kaneka

FINANCIAL SECTION 2019

Year Ended March 31, 2019

KANEKA CORPORATION

FINANCIAL REVIEW

KANEKA CORPORATION AND CONSOLIDATED SUBSIDIARIES

SALES

The Kaneka Group's business performance in the fiscal year from April 1, 2018 to March 31, 2019 (FY2019) was marked by record-high consolidated net sales of ¥621,044 million (up 4.2% year on year), driven by a contribution from global business development.

OPERATING EXPENSES AND OPERATING INCOME

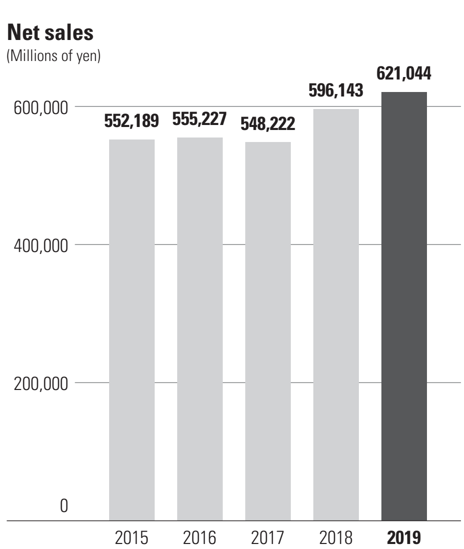
During FY2019, the cost of sales increased by 4.5% to ¥446,255 million. The cost of sales ratio increased from 71.6% to 71.9%. SG&A expenses increased 4.9% to ¥138,747 million, and the ratio of SG&A expenses to sales increased from 22.2% to 22.3%. Operating income during FY2019 decreased 2.3% to ¥36,042 million.

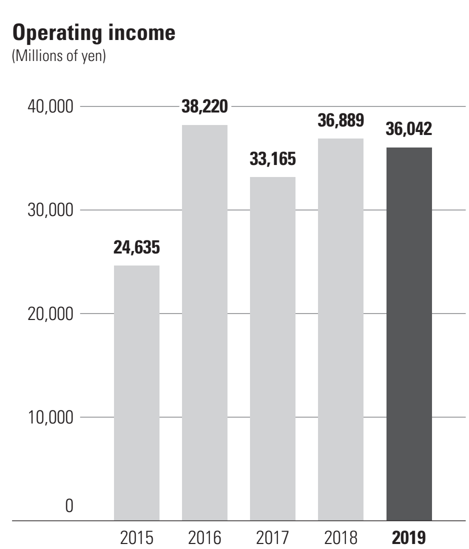
NET INCOME

For the year, the Group recorded net income attributable to owners of parent of ¥22,238 million, up 3.1% from the previous fiscal year.

FINANCIAL CONDITION

As of March 31, 2019, total assets were ¥659,588 million, up ¥19,807 million from March 31, 2018, due mainly to increases in notes and accounts receivable and property, plant and equipment. The ratio of net income attributable to owners of parent to total assets (ROA) was 3.4%, similar figures to the previous fiscal year. Interest-bearing debt stood at ¥120,519 million, up ¥7,381 million from March 31, 2018. Net assets increased ¥14,128 million to ¥360,727 million, reflecting an increase in retained earnings. As a result, the equity ratio came to 51.1%. The D/E ratio (ratio of interest-bearing debt to equity capital) was 0.36.





CASH FLOWS

Cash and cash equivalents at March 31, 2019 were ¥39,970 million, ¥7,444 million less than at March 31, 2018.

Net cash provided by operating activities was ¥41,113 million, ¥8,638 million less than in the previous fiscal year. The main contributors to the decrease were income before income taxes and non-controlling interests of ¥31,909 million, depreciation and amortization of ¥32,151 million, and ¥9,869 million for an increase in inventory asset, which were partially offset by income taxes paid of ¥8,761 million.

Net cash used in investing activities amounted to ¥47,229 million, ¥8,433 million more than in the previous fiscal year. The principal use of cash was ¥43,987 million for the purchase of property, plant and equipment.

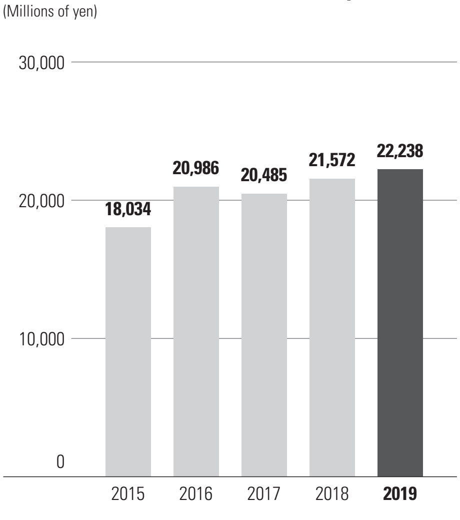
Financing activities used net cash of ¥955 million, ¥4,436 million less than in the previous fiscal year. This mainly reflected cash dividends paid of ¥5,906 million and purchase of treasury stock of ¥1,768 million, and proceeds from loans payable of ¥6,578 million.

Financial Index Trends

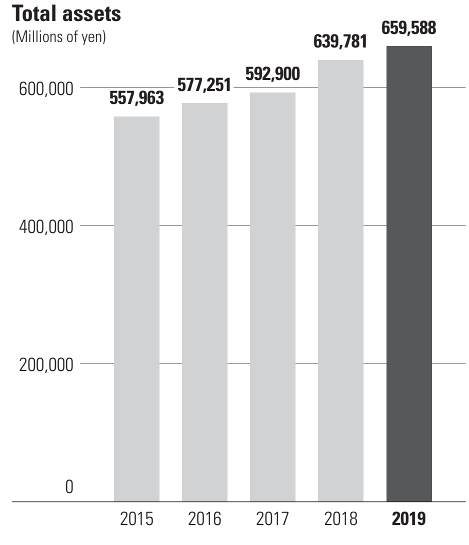
	Year ended March 31, 2015	Year ended March 31, 2016	Year ended March 31, 2017	Year ended March 31, 2018	Year ended March 31, 2019
Shareholders' equity ratio	53.5%	50.6%	51.5%	50.9%	51.1%
Shareholders' equity ratio based on market value	50.8%	55.4%	46.1%	53.9%	41.0%
Interest-bearing debt coverage ratio	3.3	1.9	2.3	2.3	2.9
Interest coverage ratio	27.8	50.9	34.2	29.6	20.5

Shareholders' equity ratio: equity capital/total assets
Shareholders' equity ratio based on market value: total market value of stock/total assets
Interest-bearing debt coverage ratio: interest-bearing debt/cash flows
Interest coverage ratio: operating cash flows/interest expenses paid
Notes:
1. All items were calculated according to financial figures on a consolidated basis.
2. The calculation of the total market value of stock was based on the total number of shares outstanding, excluding treasury stock.
3. "Operating cash flows" refers to cash flows from operations.
4. The scope of interest-bearing debt is all liabilities in the Consolidated Balance Sheets for which interest is payable.
5. Paid interest is based on the amount of interest paid shown in the Consolidated Statements of Cash Flows.

Net income attributable to owners of parent
(Millions of yen)



Total assets
(Millions of yen)



BUSINESS RISKS AND UNCERTAINTIES

Factors that may significantly affect the performance and the financial position of the Kaneka Group include those described below. Please note that the matters described are only those that we considered risks as of March 31, 2019 and that this is not an exhaustive list of risks borne by the Group.

(1) Risks related to the Group's ability to maintain operational advantages and trends in the Japanese and overseas economic environments

The Kaneka Group maintains its operational advantages by developing and commercializing high value-added products in a host of fields and by consistently cultivating new markets and leveraging its ability to integrate and combine its expertise in core polymer and fermentation technologies and fostering thin-film formation technology, biotechnology and organic synthesis technology. The Kaneka Group is working to ensure a corporate structure that is not affected by the entry of competitors into these markets, which could otherwise result in increased price competition and reduced profitability. Moreover, because the growth of generic products could cause a decrease in the demand for the Group's products and cause the Group to withdraw from or restructure certain operations, we are working to mitigate the potential effects of changes in the economic environment. However, such measures may not be sufficient to withstand a sudden downturn in the economic environment, obsolescence of the Company's technologies or an unexpected drop-off in demand for the Company's products. Such circumstances could seriously affect the Group's financial position and performance.

(2) Risks associated with the globalization of our business (fluctuations in foreign exchange rates and overseas business development)

For the Kaneka Group, globalization is a key element of its management strategy. However, overseas business operations face various risks, including unexpected changes in laws and regulations, tax systems, including transfer price taxation, and social and political disturbances resulting from terrorism or warfare. If these risks materialize, they may adversely affect the Group's performance and financial position. In addition, fluctuations in foreign exchange rates have the potential to significantly affect the Group's performance because of its revenue structure. Therefore, we employ foreign exchange forward contracts and other hedges in connection with foreign trade transactions to minimize the risk of foreign exchange rate fluctuations. However, sharp fluctuations in exchange rates beyond the coverage of hedge instruments could seriously affect the performance and financial position of the Group.

(3) Risks of price fluctuations of raw materials and fuels

Through the combination of medium- to long-term forward contracts and spot market purchases, the Kaneka Group has adopted a purchasing framework to achieve the most favorable purchasing cost for raw materials and fuels. However, since most of these commodities are subject to price fluctuations in the international market, there are still some risks involved. For example, there may be sharp fluctuations in prices which cannot be offset by cost reductions or price revisions. In particular, price fluctuations in petrochemical materials, fuels and edible oils and fats affect the production of PVC/caustic soda, modifier, expandable plastics and products and foodstuffs could significantly impact the Group's financial position and performance.

(4) Risks associated with product liability, industrial accidents and large scale disasters

The Kaneka Group implements comprehensive strategies to ensure the safe distribution of products that are safe to use. We maintain liability insurance covering the whole Group in the event of a product related accident. However, the possibility remains that unexpected problems with product quality could cause a large-scale product related accident. Moreover, despite our best efforts to ensure safety and prevent accidents by placing the highest priority on safety, risks remain. Although the Kaneka Group continues its business giving priority to safety and complying with laws and regulations, a major natural disaster such as an industrial accident or an earthquake could destroy manufacturing facilities and result in losses beyond the coverage of property insurance. In such circumstances, it is possible that the Group's financial position and performance could be significantly affected.

(5) Risks associated with the protection of intellectual property rights

To maintain its business advantages, the Kaneka Group attaches strategic importance to the protection of its patents on newly developed technologies. However, with globalization and the development of IT technologies, it is not possible for us to completely avoid the risk of external leaks of our proprietary technologies and expertise. Nor is it possible to avoid all disputes with other parties in connection with the conveyance of our intellectual property rights to others or our use of other companies' intellectual property. In such circumstances, it is possible that the Group's competitiveness could be undermined and its financial position and performance significantly affected.

(6) Impact of environment related regulations

To minimize the impact of its business activities on the global environment and the world's ecosystem, the Kaneka Group puts forth its best efforts to reduce its environmental footprint, to save resources and energy, and to prevent global warming throughout the lifecycle of its products. Nevertheless, environmental regulations are tightened every year, and depending on the nature of the regulations, expenses may be incurred in connection with the manufacture, storage and disposal of products that could significantly impact the Group's financial position and performance.

(7) Risks associated with legal action

The Group attaches great importance to compliance management regarding the observance of social rules, including the laws and regulations of the societies in which it conducts business. There are risks, however, of the Group becoming the subject of litigation or administrative measures in connection with operations in Japan or abroad. If a significant action is filed against the Group, it is possible that the Group's financial position and performance could be significantly affected.

(8) Other risks

To promote long-term business relationships, the Kaneka Group holds shares in its business partners and certain financial institutions. In the event that the market value of these shares decreased significantly at the end of the fiscal year, the Group could be required to report impairment loss pursuant to the application of the Accounting Standard for Financial Instruments. With regard to fixed assets, a substantial worsening in the operating environment could cause further decline in the market value of idle land held by the Group. Consequently, the Group could be required to report impairment loss pursuant to the application of the Accounting Standard for Impairment of Fixed Assets.

For retirement benefit obligations and retirement benefit expenses, actuarial calculations are used each year to determine the discount rate and other core ratios, incorporating the expected rate of investment return on core assets. However, a downturn in the discount rate or a decrease in investment yields on pension assets could affect the Kaneka Group's financial position and performance. Moreover, deferred tax assets are posted against future temporary differences with the assumption that they can be recovered by offsetting future taxable income. However, if future taxable income differs from expectations, the liquidation of deferred tax assets could affect the Group's financial position and performance. The Group's financial position and performance could also be significantly affected by factors such as fluctuations in the markets for its products, changes in laws and regulations, delays in research and development and technical innovations.

CONSOLIDATED BALANCE SHEETS

KANEKA CORPORATION AND CONSOLIDATED SUBSIDIARIES

March 31, 2019 and 2018

	Millions of yen		Thousands of U.S. dollars (Note 1)
Assets	**2019**	2018	**2019**
Current assets:			
Cash and cash equivalents (Note 5)	**¥ 39,970**	¥ 47,414	**$ 360,123**
Notes and accounts receivable - trade (Note 5)	**147,993**	142,195	**1,333,391**
Inventories (Note 8)	**112,434**	104,215	**1,013,010**
Short-term loans receivable from unconsolidated subsidiaries and affiliates	**1,722**	1,735	**15,515**
Other current assets	**13,365**	11,684	**120,415**
Allowance for doubtful accounts (Note 5)	**(1,238)**	(973)	**(11,154)**
Total current assets	**314,246**	306,270	**2,831,300**
Property, plant and equipment (Note 12):			
Land	**31,355**	32,545	**282,503**
Buildings and structures	**199,621**	194,565	**1,798,549**
Machinery, equipment and vehicles	**577,115**	564,428	**5,199,703**
Construction in progress	**26,339**	12,712	**237,310**
Other	**3,697**	3,728	**33,309**
	838,127	807,978	**7,551,374**
Less accumulated depreciation	**586,205**	570,503	**5,281,602**
Property, plant and equipment, net	**251,922**	237,475	**2,269,772**
Intangible assets (Note 12):	**13,425**	9,892	**120,957**
Investments and other assets:			
Investment securities (Notes 5, 6 and 12):			
Unconsolidated subsidiaries and affiliates	**4,115**	5,514	**37,075**
Other	**57,640**	63,857	**519,326**
Long-term loans receivable (Note 5)	**1,100**	1,229	**9,911**
Deferred tax assets (Note 11)	**6,864**	5,669	**61,843**
Other	**10,537**	10,145	**94,938**
Allowance for doubtful accounts (Note 5)	**(261)**	(270)	**(2,352)**
Total investments and other assets	**79,995**	86,144	**720,741**
	¥ 659,588	¥ 639,781	**$ 5,942,770**

See accompanying notes.

