

Financial Review

Financial Performance

The business environment in which the DOWA Group operated in fiscal 2019, the fiscal year ended March 31, 2020, continued to be unstable as a result of U.S.–China trade friction and the impact of COVID-19. Demand for automotive-related products hit a slump due to fewer automobiles being produced worldwide. In information and communication-related products, demand for smartphones saw some recovery, while new energy-related products continued to experience returning demand in the Chinese market. As for the commodities markets, exchange rates made a slight turn in favor of the yen at the end of the fiscal year under review. Amid an uncertain political backdrop internationally, metal prices for gold and platinum group metals (PGMs) rose, while prices for base metals such as zinc and copper continued to fall.

Amid these circumstances, the Group made steady progress with measures to raise corporate value under the basic policies put forth under its Midterm Plan 2020, which are “to expand businesses in growth markets” and “increase competitiveness of existing businesses.”

As a result, consolidated net sales increased 7.1%, to ¥485,130 million, while consolidated operating income increased 39.0%, to ¥25,955 million. Consolidated ordinary income increased 19.3%, to ¥28,996 million, and net income attributable to owners of the parent increased 16.1%, to ¥17,395 million.

COVID-19 had a minor impact on business performance and financial position in the consolidated fiscal year under review. As for the impact on business activities, operations of consolidated subsidiary Hightemp Furnaces Ltd., part of the Heat Treatment Business, were suspended from the end of March due to the lockdown in India, but initiated a staged return to operations in mid-May.

However, the halt of economic activity in Japan and other countries, particularly suspended operations and reduced production among automobile manufacturers, is expected to impact demand in the Heat Treatment Business and the Metal Processing Business in the following consolidated fiscal year, as automotive-related products constitute a large portion of sales for both businesses. Metal prices have also been sluggish during this time.

In China, consolidated subsidiaries Dowa Environmental Management Co., Ltd. (Environmental Management & Recycling Business), Dowa Advanced Materials (Shanghai) Co., Ltd. (Metal Processing business), Dowa New Materials (Shanghai) Co., Ltd. (Metal Processing Business), and Kunshan Dowa Thermo Furnace Co., Ltd. (Heat Treatment Business) conducted a staged suspension of operations from the end of January, affecting business activities, but have since resumed their respective operations.

In Mexico, equity-method affiliates Minera Tizapa, S.A. DE C.V. (Nonferrous metals Business) and Minera Plata Real, S. DE R.L. DE C.V. (Nonferrous metals Business) operate the Tizapa Mine and Los Gatos Mine, respectively. Operations of the Los Gatos Mine were suspended from mid-April to the end of May by government order, but have since resumed operations.

In addition, equity-method affiliate Fujita Kanko Inc. (Other business) was affected by the decrease in the number of domestic and overseas tourists. While the above events will affect the business performance and financial condition in the next consolidated fiscal year, it is difficult to reasonably formulate an outlook at this time.

The above-mentioned consolidated subsidiaries and equity-method affiliates end their fiscal year on December 31.

Analysis of Financial Position

Assets

Total assets at the end of the fiscal year under review stood at ¥512,495 million, up ¥17,812 million compared with the end of the previous fiscal year.

Current assets were up ¥4,135 million, while fixed assets increased ¥13,676 million. Despite decreases in notes and accounts receivable of ¥9,268 million and in raw materials and supplies of ¥4,489 million, current assets rose mainly due to increases of ¥11,612 million in cash and time deposits and ¥6,621 million in other current assets.

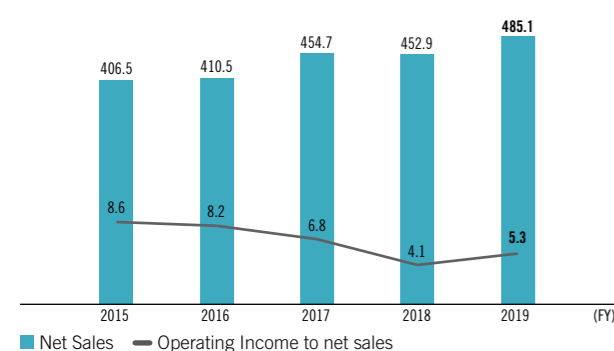
Fixed assets increased mainly due to an ¥18,970 million rise in property, plant and equipment, despite a decrease in investment securities of ¥3,126 million and in other assets listed under investments and other assets of ¥1,671 million.

Liabilities

Total liabilities grew ¥5,729 million compared with the previous fiscal year-end. This increase was largely due to increases in other current liabilities of ¥7,783 million, accrued income taxes of ¥4,088 million, and short-term borrowings of ¥3,219 million, despite a decrease in notes and accounts payable of ¥8,969 million.

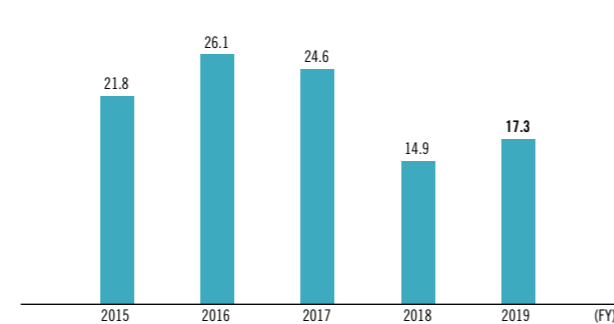
Net Sales / Operating Income to Net Sales

(Billions of yen / %)



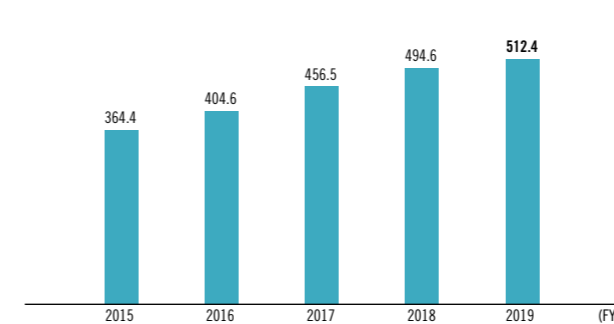
Net Income Attributable to Owners of the Parent

(Billions of yen)



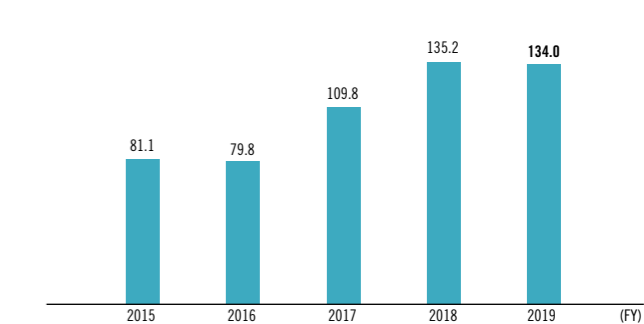
Total Assets

(Billions of yen)



Interest-Bearing Debt

(Billions of yen)



Equity

Looking at total equity, net income attributable to owners of the parent amounted to ¥17,395 million, but payment of cash dividends resulted in an increase in shareholders' equity of ¥11,186 million. In addition, total accumulated other comprehensive income dropped ¥353 million due to unrealized loss on available-for-sale securities, and total equity was ¥12,082 million higher than the balance as of the end of the previous fiscal year, with the equity ratio at 48.4%.

Analysis of Cash Flows

Consolidated cash and cash equivalents (hereinafter, "net cash") at the end of the consolidated fiscal year under review increased ¥11,229 million compared with the previous fiscal year-end, to ¥30,232 million.

Net cash provided by operating activities came to ¥55,113 million, up ¥17,558 million year on year. Principal cash inflows included income before income taxes of ¥28,762 million, non-financial expenses of depreciation and amortization of ¥19,288 million, and a decrease in notes and accounts receivable of ¥8,553 million. Outflows included a decrease in notes and accounts payable of ¥8,383 million.

Net cash used in investing activities was ¥37,812 million, down ¥13,213 million compared with the previous fiscal year. This was primarily due to capital expenditures of ¥36,126 million, primarily in the Environmental Management & Recycling Business, and payments for loans amounting to ¥8,120 million.

Net cash used in financing activities was ¥6,569 million, compared with net cash provided by financing activities of ¥15,944 million in the previous fiscal year, a difference of ¥22,514 million (rounded). This reflected cash dividends paid of ¥5,577 million and a decrease in interest-bearing debt of ¥807 million.

Basic Dividend Policy and Dividends Paid for the Fiscal Year under Review

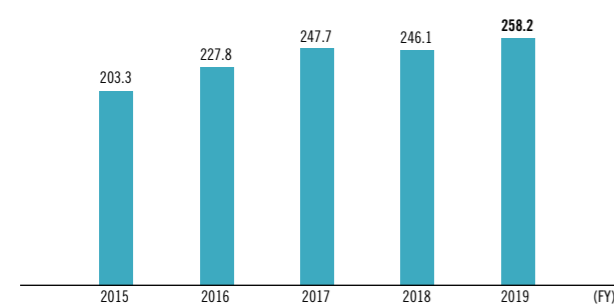
DOWA views the payment of dividends to shareholders as one of its most important management issues. The Company's fundamental policy is to maintain the stable payment of dividends and, in that light, it pays a dividend commensurate with performance, having appropriated a sufficient amount of retained earnings to bolster the Group's business position and support future business

development. As part of Midterm Plan 2020, we aim to increase dividends according to profit levels, maintaining a stable dividend of at least ¥90 per share.

Based on the above, the annual dividend paid for the fiscal year under review was ¥90 per share, the same amount as in the previous fiscal year.

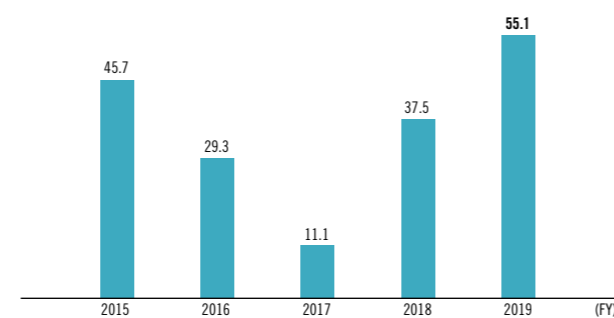
Equity

(Billions of yen)



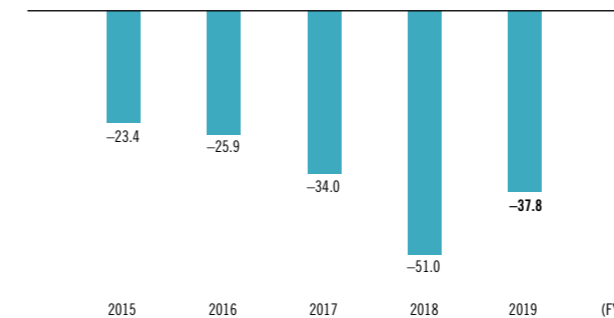
Cash Flows from Operating Activities

(Billions of yen)



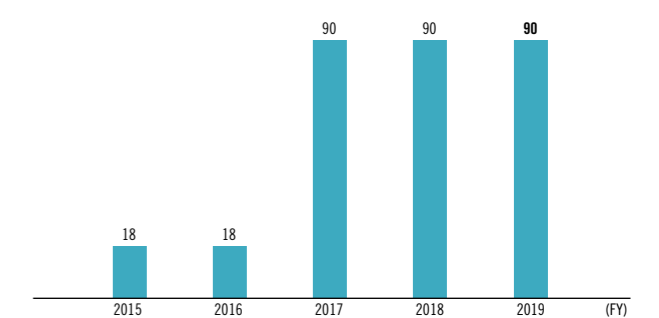
Cash Flows from Investing Activities

(Billions of yen)



Cash Dividends

(Yen)



Note: On October 1, 2017, the Company conducted a 5-for-1 reverse stock split.

