—	

### 2 Detailed Schedule of Loans Payable and Others

					(Millions of yen)
Category	Balance as of January 1, 2019	Balance as of December 31, 2019	Average Interest rate (%)	Due date	
Short-term loans	¥ 34,490	¥34,831 (US\$317,917 thousand)	0.3	—	
Current portion of long-term loans payable due within one year	12,050	¥33 (US\$301 thousand)	1.2	—	
Current portion of lease obligations due within one year (Note 2)	433	¥473 (US\$4,317 thousand)	—	—	
Current portion of lease liabilities due within one year (Note 2)	884	¥1,161 (US\$10,597 thousand)	—	—	
Long-term loans payable (Excluding current portion) (Note 3)	120,049	¥128,001 (US\$1,168,319 thousand)	0.6	From March 2021 to December 2028	
Lease obligations (Excluding current portion) (Notes 2, 3)	1,497	¥1,400 (US\$12,778 thousand)	—	From January 2021 to September 2046	
Lease liabilities (Excluding current portion) (Notes 2, 3)	19,256	¥17,025 (US\$155,394 thousand)	—	From January 2021 to June 2057	
Other interest-bearing debts	—	¥24,000 (US\$219,058 thousand)	(0.0)	—	
Commercial papers (Current portion)	—	—	—	—	
Total	¥188,662	¥206,927 (US\$1,888,709 thousand)	—	—	

## Annexed Consolidated Detailed Schedules

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

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. Repayments of long-term loans payable, lease obligations and lease liabilities (excluding those due within one year) within five years after the consolidated balance sheet date are as follows:

(Millions of yen)				
Category	Due after 1 year but within 2 years	Due after 2 years but within 3 years	Due after 3 years but within 4 years	Due after 4 years but within 5 years
Long-term loans payable	¥ 15	¥25,000	¥20,932	¥19,692
Lease obligations	396	321	238	154
Lease liabilities	1,361	949	921	918

(Thousands of U.S. dollars)				
Category	Due after 1 year but within 2 years	Due after 2 years but within 3 years	Due after 3 years but within 4 years	Due after 4 years but within 5 years
Long-term loans payable	\$ 137	\$228,185	\$191,055	\$179,737
Lease obligations	3,614	2,930	2,172	1,406
Lease liabilities	12,422	8,662	8,406	8,379

### 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, 2019 and December 31, 2019.

### 4 Quarterly Information in Fiscal 2019

(Millions of yen)				
Accumulated	First quarter from January 1 to March 31, 2019	Second quarter from January 1 to June 30, 2019	Third quarter from January 1 to September 30, 2019	Fiscal 2019
Net sales .....	¥141,646	¥287,419	¥428,914	¥575,807
Income (loss) before income taxes .....	10,363	20,339	29,045	2,893
Net income (loss) attributable to owners of the parent .....	6,085	13,254	19,357	(1,956)
Net income (loss) per share (Yen) .....	17.48	38.16	55.86	(5.66)

  

Quarterly	First quarter from January 1 to March 31, 2019	Second quarter from April 1 to June 30, 2019	Third quarter from July 1 to September 30, 2019	Fourth quarter from October 1 to December 31, 2019
Net income (loss) per share (Yen) .....	¥17.48	¥20.69	¥17.70	¥(62.01)

## Annexed Consolidated Detailed Schedules

Kuraray Co., Ltd. and its Consolidated Subsidiaries / Year ended December 31, 2019

(Thousands of U.S. dollars)

Accumulated	First quarter from January 1 to March 31, 2019	Second quarter from January 1 to June 30, 2019	Third quarter from January 1 to September 30, 2019	Fiscal 2019
Net sales .....	\$1,292,862	\$2,623,394	\$3,914,878	\$5,255,632
Income (loss) before income taxes .....	94,587	185,643	265,106	26,406
Net income (loss) attributable to owners of the parent .....	55,540	120,975	176,679	(17,853)
Net income (loss) per share (Dollars) .....	0.16	0.35	0.51	(0.05)

  

Quarterly	First quarter from January 1 to March 31, 2019	Second quarter from April 1 to June 30, 2019	Third quarter from July 1 to September 30, 2019	Fourth quarter from October 1 to December 31, 2019
Net income (loss) per share (Dollars) .....	\$0.16	\$0.19	\$0.16	\$(0.57)



## Independent Auditor's Report

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

We have audited the accompanying consolidated financial statements of Kuraray Co., Ltd. ("the Company") and its consolidated subsidiaries, which comprise the consolidated balance sheet as at December 31, 2019, and the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of changes in net assets and consolidated statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

### Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these 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.

### Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, while the purpose of the financial statement audit is not to express an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



To the Board of Directors of  
Kuraray Co., Ltd.  
Page 2

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company and its consolidated subsidiaries as at December 31, 2019, and their financial performance and cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

Convenience translation

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended December 31, 2019 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.

*PricewaterhouseCoopers Chartered LLC*

May 29, 2020