Liabilities and net assets	Millions of yen 2019	Millions of yen 2018	Thousands of U.S. dollars (Note 1) 2019
Current liabilities:			
Short-term loans payable (Notes 5 and 12)	**¥ 63,982**	¥ 50,356	**$ 576,466**
Current portion of long-term loans payable (Notes 5 and 12)	**3,687**	9,298	**33,219**
Current portion of bonds payable (Notes 5 and 12)	**10,000**	—	**90,098**
Notes and accounts payable (Note 5):			
Trade	**84,797**	84,914	**764,006**
Construction	**11,545**	8,373	**104,018**
Other	**18,682**	18,971	**168,321**
Income taxes payable	**2,865**	4,481	**25,813**
Accrued expenses	**13,764**	13,514	**124,011**
Other current liabilities	**4,590**	4,975	**41,357**
Total current liabilities	**213,912**	194,882	**1,927,309**
Noncurrent liabilities:			
Bonds payable (Notes 5 and 12)	—	10,000	—
Long-term loans payable (Notes 5 and 12)	**45,123**	45,848	**406,550**
Net defined benefit liability (Note 13)	**34,985**	37,325	**315,209**
Provision for directors' retirement benefits	**266**	297	**2,397**
Deferred tax liabilities (Note 11)	**2,137**	1,441	**19,254**
Other noncurrent liabilities	**2,438**	3,389	**21,965**
Total noncurrent liabilities	**84,949**	98,300	**765,375**
Contingent liabilities (Note 14)			
Net assets (Note 15):			
Shareholders' equity:			
Capital stock			
Authorized—150,000,000 shares			
Issued —68,000,000 shares	**33,047**	33,047	**297,748**
Capital surplus	**32,784**	32,799	**295,378**
Retained earnings	**272,944**	264,964	**2,459,176**
Less treasury stock, at cost—2,778,423 shares in 2019			
4,456,938 shares in 2018	**(11,602)**	(18,684)	**(104,532)**
Total shareholders' equity	**327,173**	312,126	**2,947,770**
Accumulated other comprehensive income:			
Valuation difference on available-for-sale securities	**19,643**	24,731	**176,980**
Deferred gains or losses on hedges	**(110)**	(109)	**(991)**
Foreign currency translation adjustments	**(4,008)**	(3,035)	**(36,111)**
Remeasurements of defined benefit plans	**(5,706)**	(7,527)	**(51,410)**
Total accumulated other comprehensive income	**9,819**	14,060	**88,468**
Subscription rights to shares (Note 16)	**432**	301	**3,892**
Non-controlling interests	**23,303**	20,112	**209,956**
Total net assets	**360,727**	346,599	**3,250,086**
	¥ 659,588	¥ 639,781	**$ 5,942,770**

See accompanying notes.

CONSOLIDATED STATEMENTS OF INCOME

KANEKA CORPORATION AND CONSOLIDATED SUBSIDIARIES

Years ended March 31, 2019, 2018 and 2017

	Millions of yen			Thousands of U.S. dollars (Note 1)
	2019	2018	2017	**2019**
Net sales	**¥ 621,044**	¥ 596,143	¥ 548,222	**$ 5,595,495**
Cost of sales	**446,255**	426,960	385,362	**4,020,677**
Gross profit	**174,789**	169,183	162,860	**1,574,818**
Selling, general and administrative expenses	**138,747**	132,294	129,695	**1,250,086**
Operating income	**36,042**	36,889	33,165	**324,732**
Other income (expenses):				
Interest and dividend income	**1,921**	1,602	1,783	**17,308**
Interest expenses	**(2,014)**	(1,692)	(1,428)	**(18,146)**
Gain on sales of investment securities	**1,515**	—	1,602	**13,650**
Gain on sales of property, plant and equipment	**428**	—	626	**3,856**
Loss on disposal of property, plant and equipment	**(2,521)**	(1,745)	(2,534)	**(22,714)**
Foreign exchange gains (losses), net	**(334)**	455	(2,270)	**(3,009)**
Equity in earnings of affiliates, net	**30**	147	118	**270**
Gain on negative goodwill (Note 17)	—	954	—	—
Litigation expenses	**(1,684)**	(1,088)	(963)	**(15,173)**
Restructuring charges (Notes 9 and 10)	**(1,851)**	(1,782)	—	**(16,677)**
Gain on step acquisitions (Note 17)	**444**	1,430	—	**4,000**
Environmental expenses	—	(567)	—	—
Provision of allowance for doubtful accounts	—	(638)	—	—
Settlement received	**1,052**	—	—	**9,478**
Gain on contribution of securities to retirement benefit trust	**1,608**	—	—	**14,488**
Other, net	**(2,727)**	(2,880)	(1,407)	**(24,569)**
Income before income taxes and non-controlling interests	**31,909**	31,085	28,692	**287,494**
Income taxes (Note 11)				
Current	**7,894**	8,372	7,089	**71,124**
Deferred	**40**	(83)	88	**360**
Net income	**23,975**	22,796	21,515	**216,010**
Net income attributable to non-controlling interests	**1,737**	1,224	1,030	**15,650**
Net income attributable to owners of parent	**¥ 22,238**	¥ 21,572	¥ 20,485	**$ 200,360**

	Yen			U.S. dollars (Note 1)
Net income per share – basic (Note 2)	**¥ 339.15**	¥ 328.46	¥ 308.60	**$ 3.06**
Net income per share – diluted (Note 2)	**338.59**	328.05	308.26	**3.05**
Cash dividends applicable to the year (Note 15)	**64.00**	18.00	18.00	**0.58**

See accompanying notes.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

KANEKA CORPORATION AND CONSOLIDATED SUBSIDIARIES

Years ended March 31, 2019, 2018 and 2017

	Millions of yen			Thousands of U.S. dollars (Note 1)
	2019	2018	2017	**2019**
Net income	**¥ 23,975**	¥ 22,796	¥ 21,515	**$ 216,010**
Other comprehensive income:				
Valuation difference on available-for-sale securities	**(5,164)**	2,440	5,047	**(46,527)**
Deferred gains or losses on hedges	**(2)**	(47)	(9)	**(18)**
Foreign currency translation adjustments	**(1,178)**	2,116	(4,268)	**(10,613)**
Remeasurements of defined benefit plans	**1,800**	2,154	1,248	**16,218**
Share of other comprehensive income of associates accounted for using equity method	**(5)**	3	(2)	**(45)**
Total other comprehensive income (Note 3)	**(4,549)**	6,666	2,016	**(40,985)**
Comprehensive income	**¥ 19,426**	¥ 29,462	¥ 23,531	**$ 175,025**
Comprehensive income attributable to:				
Comprehensive income attributable to owners of parent	**¥ 17,997**	¥ 27,959	¥ 22,597	**$ 162,150**
Comprehensive income attributable to non-controlling interests	**1,429**	1,503	934	**12,875**

See accompanying notes.

CONSOLIDATED STATEMENTS OF CHANGES IN NET ASSETS

KANEKA CORPORATION AND CONSOLIDATED SUBSIDIARIES

Years ended March 31, 2019, 2018 and 2017

	Millions of yen			Thousands of U.S. dollars (Note 1)
	2019	2018	2017	**2019**
Shareholders' equity				
Capital stock				
Balance at beginning of year	**¥ 33,047**	¥ 33,047	¥ 33,047	**$ 297,748**
Changes of items during the period				
Total changes of items during the period	—	—	—	—
Balance at the end of current period	**33,047**	33,047	33,047	**297,748**
Capital surplus				
Balance at beginning of year	**32,799**	32,813	34,936	**295,513**
Changes of items during the period				
Change in treasury shares of parent arising from transactions with non-controlling interests	**(15)**	(14)	(2,123)	**(135)**
Total changes of items during the period	**(15)**	(14)	(2,123)	**(135)**
Balance at the end of current period	**32,784**	32,799	32,813	**295,378**
Retained earnings				
Balance at beginning of year	**264,964**	248,524	234,378	**2,387,278**
Changes of items during the period				
Dividends from surplus - ¥64.00 per share	**(5,906)**	(5,934)	(6,329)	**(53,212)**
Change of scope of consolidation	—	823	—	—
Net income attributable to owners of parent	**22,238**	21,572	20,485	**200,360**
Disposal of treasury stock	**(0)**	(21)	(10)	**(0)**
Cancellation of treasury stock	**(8,352)**	—	—	**(75,250)**
Total changes of items during the period	**7,980**	16,440	14,146	**71,898**
Balance at the end of current period	**272,944**	264,964	248,524	**2,459,176**
Treasury stock				
Balance at beginning of year	**(18,684)**	(16,753)	(15,559)	**(168,340)**
Changes of items during the period				
Purchase of treasury stock	**(1,768)**	(2,619)	(1,812)	**(15,929)**
Disposal of treasury stock	**498**	688	618	**4,487**
Cancellation of treasury stock	**8,352**	—	—	**75,250**
Total changes of items during the period	**7,082**	(1,931)	(1,194)	**63,808**
Balance at the end of current period	**(11,602)**	(18,684)	(16,753)	**(104,532)**
Accumulated other comprehensive income				
Valuation difference on available-for-sale securities				
Balance at beginning of year	**24,731**	22,338	17,451	**222,822**
Changes of items during the period				
Net changes of items other than shareholders' equity	**(5,088)**	2,393	4,887	**(45,842)**
Total changes of items during the period	**(5,088)**	2,393	4,887	**(45,842)**
Balance at the end of current period	**19,643**	24,731	22,338	**176,980**
Deferred gains or losses on hedges				
Balance at beginning of year	**(109)**	(61)	(52)	**(982)**
Changes of items during the period				
Net changes of items other than shareholders' equity	**(1)**	(48)	(9)	**(9)**
Total changes of items during the period	**(1)**	(48)	(9)	**(9)**
Balance at the end of current period	**(110)**	(109)	(61)	**(991)**

	Millions of yen			Thousands of U.S. dollars (Note 1)
	2019	2018	2017	**2019**
Foreign currency translation adjustments				
Balance at beginning of year	**(3,035)**	(5,105)	(1,082)	**(27,345)**
Changes of items during the period				
Net changes of items other than shareholders' equity	**(973)**	2,070	(4,023)	**(8,766)**
Total changes of items during the period	**(973)**	2,070	(4,023)	**(8,766)**
Balance at the end of current period	**(4,008)**	(3,035)	(5,105)	**(36,111)**
Remeasurements of defined benefit plans				
Balance at beginning of year	**(7,527)**	(9,653)	(10,910)	**(67,817)**
Changes of items during the period				
Net changes of items other than shareholders' equity	**1,821**	2,126	1,257	**16,407**
Total changes of items during the period	**1,821**	2,126	1,257	**16,407**
Balance at the end of current period	**(5,706)**	(7,527)	(9,653)	**(51,410)**
Subscription rights to shares				
Balance at beginning of year	**301**	271	228	**2,712**
Changes of items during the period				
Net changes of items other than shareholders' equity	**131**	30	43	**1,180**
Total changes of items during the period	**131**	30	43	**1,180**
Balance at the end of current period	**432**	301	271	**3,892**
Non-controlling interests				
Balance at beginning of year	**20,112**	16,130	16,285	**181,206**
Changes of items during the period				
Net changes of items other than shareholders' equity	**3,191**	3,982	(155)	**28,750**
Total changes of items during the period	**3,191**	3,982	(155)	**28,750**
Balance at the end of current period	**23,303**	20,112	16,130	**209,956**
Total net assets				
Balance at beginning of year	**346,599**	321,551	308,722	**3,122,795**
Changes of items during the period				
Dividends from surplus- ¥64.00 per share	**(5,906)**	(5,934)	(6,329)	**(53,212)**
Change of scope of consolidation	—	823	—	—
Net income attributable to owners of parent	**22,238**	21,572	20,485	**200,360**
Purchase of treasury stock	**(1,768)**	(2,619)	(1,812)	**(15,929)**
Disposal of treasury stock	**498**	667	608	**4,487**
Cancellation of treasury stock	—	—	—	—
Change in treasury shares of parent arising from transactions with non-controlling interests	**(15)**	(14)	(2,123)	**(135)**
Net changes of items other than shareholders' equity	**(919)**	10,553	2,000	**(8,280)**
Total changes of items during the period	**14,128**	25,048	12,829	**127,291**
Balance at the end of current period	**¥ 360,727**	¥ 346,599	¥ 321,551	**$ 3,250,086**

See accompanying notes.