Consolidated Performance Trends

(Millions of yen)

For the years ended March 31	Midterm Plan 2020										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019(FY)*1
Financial Performance											
Net Sales	¥307,462	¥379,816	¥392,468	¥419,390	¥443,985	¥464,219	¥406,598	¥410,503	¥ 454,754	¥ 452,928	¥ 485,130
Cost of Sales	268,738	330,380	343,015	365,963	382,079	391,509	337,314	341,177	387,831	396,495	421,630
Selling, General and Administrative Expenses	25,022	26,511	27,443	28,863	30,111	33,616	34,216	35,335	35,975	37,761	37,544
Operating Income	13,701	22,924	22,009	24,564	31,794	39,094	35,067	33,990	30,948	18,671	25,955
Operating Income by Segment											
Environmental Management & Recycling (%)	15.35	12.22	20.34	26.37	29.86	18.80	18.01	19.50	16.06	30.46	27.76
Nonferrous Metals (%)	21.95	22.56	19.25	19.09	22.20	34.69	38.00	29.58	29.74	3.17	38.54
Electronic Materials (%)	35.12	31.16	24.95	23.58	21.12	22.55	22.89	19.36	18.17	11.66	4.09
Metal Processing (%)	24.00	23.66	20.59	19.89	16.96	14.85	14.01	20.49	23.54	33.74	19.71
Heat Treatment (%)	1.07	6.18	8.95	6.33	7.12	6.02	3.86	7.00	8.47	13.05	4.63
Others and Elimination (%)	2.51	4.21	5.92	4.74	2.74	3.09	3.24	4.06	4.01	7.92	5.27
Ordinary Income (Loss)	¥ 13,809	¥ 23,371	¥ 20,918	¥ 27,277	¥ 35,055	¥ 42,037	¥ 35,056	¥ 36,504	¥ 36,355	¥ 24,309	¥ 28,996
EBITDA*2	32,978	41,410	40,354	41,551	48,000	54,667	50,212	49,786	48,160	37,300	45,244
Net Income (Loss) Attributable to Owners of the Parent	4,359	8,521	10,610	15,213	23,310	26,543	21,826	26,169	24,693	14,986	17,395
Capital Expenditures	10,763	17,820	15,910	18,422	16,549	17,247	22,936	26,526	24,608	24,087	37,723
Depreciation	19,276	18,486	18,344	16,987	16,205	15,572	15,145	15,796	17,212	18,628	19,288
R&D Expenses	4,099	4,266	4,623	4,604	4,651	5,320	5,594	5,670	5,380	5,888	6,076
Exchange Rate and Metal Prices											
Copper (Price Quoted, Average)	¥609,483	¥738,200	¥717,817	¥696,375	¥757,633	¥765,775	¥675,483	¥603,917	¥ 756,683	¥ 746,608	¥ 681,592
Zinc (Price Quoted, Average)	222,575	231,858	211,683	208,675	240,325	285,983	269,383	305,633	386,733	353,725	313,308
U.S. Dollar (Average)	92.85	85.72	79.08	83.10	100.24	109.93	120.14	108.38	110.85	110.91	108.74
Financial Position											
Equity	¥111,667	¥113,785	¥121,807	¥142,400	¥166,987	¥195,649	¥203,370	¥227,821	¥ 247,762	¥ 246,158	¥ 258,241
Non-Controlling Interests	5,663	6,942	7,999	8,807	8,733	8,528	8,449	8,518	8,946	8,944	10,194
Total Assets*3	330,720	340,161	319,665	349,787	358,717	379,193	364,420	404,604	456,530	494,683	512,495
Interest-Bearing Debt	149,371	138,119	117,670	107,138	99,663	86,668	81,135	79,883	109,827	135,241	134,086
Per Share*4 (Yen)											
Basic Net Income (Loss)	¥ 14.96	¥ 28.80	¥ 35.86	¥ 51.41	¥ 78.77	¥ 89.69	¥ 73.75	¥ 88.43	¥ 417.21	¥ 253.22	¥ 293.92
Fully Diluted Equity	358.33	361.18	384.55	451.41	534.75	632.30	658.66	741.06	4,035.06	4,008.03	4,191.09
Cash Dividends	10.00	10.00	10.00	12.00	15.00	18.00	18.00	18.00	90.00	90.00	90.00
Cash Flows											
Cash Flows from Operating Activities	¥ 25,011	¥ 23,955	¥ 31,499	¥ 34,970	¥ 30,189	¥ 38,345	¥ 45,751	¥ 29,389	¥ 11,125	¥ 37,555	¥ 55,113
Cash Flows from Investing Activities	(14,602)	(19,257)	(19,491)	(19,354)	(18,689)	(20,321)	(23,486)	(25,954)	(34,010)	(51,025)	(37,812)
Cash Flows from Financing Activities	(33,888)	(15,070)	(24,134)	(14,982)	(12,341)	(16,905)	(11,159)	(7,155)	24,087	15,944	(6,569)
Free Cash Flow	10,408	4,698	12,007	15,615	11,499	18,024	22,265	3,434	(22,884)	(13,470)	17,301
Cash and Cash Equivalents at End of Year	27,115	16,741	4,788	6,129	5,823	8,044	18,902	15,126	16,472	19,002	30,232
Ratios											
Return on Assets*5 (%)	4.10	6.97	6.34	8.15	9.90	11.39	9.43	9.49	8.44	5.11	5.76
Return on Equity*6 (%)	4.26	8.01	9.62	12.30	15.97	15.37	11.43	12.64	10.78	6.30	7.17
Operating Income (Loss) to Net Sales (%)	4.46	6.04	5.61	5.86	7.16	8.42	8.62	8.28	6.81	4.12	5.35
Equity Ratio*7 (%)	32.05	31.41	35.60	38.19	44.12	49.35	53.49	54.20	52.31	47.95	48.40
Operating Income Growth (%)	—	67.31	(3.99)	11.60	29.43	22.96	(10.30)	(3.07)	(8.95)	(39.67)	39.01
Interest Coverage (Times)	5.12	10.55	11.52	14.82	21.41	34.23	39.04	43.12	55.47	20.71	21.69
Debt / Equity Ratio*7 (Times)	1.41	1.29	1.03	0.80	0.63	0.46	0.42	0.36	0.46	0.57	0.54
Debt / Capacity Ratio (Times)	1.91	1.90	1.83	1.37	1.28	1.06	1.00	0.83	1.05	1.29	1.26
Return on Invested Capital*7 (%)	1.71	3.48	4.58	6.32	9.04	9.70	7.91	8.75	7.08	4.02	4.55

*1 The years stated in the table are ended March 31. Thus, "2019" refers to the fiscal year that ran from April 1, 2019 through March 31, 2020.

*2 EBITDA is calculated by adding operating income and depreciation.

*3 Changes put forth in the Partial Amendments to Accounting Standard for Tax Effect Accounting (ASBJ Statement No. 28, issued February 16, 2018) have been applied to the consolidated financial results for the fiscal year under review. These amendments have been retroactively applied to the consolidated financial results for fiscal 2017, and the amount of total assets has been adjusted accordingly.

*4 On October 1, 2017, the Company conducted a 5-for-1 reverse stock split.

*5 Ordinary income (loss) divided by the average of total assets at the start and end of the year.

*6 Net income (loss) attributable to owners of the parent divided by the average of shareholders' equity (the amounts after deducting non-controlling interest amounts from equity amounts) at the start and end of the year.

*7 The ratios have been calculated using shareholders' equity (the amounts after deducting non-controlling interest amounts from equity amounts).

Consolidated Balance Sheet

DOWA HOLODINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2020 and 2019

Assets	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Current Assets:			
Cash and time deposits (Notes 3, 6, and 14)	¥ 31,730	¥ 20,118	\$ 291,562
Notes and accounts receivable: (Note 14)			
Trade	73,544	82,330	675,773
Nonconsolidated subsidiaries and associates	2,247	2,350	20,653
Others	6,255	3,561	57,478
Subtotal	82,047	88,241	753,905
Inventories: (Note 13)			
Merchandise and finished products	29,416	29,461	270,298
Work in process	5,679	5,769	52,186
Raw materials and supplies	80,207	84,696	736,999
Subtotal	115,303	119,928	1,059,484
Other current assets	13,413	9,866	123,250
Allowance for doubtful accounts	(352)	(147)	(3,235)
Total current assets	242,143	238,007	2,224,967
Property, Plant, and Equipment (Notes 5 and 6):			
Land	27,883	24,977	256,212
Buildings and structures	132,996	126,589	1,222,059
Machinery and equipment	261,306	250,856	2,401,052
Construction in progress	21,688	8,183	199,284
Others	18,829	17,459	173,019
Subtotal	462,704	428,066	4,251,629
Accumulated depreciation	(309,368)	(293,701)	(2,842,677)
Net property, plant, and equipment	153,336	134,365	1,408,952
Investments and Other Assets:			
Investments in securities (Notes 4, 6, and 14)	19,667	27,158	180,718
Investments in and advances to nonconsolidated subsidiaries and associates (Notes 4, 6, 14 and 19)	78,992	74,098	725,835
Deferred tax assets (Note 9)	6,883	7,689	63,253
Goodwill	4,037	4,620	37,102
Other assets	7,534	8,835	69,233
Allowance for doubtful accounts	(100)	(91)	(925)
Total investments and other assets	117,016	122,310	1,075,218
Total assets	¥ 512,495	¥ 494,683	\$ 4,709,137

*1. The accompanying notes are an integral part of these consolidated financial statements.
*2. ¥108.83 = U.S. \$1, the rate of exchange on March 31, 2020.

Liabilities and Equity	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Current Liabilities:			
Short-term borrowings (Notes 6 and 14).....	¥ 33,454	¥ 28,777	\$ 307,401
Commercial paper (Notes 6 and 14)	24,000	29,000	220,527
Current maturities of long-term debt (Notes 6 and 14)	6,838	18,271	62,840
Notes and accounts payable: (Note 14)			
Trade	33,697	43,445	309,631
Nonconsolidated subsidiaries and associates	783	4	7,195
Others	5,481	5,979	50,371
Subtotal	39,962	49,429	367,198
Accrued expenses	7,519	8,655	69,091
Accrued income taxes	6,224	2,135	57,195
Accrued bonuses	3,945	4,110	36,252
Accrued directors' bonuses	191	249	1,756
Other current liabilities	34,650	22,826	318,389
Total current liabilities	156,786	163,456	1,440,651
Long-term Liabilities:			
Long-term debt (Notes 6 and 14)	71,299	59,662	655,146
Liability for employees' retirement benefits (Note 12)	18,548	17,967	170,433
Retirement allowance for directors and audit & supervisory board members	730	621	6,708
Deferred tax liabilities (Note 9)	2,158	2,064	19,829
Other long-term liabilities	4,731	4,751	43,480
Total long-term liabilities	97,467	85,067	895,598
Total liabilities	254,254	248,524	2,336,250
Contingent Liabilities (Note 7)			
Equity: (Note 8)			
Common stock:			
Authorized: 200,000 thousand shares in 2020 and 2019			
Issued: 61,989 thousand shares in 2020 and 2019	36,437	36,437	334,809
Capital surplus	25,928	26,044	238,251
Retained earnings	184,927	173,624	1,699,230
Treasury stock, at cost (2,804 thousand shares in 2020 and 2,804 thousand shares in 2019) ..	(5,711)	(5,710)	(52,478)
Accumulated Other Comprehensive Income:			
Unrealized gain (loss) on available-for-sale securities (Note 4)	5,226	9,992	48,027
Deferred gain (loss) on derivatives under hedge accounting (Note 15)	2,285	(2,787)	21,003
Foreign currency translation adjustments	(875)	(27)	(8,044)
Defined retirement benefit plans (Note 12)	(172)	(360)	(1,582)
Total	248,047	237,214	2,279,217
Noncontrolling interests	10,194	8,944	93,670
Total equity	258,241	246,158	2,372,887
Total liabilities and equity	¥ 512,495	¥ 494,683	\$ 4,709,137

Consolidated Statement of Income

DOWA HOLODINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2020 and 2019

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Net Sales	¥ 485,130	¥452,928	\$ 4,457,689
Cost of Sales (Notes 11 and 13)	421,630	396,495	3,874,210
Gross profit (loss)	63,499	56,432	583,478
Selling, General, and Administrative Expenses (Notes 10 and 12) ...	37,544	37,761	344,984
Operating income (loss)	25,955	18,671	238,494
Other Income (Expenses):			
Interest and dividend income	2,752	2,204	25,291
Interest expense	(1,323)	(1,008)	(12,162)
Gain (loss) on sales and disposals of property, plant and equipment, net	(676)	(860)	(6,217)
Foreign exchange gain (loss)	(986)	(27)	(9,065)
Share of profit (loss) of entities accounted for using equity method	605	2,470	5,566
Commission income	838	583	7,703
Royalty income	790	1,154	7,261
Gain (loss) on sales of investments in securities, net (Note 4)	1,555	158	14,297
Environmental expenses	(535)	(522)	(4,924)
Loss on impairments (Note 5)	(1,181)	(212)	(10,853)
Loss from natural disaster	(107)	(184)	(987)
Settlement package	—	(206)	—
Reversal of foreign currency translation adjustment	—	227	—
Other, net	1,075	1,050	9,881
Subtotal	2,806	4,828	25,789
Income (loss) before income taxes	28,762	23,499	264,283
Income Taxes: (Note 9)			
Current	9,857	7,148	90,580
Deferred	223	1,240	2,057
Total income taxes	10,081	8,389	92,638
Net Income (loss)	18,680	15,110	171,645
Net Income (Loss) Attributable to Noncontrolling Interests	1,284	123	11,802
Net income (loss) attributable to owners of the parent	¥ 17,395	¥ 14,986	\$ 159,842

Per Share: (Note 17)	Yen		U.S. dollars (Note 1)
	2020	2019	2020
Basic net income	¥ 293.92	¥ 253.22	\$ 2.70
Cash dividends	90.00	90.00	0.82

*1. The accompanying notes are an integral part of these consolidated financial statements.
2. ¥108.83= U.S. \$1, the rate of exchange on March 31, 2020.

Consolidated Statement of Comprehensive Income

DOWA HOLODINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2020 and 2019

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Net Income (loss).....	¥ 18,680	¥ 15,110	\$ 171,645
Other comprehensive income: (Note 16)			
Unrealized gain (loss) on available-for-sale securities	(5,127)	(3,872)	(47,114)
Deferred gain (loss) on derivatives under hedge accounting	5,069	(4,016)	46,585
Foreign currency translation adjustments	(880)	(1,672)	(8,094)
Defined retirement benefit plans	169	307	1,559
Share of other comprehensive income in affiliates	396	(833)	3,639
Total other comprehensive income	(372)	(10,086)	(3,424)
Comprehensive income	¥ 18,307	¥ 5,023	\$ 168,221
Total comprehensive income attributable to:			
Owners of the parent	¥ 17,042	¥ 4,969	\$ 156,594
Noncontrolling interests	1,265	54	11,626

*1. The accompanying notes are an integral part of these consolidated financial statements.
2. ¥108.83= U.S. \$1, the rate of exchange on March 31, 2020.

Consolidated Statement of Changes in Equity

DOWA HOLODINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2020 and 2019

	Thousands	Millions of yen			
		Shareholders' Equity			
	Number of Shares of Common Stock Outstanding	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock, at Cost
Balance, April 1, 2018	59,185	¥ 36,437	¥ 26,222	¥ 165,029	¥ (5,708)
Cash dividends paid	—	—	—	(5,409)	—
Net Income (loss) attributable to owners of the parent	—	—	—	14,986	—
Purchases of treasury stock	(0)	—	—	—	(1)
Change of scope of consolidation	—	—	—	(982)	—
Change in the parent's ownership interest due to transactions with noncontrolling interests...	—	—	(178)	—	—
Net changes of items other than shareholders' equity	—	—	—	—	—
Balance, April 1, 2019	59,184	¥ 36,437	¥ 26,044	¥ 173,624	¥ (5,710)
Cash dividends paid	—	—	—	(5,409)	—
Net Income (loss) attributable to owners of the parent	—	—	—	17,395	—
Purchases of treasury stock	(0)	—	—	—	(1)
Change of scope of consolidation	—	—	—	(683)	—
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	(115)	—	—
Net changes of items other than shareholders' equity	—	—	—	—	—
Balance, March 31, 2020	59,184	¥ 36,437	¥ 25,928	¥ 184,927	¥ (5,711)

	Thousands	Thousands of U.S. dollars (Note 1)			
		Shareholders' Equity			
	Number of Shares of Common Stock Outstanding	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock, at Cost
Balance, April 1, 2019	59,184	\$ 334,809	\$ 239,312	\$ 1,595,369	\$ (52,467)
Cash dividends paid	—	—	—	(49,702)	—
Net Income (loss) attributable to owners of the parent	—	—	—	159,842	—
Purchases of treasury stock	(0)	—	—	—	(10)
Change of scope of consolidation	—	—	—	(6,279)	—
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	(1,061)	—	—
Net changes of items other than shareholders' equity	—	—	—	—	—
Balance, March 31, 2020	59,184	\$ 334,809	\$ 238,251	\$ 1,699,230	\$ (52,478)

*1. The accompanying notes are an integral part of these consolidated financial statements.

*2. ¥108.83= U.S. \$1, the rate of exchange on March 31, 2020.

	Millions of yen						
	Accumulated Other Comprehensive Income				Total	Non-controlling Interests	Total Equity
	Unrealized Gain (Loss) on Available-for-Sale Securities	Deferred Gain (Loss) on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans			
Balance, April 1, 2018	¥ 14,164	¥ 1,199	¥ 2,124	¥ (653)	¥ 238,815	¥ 8,946	¥ 247,762
Cash dividends paid	—	—	—	—	(5,409)	—	(5,409)
Net Income (loss) attributable to owners of the parent	—	—	—	—	14,986	—	14,986
Purchases of treasury stock	—	—	—	—	(1)	—	(1)
Change of scope of consolidation	—	—	—	—	(982)	—	(982)
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	—	—	(178)	—	(178)
Net changes of items other than shareholders' equity	(4,171)	(3,986)	(2,151)	293	(10,016)	(2)	(10,019)
Balance, April 1, 2019	¥ 9,992	¥ (2,787)	¥ (27)	¥ (360)	¥ 237,214	¥ 8,944	¥ 246,158
Cash dividends paid	—	—	—	—	(5,409)	—	(5,409)
Net Income (loss) attributable to owners of the parent	—	—	—	—	17,395	—	17,395
Purchases of treasury stock	—	—	—	—	(1)	—	(1)
Change of scope of consolidation	—	—	—	—	(683)	—	(683)
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	—	—	(115)	—	(115)
Net changes of items other than shareholders' equity	(4,766)	5,072	(848)	187	(353)	1,249	896
Balance, March 31, 2020	¥ 5,226	¥ 2,285	¥ (875)	¥ (172)	¥ 248,047	¥10,194	¥ 258,241

	Thousands of U.S. dollars (Note 1)						
	Accumulated Other Comprehensive Income				Total	Non-controlling Interests	Total Equity
	Unrealized Gain (Loss) on Available-for-Sale Securities	Deferred Gain (Loss) on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans			
Balance, April 1, 2019	\$ 91,820	\$ (25,610)	\$ (249)	\$ (3,309)	\$ 2,179,676	\$ 82,187	\$ 2,261,864
Cash dividends paid	—	—	—	—	(49,702)	—	(49,702)
Net Income (loss) attributable to owners of the parent	—	—	—	—	159,842	—	159,842
Purchases of treasury stock	—	—	—	—	(10)	—	(10)
Change of scope of consolidation	—	—	—	—	(6,279)	—	(6,279)
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	—	—	(1,061)	—	(1,061)
Net changes of items other than shareholders' equity	(43,793)	46,613	(7,794)	1,726	(3,247)	11,482	8,234
Balance, March 31, 2020	\$ 48,027	\$ 21,003	\$ (8,044)	\$ (1,582)	\$ 2,279,217	\$ 93,670	\$ 2,372,887

Consolidated Statement of Cash Flows

DOWA HOLODINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2020 and 2019

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Cash Flows from Operating Activities			
Income (loss) before income taxes.....	¥ 28,762	¥ 23,499	\$ 264,283
Adjustments for:			
Income taxes (paid) refund	(5,443)	(7,904)	(50,014)
Depreciation and amortization	19,774	19,138	181,699
Loss (gain) on sales and disposals of property, plant, and equipment, net.....	676	860	6,217
Share of (profit) loss of entities accounted for using the equity method	(605)	(2,470)	(5,566)
Loss (gain) on sales of investment securities, net (Note 4)	(1,555)	(158)	(14,297)
Loss on impairments (Note 5)	1,181	212	10,853
Changes in assets and liabilities			
Decrease (increase) in notes and accounts receivable	8,553	2,435	78,596
Decrease (increase) in inventories	4,361	(13,471)	40,076
Increase (decrease) in notes and accounts payable	(8,383)	5,883	(77,035)
Increase (decrease) in allowance for doubtful accounts	207	(42)	1,908
Increase (decrease) in net defined benefit liability	624	722	5,735
Decrease (increase) in interest and dividend receivables	3,362	2,967	30,898
Increase (decrease) in interest payable	(24)	143	(223)
Other, net	3,622	5,738	33,288
Net cash provided by operating activities	55,113	37,555	506,421
Cash Flows from Investing Activities:			
Acquisition of property, plant, and equipment	(35,241)	(23,395)	(323,823)
Proceeds from sales of property, plant, and equipment	605	338	5,560
Acquisition of intangible fixed assets.....	(885)	(288)	(8,138)
Acquisition of investments in securities	(8)	(1,835)	(77)
Proceeds from sales of investments in securities (Note 4).....	2,557	39	23,500
Acquisition of investments in subsidiaries and associates	(4,705)	(2,798)	(43,235)
Proceeds from sales of shares of subsidiaries and associates	—	196	—
Payments for loans	(8,120)	(23,818)	(74,613)
Proceeds from collection of loans	2,134	590	19,616
Proceeds from subsidies	6,484	882	59,585
Other, net	(633)	(936)	(5,820)
Net cash used in investing activities	(37,812)	(51,025)	(347,446)
Cash Flows from Financing Activities:			
Net increase (decrease) in short-term loans payable	4,661	(8,858)	42,833
Net increase (decrease) in commercial papers	(5,000)	4,000	(45,943)
Proceeds from long-term debt	9,840	23,601	90,422
Repayment of long-term debt	(10,262)	(6,811)	(94,301)
Proceeds from issuance of bonds.....	9,953	10,000	91,456
Redemption of bonds.....	(10,000)	—	(91,886)
Cash dividends paid	(5,577)	(5,641)	(51,249)
Repayment of lease obligations	(183)	(343)	(1,683)
Purchases of treasury stock	(1)	(1)	(10)
Other, net	0	(0)	0
Net cash provided by financing activities	(6,569)	15,944	(60,361)
Foreign Currency Translation Adjustment on Cash and Cash Equivalents	114	(58)	1,048
Net Increase (Decrease) in Cash and Cash Equivalents	10,846	2,416	99,661
Cash and Cash Equivalents of Newly Consolidated Subsidiaries ..	383	112	3,525
Cash and Cash Equivalents at Beginning of Year	19,002	16,472	174,604
Cash and Cash Equivalents at End of Year (Note 3)	¥ 30,232	¥ 19,002	\$ 277,791

*1. The accompanying notes are an integral part of these consolidated financial statements.

2. ¥ 108.83 = U.S. \$1, the rate of exchange on March 31, 2020.

Notes to Consolidated Financial Statements

DOWA HOLODINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2020 and 2019

1. Basis of Presentation of the Consolidated Financial Statements

The accompanying consolidated financial statements have been prepared in accordance with the provisions set forth in the Japanese Financial Instruments and Exchange Act and its related accounting regulations and in accordance with accounting principles generally accepted in Japan (“Japanese GAAP”), which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards.

Japanese yen figures less than a million yen are rounded down to the nearest million yen, except for per share data.

In preparing these consolidated financial statements, certain reclassifications and rearrangements have been made to the consolidated financial statements issued domestically in order to present them in a form which is more familiar to readers outside Japan. In addition, certain reclassifications have been made in the 2019 consolidated financial statements to conform to the classifications used in 2020.

The consolidated financial statements are stated in Japanese yen, the currency of the country in which Dowa Holdings Co., Ltd. (the “Company”) is incorporated and operates. The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of readers outside Japan and have been made at the rate of ¥108.83 to U.S. \$1, the approximate rate of exchange at March 31, 2020. Such translations should not be construed as representations that the Japanese yen amounts could be converted into U.S. dollars at that or any other rate.

2. Summary of Significant Accounting Policies

(1) Consolidation

The consolidated financial statements as of March 31, 2020, include the accounts of the Company and its 82 (82 in 2019) significant subsidiaries (together, the “Group”).

Under the control and influence concepts, those significant companies in which the Company, directly or indirectly, is able to exercise control over operations are fully consolidated, and those companies over which the Group has the ability to exercise significant influence are accounted for by the equity method.

Investments in 18 (18 in 2019) associated companies are accounted for by the equity method.

Investments in the remaining nonconsolidated subsidiaries and associated companies are stated at cost. If the equity method of accounting had been applied to the investments in these companies, the effect on the accompanying consolidated financial statements would not be material.

The excess of the cost of acquisition over the fair value of the net assets of an acquired subsidiary at the date of acquisition is amortized on a straight-line basis within 20 years.

All significant intercompany balances and transactions have been eliminated in consolidation. All material unrealized profit included in assets resulting from transactions within the Group is also eliminated.

(a) Changes in Consolidation Subsidiaries and Associates

(2020)

The consolidated financial statements for the year ended March 31, 2020 (fiscal 2020), now include Dowali Precision Co., Ltd. and DOWA THERMOTECHEX MEXICO, S.A. DE C.V. which were nonconsolidated subsidiaries in the consolidated financial statements for the year ended March 31, 2019, because they were not material subsidiaries. Furthermore, DOWA ECO-SYSTEM SINGAPORE PTE. LTD. and TECHNOCHEM ENVIRONMENTAL COMPLEX PTE. LTD., which were previously classified as consolidated subsidiaries, have been extinguished and removed as consolidated subsidiaries as a result of an absorption-type merger with MODERN ASIA ENVIRONMENTAL HOLDINGS PTE. LTD., which remains as a consolidated subsidiary.

(2019)

The consolidated financial statements for the year ended March 31, 2019 (fiscal 2019), now include GOLDEN DOWA ECO-SYSTEM MYANMAR CO., LTD. and Meltec Iwaki Co., Ltd., which were nonconsolidated subsidiaries in the consolidated financial statements for the year ended March 31, 2018, because they were not material subsidiaries. Also,

Sousou Smart Eco Company Co., Ltd., which was newly established during fiscal 2019, is now included in the consolidated group.

(b) Accounting Period of Foreign Subsidiaries

In preparing the consolidated financial statements for the year ended March 31, 2020, the Company used financial statements with an account closing date of December 31, 2019, for 18 foreign subsidiaries, including PT. Prasadha Pamunah Limbah Industri.; Dowa Environmental Management Co., Ltd.; Dowa Advanced Materials (Shanghai) Co., Ltd.; and other companies. Material transactions that occurred between January 1, 2020, and March 31, 2020, were adjusted in the consolidated financial statements, as necessary.

The fiscal year-end for GOLDEN DOWA ECO-SYSTEM MYANMAR CO., LTD. has been changed from March 31 to September 30 in accordance with local laws and regulations during this fiscal year. Therefore, provisional financial statements closing procedures were conducted on March 31, however, such change had no effect on the consolidated financial statements.