CONSOLIDATED STATEMENTS OF CASH FLOWS

KANEKA CORPORATION AND CONSOLIDATED SUBSIDIARIES

Years ended March 31, 2019, 2018 and 2017

	Millions of yen			Thousands of U.S. dollars (Note 1)
	2019	2018	2017	2019
Cash flows from operating activities				
Income before income taxes and non-controlling interests	¥ **31,909**	¥ 31,085	¥ 28,692	$ **287,494**
Depreciation and amortization	**32,151**	30,323	27,808	**289,675**
Gain on step acquisitions	**(444)**	(1,430)	—	**(4,000)**
Gain on negative goodwill	—	(954)	—	—
Restructuring charges	**1,851**	1,782	—	**16,677**
Settlement received	**(1,052)**	—	—	**(9,478)**
Gain on contribution of securities to retirement benefit trust	**(1,608)**	—	—	**(14,488)**
Increase (decrease) in net defined benefit liability	**2,244**	3,026	2,516	**20,218**
Increase (decrease) in allowance for doubtful accounts	**(12)**	639	34	**(108)**
Interest and dividend income	**(1,921)**	(1,602)	(1,783)	**(17,308)**
Interest expenses	**2,014**	1,692	1,428	**18,146**
Loss (gain) on disposal of property, plant and equipment	**445**	531	102	**4,009**
Gain on sales of investment securities	**(1,515)**	—	(1,602)	**(13,650)**
Equity in earnings of affiliates, net	**(30)**	(147)	(118)	**(270)**
Decrease (increase) in notes and accounts receivable-trade	**(5,330)**	(12,054)	(4,609)	**(48,022)**
Decrease (increase) in inventories	**(9,869)**	(6,176)	(4,057)	**(88,918)**
Increase (decrease) in notes and accounts payable-trade	**(141)**	8,568	7,304	**(1,270)**
Others	**142**	1,706	19	**1,279**
Subtotal	**48,834**	56,989	55,734	**439,986**
Interest and dividend income received	**1,997**	1,753	1,904	**17,993**
Interest expenses paid	**(2,009)**	(1,681)	(1,405)	**(18,101)**
Settlement package received	**1,052**	—	—	**9,478**
Income taxes paid	**(8,761)**	(7,310)	(8,113)	**(78,935)**
Net cash provided by operating activities	**41,113**	49,751	48,120	**370,421**
Cash flows from investing activities				
Purchase of property, plant and equipment	**(43,987)**	(34,113)	(36,726)	**(396,315)**
Proceeds from sales of property, plant and equipment	**1,706**	62	1,093	**15,371**
Purchase of intangible assets	**(1,810)**	(1,406)	(1,474)	**(16,308)**
Purchase of investment securities	**(1,607)**	(1,385)	(76)	**(14,479)**
Proceeds from sales and distributions of investment securities	**1,635**	157	1,586	**14,731**
Purchase of shares of subsidiaries resulting in change in scope of consolidation	—	(1,464)	(102)	—
Proceeds from purchase of shares of subsidiaries resulting in change in scope of consolidation	**227**	780	—	**2,045**
Purchase of stocks of subsidiaries and affiliates	**(1,879)**	—	—	**(16,929)**
Payments for transfer of business	—	(332)	—	—
Payments of loans receivable	**(1,221)**	(934)	(315)	**(11,001)**
Collection of loans receivable	**1,162**	896	213	**10,469**
Others	**(1,455)**	(1,057)	(569)	**(13,109)**
Net cash used in investing activities	**(47,229)**	(38,796)	(36,370)	**(425,525)**
Cash flows from financing activities				
Net increase (decrease) in short-term loans payable	**13,648**	6,702	(2,859)	**122,966**
Proceeds from long-term loans payable	**3,811**	5,628	6,251	**34,336**
Repayment of long-term loans payable	**(10,881)**	(9,169)	(5,986)	**(98,036)**
Proceeds from sales and leasebacks	—	232	—	—
Repayments of lease obligations	**(128)**	(266)	(171)	**(1,153)**
Proceeds from share issuance to non-controlling shareholders	**246**	—	54	**2,216**
Cash dividends paid	**(5,906)**	(5,934)	(6,329)	**(53,212)**
Cash dividends paid to non-controlling interests	**(351)**	(359)	(400)	**(3,162)**
Purchase of treasury stock	**(1,768)**	(2,618)	(1,812)	**(15,929)**
Proceeds from sales of treasury stock	**396**	475	411	**3,568**
Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation	**(22)**	(82)	(2,772)	**(198)**
Net cash used in financing activities	**(955)**	(5,391)	(13,613)	**(8,604)**
Effect of exchange rate change on cash and cash equivalents	**(373)**	232	(281)	**(3,361)**
Net increase (decrease) in cash and cash equivalents	**(7,444)**	5,796	(2,144)	**(67,069)**
Cash and cash equivalents at beginning of period	**47,414**	41,018	43,162	**427,192**
Increase in cash and cash equivalents resulting from change of scope of consolidation	—	600	—	—
Cash and cash equivalents at end of period	¥ **39,970**	¥ 47,414	¥ 41,018	$ **360,123**

See accompanying notes.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

KANEKA CORPORATION AND CONSOLIDATED SUBSIDIARIES

1. BASIS OF PRESENTING CONSOLIDATED FINANCIAL STATEMENTS

Kaneka Corporation (the "Company") and its consolidated domestic subsidiaries maintain their official accounting records in Japanese yen and in accordance with the provisions set forth in the Financial Instruments and Exchange Law in Japan and its related accounting regulations and accounting principles generally accepted in Japan ("Japanese GAAP"), which are different in certain respects as to application and disclosure requirements from International Financial Reporting Standards.

The accompanying consolidated financial statements have been restructured and translated into English with some expanded descriptions and the inclusion of consolidated statements of changes in net assets from the consolidated financial statements of the Company prepared in accordance with Japanese GAAP and filed with the appropriate Local Finance Bureau of the Ministry of Finance as required by the Financial Instruments and Exchange Law in Japan. Some supplementary information included in the statutory Japanese language consolidated financial statements, but not required for fair presentation, is not presented in the accompanying consolidated financial statements.

The accounts of consolidated overseas subsidiaries were prepared for consolidation purposes in accordance with either International Financial Reporting Standards or U.S. Generally Accepted Accounting Principles, with adjustments for the specified items as applicable in compliance with ASBJ Practical Solution No. 18, "Tentative Treatment of Accounting for Foreign Subsidiaries in Preparing Consolidated Financial Statements."

The translation of the Japanese yen amounts into U.S. dollar amounts is included solely for the convenience of readers outside Japan, using the prevailing exchange rate on March 31, 2019 which was ¥110.99 to U.S.$1.00. 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 U.S. dollars at this or any other rate of exchange.

2. SIGNIFICANT ACCOUNTING POLICIES

Consolidation

The accompanying consolidated financial statements include the accounts of the Company and significant companies over which the Company has power of control through majority voting rights or existence of certain other conditions evidencing control (together, the "Companies"). Investments in nonconsolidated subsidiaries and affiliates over which the Company has the ability to exercise significant influence over operating and financial policies are accounted for by the equity method, except for insignificant investments which are recorded at cost.

The Company has 83 consolidated subsidiaries (84 in FY2018 and 76 in FY2017) and 3 affiliates accounted for by the equity method (4 in FY2018 and 3 in FY2017). For the year ended March 31, 2019, the accounts of 18 consolidated subsidiaries were included based on a fiscal year that ended on December 31. When significant transactions occur at those subsidiaries between their fiscal year end and that of the Company, the transactions are included in consolidation. Intercompany transactions and accounts have been eliminated. In the elimination of investments in subsidiaries, the assets and liabilities of the subsidiaries, including the portion attributable to non-controlling shareholders, are evaluated using the fair value at the time the Company acquired control of the respective subsidiary.

Cash and cash equivalents

Cash on hand, readily available deposits and short-term highly liquid investments with maturities not exceeding three months at the time of purchase are considered to be cash and cash equivalents.

Allowance for doubtful accounts

The allowance for doubtful receivables is provided to cover possible losses on collection. With respect to normal trade accounts receivable, it is based on the actual rate of historical bad debts, and for certain doubtful receivables, the uncollectible amount is individually estimated.

Securities

The Companies hold equity securities issued by subsidiaries and affiliated companies and available-for-sale securities. Equity securities issued by subsidiaries and affiliated companies which are not consolidated or accounted for using the equity method are stated at moving average cost. Available-for-sale securities with available fair values are stated at fair value. Unrealized gains and unrealized losses on these securities are reported, net of applicable income taxes, as a separate component of net assets. Realized gains and losses on the sale of such securities are computed using moving average cost. Securities with no available fair value are stated at moving average cost.

Derivatives and hedge accounting

Derivative financial instruments are stated at fair value, and changes in the fair value are recognized as gain or loss unless the derivative financial instruments are used for hedging purposes. If derivative financial instruments are used as hedges and meet certain hedging criteria, the Companies defer recognition of gain or loss resulting from a change in the fair value of the derivative financial instrument until the related loss or gain on the hedged item is recognized. Also, if interest rate swap contracts are used as hedges and meet certain hedging criteria, the net amount to be paid or received under the interest rate swap contract is added to or deducted from the interest on the assets or liabilities for which the swap contract was executed.

Inventories

Inventories are principally valued at cost as determined by the average cost method. If the profitability of the inventories decreases, the book value is reduced accordingly.

Property, plant and equipment

Property, plant and equipment are stated at cost, net of accumulated loss from impairment. Cumulative amounts of recognized impairment loss are deducted from acquisition costs. Depreciation is computed over the estimated useful life of the asset mainly by the straight-line method. Repairs, maintenance and minor renewals are charged to expenses as incurred. Property, plant and equipment capitalized under finance lease arrangements are depreciated over the estimated useful life as measured by the lease term of the respective asset by the straight-line method. The residual value is zero or the guaranteed residual value.

Goodwill

Goodwill, except for minor goodwill, is amortized by the straight-line method within 20 years. Minor goodwill is expensed as incurred.

Liability (asset) for retirement benefits

The Company has an unfunded lump-sum benefit plan generally covering all employees. Under the terms of the plan, eligible employees are entitled upon mandatory retirement at age 60 or earlier voluntary termination to a lump-sum severance payment based on compensation at the time of severance and years of service.

In addition to the unfunded lump-sum plan, the Company participates in a noncontributory funded pension plan, which covers substantially all employees. Consolidated domestic subsidiaries have similar lump-sum benefit plans and pension plans. Certain overseas consolidated subsidiaries have defined contribution plans.

The Companies provide employees' severance and retirement benefits based on the estimated amounts of projected benefit obligation, actuarially calculated using certain assumptions, and the fair value of the plan assets. The estimated benefit is attributed to each period based on the plan's benefit formula. Prior service costs are recognized as expense using the straight-line method over mainly 5 years, a term within the average of the estimated remaining service years of the current employees. Actuarial gains and losses are recognized using the straight-line method over mainly 10 years, a term also within the average of the estimated remaining service years of employees, commencing with the following period.

Provision for directors' retirement benefits

Directors and statutory auditors terminating their service with certain consolidated domestic subsidiaries are entitled to receive retirement benefits based on compensation and years of service, subject to the approval of shareholders. Certain consolidated domestic subsidiaries accrue the liability for their plans in amounts sufficient to provide for benefits arising from services performed through the balance sheet date.

Research and development expenses

Expenses related to research and development activities are charged to income as incurred. Research and development expenses for the years ended March 31, 2019, 2018 and 2017 were ¥28,963 million ($260,951 thousand), ¥28,039 million and ¥28,513 million, respectively.

Income taxes

The tax effects of temporary differences between the carrying amounts of assets and liabilities for tax and financial reporting are recognized as deferred income taxes. The asset-liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

Net income per share

The computations of net income per share of common stock are based on the weighted average number of shares outstanding during each period. The Company implemented a 5 to 1 consolidation of shares of common stock with October 1, 2018 as the effective date. Net income per share is calculated based on the assumption that the consolidation had been implemented at the beginning of FY2017.

Application of consolidated taxation system

The Company and certain domestic consolidated subsidiaries apply a consolidated taxation system.

Reclassifications

Certain prior year amounts have been reclassified to conform to the 2019 presentation. These changes had no impact on previously reported results of operations or shareholders' equity.

Additional information

(Transfer of Company shares to the employees through an employee stock ownership trust)
The Company has introduced a plan to transfer Company shares to the employees' share holding association through a trust in order to provide the Company group's employees to promote the benefit and welfare of the employees of the Company and to provide incentives to increase the enterprise value of the Company. The transaction was completed in FY2019.

(1) Outline of the transactions
The Board of Directors approved a resolution on October 9, 2015 to introduce the "Employee Stock Ownership Plan (ESOP) Trust" (the "Plan") to provide employees an incentive toward achieving medium- to long-term growth in corporate value.

The Plan was an incentive plan in which all employees of the Company who were members of the "Kaneka Share Holding Association"("Share Holding Association") could participate. According to the plan, the Company created a trust with employee members of the Share Holding Association who met certain requirements as beneficiaries. During a predetermined period, the trust acquired a number of the Company's shares that the Association was then expected to acquire over the next five years.

Afterwards, the trust sold the shares to the Share Holding Association in accordance with the plan. The remaining funds were to be distributed according to each employee's contribution ratio when there were trust earnings resulting from an upward swing in the stock price when the trust ended. There was no additional risk of loss to the employees when a loss was incurred as a result of a decrease in the stock price as the Company would pay back the loan based on a guarantee clause in the loan agreement.

The trust completed its purpose and terminated in FY2019.

(2) Stocks remaining in the trust
The book value (excluding incidental expenses) of stock remaining in the trust is included as "treasury stock" in net assets in the consolidated balance sheets. As of March 31, 2018, the trust held 419,000 shares of Company stock with a book value of ¥498 million. As of March 31, 2019, since the trust has ended, there will be no remaining shares of Company stock.

(3) Book value of loans recorded using the gross price method
¥791 million as of March 31, 2018.

There is no book value of borrowings recorded as the trust had ended as of March 31, 2019.

Changes in accounting policies

(Standards and guidance not yet adopted)
1 The Company and domestic consolidated subsidiaries
The following standard and guidance were issued but not yet adopted.

- "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) Overview
The above standard and guidance provide comprehensive principles for revenue recognition. Under the standard and guidance, revenue is recognized by applying following 5 steps:
Step1: Identify contract(s) with customers.
Step2: Identify the performance obligations in the contract.
Step3: Determine the transaction price.
Step4: Allocate the transaction price to the performance obligation in the contract.
Step5: Recognize revenue when (or as) the entity satisfies a performance obligation.

(2) Effective date
Effective from the beginning of the fiscal year ending March 31, 2022.

(3) Effects of the application of the standards
The Company and its domestic consolidated subsidiaries are currently in the process of determining the effects of these new standards on the consolidated financial statements.

2 Overseas consolidated subsidiaries
"Lease" (IFRS 16)

(1) Overview
This accounting standard requires the lessee of the lease to recognize assets and liabilities for all leases in principle.