(c) Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements

Under Accounting Standards Board of Japan (“ASBJ”) Practical Issues Task Force (“PITF”) No. 18, “Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements,” the accounting policies and procedures applied to a parent company and its subsidiaries for similar transactions and events under similar circumstances should in principle be unified for the preparation of the consolidated financial statements. However, financial statements prepared by foreign subsidiaries in accordance with either International Financial Reporting Standards (“IFRS”) or generally accepted accounting principles in the United States of America (Financial Accounting Standards Board Accounting Standards Codification—“FASB ASC”) tentatively may be used for the consolidation process, except for the following items that should be adjusted in the consolidation process so that net income is accounted for in accordance with Japanese GAAP, unless they are not material: (a) amortization of goodwill; (b) scheduled amortization of actuarial gain or loss of pensions that has been recorded in equity through other comprehensive income; (c) expensing capitalized development costs of R&D; and (d) cancellation of the fair value model of accounting for property, plant and equipment and investment properties and incorporation of the cost model of accounting.

(2) Cash Equivalents

Cash equivalents are short-term investments that are readily convertible into cash and that are exposed to insignificant risk of changes in value.

Cash equivalents include time deposits, certificates of deposit, commercial paper and bond funds, all of which mature or become due within three months of the date of acquisition.

(3) Investment Securities

Investment securities held by the Group are classified into two categories.

Available-for-sale securities with market quotations are stated at fair value. Unrealized gains and losses on these securities are stated, net of applicable taxes, as “unrealized gain (loss) on available-for-sale securities” on the consolidated balance sheet. The fair value is determined based on the average market price during the month before the balance sheet date.

Available-for-sale securities without market quotations are stated at cost by using the moving-average method.

In cases where the fair value of equity securities issued by nonconsolidated subsidiaries and associates, or available-for-sale securities, has declined significantly and such impairment is deemed other than temporary, those securities are written down to the fair value and the resulting losses are included in net profit or loss for the period.

(4) Inventories

Inventories are stated at the lower of cost or market value. The costs of the primary finished products such as gold, silver, copper, zinc, lead, platinum, palladium, rhodium, cadmium, and other metals, and imported raw materials are determined by the first-in, first-out method. The costs of other finished products and other raw materials are determined by the moving-average method or the specific identification method, etc.

(5) Property, Plant and Equipment

Property, plant and equipment, including significant renewals and additions, are stated at cost. Repairs and maintenance expenses are charged to current income. Depreciation is mainly computed by the declining-balance method based on the estimated useful lives of the respective assets.

The Company and domestic consolidated subsidiaries have computed the depreciation for buildings (excluding leasehold improvements and building improvements) acquired on or after April 1, 1998, as well as for building improvements and structures acquired on or after April 1, 2016, by the straight-line method.

Depreciation of the landfill is computed using the production method, while the straight-line method is applied to all property, plant and equipment of consolidated foreign subsidiaries.

(6) Long-lived Assets

The Group reviews its long-lived assets for impairment whenever events or changes in circumstances indicate the carrying amount of an asset or asset group may not be recoverable.

An impairment loss would be recognized if the carrying amount of an asset or asset group exceeds the sum of the undiscounted future cash flows expected to result from the continued use and eventual disposition of the asset or asset group.

The impairment loss would be measured as the amount by which the carrying amount of the asset exceeds its recoverable amount, which is the higher of the discounted cash flows from the continued use and eventual disposition of the asset or the net selling price at disposition.

(7) Leases

Finance lease transactions are capitalized to recognize lease assets and lease obligations in the balance sheet.

(8) Research and Development

Research and development costs are charged to income as incurred.

(9) Allowance for Doubtful Accounts

The allowance for doubtful accounts is stated in amounts considered to be appropriate based on the Group’s past credit loss experience and an evaluation of potential losses in the receivables outstanding.

(10) Accrued Bonuses

Accrued bonuses to employees are provided for at the estimated amounts, which the Group is obliged to pay to employees after the year-end.

(11) Accrued Directors’ Bonuses

Accrued bonuses to directors, including bonuses for the portion corresponding to the corporate performance-based remuneration system, are provided for at the estimated amounts, which the Group is obliged to pay to directors after the year-end.

(12) Retirement and Pension Plans

The Company and consolidated subsidiaries have unfunded retirement benefit plans for employees.

The Company accounts for the liability for retirement benefits based on the projected benefit obligations at the balance sheet date. The projected benefit obligations are attributed to periods on a benefit formula basis. Actuarial gains and losses are amortized on a straight-line basis over five years within the average remaining service period.

(13) Retirement Allowances for Directors and Audit & Supervisory Board Members

Retirement allowance for directors and Audit & Supervisory Board members of some of the Company’s subsidiaries are recorded as a liability at the amount that would be required if all directors and Audit & Supervisory Board members retired at each balance sheet date.

(14) Allowance for Environmental Measures

The Group adopted the Act Concerning Special Measures against PCB Waste (Act No. 65 of June 22, 2001) and recorded the estimated cost for the disposal of polychlorinated biphenyl waste. Those amounts are included in other long-term liabilities in the consolidated balance sheet.

(15) Construction Contracts

In December 2007, the ASBJ issued ASBJ Statement No. 15, "Accounting Standard for Construction Contracts," and ASBJ Guidance No. 18, "Guidance on Accounting Standard for Construction Contracts." Under this accounting standard, construction revenue and construction costs should be recognized by the percentage-of-completion method if the outcome of a construction contract can be estimated reliably. When total construction revenue, total construction costs, and the stage of completion of the contract at the balance sheet date can be reliably measured, the outcome of a construction contract is deemed to be estimated reliably. If the outcome of a construction contract cannot be reliably estimated, the completed-contract method should be applied. When it is probable that the total construction costs will exceed total construction revenue, an estimated loss on the contract should be immediately recognized by providing for a loss on construction contracts.

(16) Accounting Treatment for Consumption Tax

All transactions are recorded net of consumption tax.

(17) Income Taxes

The provision for income taxes is computed based on the pretax income included in the consolidated statements of income. The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Deferred taxes are measured by applying currently enacted income tax rates to the temporary differences.

(18) Consolidated Tax Return

The Group files a tax return under the consolidated taxation system, which allows companies to base tax payments on the combined profits or losses of the Parent company and its wholly owned domestic subsidiaries.

(19) Adoption of tax effect accounting for the transition from the consolidated taxation system to the group tax sharing system

The Company adopted the group tax sharing system established under the "Act on Partial Revision of the Income Tax Act, etc." (Act No. 8 of 2020), as well as the revision of the non-consolidated taxation system. However, domestic consolidated companies have not yet adopted the provisions of Paragraph 44 of the "Implementation Guidance on Tax Effect Accounting" (ASBJ Guidance No. 28, issued on February 16, 2018), in accordance with the treatment under Paragraph 3 of the "Practical Solution on the Treatment of Tax Effect Accounting for the Transition from the Consolidated Taxation System to the Group Tax Sharing System" (PITF No. 39, issued on March 31, 2020). Therefore, the amounts of deferred tax assets and deferred tax liabilities are calculated based on the provisions of the Income Tax Act prior to the revision.

(20) Foreign Currency Translations and Consolidated Foreign Currency Financial Statements

All monetary receivables and payables denominated in foreign currencies are translated into Japanese yen at the spot exchange rates as of the balance sheet date and foreign exchange gains and losses from translation are recognized in the consolidated statement of income. Assets and liabilities of foreign subsidiaries are converted into Japanese yen at the spot exchange rates prevailing on the balance sheet date of the foreign subsidiaries. Revenues and expenses of foreign subsidiaries are converted into Japanese yen at the average exchange rate for the accounting period of foreign subsidiaries. Translation differences are included as non-controlling interests and foreign currency translation adjustments in equity.

(21) Derivatives and Hedging Activities

The Group uses derivative financial instruments to manage its exposures to fluctuations in nonferrous metal, foreign exchange, and interest rates.

Nonferrous metal forward contracts, foreign exchange forward contracts, and interest rate swaps are utilized by the Group to reduce risks of fluctuation in nonferrous metal rates, foreign currency exchange, and interest rates. The Group does not enter into derivatives for trading or speculative purposes.

Derivative financial instruments and foreign currency transactions are classified and accounted for as follows:

- a) All derivatives are recognized as either assets or liabilities and measured at fair value, and gains or losses on derivative transactions are recognized in the consolidated statement of income.
- b) For derivatives used for hedging purposes, if derivatives qualify for hedge accounting because of high correlation and effectiveness between the hedging instruments and the hedged items, gains or losses on derivatives are deferred until maturity of the hedged transactions.

Foreign exchange forward contracts employed to hedge foreign exchange exposures for export sales and import purchases are measured at fair value and the unrealized gains or losses are mainly recognized in income. Forward contracts applied for forecasted (or committed) transactions are also measured at fair value, but the unrealized gains or losses are deferred until the underlying transactions are completed.

Interest rate swaps which qualify for hedge accounting and meet specific matching criteria are not remeasured at market value but the differential paid or received under the swap agreements is recognized and included in interest expense.

(22) Per Share Information

Basic net income per share is based on the weighted-average number of shares of common stock of the Company issued and outstanding during the respective year.

(23) New Accounting Pronouncements

(a) Revenue Recognition

On March 31, 2020, the ASBJ issued ASBJ Statement No. 29, "Accounting Standard for Revenue Recognition," and ASBJ Guidance No. 30, "Implementation Guidance on Accounting Standard for Revenue Recognition." The core principle of the standard and guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. An entity should recognize revenue in accordance with that core principle by applying the following steps:

- Step 1: Identify the contract(s) with a customer
- Step 2: Identify the performance obligations in the contract
- Step 3: Determine the transaction price
- Step 4: Allocate the transaction price to the performance obligations in the contract
- Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation

The accounting standard and guidance are effective for annual periods beginning on or after April 1, 2021. Earlier application is permitted for annual periods beginning on or after April 1, 2018.

The Company expects to apply the accounting standard and guidance for annual periods beginning on or after April 1, 2021, and is in the process of measuring the effects of applying the accounting standard and guidance in future applicable periods.

(b)Fair Value Measurement

On July 4, 2019, the ASBJ issued ASBJ Statement No. 30, "Accounting Standard for Fair Value Measurement", ASBJ Guidance No. 31, "Implementation Guidance on Accounting Standard for Fair Value Measurement", ASBJ Statement No. 9, "Accounting Standard for Measurement of Inventories", and ASBJ Statement No. 10, "Accounting Standard for Financial Instruments". Also, on March 31, 2020, the ASBJ issued ASBJ Guidance No. 19, "Implementation Guidance on Disclosures about Fair Value of Financial Instruments".

"Accounting Standard for Fair Value Measurement" and "Implementation Guidance on Accounting Standard for Fair Value Measurement" (hereinafter, collectively referred to as "Accounting Standard and Guidance for Fair Value Measurement") were developed to increase comparability with international accounting standards and had been established to provide guidance for matters related to fair value measurement methods. "Accounting Standard and Guidance for Fair Value Measurement" is applied to the fair value of the items below.

- i) Financial instruments highlighted under "Accounting Standard for Financial Instruments"
- ii) Inventory assets held for trading purposes highlighted under "Accounting Standard for Measurement of Inventories"

In addition, "Implementation Guidance on Disclosures about Fair Value of Financial Instruments" has been revised, and disclosure items, including the fair value of financial instruments by level, have been established.

These accounting standards are effective for annual periods beginning on or after April 1, 2021. Earlier application is permitted for annual periods beginning on or after April 1, 2020.

The Company anticipates to apply these accounting standards for annual periods beginning on or after April 1, 2021, and is in the process of measuring the effects of applying these accounting standards in future applicable periods.

(c)Accounting Policy Disclosures, Accounting Changes and Error Corrections

On March 31, 2020, the ASBJ issued ASBJ Statement No. 24, "Accounting Standard for Accounting Policy Disclosures, Accounting Changes and Error Corrections." The purpose of this accounting standard is to provide an overview of the accounting principles and procedures adopted when the relevant accounting standards are not clear.

The accounting standard is effective for annual periods ending March 31, 2021.

The Company expects to apply the accounting standard for annual periods ending March 31, 2021, and is in the process of measuring the effects of applying the accounting standard in future applicable periods.

(d)Disclosure of Accounting Estimates

On March 31, 2020, the ASBJ issued ASBJ Statement No. 31, "Accounting Standard for Disclosure of Accounting Estimates." The purpose of this accounting standard is to disclose information that will facilitate better understanding with financial statements users regarding accounting estimates that are likely to have a material impact on financial statements of the following fiscal year.

The accounting standard is effective for annual periods ending March 31, 2021.

The Company expects to apply the accounting standard for annual periods ending March 31, 2021, and is in the process of measuring the effects of applying the accounting standard in future applicable periods.

3. Consolidated Statement of Cash Flows

(1) Cash and cash equivalents

Cash and cash equivalents at March 31, 2020 and 2019, consisted of the following:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Cash and time deposits	¥ 31,730	¥ 20,118	\$ 291,562
Time deposits with deposit terms of over three months	(1,498)	(1,115)	(13,770)
Cash and cash equivalents	¥ 30,232	¥ 19,002	\$ 277,791

(2) Non-cash investing and financing activity

The increase (decrease) in assets related to investment at March 31, 2020 and 2019, consisted of the following:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Increase in investment in securities	¥ 5,496	¥ —	\$ 50,508
Decrease in long-term loans receivable	5,498	—	50,521

4. Investment

Investment securities as of March 31, 2020 and 2019, consisted of the following:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Investments in and advances to nonconsolidated subsidiaries and associates	¥ 78,992	¥ 74,098	\$ 725,835
Available-for-sale securities with market quotations	16,969	24,437	155,922
Unlisted securities	2,698	2,720	24,795
Total	¥ 98,660	¥ 101,256	\$ 906,553

The net unrealized gains on the available-for-sale securities with market quotations as of March 31, 2020 and 2019, were ¥6,616 million (U.S. \$60,799 thousand) and ¥13,106 million, respectively.

The information for available-for-sale securities which were sold during the years ended March 31, 2020 and 2019, is as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Proceeds from sales	¥ 2,557	¥ 236	\$ 23,500
Gain on sales	1,556	158	14,299
Loss on sales	0	—	2

5. Long-lived Assets

(2020)

The Group reviewed its long-lived assets for impairment as of March 31, 2020. As a result, the Group recognized an impairment loss of ¥1,181 million (U.S. \$10,853 thousand) included in other expenses related to the building and machinery asset group for the heat treatment processing business in Mexico, the waste treatment business in Singapore, the chemical production facilities in Honjo City, the waste treatment business in Thailand, the brass alloy rods production facilities in Asahi City, the platinum group metals smelting business in the United States, the soil remediation business in Chiyoda Ward (due to significant decreases of business profitability), and the idle asset group due to significant decreases in fair value. The carrying amount of the relevant assets were written down to the recoverable amount for the year ended March 31, 2020.

(2019)

The Group reviewed its long-lived assets for impairment as of March 31, 2019. As a result, the Group recognized an impairment loss of ¥212 million included in other expenses related to the building and machinery asset group for the waste treatment business in Thailand and the goodwill of nonferrous metals business in the United States due to significant decreases of business profitability, and the idle asset group due to significant decreases in fair value. The carrying amount of the relevant assets were written down to the recoverable amount for the year ended March 31, 2019.

6. Short-term Borrowings and Long-term Debt

Short-term borrowings from banks and other financial institutions were represented by short-term borrowings bearing interest at 0.23% to 7.50% (an approximate average rate of 0.76%) per annum at March 31, 2020, and 0.33 % to 8.35% (an approximate average rate of 1.10%) per annum at March 31, 2019.

Commercial paper was represented by commercial paper bearing interest at an approximate average rate of 0.008% per annum at March 31, 2020, and an approximate average rate of -0.005% per annum at March 31, 2019.

It is customary in Japan for short-term borrowings to be rolled over each year.

At March 31, 2020 and 2019, long-term debt consisted of the following:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
0.00% to 9.40% loans, principally from banks and due between 2020 and 2033:			
Collateralized	¥ 458	¥ 3,103	\$ 4,210
Unsecured	56,174	54,360	516,163
0.20% straight bonds due 2019	—	10,000	—
0.14% straight bonds due 2023	10,000	10,000	91,886
0.11% straight bonds due 2024	10,000	—	91,886
Lease obligations	1,506	470	13,839
Total	78,138	77,934	717,986
Long-term debt, bonds, and lease obligations (due within one year)	6,838	18,271	62,840
Long-term debt (due after one year)	¥71,299	¥59,662	\$ 655,146

At March 31, 2020 and 2019, the following assets were pledged as collateral for short-term borrowings and the long-term debt of the Group, and as a deposit of deferred payment of import consumption tax.

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Cash and time deposits	¥ 4	¥ 4	\$ 36
Property, plant, and equipment, less accumulated depreciation, and land	238	240	2,192
Investments in and advances to affiliates	13,014	15,201	119,585
Investments in securities	3,247	5,929	29,838
Total	¥16,504	¥21,375	\$ 151,652

Annual maturities of long-term debt excluding lease obligations as of March 31, 2020, for the next five years and thereafter were as follows:

	Millions of yen	Thousands of U.S. dollars (Note 1)
2020	¥ 6,651	\$ 61,114
2021	13,656	125,486
2022	10,011	91,995
2023	14,572	133,904
2024 and thereafter	31,739	291,646
Total	¥76,632	\$ 704,146

7. Contingent Liabilities

At March 31, 2020 and 2019, the Group guaranteed loans incurred by nonconsolidated subsidiaries and associates in the amount of ¥176 million (U.S. \$1,623 thousand) and ¥70 million, respectively.

The Company sold notes and accounts receivable amounts to a finance company. As part of the finance agreement, under certain circumstances, the Company has the obligation to repurchase a part of these amounts. At March 31, 2020 and 2019, in connection with this structured finance agreement and the maximum repurchase commitment, the Company's exposure was ¥115 million (U.S. \$1,064 thousand) and ¥247 million, respectively.

8. Equity

Japanese companies are subject to the Companies Act of Japan (the "Companies Act"). The significant provisions in the Companies Act that affect financial and accounting matters are summarized below:

(a) Dividends

Under the Companies Act, companies can pay dividends at any time during the fiscal year in addition to the year-end dividend upon resolution at the shareholders' meeting. Additionally, for companies that meet certain criteria including (1) having a Board of Directors, (2) having independent auditors, (3) having an Audit & Supervisory Board, and (4) the term of service of the directors being prescribed as one year rather than the normal two-year term by its articles of incorporation, the Board of Directors may declare dividends (except for dividends in kind) at any time during the fiscal year if the company has prescribed so in its articles of incorporation.

The Company meets all the above criteria and accordingly, the Board of Directors may declare dividends (except for dividends in kind) at any time during the fiscal year.

Semiannual interim dividends may also be paid once a year upon resolution by the board of directors if the articles of incorporation of the company so stipulate. The Companies Act provides certain limitations on the amounts available for dividends or the purchase of treasury stock. The limitation is defined as the amount available for distribution to the shareholders, but the amount of net assets after dividends must be maintained at no less than ¥3 million.

(b) Increases/decreases and transfer of common stock, reserve, and surplus

The Companies Act requires that an amount equal to 10% of dividends must be appropriated as a legal reserve (a component of retained earnings) or as additional paid-in capital (a component of capital surplus), depending on the equity account charged upon the payment of such dividends, until the aggregate amount of legal reserve and additional paid-in capital equals 25% of the common stock.

Under the Companies Act, the total amount of additional paid-in capital and legal reserve may be reversed without limitation. The Companies Act also provides that common stock, legal reserve, additional paid-in capital, other capital surplus, and retained earnings can be transferred among the accounts within equity under certain conditions upon resolution of the shareholders.

(c) Treasury stock and treasury stock acquisition rights

The Companies Act also provides for companies to purchase treasury stock and dispose of such treasury stock by resolution of the board of directors. The amount of treasury stock purchased cannot exceed the amount available for distribution to the shareholders, which is determined by a specific formula. Under the Companies Act, stock acquisition rights are presented as a separate component of equity. The Companies Act also provides that companies can purchase both treasury stock acquisition rights and treasury stock. Such treasury stock acquisition rights are presented as a separate component of equity or deducted directly from stock acquisition rights.

9. Income Taxes

The Company and its domestic subsidiaries are subject to Japanese national and local income taxes which, in the aggregate, resulted in normal effective statutory tax rates of approximately 31.3% for each of the years ended March 31, 2020 and 2019.

The tax effects of significant temporary differences and tax loss carryforwards which resulted in deferred tax assets and liabilities at March 31, 2020 and 2019, are as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Deferred tax assets			
Reserve for employees' retirement benefits	¥ 5,711	¥ 5,452	\$ 52,483
Unrealized earnings	2,672	2,705	24,557
Loss on devaluation of investment securities	2,017	2,051	18,534
Loss on impairments of property, plant and equipment	1,826	1,546	16,782
Loss on devaluation of inventories	1,288	973	11,841
Accrued bonus	1,216	1,267	11,174
Consolidated subsidiaries' deficit	777	1,715	7,143
Bad debt loss	696	—	6,400
Accrued enterprise tax	470	256	4,324
Reserve for directors' and Audit & Supervisory Board members' retirement benefits	228	194	2,099
Loss on disposal of property, plant and equipment	220	253	2,029
Excess depreciation	136	142	1,256
Allowance for doubtful accounts	78	26	718
Deferred losses on derivatives under hedge accounting	19	1,171	175
Unrealized loss on available-for-sale securities	10	—	93
Others	3,454	3,589	31,738
Total	20,824	21,346	191,352
Less valuation allowance for tax loss carryforwards(*2)	(685)	(1,522)	(6,294)
Less valuation allowance for temporary differences	(7,287)	(5,877)	(66,960)
Total valuation allowance(*1)	(7,972)	(7,400)	(73,255)
Total deferred tax assets	12,852	13,946	118,097
Deferred tax liabilities			
Unrealized gain on available-for-sale securities	(2,219)	(3,563)	(20,392)
Deferred gain on derivatives under hedge accounting	(1,014)	(24)	(9,326)
Unrealized gain on land	(732)	(732)	(6,726)
Reserve for overseas investment loss	(52)	(52)	(484)
Enterprise tax receivable	(6)	(8)	(60)
Special depreciation reserve	—	(2)	—
Others	(4,101)	(3,938)	(37,682)
Total deferred tax liabilities	(8,126)	(8,321)	(74,673)
Net deferred tax assets	¥ 4,725	¥ 5,624	\$ 43,423

(*1) The amount of valuation allowance for 2020 increased by ¥572 million (U.S. \$5,259 thousand) compared to 2019.

This increase mainly resulted from the recognition of a valuation allowance for the temporary difference of ¥696 million (U.S. \$6,400 thousand) related to bad debt loss.

(*2) The expiration of tax loss carryforwards, the related valuation allowances and the resulting net deferred tax assets as of March 31, 2020 and 2019, were as follows:

Millions of yen							
March 31, 2020	1 year or less	After 1 year through 2 years	After 2 years through 3 years	After 3 years through 4 years	After 4 years through 5 years	After 5 years	Total
Deferred tax assets relating to tax loss carryforwards (a)	213	117	60	7	33	343	777
Less valuation allowances for tax loss carryforwards	(161)	(110)	(60)	(7)	(27)	(317)	(685)
Net deferred tax assets relating to tax loss carryforwards	52	7	—	—	6	26	(b)92
Thousands of U.S. Dollars							
March 31, 2020	1 year or less	After 1 year through 2 years	After 2 years through 3 years	After 3 years through 4 years	After 4 years through 5 years	After 5 years	Total
Deferred tax assets relating to tax loss carryforwards (a)	1,959	1,081	559	72	310	3,158	7,143
Less valuation allowances for tax loss carryforwards	(1,480)	(1,016)	(559)	(72)	(249)	(2,916)	(6,294)
Net deferred tax assets relating to tax loss carryforwards	479	65	—	—	61	242	(b)848

Millions of yen							
March 31, 2019	1 year or less	After 1 year through 2 years	After 2 years through 3 years	After 3 years through 4 years	After 4 years through 5 years	After 5 years	Total
Deferred tax assets relating to tax loss carryforwards (a)	357	233	134	60	15	914	1,715
Less valuation allowances for tax loss carryforwards	(220)	(229)	(117)	(60)	(13)	(880)	(1,522)
Net deferred tax assets relating to tax loss carryforwards	136	3	16	—	1	33	(b)192

(a) Tax loss carryforwards were calculated using the statutory tax rate.

(b) Out of tax loss carryforward as of March 31, 2020 and 2019 of ¥777 million (U.S. \$7,143 thousand) and ¥1,715 million were calculated using the statutory tax rate. Deferred tax assets of ¥92 million (U.S. \$848 thousand) and ¥192 million were recognized, because utilization of such assets are supported by probable future taxable net income.

A reconciliation between the normal effective statutory tax rates and the actual effective tax rates reflected in the accompanying consolidated statement of income for the year ended March 31, 2020 with the corresponding figures for 2019, is as follows:

	2020	2019
Normal effective statutory tax rate	31.3 %	31.3 %
Tax credits	(1.6)	(2.2)
Equity in earnings of affiliates	(0.9)	(4.0)
Nontaxable items, including dividend income	(0.2)	(0.0)
Valuation allowance	3.0	4.6
Retained earnings of affiliated companies	1.0	2.2
Foreign source taxes	0.7	0.8
Nondeductible items, including entertainment expenses	0.5	1.0
Inhabitants' tax	0.4	0.5
Others	0.9	1.5
Actual effective tax rate	35.1 %	35.7

10. Research and Development Costs

Research and development costs charged to income were ¥5,554 million (U.S. \$51,039 thousand) and ¥5,171 million for the years ended March 31, 2020 and 2019, respectively.

11. Leases

The minimum rental commitments under noncancelable operating leases due at March 31, 2020 and 2019, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Operating leases (lessee)			
Within one year	¥ 268	¥ 336	\$ 2,466
Over one year	515	1,315	4,738
Total	¥ 784	¥ 1,652	\$ 7,205

12. Retirement and Pension Plans

The Company and its consolidated subsidiaries have adopted lump-sum benefit plans as their defined benefit pension plans and the Company and certain consolidated subsidiaries have adopted contributory defined benefit pension plans. In addition, certain consolidated subsidiaries have adopted the Smaller Enterprise Retirement Allowance Mutual Aid (SERAMA) Scheme. Moreover, the payment of a premium severance amount that falls outside the scope of retirement benefit obligations based on computations that comply with accounting standards for retirement benefits may arise at the time of an employee's retirement.