(2) Effective date
Effective from the beginning of the fiscal year ending March 31, 2020.

(3) Effects of the application of the standards
The Company and its consolidated overseas subsidiaries are currently in the process of determining the effects of these new standards on the consolidated financial statements.

Changes in presentation method

(Changes due to adoption of "Partial Amendments to Accounting Standard for Tax Effect Accounting")
Upon application of "Partial Amendments to Accounting Standard for Tax Effect Accounting" (ASBJ Statement No. 28, February 16, 2018 (hereinafter, "Statement No. 28")) from the beginning of the current fiscal year, the Company and its domestic subsidiaries changed the presentation and deferred tax liabilities, such that deferred tax assets and deferred tax liabilities are classified as part of "investments and other assets" and "non current liabilities", respectively.

As a result, ¥5,639 million ($50,806 thousand) of deferred tax assets classified as "current assets" and ¥1,229 million ($11,073 thousand) of deferred tax liabilities classified as "non current liabilities" have been included in ¥5,669 million ($51,077 thousand) of deferred tax assets in "investments and other assets", and deferred tax liabilities classified as non current liabilities have been restated to ¥1,441 million ($12,983 thousand) in the balance sheet as of the end of the previous fiscal year.

3. COMPREHENSIVE INCOME

	Millions of yen			Thousands of U.S. dollars (Note 1)
	2019	2018	2017	**2019**
Valuation difference on available-for-sale securities				
Increase (Decrease) during the year	**¥ (4,299)**	¥ 3,539	¥ 8,584	**$ (38,733)**
Reclassification adjustments	**(2,911)**	(14)	(1,600)	**(26,228)**
Subtotal, before tax	**(7,210)**	3,525	6,984	**(64,961)**
Tax expense	**2,046**	(1,085)	(1,937)	**18,434**
Subtotal, net of tax	**(5,164)**	2,440	5,047	**(46,527)**
Deferred gains or losses on hedges				
Increase (Decrease) during the year	**224**	(1,061)	475	**2,018**
Reclassification adjustments	**(227)**	999	(484)	**(2,045)**
Subtotal, before tax	**(3)**	(62)	(9)	**(27)**
Tax expense	**1**	15	(0)	**9**
Subtotal, net of tax	**(2)**	(47)	(9)	**(18)**
Foreign currency translation adjustment				
Increase (Decrease) during the year	**(1,153)**	2,116	(4,268)	**(10,388)**
Reclassification adjustments	**(25)**	—	—	**(225)**
Subtotal, before tax	**(1,178)**	2,116	(4,268)	**(10,613)**
Tax expense	—	—	—	—
Subtotal, net of tax	**(1,178)**	2,116	(4,268)	**(10,613)**
Remeasurements of defined benefit plans				
Increase (Decrease) during the year	**651**	483	(711)	**5,865**
Reclassification adjustments	**1,941**	2,644	2,515	**17,488**
Subtotal, before tax	**2,592**	3,127	1,804	**23,353**
Tax expense	**(792)**	(973)	(556)	**(7,135)**
Subtotal, net of tax	**1,800**	2,154	1,248	**16,218**
Share of other comprehensive income of associates accounted for using equity method				
Increase (Decrease) during the year	**(77)**	3	(2)	**(694)**
Reclassification adjustments	**72**	—	—	**649**
Subtotal, net of tax	**(5)**	3	(2)	**(45)**
Total other comprehensive income	**¥ (4,549)**	¥ 6,666	¥ 2,016	**$ (40,985)**

4. STATEMENTS OF CASH FLOWS

	Millions of yen			Thousands of U.S. dollars (Note 1)
Important non-cash transactions	**2019**	2018	2017	**2019**
Cancellation of treasury stock	**¥ 8,351**	¥ —	¥ —	**$ 75,241**

5. FINANCIAL INSTRUMENTS

1. Matters regarding financial instruments

(1) Policy for handling financial instruments

The Companies procure funds necessary for the manufacturing and sales business primarily through borrowings from financial institutions or by issuing corporate bonds based upon the plan and budget for capital investments. In principle, temporary surplus funds are centralized by the Cash Management System (CMS) and invested in highly safe financial assets. Derivative transactions are used to hedge against risks described below, but never for speculative purposes.

(2) Description of financial instruments and inherent risks

Notes and accounts receivable - trade, which are operating receivables, are exposed to customer credit risk. Operating receivables denominated in foreign currencies generated from global business operations are exposed to foreign exchange fluctuation risk. Marketable securities and investment securities, primarily shares of companies with which the Companies maintain business relations, are exposed to the risk of market price fluctuations.

Notes and accounts payable, which are operating payables, are basically settled in the short-term with a deadline set within a year. Operating payables include payables denominated in foreign currencies for importing materials and are exposed to foreign exchange fluctuation risk. However, they remain within the range of the balance of operating receivables denominated in the same foreign currencies. Short-term borrowings are primarily for procuring operating capital and long-term debt, and bonds are issued to obtain necessary funds mainly for capital expenditures. A portion of the short-term debt and the long-term debt is exposed to interest rate fluctuation risk, but the effect is limited.

Derivative transactions such as foreign exchange forward contracts, currency swaps and interest rate swaps are used to hedge against the foreign currency fluctuation risk and interest rate fluctuation risk associated with operating receivables and payables denominated in foreign currencies, investment assets, loans receivable, etc. Since all derivative transactions correspond to assets and liabilities on the balance sheets, foreign exchange fluctuation risk is hedged and the fluctuation risk of market interest rates is rendered insignificant.

(3) Risk management system related to financial instruments

(a) Credit risk management (risk pertaining to breach of contract on the part of business partners)

The Company aims to mitigate credit risk by quickly identifying any concerns about the collection of operating receivables resulting from the deterioration of a business partner's financial position or other factors. Also, each business division periodically reviews the status of our main business partners and regularly monitors deadlines, balances and credit status for each partner. The consolidated subsidiaries also manage operating receivables in accordance with the practices of the Company.

As for debt securities, the credit risk is insignificant since the Company only handles those with high ratings or issued by companies with existing business relations with the Company and whose creditability is verifiable. Furthermore, the Company periodically verifies the financial position of issuers to mitigate risk. Since the counterparties to the derivative transactions are highly creditworthy financial institutions, the Company considers the risk of their breach of contract as almost nil.

The maximum credit risk exposure of financial assets is represented by their carrying amounts on the balance sheet as of March 31, 2019.

(b) Market risk management (foreign exchange and interest rate fluctuation risk)

The Company and some consolidated subsidiaries identify foreign exchange fluctuation risk associated with operating receivables or operating payables denominated in foreign currencies by currency and by month. Such risk is hedged by using foreign exchange forward contracts, principally up to the amounts to be settled after netting operating payables or operating receivables denominated in foreign currencies. Note that the Company defines the monthly execution limit and the operating standard based upon its Procedures for Foreign Exchange Management and enters into foreign exchange forward contracts within the scope provided by the procedures. Also, the Companies utilize interest rate swaps mainly to hedge against the fluctuation risk of market interest rates.

For marketable securities and investment securities, the Company periodically identifies fair values and the financial positions of the issuers (business partner companies). For securities other than held-to-maturity bonds, the Company continuously revises the holding status taking into consideration the business relationship with the business partner companies.

The Financial Department of the Company executes derivative transactions based upon its Transaction Regulations for Derivative Financial Products, which defines the basic policy, the scope of operations, the personnel responsible for execution, the basis for decision making and the management system. Consolidated subsidiaries enter into derivative transactions based upon resolutions passed by their respective bodies upon the Company's approval. The Company ensures an effective internal checking system by segregating the execution function from the monitoring and managing function. Also, the Director of the Company's Financial Department performs evaluations for hedge effectiveness of all derivative transactions entered into by the Companies and reports the results together with a description of the underlying assets and liabilities to the President and the CFO on a monthly basis.

(c) Liquidity risk management relating to fund procurement (risk of non-execution of payments by deadlines)

The Company manages liquidity risk by timely preparing and updating cash flow plans by the Financial Department and by maintaining a liquidity facility, which is the sum of liquidity on hand and commitment lines, in the approximate amount of one month's consolidated net sales. In addition, the Companies mitigate liquidity risk in principle by centralizing the Companies' funds using CMS. Accordingly, the Companies consider that no significant liquidity risk exists.

(4) Supplementary explanation for matters regarding fair value of financial instruments

The fair value of financial instruments is based on market price. If a market price is not available, another valuation method is used. Such methods include variable factors and assumptions, and the results of a valuation may differ depending on which factors and assumptions are used.

The contract amounts related to the derivative transactions shown in "Derivative Transactions" do not indicate the market risks associated with the derivative transactions themselves.

2. Matters regarding the fair value of financial instruments

The table below shows the amounts of financial instruments recorded in the consolidated balance sheets as of March 31, 2019 (the consolidated accounts settlement date of the year ending March 31, 2019), their fair values and any differences between the balance sheet amounts and the fair values. Financial instruments whose fair values were deemed extremely difficult to assess were not included (see Note 2).

Millions of yen

	Consolidated balance sheet amount	Fair value	Difference
(1) Cash and cash equivalents	**¥ 39,970**	**¥ 39,970**	**¥ —**
(2) Notes and accounts receivable - trade	**147,993**	**147,993**	**—**
(3) Marketable and investment securities			
Available-for-sale securities	**49,233**	**49,233**	**—**
(4) Long-term loans receivable	**1,100**		
Allowance for doubtful accounts [*1]	**(0)**		
	1,100	**1,108**	**8**
Total assets	**238,296**	**238,304**	**8**
(1) Notes and accounts payable - trade	**84,797**	**84,797**	**—**
(2) Short-term loans payable	**67,669**	**67,669**	**—**
(3) Current portion of bonds payable	**10,000**	**10,081**	**81**
(4) Accounts payable - other	**29,534**	**29,534**	**—**
(5) Bonds payable	**—**	**—**	**—**
(6) Long-term loans payable	**45,123**	**45,090**	**(33)**
Total liabilities	**237,123**	**237,171**	**48**
Derivative transactions [*2]			
– Hedge accounting not applied	**(13)**	**(13)**	**—**
– Hedge accounting applied	**(96)**	**(96)**	**—**

The table below shows the amounts of financial instruments recorded in the consolidated balance sheets as of March 31, 2018 (the consolidated accounts settlement date for the year ending March 31, 2018), their fair values and any differences between the balance sheet amounts and the fair values. Financial instruments whose fair values were deemed extremely difficult to assess were not included (see Note 2).

Millions of yen

	Consolidated balance sheet amount	Fair value	Difference
(1) Cash and cash equivalents	¥ 47,414	¥ 47,414	¥ —
(2) Notes and accounts receivable - trade	142,195	142,195	—
(3) Marketable and investment securities			
Available-for-sale securities	58,250	57,710	(540)
(4) Long-term loans receivable	1,229		
Allowance for doubtful accounts [*1]	(0)		
	1,229	1,230	1
Total assets	249,088	248,549	(539)
(1) Notes and accounts payable - trade	84,914	84,914	—
(2) Short-term loans payable	59,654	59,654	—
(3) Current portion of bonds payable	—	—	—
(4) Accounts payable - other	26,983	26,983	—
(5) Bonds payable	10,000	10,236	236
(6) Long-term loans payable	45,848	45,704	(144)
Total liabilities	227,399	227,491	92
Derivative transactions [*2]			
– Hedge accounting not applied	6	6	—
– Hedge accounting applied	(322)	(322)	—

The table below shows the amounts as of March 31, 2019 calculated into U.S. dollars.

Thousands of U.S. dollars (Note 1)

	Consolidated balance sheet amount	Fair value	Difference
(1) Cash and cash equivalents	**$ 360,123**	**$ 360,123**	**$ —**
(2) Notes and accounts receivable - trade	**1,333,391**	**1,333,391**	**—**
(3) Marketable and investment securities			
Available-for-sale securities	**443,581**	**443,581**	**—**
(4) Long-term loans receivable	**9,911**		
Allowance for doubtful accounts [*1]	**(0)**		
	9,911	**9,983**	**72**
Total assets	**2,147,006**	**2,147,078**	**72**
(1) Notes and accounts payable - trade	**764,006**	**764,006**	**—**
(2) Short-term loans payable	**609,685**	**609,685**	**—**
(3) Current portion of bonds payable	**90,098**	**90,828**	**730**
(4) Accounts payable - other	**266,096**	**266,096**	**—**
(5) Bonds payable	**—**	**—**	**—**
(6) Long-term loans payable	**406,550**	**406,253**	**(297)**
Total liabilities	**2,136,435**	**2,136,868**	**433**
Derivative transactions [*2]			
– Hedge accounting not applied	**(117)**	**(117)**	**—**
– Hedge accounting applied	**(865)**	**(865)**	**—**

[*1] The amount of allowance for doubtful accounts, which is recorded for each long-term loan receivable, is excluded.

[*2] Assets and liabilities arising from derivative transactions are stated as a net amount. The figures in parenthesis indicate net liabilities.

Note 1.
Matters regarding the determination of fair value for financial instruments, marketable securities and derivative transactions

Assets

(1) Cash and cash equivalents
The fair value of time deposits approximates book value because of their short-term nature. Thus, the book value is used as the fair value.

(2) Notes and accounts receivable - trade
The fair value of notes and accounts receivable - trade settled in a short period of time approximates book value. Therefore, the book value is used as the fair value. The fair value of long-term notes and accounts receivable - trade is based on the present value calculated by discounting receivable amounts classified by certain periods at a rate that takes into account the time to maturity and credit risk.

(3) Marketable and investment securities
The fair value of equity securities is measured by market prices on exchanges. The fair value of debt securities is based on market prices on exchanges or by prices obtained from financial institutions. Debt securities without available market prices are measured at present value by discounting future cash flows generated by the financial assets. Refer to "Securities" for matters regarding securities classified by the purpose for which they are held.

(4) Long-term loans receivable
The fair value of long-term loans receivable is measured at the present value of future cash flows classified by the length of term and by risk category, according to the Company's credit risk management, at a rate with credit spread added to appropriate indices such as JGB yields.
The fair value of borrowings with special concern is measured at the amounts deemed collectable because of the existence of collateral and/or guarantees.

Liabilities

(1) Notes and accounts payable - trade, (2) Short-term loans payable and (4) Accounts payable - other
The fair value of notes and accounts payable - trade, short-term loans payable and accounts payable - other approximate book value because they are mostly settled in a short period of time. As a result, the book value is used as the fair value. When it cannot be determined whether or not the settlement is made in a short period of time, the fair value is measured at the present value of future cash flows classified by a certain period at a rate that takes into account the time to maturity and credit risk.

(3) Current portion of bonds payable and (5) Bonds payable
The fair value of bonds payable issued by the Company is measured based on the market price.

(6) Long-term loans payable
The fair value of long-term loans payable is measured at the present value calculated by discounting the total amount of principle and interest at an interest rate for similar new borrowings.

Derivative transactions

Refer to Note 7, "Derivative financial instruments and hedging transactions."

Note 2.
Financial instruments whose fair values are deemed extremely difficult to assess

Type	Consolidated balance sheet amount		
	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	**2019**
Unlisted equity securities	**¥ 12,644**	¥ 11,121	**$ 113,920**

The financial instruments shown above are not included in the tables in "(3) Marketable and investment securities" because their market prices were not available and their fair values were deemed extremely difficult to assess.

Note 3.
Redemption schedules after the consolidated balance sheet date for monetary receivables and securities with maturity dates

	Millions of yen			
	2019			
	Within one year	Over one year to five years	Over five years to ten years	Over ten years
Cash and cash equivalents	**¥ 39,970**	**¥ —**	**¥ —**	**¥ —**
Notes and accounts receivable - trade	**147,993**	**—**	**—**	**—**
Marketable and investment securities				
Other securities with maturities (corporate bonds)	**—**	**222**	**—**	**—**
Long-term loans receivable	**37**	**589**	**459**	**15**
Total	**¥ 188,000**	**¥ 811**	**¥ 459**	**¥ 15**

	Millions of yen			
	2018			
	Within one year	Over one year to five years	Over five years to ten years	Over ten years
Cash and cash equivalents	¥ 47,414	¥ —	¥ —	¥ —
Notes and accounts receivable - trade	142,195	—	—	—
Long-term loans receivable	47	614	461	107
Total	¥ 189,656	¥ 614	¥ 461	¥ 107

	Thousands of U.S. dollars (Note 1)			
	2019			
	Within one year	Over one year to five years	Over five years to ten years	Over ten years
Cash and cash equivalents	**$ 360,123**	**$ —**	**$ —**	**$ —**
Notes and accounts receivable - trade	**1,333,391**	**—**	**—**	**—**
Marketable and investment securities				
Other securities with maturities (corporate bonds)	**—**	**2,000**	**—**	**—**
Long-term loans receivable	**333**	**5,307**	**4,136**	**135**
Total	**$ 1,693,847**	**$ 7,307**	**$ 4,136**	**$ 135**

Note 4.
Maturity schedules after the consolidated balance sheet date for bonds and long-term debt
Refer to Note 11, "Short-term loans payable and long-term debt."

6. SECURITIES

The following tables summarize acquisition costs and book values (fair values) of available-for-sale securities with available fair values as of March 31, 2019:

Securities with book value exceeding acquisition cost:

	Millions of yen			Thousands of U.S. dollars (Note 1)		
			2019			**2019**
	Acquisition cost	Book value	Difference	Acquisition cost	Book value	Difference
Equity securities	**¥ 17,290**	**¥ 46,159**	**¥ 28,869**	**$ 155,780**	**$ 415,884**	**$ 260,104**
Bonds	**—**	**—**	**—**	**—**	**—**	**—**
	¥ 17,290	**¥ 46,159**	**¥ 28,869**	**$ 155,780**	**$ 415,884**	**$ 260,104**

Securities with book value not exceeding acquisition cost:

	Millions of yen			Thousands of U.S. dollars (Note 1)		
			2019			**2019**
	Acquisition cost	Book value	Difference	Acquisition cost	Book value	Difference
Equity securities	**¥ 3,546**	**¥ 3,074**	**¥ (472)**	**$ 31,949**	**$ 27,696**	**$ (4,253)**
Bonds	**—**	**—**	**—**	**—**	**—**	**—**
	¥ 3,546	**¥ 3,074**	**¥ (472)**	**$ 31,949**	**$ 27,696**	**$ (4,253)**

The following table summarizes sales of available-for-sale securities as of March 31, 2019:

	Millions of yen			Thousands of U.S. dollars (Note 1)		
			2019			**2019**
	Sales	Gain on sales	Loss on sales	Sales	Gain on sales	Loss on sales
Equity securities	**¥ 1,698**	**¥ 1,515**	**¥ —**	**$ 15,299**	**$ 13,650**	**$ —**
Bonds	**—**	**—**	**—**	**—**	**—**	**—**
	¥ 1,698	**¥ 1,515**	**¥ —**	**$ 15,299**	**$ 13,650**	**$ —**

The following tables summarize acquisition costs and book values (fair values) of available-for-sale securities with available fair values as of March 31, 2018:

Securities with book value exceeding acquisition cost:

	Millions of yen		
			2018
	Acquisition cost	Book value	Difference
Equity securities	¥ 19,004	¥ 55,029	¥ 36,025
Bonds	—	—	—
	¥ 19,004	¥ 55,029	¥ 36,025

Securities with book value not exceeding acquisition cost:

	Millions of yen		
			2018
	Acquisition cost	Book value	Difference
Equity securities	¥ 2,181	¥ 1,785	¥ (396)
Bonds	—	—	—
	¥ 2,181	¥ 1,785	¥ (396)

The following table summarizes sales of available-for-sale securities as of March 31, 2018:

	Millions of yen		
			2018
	Sales	Gain on sales	Loss on sales
Equity securities	¥ 25	¥ 14	¥ —
Bonds	—	—	—
	¥ 25	¥ 14	¥ —

7. DERIVATIVE FINANCIAL INSTRUMENTS AND HEDGING TRANSACTIONS

Derivative transactions to which hedge accounting was not applied as of March 31, 2019 were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)	
	Contract amount	Fair value	Contract amount	Fair value
Foreign exchange forward contracts				
Sell contracts				
U.S. dollar	**¥ 1,920**	**¥ (5)**	**$ 17,299**	**$ (45)**
British pound	**231**	**(2)**	**2,081**	**(18)**
Thai baht	**690**	**(3)**	**6,217**	**(27)**
Buy contract				
U.S. dollar	**334**	**(0)**	**3,009**	**(0)**
Currency swap contracts				
Pay Malaysia Ringgit and receive Singapore dollars	**678**	**(3)**	**6,109**	**(27)**

Derivative transactions to which hedge accounting was applied as of March 31, 2019 were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)	
	Contract amount	Fair value	Contract amount	Fair value
Currency swap contracts				
Pay U.S. dollars and receive Malaysia Ringgit	**¥ 2,353**	**¥ (116)**	**$ 21,200**	**$ (1,045)**
Pay Japanese Yen and receive Malaysia Ringgit	**4,754**	**20**	**42,833**	**180**

	Millions of yen		Thousands of U.S. dollars (Note 1)	
	Contract amount	Fair value	Contract amount	Fair value
Interest rate swap				
Pay floating and receive fixed	**¥ 500**	**(*)**	**$ 4,505**	**(*)**

Derivative transactions to which hedge accounting was not applied as of March 31, 2018 were as follows:

	Millions of yen	
	Contract amount	Fair value
Foreign exchange forward contracts		
Sell contract		
U.S. dollar	¥ 1,383	¥ 6
Euro	137	6
Buy contract		
U.S. dollar	499	(1)
Currency swap contracts		
Pay Euro and receive U.S. dollars	2,178	0
Pay Malaysia Ringgit and receive Japanese Yen	1,113	(0)
Pay Malaysia Ringgit and receive Singapore dollars	545	(5)

Derivative transactions to which hedge accounting was applied as of March 31, 2018 were as follows:

	Millions of yen	
	Contract amount	Fair value
Currency swap contracts		
Pay U.S. dollars and receive Malaysia Ringgit	¥ 2,550	¥ (281)
Pay Japanese Yen and receive Malaysia Ringgit	4,754	(41)

	Millions of yen	
	Contract amount	Fair value
Interest rate swap		
Pay floating and receive fixed	¥ 500	(*)

(*) Because interest rate swaps are processed with loans payable, the fair value is included in the fair value of the loans payable (Note 5).

8. INVENTORIES

Inventories at March 31, 2019 and 2018 consisted of the following:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	**2019**
Merchandise and finished goods	**¥ 61,609**	¥ 55,956	**$ 555,086**
Work-in-process	**9,365**	9,527	**84,377**
Raw materials and supplies	**41,460**	38,732	**373,547**
	¥ 112,434	¥ 104,215	**$ 1,013,010**

9. RESTRUCTURING CHARGES

In 2018, the demand for high thermal conductive graphite sheets expanded drastically with the arrival of IoT and AI in social media applications.

In addition, the structure of high thermal conductive graphite sheets had changed dramatically.

Therefore, the production process for sticker of high thermal conductive graphite sheets was reviewed in light of the rising quality requirements, and we decided to restructure and dispose of old production facilities and inventories.

As a result, the Companies posted a restructuring charges with loss on valuation of inventories accounting for ¥996 million.

After reviewing the future planning of River Seiko Corporation by new productions and reforming the business operation structure to strengthen profitability in the digestive system and electrophysiology fields, the book value of goodwill and other assets was written down to the recoverable value, and the Companies posted an impairment loss of ¥671 million.

In 2019, in order to develop and launch high-efficiency solar cells in the solar cell business where demand is expected to expand, the Group has radically reinvented the production processes based on technologies accumulated from the past.

Following these structural reforms, the following losses were recorded as restructuring costs for obsolete manufacturing facilities and inventories.

The main component of this was inventory valuation loss of ¥1,579 million ($14,227 thousand).

With regard to machinery and equipment for which there was no prospect of future use due to the business restructuring, the book value has been reduced to the recoverable value, and the reduction of ¥273 million ($2,460 thousand) has been included in business restructuring expenses as extraordinary loss.

10. IMPAIRMENT LOSS

The Companies recognized impairment loss in other expenses for the year ended March 31, 2018.

Location	Use	Type
–	Other	Goodwill etc.

The Companies group their assets mainly according to Solution Vehicle. For businesses run mainly by subsidiaries, the Companies group assets according to subsidiary units.

After reviewing the future planning of River Seiko Corporation through restructuring, the book value of goodwill and other assets was written down to its recoverable value, and the Companies posted an impairment loss of ¥671 million. Of this amount, goodwill accounted for ¥635 million.

The recoverable value of the above asset groups were estimated by net sales values based mainly on inheritance tax values by roadside land prices.

The Companies recognized impairment loss in other expenses for the year ended March 31, 2019.

Location	Use	Type
Toyooka, Hyogo	Business assets	Machinery, equipment and vehicles, etc.

The Companies group their assets mainly by the Solutions Vehicles of the Company, and among these, the businesses of the consolidated subsidiaries are grouped by the relevant subsidiaries. Idle assets are grouped by individual assets in the current consolidated fiscal year, the book value of machinery and equipment the use of which is no longer expected due to business structural reform was reduced to the recoverable value, and a reduction of ¥273 million ($2,460 thousand) was included in business structural reform expenses as extraordinary loss. The major component was machinery and equipment ¥202 million ($1,820 thousand) in addition, the recoverable value was measured by the net selling price and evaluated by the memorandum price.

11. INCOME TAXES

The Company and its consolidated domestic subsidiaries are subject to a number of taxes based on income, which, in the aggregate, indicate a statutory rate in Japan of approximately 30.58% for the year ended March 31, 2019 and approximately 30.81% for the years ended March 31, 2018 and 2017.

The significant differences between the statutory and effective tax rate for the years ended March 31, 2019, 2018 and 2017 were as follows:

	2019	2018	2017
Statutory tax rate	**30.58%**	30.81%	30.81%
Permanently non-deductible expense	**0.62%**	0.65%	0.66%
Permanently non-taxable income	**(6.70%)**	(6.26%)	(7.42%)
Elimination of dividends on consolidation	**6.35%**	6.00%	6.92%
Tax credits primarily for research and development expenses	**(3.80%)**	(7.85%)	(12.35%)
Change in valuation allowance	**(3.18%)**	4.19%	2.42%
Tax rate differences of foreign subsidiaries	**0.88%**	1.37%	3.31%
Amortization of goodwill	**0.43%**	0.52%	0.56%
Impairment loss of goodwill	**–%**	0.63%	–%
Gain on negative goodwill	**–%**	(0.95%)	–%
Gain on step acquisitions	**(0.42%)**	(1.42%)	–%
Adjustment of deferred tax assets (liabilities) by the changes of tax rate	**–%**	(2.22%)	–%
Other	**0.10%**	1.19%	0.11%
Effective tax rate	**24.86%**	26.66%	25.02%

Significant components of deferred tax assets and liabilities as of March 31, 2019 and 2018 were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
Deferred tax assets:	**2019**	2018	**2019**
Net defined benefit liability	**¥ 10,371**	¥ 11,091	**$ 93,441**
Tax loss carryforwards	**1,223**	1,436	**11,019**
Loss on valuation of investment securities	**827**	860	**7,451**
Excess bonuses accrued	**1,923**	1,859	**17,326**
Impairment loss on noncurrent assets	**2,170**	3,173	**19,551**
Unrealized gain	**1,408**	1,595	**12,686**
Tax credit carryforwards	**3,669**	3,854	**33,057**
Other	**2,790**	3,205	**25,137**
Subtotal	**24,381**	27,073	**219,668**
Valuation allowance	**(7,123)**	(8,138)	**(64,177)**
Total deferred tax assets	**17,258**	18,935	**155,491**
Deferred tax liabilities:			
Valuation difference on available-for-sale securities	**8,370**	10,387	**75,412**
Depreciation of foreign subsidiaries	**2,509**	2,528	**22,606**
Other	**1,652**	1,792	**14,884**
Total deferred tax liabilities	**12,531**	14,707	**112,902**
Net deferred tax assets (liabilities)	**¥ 4,727**	¥ 4,228	**$ 42,589**

Adjustment of deferred tax assets and liabilities for enacted changes in tax laws and rates:
On December 22, 2017, amendments to U.S. tax regulations were enacted by the U.S. Congress. Based on the amendments, corporate statutory income tax rate in the U.S. was changed from 35% to 21%, and the lower rates were applied to the consolidated subsidiaries in the U.S. As a result, net deffered tax liabilities (after deducting deferred tax assets) decreased by ¥689 million as of March 31, 2018, and deferred income tax expence recognized for the fiscal year ended March 31, 2018 decreased by ¥689 million.