Further, the lump-sum benefit plans adopted by certain consolidated subsidiaries calculate the liabilities for employees' retirement benefits and retirement benefit expenses using the simplified method.

Defined benefit plans excluding plans applying the simplified method

(1) The changes in defined benefit obligations relating to defined benefit plans in the consolidated fiscal years ended March 31, 2020 and 2019, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Balance at beginning of year	¥ 11,483	¥ 11,170	\$ 105,520
Service cost	923	805	8,481
Interest expense	38	36	350
Actuarial (gains) losses	(41)	(131)	(379)
Benefits paid	(459)	(377)	(4,219)
Other	8	(19)	77
Balance at end of year	¥ 11,952	¥ 11,483	\$ 109,830

(2) Reconciliation between the liability recorded in the consolidated balance sheet and the balances of defined benefit obligation and plan assets was as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Funded defined benefit obligation	¥ —	¥ —	\$ —
Plan assets	—	—	—
Unfunded defined benefit obligation	11,952	11,483	109,830
Net liability arising from defined benefit obligation	¥ 11,952	¥ 11,483	\$ 109,830

(3) The components of net periodic benefit costs for the years ended March 31, 2020 and 2019, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Service cost	¥ 923	¥ 805	\$ 8,481
Interest expense	38	36	350
Recognized actuarial (gains) losses	179	237	1,652
Net periodic benefit costs	¥ 1,141	¥ 1,079	\$ 10,484

(4) Amounts recognized in other comprehensive income (before income tax effect) in respect of defined retirement benefit plans for the years ended March 31, 2020 and 2019, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Actuarial (gains) losses	¥225	¥413	\$ 2,074
Total	¥225	¥413	\$ 2,074

(5) Amounts recognized in accumulated other comprehensive income (before income tax effect) in respect of defined retirement benefit plans as of March 31, 2020 and 2019, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Unrecognized actuarial (gains) losses	¥117	¥343	\$ 1,079
Total	¥117	¥343	\$ 1,079

(6) Matters concerning the assumptions for the main actuarial calculations related to defined benefit plans as of March 31, 2020 and 2019, were as follows:

	2020	2019
Discount rate	0.08 %	0.08 %

The Company used the index of salary increases by age at March 31, 2020 and 2019, as the expected rate of future salary increases.

Defined benefit plans applying the simplified method

(7) The changes in defined benefit obligations related to defined benefit plans to which the simplified method is applied in the consolidated fiscal years ended March 31, 2020 and 2019, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Balance at beginning of year	¥ 6,483	¥ 6,240	\$ 59,572
Retirement benefit expenses	757	752	6,957
Benefits paid	(640)	(494)	(5,888)
Other	(4)	(15)	(38)
Balance at end of year	¥ 6,595	¥ 6,483	\$ 60,602

(8) Reconciliation between the liability recorded in the consolidated balance sheet and the balances of defined benefit obligation and plan assets that apply the simplified method as of March 31, 2020 and 2019, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Funded defined benefit obligation	¥ —	¥ —	\$ —
Plan assets	—	—	—
Unfunded defined benefit obligation	6,595	6,483	60,602
Net liability arising from defined benefit obligation	¥ 6,595	¥ 6,483	\$ 60,602

(9) The retirement benefit costs related to defined benefit plans calculated by the simplified method in the consolidated fiscal years ended March 31, 2020 and 2019, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Retirement benefit costs calculated by the simplified method	¥757	¥752	\$ 6,957

Defined contribution plans

(10) The required contributions to defined contribution plans of the Company and its consolidated subsidiaries in the consolidated fiscal years ended March 31, 2020 and 2019, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Required contributions to defined contribution plans	¥552	¥534	\$ 5,073

13. Loss on Devaluation of Inventories

The Group recorded the following loss on devaluation of inventories held for ordinary sales purposes due to impairments reflecting a drop in profitability for the years ended March 31, 2020 and 2019:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Cost of sales	¥ 2,965	¥ 2,953	\$ 27,246

14. Financial Instruments

(1) Status of Financial Instruments

(a) Policy for financial instruments

The Group manages its funds using short-term deposits and bond repurchase agreements.

Financial instruments used for financing are mainly bank loans and other instruments, including corporate bonds and electronic commercial paper, based on the Group's policy of diversifying financing methods, sources, and maturities, etc.

Derivatives are used to avoid the market fluctuation risks of interest on borrowings and the sale and purchase prices of inventories, etc., only within the range of the hedged items, and the Group's policy is to not use derivatives for speculative purposes.

(b) Nature, extent of risks, and risk management for financial instruments

Notes and accounts receivable, which are operating receivables, are exposed to customer credit risk. The Group manages the credit risk of receivables by monitoring the payment terms and balances for each customer.

Listed securities, which are among the equity instruments in investments in securities, are exposed to the risk of market price fluctuations. The Group has a system to periodically monitor and assess the fair values of listed securities, although the securities are held neither for pure investment purposes nor short-term trading purposes.

Payment terms of notes and accounts payable, which are operating debt, are mostly less than one year.

Borrowings are exposed to liquidity risk and interest rate fluctuation risk. In order to mitigate these risks, the Group uses multiple financial institutions and staggers the redemption dates of loans. With regard to a portion of long-term debt, the Group uses interest rate swaps as hedging instruments to avoid fluctuation risks of interest rates. The Group periodically compiles cash flow plans and performance and the status of financing is reported at the management meeting monthly.

In addition to interest rate swaps, the Group enters into derivative financial instruments, namely foreign exchange forward contracts and nonferrous metal forward contracts. The former are used to avoid risks of foreign exchange fluctuations associated with the sale of finished products and purchases of inventories (mainly imported raw materials), which are denominated in foreign currencies. The latter are used to avoid fluctuation risks in market prices for raw materials and finished goods that are influenced by nonferrous metal market prices.

Monthly meetings are held regarding derivative transactions, with the attendance of directors who are in charge of hedge transactions and the head of each business division. At the meetings, the implementation policies for hedge transactions are determined, the execution of derivative transactions is managed and reported, and hedge effectiveness is evaluated. In accordance with the policies, each derivative transaction is executed based on internal guidelines, which regulate the credit limit amount and procedures of transactions and reporting. Evaluation of hedge effectiveness is omitted for interest rate swaps as the swaps qualify for hedge accounting and meet specific matching criteria for interest rate swaps. The Group has a policy to diversify transactions through multiple counterparties with high credit standings in order to mitigate credit risk.

(c) Supplementary explanation to fair values of financial instruments

Fair values of financial instruments are based on quoted prices in active markets. If a quoted price is not available, other rational valuation techniques are used instead. Such techniques include variable factors, and the results of valuation may differ depending on prerequisites. The contract or notional amounts of derivatives which are shown in Note 15. Derivatives do not represent the amounts exchanged by the parties and do not measure the Group's exposure to credit or market risk.

(2) Fair Value of Financial Instruments

The table below shows the amounts of financial instruments recorded in the consolidated balance sheet and their fair values. Financial instruments whose fair values are not readily determinable are not included (refer to (b) below).

As of March 31, 2020	Millions of yen			Thousands of U.S. dollars (Note 1)		
	Carrying amount	Fair value	Difference	Carrying amount	Fair value	Difference
(1) Cash and time deposits	¥ 31,730	¥ 31,730	¥ —	\$ 291,562	\$ 291,562	\$ —
(2) Notes and accounts receivable (*1)	75,130	75,130	—	690,347	690,347	—
(3) Investments in securities (*2)	32,402	23,282	(9,120)	297,736	213,930	(83,806)
(4) Long-term loans receivable	33,628	32,670	(958)	309,001	300,196	(8,804)
Total	¥ 172,892	¥ 162,813	¥(10,078)	\$ 1,588,648	\$ 1,496,037	\$ (92,610)
(1) Notes and accounts payable (*3)	34,480	34,480	—	316,827	316,827	—
(2) Short-term borrowings	33,454	33,454	—	307,401	307,401	—
(3) Commercial paper	24,000	24,000	—	220,527	220,527	—
(4) Long-term debt (including repayments due within one year) (*4)	76,632	77,225	592	704,146	709,594	5,448
Total	¥ 168,567	¥ 169,159	¥ 592	\$ 1,548,902	\$ 1,554,350	\$ 5,448
Derivatives (*5)	¥ 4,231	¥ 4,231	¥ —	\$ 38,884	\$ 38,884	\$ —

As of March 31, 2019	Millions of yen		
	Carrying amount	Fair value	Difference
(1) Cash and time deposits	¥ 20,118	¥ 20,118	¥ —
(2) Notes and accounts receivable (*1)	84,399	84,399	—
(3) Investments in securities (*2)	39,639	34,683	(4,956)
Total	¥ 144,156	¥ 139,200	¥ (4,956)
(1) Notes and accounts payable (*3)	43,449	43,449	—
(2) Short-term borrowings	28,777	28,777	—
(3) Commercial paper	29,000	29,000	—
(4) Long-term debt (including repayments due within one year) (*4)	77,463	77,739	275
Total	¥ 178,691	¥ 178,966	¥ 275
Derivatives (*5)	¥ (4,566)	¥ (4,566)	¥ —

(*1) Assets (2): Notes and accounts receivable as of March 31, 2020 and 2019, stated above, are obtained by subtracting advances paid of ¥1,068 million (U.S. \$9,814 thousand) and ¥347 million, respectively, accounts receivable other of ¥5,656 million (U.S. \$51,971 thousand) and ¥3,295 million, respectively, and loans of ¥212 million (U.S. \$1,955 thousand) and ¥199 million, respectively, from the amount of notes and accounts receivable of ¥82,047 million (U.S. \$753,905 thousand) and ¥88,241 million, respectively, presented in the consolidated balance sheet.

(*2) Assets (3): Investments in securities as of March 31, 2020 and 2019, stated above, are obtained by subtracting financial instruments whose fair values are not readily determinable of ¥32,628 million (U.S. \$299,815 thousand) and ¥28,518 million, respectively, and long-term loans receivable of ¥33,628 million (U.S. \$309,001 thousand) and ¥33,098 million, respectively, from the sum of investments in securities of ¥19,667 million (U.S. \$180,718 thousand) and ¥27,158 million, respectively, and investments in and advances to nonconsolidated subsidiaries and associates of ¥78,992 million (U.S. \$725,835 thousand) and ¥74,098 million, respectively, presented in the consolidated balance sheet.

(*3) Liabilities (1): Notes and accounts payable as of March 31, 2020 and 2019, stated above are obtained by subtracting accounts payable other of ¥4,998 million (U.S. \$45,926 thousand) and ¥5,383 million, respectively, and deposits received of ¥485 million (U.S. \$4,456 thousand) and ¥595 million, respectively, from notes and accounts payable of ¥39,962 million (U.S. \$367,198 thousand) and ¥49,429 million, respectively, presented in the consolidated balance sheet.

(*4) Liabilities (4): Long-term debt as of March 31, 2020 and 2019, stated above, is obtained by subtracting lease obligations of ¥1,506 million (U.S. \$13,839 thousand) and ¥470 million, respectively, from the sum of current maturities of long-term debt of ¥6,838 million (U.S. \$62,840 thousand) and ¥18,271 million, respectively, and long-term debt of ¥71,299 million (U.S. \$655,146 thousand) and ¥59,662 million, respectively, presented in the consolidated balance sheet.

(*5) Derivative transactions stated above are stated net of assets and liabilities.

(a) Fair value measurement of financial instruments and matters regarding securities and derivatives

Assets

(1) Cash and time deposits and (2) Notes and accounts receivable

The fair value of these accounts approximates their book value because of their short maturities.

(3) Investments in securities

The fair value of equity instruments is measured using market prices from stock exchanges.

(4) Long-term loans receivable

The fair value of long-term loans receivable is determined by discounting the amount of the total principal and interest at the interest rate assumed when similar new loans are made.

Liabilities

(1) Notes and accounts payable, (2) Short-term borrowings, and (3) Commercial paper

The fair value of these accounts approximates their book value because of their short maturities.

(4) Long-term debt (including repayment due within one year)

The fair value of long-term debt is determined by discounting the future cash flows related to the debt at the Group's assumed corporate borrowing rate for loans from banks and the market price for bonds. Long-term debt with variable interest rates qualifies for special treatment under hedge accounting (refer to Note 15. Derivatives). The fair value of these accounts is calculated by discounting the total of interest and principal, including the relevant interest rate swap, by an interest rate reasonably estimated assuming similar borrowings are taken out.

Derivatives

Refer to Note 15. Derivatives.

(b) Financial instruments whose fair values are not readily determinable

Classification	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Unlisted securities and others (carrying amount)	¥ 32,628	¥ 28,518	\$ 299,815

These financial instruments are not included in Assets (3) Investments in securities, as they have no quoted market prices and their fair values are not readily determinable.