12. SHORT-TERM LOANS PAYABLE AND LONG-TERM DEBT

Short-term loans payable are generally unsecured notes for three months with average interest rates of 1.52% and 1.44% at March 31, 2019 and 2018, respectively. Such borrowings are generally renewable at maturity.

Long-term loans payable and bonds payable at March 31, 2019 and 2018 consisted of the following:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	**2019**
Secured:			
Loans principally from banks and insurance companies at interest rates from 0.00% to 1.47% in 2019 and 2018, maturing serially through 2024	**¥ 962**	¥ 1,132	**$ 8,667**
Unsecured:			
Loans from banks and insurance companies at interest rates from 0.00% to 8.60% in 2019 and 2018, maturing serially through 2033	**47,848**	54,014	**431,102**
Bonds at interest rate of 1.67%, due September 13, 2019	**10,000**	10,000	**90,098**
	58,810	65,146	**529,867**
Less amounts due within one year	**13,687**	9,298	**123,317**
	¥ 45,123	¥ 55,848	**$ 406,550**

At March 31, 2019 and 2018, assets pledged as collateral for secured long-term loans payable, short-term loans payable and trade payables totaling ¥1,346 million ($12,130 thousand) were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	**2019**
Property, plant and equipment, net	**¥ 5,097**	¥ 5,346	**$ 45,923**
Investment securities	**1,354**	2,333	**12,199**
Intangible assets	—	16	—
	¥ 6,451	¥ 7,695	**$ 58,122**

The aggregate annual maturities of long-term loans payable and bonds payable were as follows:

	Millions of yen	Thousands of U.S. dollars (Note 1)
Years ending March 31,	**2019**	**2019**
2020	**¥ 13,687**	**$ 123,317**
2021	**13,049**	**117,569**
2022	**8,123**	**73,187**
2023	**4,928**	**44,400**
2024	**8,019**	**72,250**
2025 and thereafter	**11,004**	**99,144**
	¥ 58,810	**$ 529,867**

	Millions of yen
Years ending March 31,	2018
2019	¥ 9,298
2020	12,893
2021	14,980
2022	5,544
2023	4,718
2024 and thereafter	17,713
	¥ 65,146

13. PROVISION FOR RETIREMENT BENEFITS

Defined benefit plans

(1) Movement in retirement benefit obligations, except plan applying simplified method

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	**2019**
Balance at beginning of year	**¥ 117,567**	¥ 115,523	**$ 1,059,258**
Service cost	**4,250**	4,274	**38,292**
Interest cost	**898**	881	**8,091**
Actuarial loss (gain)	**(1,033)**	576	**(9,307)**
Benefits paid	**(3,778)**	(3,834)	**(34,039)**
Other	**20**	147	**179**
Balance at the end of year	**¥ 117,924**	¥ 117,567	**$ 1,062,474**

(2) Movements in plan assets, except plan applying simplified method

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	**2019**
Balance at beginning of year	**¥ 83,516**	¥ 81,343	**$ 752,464**
Expected return on plan asset	**2,088**	2,034	**18,813**
Actuarial gain (loss)	**(382)**	1,059	**(3,442)**
Contributions paid by the employer	**1,752**	1,692	**15,785**
Benefits paid	**(2,646)**	(2,612)	**(23,840)**
Contribution of securities to retirement benefit trust	**2,001**	—	**18,029**
Balance at the end of year	**¥ 86,329**	¥ 83,516	**$ 777,809**

(3) Movement in liability for retirement benefits of defined benefit plan applying the simplified method

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	**2019**
Balance at beginning of year	**¥ 3,274**	¥ 3,130	**$ 29,498**
Retirement benefit cost	**430**	432	**3,874**
Benefits paid	**(311)**	(251)	**(2,802)**
Increase from newly consolidated subsidiaries	**—**	71	**—**
Other	**(3)**	(108)	**(27)**
Balance at the end of year	**¥ 3,390**	¥ 3,274	**$ 30,543**

(4) Reconciliation from retirement benefit obligations and plan assets to liability and asset for retirement benefits

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	**2019**
Funded retirement benefit obligation	**¥ 114,018**	¥ 91,416	**$ 1,027,282**
Plan asset	**(86,330)**	(83,518)	**(777,818)**
	27,688	7,898	**249,464**
Unfunded retirement benefit obligations	**7,297**	29,427	**65,745**
Total net liability (asset) for retirement benefits	**34,985**	37,325	**315,209**
Liability for retirement benefits	**34,985**	37,325	**315,209**
Asset for retirement benefits	**—**	—	**—**
Total net liability (asset) for retirement benefits	**¥ 34,985**	¥ 37,325	**$ 315,209**

(5) Retirement benefit costs

		Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	2017	**2019**
Service cost	**¥ 4,250**	¥ 4,274	¥ 3,841	**$ 38,292**
Interest cost	**898**	881	812	**8,091**
Expected return on plan assets	**(2,088)**	(2,034)	(2,001)	**(18,813)**
Net actuarial loss amortization	**1,941**	2,644	2,515	**17,488**
Retirement benefit expenses calculated by simplified method	**430**	432	451	**3,874**
	¥ 5,431	¥ 6,197	¥ 5,618	**$ 48,932**

(6) Remeasurements for retirement benefits

		Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	2017	**2019**
Actuarial gains and losses	**¥ (2,592)**	¥ 3,127	¥ 1,804	**$ (23,353)**

(7) Accumulated remeasurements for retirement benefits

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	**2019**
Actuarial gains and losses that are yet to be recognized	**¥ 8,255**	¥ 10,847	**$ 74,376**

(8) Plan assets

1. Plan assets comprise:

	2019	2018
Bonds	**50%**	52%
Equity securities	**26%**	25%
General account	**14%**	15%
Other	**9%**	8%
	100%	100%

2. Long-term expected rate of return

Current and target asset allocations, historical and expected returns on various categories of plan assets have been considered in determining the long-term expected rate of return.

(9) Actuarial assumptions

The principal actuarial assumptions

	2019	2018	2017
Discount rate	**Mainly 0.72%**	Mainly 0.72%	Mainly 0.72%
Long-term expected rate of return	**Mainly 2.50%**	2.50%	2.50%

Defined contribution plans

		Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	2017	**2019**
The amount of contributions to the defined contribution plan	**¥ 447**	¥ 425	¥ 607	**$ 4,027**

14. CONTINGENT LIABILITIES

At March 31, 2019 and 2018, contingent liabilities were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	**2019**
Notes endorsed	**¥ 11**	¥ 10	**$ 99**
Notes discounted	**15**	30	**135**
Guarantees	**319**	313	**2,874**
Letters of awareness	**181**	204	**1,631**
	¥ 526	¥ 557	**$ 4,739**

15. NET ASSETS

Under the Japanese Corporate Law ("the Law"), the entire amount paid for new shares is required to be designated as common stock. However, a company may, by a resolution of the Board of Directors, designate an amount not exceeding one half of the price of the new shares as additional paid-in capital, which is included in capital surplus.

Under the Law, in cases in which a dividend distribution of surplus is made, the smaller of an amount equal to 10% of the dividend or the excess, if any, of 25% of common stock over the total of legal earnings reserve and additional paid-in capital must be set aside as legal earnings reserve or additional paid-in capital. Legal earnings reserve is included in retained earnings in the accompanying consolidated balance sheets.

Legal earnings reserve and additional paid-in capital may not be distributed as dividends. By resolution of the shareholders' meeting, legal earnings reserve and additional paid-in capital may be transferred to other retained earnings and capital surplus, respectively, which are potentially available for dividends.

On May 14, 2019, the Board of Directors authorized cash dividends to shareholders of record at March 31, 2019 on the shares of stock then outstanding at the rate of ¥55.0 ($0.50) per share or a total of ¥3,587 million ($32,318 thousand). The appropriations had not been accrued in the consolidated financial statements as of March 31, 2019.

Such appropriations are recognized in the period in which they are approved by the Board of Directors.

Cash dividends per share applicable to the fiscal year ended March 31, 2019, comprise interim dividends of ¥9.0 ($0.08) (before consolidation) and year-end dividends of ¥55.0 ($0.50) (after consolidation).

16. STOCK OPTIONS

(1) The Company

The Company has implemented a stock option plan by which subscription rights to shares were granted to directors of the Company.

The Company conducted a consolidation of shares of common stock at the ratio of five shares to one share on October 1, 2018. The figures after conducting the consolidation of shares are shown as following in the table below.

The following table summarizes the Company's stock option plan.

	Stock options granted on August 9, 2018	Stock options granted on August 9, 2017	Stock options granted on August 9, 2016	Stock options granted on August 11, 2015	Stock options granted on August 11, 2014	Stock options granted on August 9, 2013	Stock options granted on August 9, 2012	Stock options granted on August 10, 2011	Stock options granted on August 10, 2010	Stock options granted on August 11, 2009	Stock options granted on August 11, 2008	Stock options granted on September 10, 2007
Category and number of people granted stock options	Company directors, 9 Executive officers, 20	Company directors, 9 Executive officers, 16	Company directors, 10	Company directors, 10	Company directors, 10	Company directors, 10	Company directors, 12	Company directors, 12	Company directors, 13	Company directors, 12	Company directors, 13	Company directors, 13
Number of stock options granted by category of stock	24,400 shares of common stock	22,600 shares of common stock	14,800 shares of common stock	14,800 shares of common stock	15,000 shares of common stock	13,000 shares of common stock	15,000 shares of common stock	15,000 shares of common stock	15,000 shares of common stock	15,000 shares of common stock	15,000 shares of common stock	11,400 shares of common stock
Vesting conditions	No provision	No provision	No provision	No provision	No provision	No provision	No provision	No provision	No provision	No provision	No provision	No provision
Exercise period	From August 10, 2018 through August 9, 2043 (*)	From August 10, 2017 through August 9, 2042 (*)	From August 10, 2016 through August 9, 2041 (*)	From August 12, 2015 through August 11, 2040 (*)	From August 12, 2014 through August 11, 2039 (*)	From August 10, 2013 through August 9, 2038 (*)	From August 10, 2012 through August 9, 2037 (*)	From August 11, 2011 through August 10, 2036 (*)	From August 11, 2010 through August 10, 2035 (*)	From August 12, 2009 through August 11, 2034 (*)	From August 12, 2008 through August 11, 2033 (*)	From September 11, 2007 through September 10, 2032 (*)

(*) If a holder of subscription rights to shares loses his/her position as a Company director during the above stated exercise period, the holder may exercise those rights only within the 10-day period beginning the day after losing such position.

The following table summarizes the movements and prices of subscription rights to shares.

	Stock options granted on August 9, 2018	Stock options granted on August 9, 2017	Stock options granted on August 9, 2016	Stock options granted on August 11, 2015	Stock options granted on August 11, 2014	Stock options granted on August 9, 2013	Stock options granted on August 9, 2012	Stock options granted on August 10, 2011	Stock options granted on August 10, 2010	Stock options granted on August 11, 2009	Stock options granted on August 11, 2008	Stock options granted on September 10, 2007
Unvested stock options												
Beginning of term	—	—	—	—	—	—	—	—	—	—	—	—
Granted	24,400	—	—	—	—	—	—	—	—	—	—	—
Expired or forfeited	—	—	—	—	—	—	—	—	—	—	—	—
Vested	24,400	—	—	—	—	—	—	—	—	—	—	—
Unvested balance	—	—	—	—	—	—	—	—	—	—	—	—
Vested stock options												
Beginning of term	—	22,600	11,600	10,200	9,400	5,200	4,200	3,600	2,600	2,200	2,400	600
Vested	24,400	—	—	—	—	—	—	—	—	—	—	—
Exercised	—	—	—	—	—	—	—	—	—	—	—	—
Expired or forfeited	—	—	—	—	—	—	—	—	—	—	—	—
Unexercised balance	24,400	22,600	11,600	10,200	9,400	5,200	4,200	3,600	2,600	2,200	2,400	600
Exercise price (yen)	1	1	1	1	1	1	1	1	1	1	1	1
Weighted average market value per stock at the dates exercised (yen)	—	—	—	—	—	—	—	—	—	—	—	—
Fair value per stock at the date granted (yen)	4,900	3,880	3,605	4,735	2,510	2,790	1,815	2,060	2,280	3,110	3,000	4,415
Exercise price (USD)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Weighted average market value per stock at the dates exercised (USD)	—	—	—	—	—	—	—	—	—	—	—	—
Fair value per stock at the date granted (USD)	44.15	34.96	32.48	42.66	22.61	25.14	16.35	18.56	20.54	28.02	27.03	39.78

Expenses related to stock options were included in selling, general and administrative expenses and amounted to ¥120 million ($1,081 thousand), ¥88 million and ¥53 million for the years ended March 31, 2019, 2018 and 2017, respectively.

The fair value of options granted was estimated using the Black-Scholes model with the following assumptions.

	Stock options granted on August 9, 2018	Stock options granted on August 9, 2017
Expected volatility	30.88%	29.84%
Expected holding period	4 years	4 years
Expected dividend	90 yen (*)	90 yen (*)
Risk free interest rate	0.081%	(0.069)%

(*) The Company conducted a consolidation of shares of common stock at the ratio of five shares to one share on October 1, 2018. The expected dividend is shown as though the share consolidation took place beginning of the fiscal year ended March, 2017.

(2) Cemedine Co., Ltd.