(c) Maturity analysis for financial assets with contractual maturities

As of March 31, 2020	Millions of yen			
	Due in 1 year or less	Due after 1 year through 5 years	Due after 5 years through 10 years	Due after 10 years
Cash and time deposits	¥ 2,898	¥ —	¥ —	¥ —
Notes and accounts receivable	75,130	—	—	—
Long-term loans receivable	—	20,384	13,244	—
Total	¥ 78,029	¥ 20,384	¥ 13,244	¥ —

As of March 31, 2020	Thousands of U.S. dollars (Note 1)			
	Due in 1 year or less	Due after 1 year through 5 years	Due after 5 years through 10 years	Due after 10 years
Cash and time deposits	\$ 26,636	\$ —	\$ —	\$ —
Notes and accounts receivable	690,347	—	—	—
Long-term loans receivable	—	187,304	121,696	—
Total	\$ 716,984	\$ 187,304	\$ 121,696	\$ —

As of March 31, 2019	Millions of yen			
	Due in 1 year or less	Due after 1 year through 5 years	Due after 5 years through 10 years	Due after 10 years
Cash and time deposits	¥ 1,958	¥ —	¥ —	¥ —
Notes and accounts receivable	84,399	—	—	—
Total	¥ 86,357	¥ —	¥ —	¥ —

(d) Maturity analysis for long-term debt

See Note 6. Short-term Borrowings and Long-term Debt

15. Derivatives

(1) Derivative Transactions to which Hedge Accounting is Not Applied

Currency-related transactions (2020)

Type	Millions of yen				Thousands of U.S. dollars (Note 1)			
	Contract amount	Over 1 year	Fair value	Unrealized gains/losses	Contract amount	Over 1 year	Fair value	Unrealized gains/losses
Forward Exchange Contract Transactions								
Selling								
U. S. dollars	¥ 17,112	¥ —	¥ (146)	¥ (146)	\$ 157,240	\$ —	\$ (1,349)	\$ (1,349)
Thai baht	1,080	—	58	58	9,927	—	539	539
Total	¥ —	¥ —	¥ —	¥ (88)	\$ —	\$ —	\$ —	\$ (810)

Commodity-related transactions (2020)

Type	Millions of yen				Thousands of U.S. dollars (Note 1)			
	Contract amount	Over 1 year	Fair value	Unrealized gains/losses	Contract amount	Over 1 year	Fair value	Unrealized gains/losses
Nonferrous Metal Forward Contracts								
Selling								
Gold	¥ 1,708	¥ —	¥ (27)	¥ (27)	\$ 15,695	\$ —	\$ (251)	\$ (251)
Silver	2,487	—	449	449	22,859	—	4,125	4,125
Zinc	755	—	104	104	6,943	—	961	961
Copper	3,462	—	448	448	31,816	—	4,125	4,125
Lead	4	—	0	0	38	—	2	2
Nickel	164	—	17	17	1,509	—	158	158
Palladium	1,384	—	(91)	(91)	12,724	—	(839)	(839)
Total	¥ —	¥ —	¥ —	¥ 901	\$ —	\$ —	\$ —	\$ 8,282

Currency-related transactions (2019)

Type	Millions of yen			
	Contract amount	Over 1 year	Fair value	Unrealized gains/losses
Forward Exchange Contract Transactions				
Selling				
U. S. dollars	¥ 15,891	¥—	¥(229)	¥(229)
Thai baht	1,606	—	(35)	(35)
Total	¥ —	¥—	¥ —	¥(265)

Commodity-related transactions (2019)

Type	Millions of yen			
	Contract amount	Over 1 year	Fair value	Unrealized gains/losses
Nonferrous Metal Forward Contracts				
Selling				
Gold	¥ 1,387	¥—	¥ 5	¥ 5
Silver	1,821	—	22	22
Zinc	1,057	—	(174)	(174)
Copper	2,039	—	(100)	(100)
Lead	0	—	(0)	(0)
Nickel	120	—	(9)	(9)
Buying				
Silver	¥ 31	¥—	¥ (1)	¥ (1)
Nickel	8	—	1	1
Total	¥ —	¥—	¥ —	¥(256)

(Note) Fair value was calculated using quotations obtained from the commodity futures market and the exchange futures market as of March 31, 2020 and 2019.

(2) Derivative Transactions to which Hedge Accounting is Applied

Currency-related transactions (2020)

Treatment	Type	Hedged item	Millions of yen			Thousands of U.S. dollars (Note 1)		
			Contract amount	Over 1 year	Fair value	Contract amount	Over 1 year	Fair value
Standard treatment	Forward exchange contract transactions	Accounts receivable						
	Selling							
	U. S. dollars		¥ 12,573	¥—	¥ (162)	\$ 115,532	\$—	\$ (1,494)
	Thai baht		348	—	5	3,203	—	47
Currency swaps under designated hedge accounting	Forward exchange contract transactions	Accounts receivable						
	Selling							
	U. S. dollars		¥ 1,854	¥—	(*1)	\$ 17,037	\$—	(*1)
	Thai baht		519	—	(*1)	4,776	—	(*1)
Total			¥ —	¥—	¥ —	\$ —	\$—	\$ —

Interest-related transactions (2020)

Treatment	Type	Hedged item	Millions of yen			Thousands of U.S. dollars (Note 1)		
			Contract amount	Over 1 year	Fair value	Contract amount	Over 1 year	Fair value
Interest rate swaps under special accounting treatment	Interest rate swaps	Long-term debt						
	Fixed rate payment, Floating rate receipt		¥ 964	¥ 464	(*2)	\$ 8,857	\$ 4,263	(*2)
Total			¥ —	¥ —	¥ —	\$ —	\$ —	\$ —

Commodity-related transactions (2020)

Treatment	Type	Hedged item	Millions of yen			Thousands of U.S. dollars (Note 1)		
			Contract amount	Over 1 year	Fair value	Contract amount	Over 1 year	Fair value
Standard treatment	Nonferrous Metal Forward Contracts	Inventory						
	Selling							
	Gold		¥ 4,981	¥—	¥ (143)	\$ 45,777	\$—	\$ (1,319)
	Silver		3,129	—	516	28,752	—	4,746
	Zinc		13,566	—	1,757	124,658	—	16,151
	Copper		9,968	—	1,578	91,600	—	14,501
	Lead		157	—	7	1,450	—	64
	Buying							
	Silver		¥ 567	¥—	¥ (72)	\$ 5,215	\$—	\$ (667)
	Zinc		820	6	(63)	7,539	57	(585)
	Copper		55	—	(3)	512	—	(32)
Total			¥ —	¥—	¥ —	\$ —	\$—	\$ —

Currency-related transactions (2019)

Treatment	Type	Hedged item	Millions of yen			
			Contract amount	Over 1 year	Fair value	
Standard treatment	Forward exchange contract transactions	Accounts receivable				
			Selling			
			U. S. dollars	¥ 11,323	¥—	¥ (246)
		Thai baht	604	—	(4)	
Currency swaps under designated hedge accounting	Forward exchange contract transactions	Accounts receivable				
			Selling			
			U. S. dollars	¥ 2,558	¥—	(*1)
		Thai baht	828	—	(*1)	
Total			¥ —	¥—	¥ —	

Interest-related transactions (2019)

Treatment	Type	Hedged item	Millions of yen		
			Contract amount	Over 1 year	Fair value
Interest rate swaps under special accounting treatment	Interest rate swaps	Long-term debt			
			Fixed rate payment, Floating rate receipt	¥ 2,670	¥ 2,212
Total			¥ —	¥ —	¥ —

Commodity-related transactions (2019)

Treatment	Type	Hedged item	Millions of yen			
			Contract amount	Over 1 year	Fair value	
Standard treatment	Nonferrous Metal Forward Contracts	Inventory				
			Selling			
			Gold	¥ 4,772	¥—	¥ (39)
			Silver	4,320	—	66
			Zinc	17,695	—	(2,758)
			Copper	14,116	—	(1,186)
			Lead	131	—	0
			Buying			
			Silver	¥ 302	¥—	¥ 5
			Zinc	1,241	6	120
Copper	71	—	0			
Total			¥ —	¥—	¥ —	

(Note) Fair value was calculated using quotations obtained from the commodity futures market and the exchange futures market as of March 31, 2020 and 2019.

(*1) The fair values of currency swaps under designated hedge accounting are included in the fair values of accounts receivable because they are accounted for as an integral part of accounts receivable, which are hedged items.

(*2) The fair values of interest rate swaps under special accounting treatment are included in the fair values of long-term debt because they are accounted for as an integral part of long-term debt, which are hedged items.

16. Comprehensive Income

The components of other comprehensive income for the years ended March 31, 2020 and 2019, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Unrealized gain (loss) on available-for-sale securities:			
Gain (loss) arising during the year	¥ (4,974)	¥ (5,319)	\$ (45,709)
Reclassification adjustments to profit or loss	(1,507)	(30)	(13,849)
Amount before income tax effect	(6,481)	(5,349)	(59,558)
Income tax effect	1,354	1,477	12,443
Total	¥ (5,127)	¥ (3,872)	\$ (47,114)
Deferred gain (loss) on derivatives under hedge accounting:			
Gain (loss) arising during the year	¥ 7,961	¥ (3,074)	\$ 73,152
Reclassification adjustments to profit or loss	(794)	(2,642)	(7,297)
Adjustment for cost of asset acquisition	48	—	445
Amount before income tax effect	7,215	(5,716)	66,301
Income tax effect	(2,145)	1,700	(19,715)
Total	¥ 5,069	¥ (4,016)	\$ 46,585
Foreign currency translation adjustments:			
Adjustments arising during the year	¥ (880)	¥ (1,444)	\$ (8,094)
Reclassification adjustments to profit or loss	—	(227)	—
Amount before income tax effect	(880)	(1,672)	(8,094)
Income tax effect	—	—	—
Total	¥ (880)	¥ (1,672)	\$ (8,094)
Defined retirement benefit plan:			
Adjustments arising during the year	¥ 41	¥ 134	\$ 381
Reclassification adjustments to profit or loss	184	279	1,693
Amount before income tax effect	225	413	2,074
Income tax effect	(56)	(105)	(515)
Total	¥ 169	¥ 307	\$ 1,559
Share of other comprehensive income in associates:			
Gain (loss) arising during the year	¥ 522	¥ (886)	\$ 4,803
Reclassification adjustments to profit or loss	(126)	53	(1,164)
Total	¥ 396	¥ (833)	\$ 3,639
Total other comprehensive income	¥ (372)	¥ (10,086)	\$ (3,424)

17. Subsequent Event

The following appropriation of retained earnings at March 31, 2020, was approved at the Board of Directors' meeting held on June 8, 2020:

	Millions of yen	Thousands of U.S. dollars (Note 1)
Year-end cash dividends, ¥90 (U.S. \$0.82) per share	¥ 5,409	\$ 49,702

18. Segment Information

(1) Outline of reportable segments

The Company's reportable segments are the components of the Group about which separate financial information is available. These segments are subject to periodic examinations to enable the Company's Board of Directors to decide how to allocate resources and assess performance.

The Company's operations are classified into five product and service segments based on its operating companies.

Each segment's businesses are as follows:

In the Environmental Management & Recycling segment, the Group conducts waste treatment, soil remediation, resource recycling, logistics, and other operations.

In the Nonferrous Metals segment, the Group produces and sells copper, zinc, lead, gold, silver, zinc alloys, platinum, palladium, rhodium, indium, sulfuric acid, tin, antimony, and other materials.

In the Electronic Materials segment, the Group produces and sells high-purity metal materials, compound semiconductor wafers, LEDs, conductive materials, battery materials, magnetic materials, reduced iron powder, and other materials. In the Metal Processing segment, the Group produces and sells copper, brass and copper alloy strips, electroplated products, brass rods, metal-ceramic substrates, and other materials.

In the Heat Treatment segment, the Group provides heat and surface treatment of metallic materials, such as automobile components, and manufactures, sells, and provides maintenance of industrial furnaces and ancillary equipment.

(2) Method for calculating sales, income (loss), assets, liabilities, and other items by reportable segment

The accounting treatment and methods for the reportable segments are largely consistent with Note 1. Basis of Presentation of the Consolidated Financial Statements, and Note 2. Summary of Significant Accounting Policies.

Segment income is reconciled to ordinary income. Ordinary income is calculated by adding share of profit (loss) of entities accounted for using equity method, interest and dividend income, royalty income, etc. and deducting interest expense, environmental expenses, etc. from operating profit (loss).

(3) Information on sales, income (loss), assets, liabilities, and other items by reportable segment

Segment information as of March 31, 2020 and 2019, are summarized as follows:

	Millions of yen									
	Reportable segment						Reconciliations			
	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others (*1)	Total	(*2)	Consolidated
2020										
Net sales										
Outside customers	¥ 67,548	¥ 209,955	¥ 95,551	¥ 82,300	¥ 27,992	¥ 483,346	¥ 1,783	¥ 485,130	¥ —	¥ 485,130
Intersegment	44,573	17,335	2,674	48	3	64,635	10,272	74,907	(74,907)	—
Total	¥ 112,121	¥ 227,290	¥ 98,226	¥ 82,348	¥ 27,995	¥ 547,982	¥ 12,055	¥ 560,037	¥ (74,907)	¥ 485,130
Segment income (*3)	¥ 6,905	¥ 12,204	¥ 2,403	¥ 5,199	¥ 1,256	¥ 27,969	¥ 825	¥ 28,794	¥ 202	¥ 28,996
Segment assets	121,889	208,915	64,324	77,905	45,717	518,752	10,024	528,777	(16,281)	512,495
Other items:										
Depreciation	5,493	4,216	3,162	3,064	2,535	18,473	241	18,714	574	19,288
Amortization of goodwill	348	—	—	—	136	485	—	485	—	485
Investment in affiliates accounted for by the equity method	3,278	15,510	427	387	—	19,604	—	19,604	15,553	35,157
Increase in property, plant, and equipment and intangible fixed assets	¥ 16,987	¥ 6,915	¥ 2,844	¥ 5,464	¥ 4,339	¥ 36,551	¥ 384	¥ 36,935	¥ 788	¥ 37,723

	Thousands of U.S. dollars (Note 1)									
	Reportable segment						Reconciliations			
	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others (*1)	Total	(*2)	Consolidated
2020										
Net sales										
Outside customers	\$ 620,675	\$ 1,929,202	\$ 877,987	\$ 756,227	\$ 257,208	\$ 4,441,302	\$ 16,387	\$ 4,457,689	\$ —	\$ 4,457,689
Intersegment	409,566	159,287	24,577	445	33	593,909	94,389	688,298	(688,298)	—
Total	\$1,030,241	\$ 2,088,490	\$ 902,564	\$ 756,672	\$ 257,241	\$ 5,035,211	\$ 110,776	\$ 5,145,988	\$ (688,298)	\$ 4,457,689
Segment income (*3)	\$ 63,450	\$ 112,142	\$ 22,088	\$ 47,776	\$ 11,542	\$ 257,000	\$ 7,584	\$ 264,585	\$ 1,857	\$ 266,442
Segment assets	1,119,996	1,919,649	591,057	715,848	420,081	4,766,632	92,114	4,858,746	(149,608)	4,709,137
Other items:										
Depreciation	50,479	38,740	29,061	28,163	23,297	169,741	2,219	171,961	5,276	177,238
Amortization of goodwill	3,204	—	—	—	1,256	4,461	—	4,461	—	4,461
Investment in affiliates accounted for by the equity method	30,128	142,524	3,929	3,558	—	180,140	—	180,140	142,911	323,051
Increase in property, plant, and equipment and intangible fixed assets	\$ 156,087	\$ 63,541	\$ 26,139	\$ 50,214	\$ 39,870	\$ 335,854	\$ 3,530	\$ 339,384	\$ 7,241	\$ 346,626

2019	Millions of yen									
	Reportable segment								Reconcili- ations (*2)	Consolidated
	Environmen- tal Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others (*1)	Total		
Net sales										
Outside customers	¥ 65,014	¥ 201,838	¥ 62,689	¥ 91,981	¥ 29,702	¥ 451,227	¥ 1,700	¥ 452,928	¥ —	¥ 452,928
Intersegment	39,421	19,830	2,294	88	36	61,671	9,928	71,599	(71,599)	—
Total	¥ 104,436	¥ 221,668	¥ 64,984	¥ 92,069	¥ 29,739	¥ 512,899	¥ 11,628	¥ 524,528	¥ (71,599)	¥ 452,928
Segment income (*3)	¥ 6,271	¥ 4,624	¥ 3,142	¥ 6,448	¥ 2,572	¥ 23,059	¥ 846	¥ 23,905	¥ 403	¥ 24,309
Segment assets	99,501	204,200	58,748	78,747	47,088	488,286	9,387	497,674	(2,991)	494,683
Other items:										
Depreciation	5,356	4,115	2,898	2,751	2,333	17,455	232	17,687	941	18,628
Amortization of goodwill	348	19	—	—	141	509	—	509	—	509
Investment in affiliates accounted for by the equity method	3,352	13,210	326	383	—	17,272	—	17,272	15,321	32,594
Increase in property, plant, and equipment and intangible fixed assets	¥ 6,647	¥ 3,407	¥ 3,825	¥ 4,295	¥ 4,870	¥ 23,046	¥ 186	¥ 23,232	¥ 854	¥ 24,087

(*1) The Others segment comprises business operations that are not included in the reportable segments. These operations primarily comprise intergroup transactions, including real estate leasing, plant construction, civil engineering, construction and engineering, office administration services, technological development support, and other operations.

(*2) Reconciliations for the fiscal years ended March 31, 2020 and 2019, were as follows:

(1) The reconciliations to segment income of ¥202 million (U.S. \$1,857 thousand) and ¥403 million include non-operating income and expenses not allocated to any reportable segment (dividends, Share of profit (loss) of entities accounted for using equity method, interest expense, etc.) of ¥269 million (U.S. \$2,477 thousand) and ¥398 million, respectively, and eliminations for intersegment unrealized earning of ¥39 million (U.S. \$360 thousand) and ¥33 million, respectively.

(2) The reconciliations to segment assets of ¥16,281 million (U.S. \$149,608 thousand) and ¥2,991 million include corporate assets of ¥62,182 million (U.S. \$571,370 thousand) and ¥53,484 million that are not allocated to any reportable segment, respectively, and intersegment eliminations of ¥78,464 million (U.S. \$720,978 thousand) and ¥56,476 million, respectively. The main components of corporate assets are surplus working capital (cash and deposits), long-term investments (investments in securities), and assets of administrative department.

(*3) Segment income is reconciled with ordinary income.

Related Information

1. Information by product and service (2020)

The Company has omitted such disclosure herein because equivalent information appears in the segment information.

2. Information by geographic region (2020)

(1) Net sales

Millions of yen						
Japan	North and Central America	Europe	China	Asia (excluding Japan and China)	Other	Total
¥342,346	¥4,955	¥25,831	¥69,547	¥41,745	¥703	¥485,130

Thousands of U.S. dollars (Note 1)						
Japan	North and Central America	Europe	China	Asia (excluding Japan and China)	Other	Total
\$3,145,702	\$45,534	\$237,357	\$639,046	\$383,585	\$6,463	\$4,457,689

(2) Total property, plant, and equipment

Millions of yen						
Japan	North and Central America	Europe	China	Asia (excluding Japan and China)	Other	Total
¥126,505	¥3,055	¥89	¥2,234	¥21,451	¥—	¥153,336

Thousands of U.S. dollars (Note 1)						
Japan	North and Central America	Europe	China	Asia (excluding Japan and China)	Other	Total
\$1,162,411	\$28,073	\$821	\$20,533	\$197,113	\$—	\$1,408,952

3. Information by major customer (2020)

Name of corporate customer	Net sales (Note 1)	Name of involved segment
TANAKA KIKINZOKU KOGYO K.K.	¥65,403 million (U.S. \$600,971 thousand)	Mainly the Nonferrous Metals segment

4. Information on impairment losses on fixed assets by reportable segment (2020)

2020	Millions of yen									
	Reportable segment								Eliminations	Consolidated
	Environmen- tal Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total		
Impairment losses on fixed assets	¥457	¥60	¥187	¥111	¥362	¥1,179	¥—	¥1,179	¥2	¥1,181

2020	Thousands of U.S. dollars (Note 1)									
	Reportable segment								Eliminations	Consolidated
	Environmen- tal Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total		
Impairment losses on fixed assets	\$4,200	\$554	\$1,726	\$1,026	\$3,326	\$10,833	\$—	\$10,833	\$19	\$10,853

5. Amortization of goodwill and unamortized balance of goodwill by reportable segment (2020)

Millions of yen										
Reportable segment										
2020	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total	Eliminations	Consolidated
	Unamortized balance at fiscal year end	¥3,138	¥—	¥—	¥—	¥899	¥4,037	¥—	¥4,037	¥—

Thousands of U.S. dollars (Note 1)										
Reportable segment										
2020	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total	Eliminations	Consolidated
	Unamortized balance at fiscal year end	\$28,838	\$—	\$—	\$—	\$8,264	\$37,102	\$—	\$37,102	\$—

(Note) The Company has omitted disclosure of amortization of goodwill because equivalent information appears in the segment information

1. Information by product and service (2019)

The Company has omitted such disclosure herein because equivalent information appears in the segment information.

2. Information by geographic region (2019)

(1) Net sales

Millions of yen						
Japan	North America	Europe	China	Asia (excluding Japan and China)	Other	Total
¥344,539	¥6,360	¥24,661	¥33,999	¥42,391	¥976	¥452,928

(2) Total property, plant, and equipment

Millions of yen						
Japan	North America	Europe	China	Asia (excluding Japan and China)	Other	Total
¥113,968	¥1,669	¥135	¥839	¥17,752	¥—	¥134,365

3. Information by major customer (2019)

Name of corporate customer	Net sales	Name of involved segment
TANAKA KIKINZOKU KOGYO K.K.	¥53,791 million	Mainly the Nonferrous Metals segment

4. Information on impairment losses on fixed assets by reportable segment (2019)

Millions of yen										
Reportable segment										
2019	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total	Eliminations	Consolidated
	Impairment losses on fixed assets	¥94	¥85	¥—	¥13	¥—	¥194	¥—	¥194	¥18

5. Amortization of goodwill and unamortized balance of goodwill by reportable segment (2019)

Millions of yen										
Reportable segment										
2019	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total	Eliminations	Consolidated
	Unamortized balance at fiscal year end	¥3,487	¥—	¥—	¥—	¥1,133	¥4,620	¥—	¥4,620	¥—

(Note) The Company has omitted disclosure of amortization of goodwill because equivalent information appears in the segment information.

19. Related Party Disclosures

Transactions with related parties

2020										
Type	Company	Address	Capital or contribution to capital	Contents of business	Ratio of voting rights ownership	Relationship with related parties	Content	Transaction amount	Account items	Balance at the end of the period
Affiliate	MINERA PLATA REAL, S. DE R.L. DE C.V.	LOMAS DE CHAPUL TEPEC 11000, MEXICO, D.F.	\$174,102 thousand	Smelting	48.5% indirectly	Fund loan	Long-term fund loan	¥1,418 million (\$13,032 thousand)	Long-term loan	¥3,972 million (\$36,502 thousand)
							Long-term fund collection	¥534 million (\$4,915 thousand)	—	—
							Underwriting of capital increase	¥541 million (\$4,977 thousand)	—	—
							Interest on loans	¥178 million (\$1,638 thousand)	—	—
							Long-term fund loan	¥7,048 million (\$64,768 thousand)	Long-term loan	¥26,802 million (\$246,280 thousand)
Affiliate	OPERACIONE S SAN JOSÉ DE PLATA, S. DE R.L. DE C.V.	LOMAS DE CHAPUL TEPEC 11000, MEXICO, D.F.	\$63,802 thousand	Smelting	48.5% indirectly	Fund loan	Long-term fund collection	¥6,582 million (\$60,483 thousand)	—	—
							Underwriting of capital increase	¥4,955 million (\$45,531 thousand)	—	—
							Interest on loans	¥1,241 million (\$11,412 thousand)	—	—

(Note) The interest rate of the loan is determined taking market interest rate into account.

(Note) ¥108.83= U.S. \$1, the rate of exchange on March 31, 2020.

2019

Type	Company	Address	Capital or contribution to capital	Contents of business	Ratio of voting rights ownership	Relationship with related parties	Content	Transaction amount	Account items	Balance at the end of the period
Affiliate	MINERA PLATA REAL, S. DE R.L. DE C.V.	LOMAS DE CHAPUL TEPEC 11000, MEXICO, D.F.	\$168,867 thousand	Smelting	30.0% indirectly	Fund loan	Long-term fund loan	¥2,603 million	Long-term loan	¥3,161 million
							Interest on loans	¥76 million	—	—
Affiliate	OPERACIONE S SAN JOSÉ DE PLATA, S. DE R.L. DE C.V.	LOMAS DE CHAPUL TEPEC 11000, MEXICO, D.F.	\$100 thousand	Smelting	30.0% indirectly	Fund loan	Long-term fund loan	¥20,189 million	Long-term loan	¥26,857 million
							Interest on loans	¥745 million	—	—

(Note) The interest rate of the loan is determined taking market interest rate into account.



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INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of Dowa Holdings Co., Ltd.:

Opinion

We have audited the consolidated financial statements of Dowa Holdings Co., Ltd. and its consolidated subsidiaries (the "Group"), which comprise the consolidated balance sheet as of March 31, 2020, and the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies, all expressed in Japanese yen.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of March 31, 2020, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

Convenience Translation

Our audit also comprehended the translation of Japanese yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made in accordance with the basis stated in Note 1 to the consolidated financial statements. Such U.S. dollar amounts are presented solely for the convenience of readers outside Japan.

Basis for Opinion

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

Responsibilities of Management and Audit & Supervisory Board Members and the Audit & Supervisory Board for the Consolidated Financial Statements

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

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern in accordance with accounting principles generally accepted in Japan and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Audit & Supervisory Board members and the Audit & Supervisory Board are responsible for overseeing the Directors' execution of duties relating to the design and operating effectiveness of the controls over the Group's financial reporting process.

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

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

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

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks. The procedures selected depend on the auditor's judgment. In addition, we obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain, when performing risk assessment procedures, an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate whether the overall presentation and disclosures of the consolidated financial statements are in accordance with accounting principles generally accepted in Japan, as well as the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with Audit & Supervisory Board members and the Audit & Supervisory Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide Audit & Supervisory Board members and the Audit & Supervisory Board with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

Interest Required to Be Disclosed by the Certified Public Accountants Act of Japan

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

Deloitte Touche Tohmatsu LLC

July 15, 2020