Cemedine Co., Ltd. has implemented a stock option plan by which subscription rights to shares were granted to directors of the company.

The following table summarizes the company's stock option plan.

	Stock options granted on July 9, 2018	Stock options granted on July 10, 2017	Stock options granted on July 7, 2016	Stock options granted on July 9, 2015	Stock options granted on July 10, 2014	Stock options granted on July 9, 2013	Stock options granted on July 12, 2012	Stock options granted on July 14, 2011	Stock options granted on July 26, 2010	Stock options granted on August 11, 2009	Stock options granted on October 20, 2008
Category and number of people granted stock options	Company directors, 4	Company directors, 4	Company directors, 5	Company directors, 4	Company directors, 6	Company directors, 7	Company directors, 8	Company directors, 8	Company directors, 8	Company directors, 7	Company directors, 7
Number of stock options granted by category of stock	13,000 shares of common stock	15,000 shares of common stock	32,000 shares of common stock	26,000 shares of common stock	38,000 shares of common stock	53,000 shares of common stock	58,000 shares of common stock	64,000 shares of common stock	67,000 shares of common stock	58,000 shares of common stock	58,000 shares of common stock
Vesting conditions	After people granted stock option lose their position as Company director.	After people granted stock option lose their position as Company director.	After people granted stock option lose their position as Company director.	After people granted stock option lose their position as Company director.	After people granted stock option lose their position as Company director.	After people granted stock option lose their position as Company director.	After people granted stock option lose their position as Company director.	After people granted stock option lose their position as Company director.	After people granted stock option lose their position as Company director.	After people granted stock option lose their position as Company director.	After people granted stock option lose their position as Company director.
Exercise period	From July 9, 2018 through July 8, 2038 (*)	From July 11, 2017 through July 10, 2037 (*)	From July 8, 2016 through July 7, 2036 (*)	From July 10, 2015 through July 9, 2035 (*)	From July 11, 2014 through July 10, 2034 (*)	From July 10, 2013 through July 9, 2033 (*)	From July 13, 2012 through July 12, 2032 (*)	From July 15, 2011 through July 14, 2031 (*)	From July 27, 2010 through July 26, 2030 (*)	From August 12, 2009 through August 11, 2029 (*)	From October 21, 2008 through October 20, 2028 (*)

(*) If a holder of subscription rights to shares loses his/her position as a Company director during the above stated exercise period, the holder may exercise those rights only within the 10-day period beginning the day after losing such position.

The following table summarizes the movements and prices of subscription rights to shares.

	Stock options granted on July 9, 2018	Stock options granted on July 10, 2017	Stock options granted on July 7, 2016	Stock options granted on July 9, 2015	Stock options granted on July 10, 2014	Stock options granted on July 9, 2013	Stock options granted on July 12, 2012	Stock options granted on July 14, 2011	Stock options granted on July 26, 2010	Stock options granted on August 11, 2009	Stock options granted on October 20, 2008
Unvested stock options											
Beginning of term	—	15,000	32,000	26,000	22,000	14,000	12,000	7,000	8,000	8,000	8,000
Granted	13,000	—	—	—	—	—	—	—	—	—	—
Expired or forfeited	—	—	—	—	—	—	—	—	—	—	—
Vested	—	—	10,000	8,000	10,000	—	—	—	—	—	—
Unvested balance	13,000	15,000	22,000	18,000	12,000	14,000	12,000	7,000	8,000	8,000	8,000
Vested stock options											
Beginning of term	—	—	—	—	—	—	—	—	—	—	—
Vested	—	—	10,000	8,000	10,000	—	—	—	—	—	—
Exercised	—	—	10,000	8,000	10,000	—	—	—	—	—	—
Expired or forfeited	—	—	—	—	—	—	—	—	—	—	—
Unexercised balance	—	—	—	—	—	—	—	—	—	—	—
Exercise price (yen)	1	1	1	1	1	1	1	1	1	1	1
Weighted average market value per stock at the dates exercised (yen)	—	—	701	701	701	—	—	—	—	—	—
Fair value per stock at the date granted (yen)	938	664	441	415	388	388	352	342	293	273	163
Exercise price (USD)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Weighted average market value per stock at the dates exercised (USD)	—	—	—	—	—	—	—	—	—	—	—
Fair value per stock at the date granted (USD)	8.45	5.98	3.97	3.74	3.50	3.50	3.17	3.08	2.64	2.46	1.47

Expenses related to stock options were included in selling, general and administrative expenses and amounted to ¥12 million ($108 thousand), ¥10 million and ¥13 million for the years ended March 31, 2019, 2018 and 2017, respectively.

The fair value of options granted was estimated using the Black-Scholes model with the following assumptions.

	Stock options granted on July 10, 2018	Stock options granted on July 10, 2017
Expected volatility	40.72%	27.65%
Expected holding period	4 years and 11 months	5 years and 2 months
Expected dividend	10 yen	10 yen
Risk free interest rate	(0.120)%	(0.040)%

17. BUSINESS COMBINATION DUE TO ACQUISITION

(Additional acquisition of subsidiary's shares)

1. Summary of business combination

(1) Name of acquired company and its business

Name of acquired company

Eurogentec S.A.

Business

Sales and manufacture of biopharmaceuticals, diagnostic and biotech products

(2) Date of business combination

August 19, 2016

(3) Legal form of business combination

Acquisition of shares from non-controlling interests

(4) Name of company after combination

There was no change in the company name.

(5) Other matters regarding summary

The company group acquired 30% of the voting rights and made the target company a wholly-owned subsidiary.

Through the business combination, the Company expects to strengthen management structure and expedite decision making.

2. Summary of accounting treatment applied

Pursuant to the "Revised Accounting Standard for Business Combinations" (ASBJ Statement No. 21, issued on September 13, 2013) and the "Revised Guidance on Accounting Standard for Business Combinations and Accounting Standard for Business Divestitures" (ASBJ Guidance No. 10, issued on September 13, 2013), the business combination under common control was treated as a transaction with non-controlling interests.

3. Additional acquisition of shares in subsidiary

Acquisition cost and consideration paid

Consideration paid for acquisition: Cash and cash equivalents in the amount of ¥2,603 million

4. Changes in the portion held by the Company in connection with the transactions with non-controlling interests

(1) Main reasons for changes in capital surplus

Additional acquisition of subsidiary's shares

(2) Decreases in capital surplus due to transactions with non-controlling interests

¥2,181 million

(Business Combination due to Acquisition)

1. Summary of Business Combination

(1) Name of acquired company and its business

Name of acquired company

Tobu Chemical Co., Ltd.

Business

Manufacture and sale of PVC special resin

(2) Reasons for executing business combination

Promotion of downstream deployment of business in Material Solutions Unit.

(3) Date of business combination

January 19, 2018

(4) Legal form of business combination

Share acquisition in exchange for cash

(5) Name of company after combination

There was no change in the company name.

(6) Share of voting rights acquired

Share of voting rights held immediately before the date of business combination

26.26%

Share of voting rights additionally acquired on the date of business combination

26.50%

Share of voting rights held after acquisition

52.76%

(7) Rational behind determining the company to be acquired

The Company acquired a majority of the voting rights and clearly has control over the decision making body of the acquiree.

2. Period of results of the acquired company included in the consolidated financial statements

The acquired company's financial results from January 1, 2018 to March 31, 2018 are included in the consolidated statement of income for the year ended March 31, 2018 as the acquisition date is regarded as January 1, 2018.

3. Additional acquisition of shares in acquired company

Acquisition cost and consideration paid

		Millions of yen
Consideration paid for the acquisition		
Fair value of common stock of Tobu Chemical held before the business combination	¥	915
Fair value of additional common stock acquired as of the business combination		924
Acquisition cost	¥	1,839

4. Main acquisition related costs

Advisory fees : ¥6 million

5. Difference between acquisition cost of the acquired company and the total acquisition cost of individual transactions until the business combination

Gain on step acquisitions : ¥1,430 million

6. Amount of gain on negative goodwill recognized and reason for recognition

(1) Amount of gain on negative goodwill recognized

¥954 million

(2) Reason for recognition

The acquisition cost was less than the net asset value at the date of business combination.

7. Value of assets and liabilities assumed as of business combination

		Millions of yen
Current assets	¥	5,709
Non-current assets		2,531
Total assets	¥	8,240
Current liabilities	¥	2,857
Non-current liabilities		90
Total liabilities	¥	2,947

8. Estimated effect on consolidated statement of operations assuming the business combination was concluded at the beginning of the fiscal year ended March 31, 2018 and methods for calculation

		Millions of yen
Net sales	¥	4,442
Operating income		364
Income before income taxes and non-controlling interests		218
Net income attributable to owners of parent		9

		Yen
Net income per share	¥	0.03

(Methods for calculating estimated amounts)

The difference between net sales and profit and loss accounts calculated assuming the business combination was concluded at the beginning of the fiscal year ended March 31, 2018 and the corresponding figures in the accompanying consolidated statement of operations were used.

The amounts shown above have not been audited.

18. SEGMENT INFORMATION

(Segment Information)

1. Overview of Reporting Segments

Kaneka's reporting segments aim to gather financial information from the Company's separate business units to facilitate decisions by the Board of Directors on the allocation of management resources and allow for the Board's regular review of business performance.

The Company has established the "Solutions Vehicle" as organizations for executing its growth strategies from a solutions perspective. There are nine Solutions Vehicles grouped into four solution domains called "Solutions Unit." Each Solutions Unit has established a global Group strategy for its products and services, bringing together subsidiaries in Japan and overseas to develop its business activities.

The Company, therefore has four reporting segments categorized by Solution Unit: the "Material Solutions Unit," "Quality of Life Solutions Unit," "Health Care Solutions Unit" and "Nutrition Solutions Unit."

The Material Solutions Unit contributes to environmental protection and comfortable living by providing solutions in the form of high-performance materials to support the development of social infrastructure and mobility (i.e. weight reduction and improved fuel economy), and cutting-edge materials such as biopolymers that assist directly with the realization of environmental societies. The Quality of Life Solutions Unit contributes to energy conservation and the creation of high quality lifestyles by providing solutions in the form of high performance materials and unique services that respond to the need for energy conservation and adoption of smart technologies in housing and daily infrastructure. The unit is also responding to innovation in information driven societies, such as the advance of the IoT and AI. The Health Care Solutions Unit contributes to a society with greater longevity and more sophisticated medical care by providing valuable solutions that combine devices and pharmaceuticals in fields such as medicine, health and nursing care. The unit is also developing a unique healthcare business based on advanced medical technologies such as biopharmaceuticals and regenerative and cellular medicine. The Nutrition Solutions Unit contributes to health and high-quality food by providing a wide range of solutions in the form of distinctive materials and supplements that meet needs in food diversification and health promotion. The unit also provides solutions that contribute to food production support in the fields of agriculture, livestock and fishery.

The Solutions Vehicles and main products that belong to each reporting segment are as follows:

Solutions Unit (Reporting Segments)	Solutions Vehicle	Main products
Material Solutions Unit	Vinyls and Chlor-Alkali	General PVC resins, Caustic soda, Specialty PVC resins
	Performance Polymers	Modifiers, Modified silicone polymers, Biodegradable polymers
Quality of Life Solutions Unit	Foam & Residential Techs	Expandable polystyrene resins and products, Extruded polystyrene foam boards, Bead-method polyolefin foam, Solar circuit construction method (external insulation and double ventilation construction) products
	E & I Technology	Ultra-heat-resistant polyimide films, Optical materials, High thermal conductive graphite sheets
	PV & Energy management	Photovoltaic modules, Energy storage batteries for residences
	Performance Fibers	Acrylic synthetic fibers
Health Care Solutions Unit	Medical Devices	Medical devices
	Pharma & Supplemental Nutrition (Pharma)	Low-molecular pharmaceutical materials, API, Biopharmaceuticals
Nutrition Solutions Unit	Pharma & Supplemental Nutrition (Supplemental Nutrition)	Functional foodstuffs
	Foods & Agris	Margarine, Shortening, Bakery yeast, Spices, Antifreeze materials, Dairy products, Functional fertilizers and feeds

Notes: On March 1, 2019, Performance Polymers reorganized into Performance Polymers (MOD) and Performance Polymers (MS).

2. Basis of Calculation of Monetary Amounts for Net Sales, Profit or Loss, Assets, Liabilities, and Other Items by Reporting Segment

Accounting treatment and procedures for reporting segments are the same as those shown in the "Notes to Consolidated Financial Statements." Intersegment transactions are based on prevailing market prices.

3. Segment Information by Business Category

Millions of yen

2019	Reporting Segment: Material Solutions Unit	Quality of Life Solutions Unit	Health Care Solutions Unit	Nutrition Solutions Unit	Total	Others (Note 1)	Total	Adjustments	Consolidated (Note 2)
Sales									
Customers	**¥ 255,919**	**¥ 156,674**	**¥ 47,442**	**¥ 158,968**	**¥ 619,003**	**¥ 2,041**	**¥ 621,044**	**¥ —**	**¥ 621,044**
Intersegment	**1,204**	**19**	**—**	**28**	**1,251**	**1,089**	**2,340**	**(2,340)**	**—**
Total	**257,123**	**156,693**	**47,442**	**158,996**	**620,254**	**3,130**	**623,384**	**(2,340)**	**621,044**
Segment profit (loss)	**25,961**	**15,093**	**10,584**	**5,931**	**57,569**	**1,465**	**59,034**	**(22,992)**	**36,042**
Segment assets	**237,437**	**173,351**	**59,956**	**113,501**	**584,245**	**795**	**585,040**	**74,548**	**659,588**
Other Items									
Depreciation	**10,747**	**10,980**	**2,463**	**3,914**	**28,104**	**19**	**28,123**	**3,755**	**31,878**
Amortization of goodwill	**35**	**—**	**333**	**—**	**368**	**—**	**368**	**86**	**454**
Investment in equity method affiliates	**67**	**2,125**	**—**	**—**	**2,192**	**—**	**2,192**	**—**	**2,192**
Increase in assets	**13,471**	**20,500**	**3,927**	**9,252**	**47,150**	**387**	**47,537**	**6,057**	**53,594**

Notes 1: "Others" is a business segment that is not included in the reporting segments and includes property and life insurance agency business.
Notes 2: Segment profit (loss) is reconciled with operating income in the consolidated financial statements.

Millions of yen

2018	Reporting Segment: Material Solutions Unit	Quality of Life Solutions Unit	Health Care Solutions Unit	Nutrition Solutions Unit	Total	Others (Note 1)	Total	Adjustments	Consolidated (Note 2)
Sales									
Customers	¥ 238,881	¥ 149,360	¥ 45,857	¥ 160,930	¥ 595,028	¥ 1,115	¥ 596,143	¥ —	¥ 596,143
Intersegment	1,267	28	0	30	1,325	1,210	2,535	(2,535)	—
Total	240,148	149,388	45,857	160,960	596,353	2,325	598,678	(2,535)	596,143
Segment profit (loss)	27,109	13,731	9,850	6,532	57,222	520	57,742	(20,853)	36,889
Segment assets	230,669	158,740	57,973	109,017	556,399	829	557,228	83,782	641,010
Other Items									
Depreciation	10,157	10,459	2,376	3,751	26,743	18	26,761	3,360	30,121
Amortization of goodwill	35	—	448	—	483	—	483	46	529
Investment in equity method affiliates	70	2,085	—	1,436	3,591	—	3,591	—	3,591
Increase in assets	13,203	10,440	4,321	3,616	31,580	74	31,654	9,263	40,917

Notes 1: "Others" is a business segment that is not included in the reporting segments and includes property and life insurance agency business.
Notes 2: Segment profit (loss) is reconciled with operating income in the consolidated financial statements.

Millions of yen

2017	Reporting Segment: Material Solutions Unit	Quality of Life Solutions Unit	Health Care Solutions Unit	Nutrition Solutions Unit	Total	Others (Note 1)	Total	Adjustments	Consolidated (Note 2)
Sales									
Customers	¥ 207,297	¥ 136,849	¥ 45,141	¥ 157,990	¥ 547,277	¥ 945	¥ 548,222	¥ —	¥ 548,222
Intersegment	1,357	11	—	39	1,407	1,374	2,781	(2,781)	—
Total	208,654	136,860	45,141	158,029	548,684	2,319	551,003	(2,781)	548,222
Segment profit (loss)	22,251	15,041	10,897	5,281	53,470	382	53,852	(20,687)	33,165
Segment assets	205,506	153,811	52,708	101,362	513,387	1,293	514,680	78,220	592,900
Other Items									
Depreciation	9,030	9,938	2,094	3,700	24,762	60	24,822	2,820	27,642
Amortization of goodwill	32	56	431	—	519	—	519	—	519
Investment in equity method affiliates	68	1,953	—	—	2,021	—	2,021	—	2,021
Increase in assets	14,428	9,607	3,174	2,702	29,911	113	30,024	7,956	37,980

Notes 1: "Others" is a business segment that is not included in the reporting segments and includes property and life insurance agency business.
Notes 2: Segment profit (loss) is reconciled with operating income in the consolidated financial statements.

Thousands of U.S. dollars (Note 1)

2019	Reporting Segment: Material Solutions Unit	Quality of Life Solutions Unit	Health Care Solutions Unit	Nutrition Solutions Unit	Total	Others (Note 1)	Total	Adjustments	Consolidated (Note 2)
Sales									
Customers	**$ 2,305,784**	**$ 1,411,605**	**$ 427,444**	**$ 1,432,273**	**$ 5,577,106**	**$ 18,389**	**$ 5,595,495**	**$ —**	**$ 5,595,495**
Intersegment	**10,848**	**171**	**—**	**252**	**11,271**	**9,812**	**21,083**	**(21,083)**	**—**
Total	**2,316,632**	**1,411,776**	**427,444**	**1,432,525**	**5,588,377**	**28,201**	**5,616,578**	**(21,083)**	**5,595,495**
Segment profit (loss)	**233,904**	**135,985**	**95,360**	**53,437**	**518,686**	**13,200**	**531,886**	**(207,154)**	**324,732**
Segment assets	**2,139,265**	**1,561,861**	**540,193**	**1,022,624**	**5,263,943**	**7,163**	**5,271,106**	**671,664**	**5,942,770**
Other Items									
Depreciation	**96,829**	**98,928**	**22,191**	**35,264**	**253,212**	**171**	**253,383**	**33,832**	**287,215**
Amortization of goodwill	**316**	**—**	**3,000**	**—**	**3,316**	**—**	**3,316**	**774**	**4,090**
Investment in equity method affiliates	**604**	**19,146**	**—**	**—**	**19,750**	**—**	**19,750**	**—**	**19,750**
Increase in assets	**121,371**	**184,701**	**35,382**	**83,359**	**424,813**	**3,487**	**428,300**	**54,572**	**482,872**

Notes 1: "Others" is a business segment that is not included in the reporting segments and includes property and life insurance agency business.
Notes 2: Segment profit (loss) is reconciled with operating income in the consolidated financial statements.

4. Reconciliation Between Segment Total and Consolidated Statements of Income (Adjustments)

	Millions of yen			Thousands of U.S. dollars (Note 1)
	2019	2018	2017	**2019**
Income				
Segment total	**¥ 57,569**	¥ 57,222	¥ 53,470	**$ 518,686**
Income classified under "others"	**1,465**	520	382	**13,200**
Elimination of intersegment transactions	**12**	(8)	(6)	**108**
Companywide expenses (Note)	**(23,092)**	(20,909)	(20,695)	**(208,055)**
Other adjustments	**88**	64	14	**793**
Operating income in the consolidated statements of income	**¥ 36,042**	¥ 36,889	¥ 33,165	**$ 324,732**

Note: Companywide expenses are primarily expenses for basic R&D that are not allocable to any reporting segments.

	Millions of yen			Thousands of U.S. dollars (Note 1)
	2019	2018	2017	**2019**
Assets				
Segment total	**¥ 584,245**	¥ 556,399	¥ 513,387	**$ 5,263,943**
Assets classified under "others"	**795**	829	1,293	**7,163**
Elimination of intersegment transactions	**(14,184)**	(13,530)	(13,575)	**(127,795)**
Companywide assets (Note)	**88,168**	96,745	91,212	**794,378**
Other adjustments	**564**	567	583	**5,081**
Total assets in the consolidated statements of income	**¥ 659,588**	¥ 641,010	¥ 592,900	**$ 5,942,770**

Note: Companywide assets are working capital, investment securities and land that are not allocable to any reporting segments.

	Millions of yen											
	Segment total			Others			Adjustments			Consolidated		
	2019	2018	2017	**2019**	2018	2017	**2019**	2018	2017	**2019**	2018	2017
Other Items												
Depreciation	**¥ 28,104**	¥ 26,743	¥ 24,762	**¥ 19**	¥ 18	¥ 60	**¥ 3,755**	¥ 3,360	¥ 2,820	**¥ 31,878**	¥ 30,121	¥ 27,642
Increase in assets	**47,150**	31,580	29,911	**387**	74	113	**6,057**	9,263	7,956	**53,594**	40,917	37,980

Note: "Others" is primarily expenses for basic R&D that are not allocable to any reporting segments.

	Thousands of U.S. dollars (Note 1)			
	Segment total	Others	Adjustments	Consolidated
	2019	**2019**	**2019**	**2019**
Other Items				
Depreciation	**$ 253,212**	**$ 171**	**$ 33,832**	**$ 287,215**
Increase in assets	**424,813**	**3,487**	**54,572**	**482,872**

Note: "Others" is primarily expenses for basic R&D that are not allocable to any reporting segments.

(Related Information)

Related information at March 31, 2019, 2018 and 2017 consisted of the following.

1. Information by Product and Service

No information is reported because product and service classifications are the same as the reporting segment classifications.

2. Geographic Area

(1) Sales

2019 — Millions of yen

	Japan	Asia	North America	Europe	Other areas	Total
	¥ 371,315	**¥ 115,661**	**¥ 48,841**	**¥ 59,264**	**¥ 25,963**	**¥ 621,044**

2018 — Millions of yen

	Japan	Asia	North America	Europe	Other areas	Total
	¥ 359,740	¥ 109,962	¥ 44,725	¥ 58,813	¥ 22,903	¥ 596,143

2017 — Millions of yen

	Japan	Asia	North America	Europe	Other areas	Total
	¥ 344,891	¥ 86,188	¥ 42,702	¥ 51,068	¥ 23,373	¥ 548,222

2019 — Thousands of U.S. dollars (Note 1)

	Japan	Asia	North America	Europe	Other areas	Total
	$ 3,345,482	**$ 1,042,085**	**$ 440,049**	**$ 533,958**	**$ 233,921**	**$ 5,595,495**

Note: Sales are classified into countries or regions based on the geographic location of customers.

(2) Property, plant and equipment

2019 — Millions of yen

	Japan	Malaysia	Asia-Other	North America	Europe	Total
	¥ 176,885	**¥ 27,714**	**¥ 8,967**	**¥ 18,952**	**¥ 19,404**	**¥ 251,922**

2018 — Millions of yen

	Japan	Malaysia	Asia-Other	North America	Europe	Total
	¥ 166,859	¥ 29,921	¥ 8,431	¥ 18,126	¥ 14,138	¥ 237,475

2019 — Thousands of U.S. dollars (Note 1)

	Japan	Malaysia	Asia-Other	North America	Europe	Total
	$ 1,593,702	**$ 249,698**	**$ 80,791**	**$ 170,754**	**$ 174,827**	**$ 2,269,772**

3. Information on Major Customers

No information is reported because no sales to any external customer represented more than 10% of net sales on the consolidated statements of income.

(Information on Impairment Loss on Fixed Assets by Reporting Segment)

Information on impairment loss on fixed assets by reporting segment at March 31, 2019, 2018 and 2017 consisted of the following.

Millions of yen

2019	Segment Information: Material Solutions Unit	Quality of Life Solutions Unit	Health Care Solutions Unit	Nutrition Solutions Unit	Total	Others	Adjustments	Consolidated
(Impairment loss)	**¥ —**	**¥ 274**	**¥ —**	**¥ —**	**¥ 274**	**¥ —**	**¥ —**	**¥ 274**

Millions of yen

2018	Segment Information: Material Solutions Unit	Quality of Life Solutions Unit	Health Care Solutions Unit	Nutrition Solutions Unit	Total	Others	Adjustments	Consolidated
(Impairment loss)	¥ —	¥ 114	¥ 671	¥ —	¥ 785	¥ —	¥ —	¥ 785

Millions of yen

2017	Segment Information: Material Solutions Unit	Quality of Life Solutions Unit	Health Care Solutions Unit	Nutrition Solutions Unit	Total	Others	Adjustments	Consolidated
(Impairment loss)	¥ —	¥ —	¥ —	¥ —	¥ —	¥ —	¥ —	¥ —

Thousands of U.S. dollars (Note 1)

2019	Segment Information: Material Solutions Unit	Quality of Life Solutions Unit	Health Care Solutions Unit	Nutrition Solutions Unit	Total	Others	Adjustments	Consolidated
(Impairment loss)	**$ —**	**$ 2,469**	**$ —**	**$ —**	**$ 2,469**	**$ —**	**$ —**	**$ 2,469**

(Information on Amortization of Goodwill and Unamortized Balances by Reporting Segment)

Information on amortization of goodwill and unamortized balances by reporting segment at March 31, 2019 and 2018 consisted of the following.

Millions of yen

	Segment Information							
2019	Material Solutions Unit	Quality of Life Solutions Unit	Health Care Solutions Unit	Nutrition Solutions Unit	Total	Others	Adjustments	Consolidated
(Goodwill)								
Amortization	**¥ 35**	**¥ —**	**¥ 333**	**¥ —**	**¥ 368**	**¥ —**	**¥ 86**	**¥ 454**
Balance	**79**	**—**	**2,016**	**1,118**	**3,213**	**—**	**769**	**3,982**

Millions of yen

	Segment Information							
2018	Material Solutions Unit	Quality of Life Solutions Unit	Health Care Solutions Unit	Nutrition Solutions Unit	Total	Others	Adjustments	Consolidated
(Goodwill)								
Amortization	¥ 35	¥ —	¥ 448	¥ —	¥ 483	¥ —	¥ 46	¥ 529
Balance	118	—	2,412	—	2,530	—	947	3,477

Thousands of U.S. dollars (Note 1)

	Segment Information							
2019	Material Solutions Unit	Quality of Life Solutions Unit	Health Care Solutions Unit	Nutrition Solutions Unit	Total	Others	Adjustments	Consolidated
(Goodwill)								
Amortization	**$ 316**	**$ —**	**$ 3,000**	**$ —**	**$ 3,316**	**$ —**	**$ 774**	**$ 4,090**
Balance	**712**	**—**	**18,164**	**10,073**	**28,949**	**—**	**6,928**	**35,877**

Note: "Adjustments" includes amortization expense mainly related to basic research and development activities that is not attributed to any specific reporting segment.

(Information on Gain on Negative Goodwill by Reporting Segment)

In the Material Solutions Unit, the Company recorded gain on negative goodwill of ¥954 million in conjunction with the acquisition of additional shares of an affiliate and its conversion into a consolidated subsidiary on March 31, 2018.

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of Kaneka Corporation:

We have audited the accompanying consolidated financial statements of Kaneka Corporation and its consolidated subsidiaries, which comprise the consolidated balance sheets as at March 31, 2019 and 2018, and the consolidated statements of income, statements of comprehensive income, statements of changes in net assets and statements of cash flows for each of the three years in the period ended March 31, 2019, 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 audits. We conducted our audits 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 our 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, we consider 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 objective of the financial statement audit is not for the purpose of expressing 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.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Kaneka Corporation and its consolidated subsidiaries as at March 31, 2019 and 2018, and their financial performance and cash flows for each of the three years in the period ended March 31, 2019, 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 March 31, 2019 are presented solely for convenience. Our audit also included the translation of yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 1 to the consolidated financial statements.

KPMG AZSA LLC

August 8, 2019
Osaka, Japan

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