

Detailed Consolidated Financial Statements

Years ended March 31, 2022 and 2021

Consolidated Statements of Financial Position

As of March 31, 2022 and 2021

	Millions	s of yen	Thousands of U.S. dollars
	As of	As of	As of
	March 31, 2022	March 31, 2021	March 31, 2022
ASSETS			
Current assets			
Cash and cash equivalents (Note 8)	¥ 181,152	¥ 195,987	\$ 1,480,121
Trade receivables (Note 9)	370,426	285,846	3,026,603
Inventories (Note 10)	369,009	258,814	3,015,026
Other financial assets (Notes 11 and 37)	43,496	27,176	355,389
Other current assets (Note 12)	27,258	15,230	222,714
Subtotal	991,341	783,053	8,099,853
Assets held for sale (Note 13)	42,104	4,519	344,015
Total current assets	1,033,445	787,572	8,443,868
Non-current assets			
Property, plant and equipment (Note 14)	513,950	455,749	4,199,281
Right-of-use assets (Note 15)	39,634	46,211	323,834
Goodwill (Notes 7 and 16)	17,981	1,123	146,916
Intangible assets (Note 16)	45,341	19,678	370,463
Investment property (Note 17)	21,546	23,222	176,044
Investments accounted for using equity method (Note 19)	133,157	97,509	1,087,973
Other financial assets (Notes 11 and 37)	55,757	57,463	455,568
Retirement benefit assets (Note 24)	60,750	55,059	496,364
Deferred tax assets (Note 35)	8,579	9,333	70,096
Other non-current assets (Note 12)	4,825	5,206	39,422
Total non-current assets	901,520	770,553	7,365,961
Total assets	¥1,934,965	¥1,558,125	\$15,809,829

	Millions	s of yen	Thousands of U.S. dollars
	As of	As of	As of
	March 31, 2022	March 31, 2021	March 31, 2022
LIABILITIES AND EQUITY			
Liabilities			
Current liabilities			
Trade payables (Note 20)	¥174,844	¥ 119,712	\$1,428,581
Bonds and borrowings (Note 21)	346,615	216,721	2,832,053
Income taxes payable	12,903	6,195	105,425
Other financial liabilities (Notes 22 and 37)	127,608	84,242	1,042,634
Provisions (Note 25)	2,474	1,157	20,214
Other current liabilities (Note 26)	42,125	37,736	344,187
Subtotal	706,569	465,763	5,773,094
Liabilities directly associated with assets held for sale (Note 13)	_	542	_
Total current liabilities	706,569	466,305	5,773,094
Non-current liabilities			
Bonds and borrowings (Note 21)	319,471	293,495	2,610,270
Other financial liabilities (Notes 22 and 37)	49,297	67,722	402,786
Retirement benefit liabilities (Note 24)	18,857	16,384	154,073
Provisions (Note 25)	5,051	3,698	41,270
Deferred tax liabilities (Note 35)	28,133	27,834	229,864
Other non-current liabilities (Note 26)	465	530	3,799
Total non-current liabilities	421,274	409,663	3,442,062
Total liabilities	1,127,843	875,968	9,215,156
Equity			
Share capital (Note 27)	125,414	125,331	1,024,708
Capital surplus (Note 27)	69,866	74,009	570,847
Treasury stock (Note 27)	(34,932)	(24,900)	(285,415)
Retained earnings (Note 27)	516,098	424,084	4,216,831
Other components of equity (Note 27)	36,208	9,397	295,841
Total equity attributable to owners of the parent	712,654	607,921	5,822,812
Non-controlling interests	94,468	74,236	771,861
Total equity	807,122	682,157	6,594,673
Total liabilities and equity	¥1,934,965	¥1,558,125	\$15,809,829

Consolidated Statements of Income

For the years ended March 31, 2022 and 2021

	Millions	s of yen	Thousands of U.S. dollars
	Year ended	Year ended	Year ended
	March 31, 2022	March 31, 2021	March 31, 2022
Sales revenue (Note 29)	¥ 1,612,688	¥1,211,725	\$ 13,176,632
Cost of sales	(1,233,948)	(917,883)	(10,082,098)
Gross profit	378,740	293,842	3,094,534
Selling, general and administrative expenses (Notes 7, 30 and 32)	(239,356)	(211,980)	(1,955,683)
Other operating income (Notes 7 and 33)	13,112	4,406	107,133
Other operating expenses (Notes 7 and 33)	(31,005)	(14,183)	(253,330)
Share of profit of investments accounted for using equity method (Note 19)	25,819	5,989	210,957
Operating income	147,310	78,074	1,203,611
Financial income (Note 34)	6,175	4,297	50,454
Financial expenses (Note 34)	(12,211)	(8,128)	(99,771)
Income before income taxes	141,274	74,243	1,154,294
Income tax expense (Note 35)	(22,723)	(10,024)	(185,661)
Net income	118,551	64,219	968,633
Net income attributable to:			
Owners of the parent	109,990	57,873	898,685
Non-controlling interests	8,561	6,346	69,948
Net income	¥ 118,551	¥ 64,219	\$ 968,633
	Yen		U.S. dollars
Earnings (loss) per share			
Basic earnings per share (Yen) (Note 36)	¥565.45	¥298.00	\$4.620

Consolidated Statements of Comprehensive Income

For the years ended March 31, 2022 and 2021

	Millions	s of yen	Thousands of U.S. dollars
	Year ended	Year ended	Year ended
	March 31, 2022	March 31, 2021	March 31, 2022
Net income	¥118,551	¥64,219	\$ 968,633
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Financial assets measured at fair value through other comprehensive income (Note 27)	3,074	670	25,116
Remeasurements of defined benefit plans (Note 27)	2,149	24,605	17,559
Share of other comprehensive income of investments accounted for using equity method (Notes 19 and 27)	210	263	1,716
Total of items that will not be reclassified to profit or loss	5,433	25,538	44,391
Items that may be reclassified to profit or loss			
Exchange differences on translation of foreign operations (Note 27)	22,496	5,816	183,806
Effective portion of net change in fair value of cash flow hedges (Note 27)	494	579	4,036
Share of other comprehensive income of investments accounted for using equity method (Notes 19 and 27)	3,726	(280)	30,444
Total of items that may be reclassified to profit or loss	26,716	6,115	218,286
Total other comprehensive income, net of tax	32,149	31,653	262,677
Comprehensive income	¥150,700	¥95,872	\$1,231,310
Comprehensive income attributable to:			
Owners of the parent	139,352	88,974	1,138,590
Non-controlling interests	11,348	6,898	92,720
Comprehensive income	¥150,700	¥95,872	\$1,231,310

Consolidated Statements of Changes in Equity

For the year ended March 31, 2022

_						Million	s of yen					
-				Equi	ity attributable to							
						Other	components of	equity				
	Share capital	Capital surplus	Treasury stock	Retained earnings	Financial assets measured at fair value through other comprehensive income	Remeasure- ments of defined benefit plans	Exchange differences on translation of foreign operations	Effective portion of net change in fair value of cash flow hedges	Total	Total equity attributable to owners of the parent	Non- controlling interests	Total equity
Balance as of April 1, 2021	¥125,331	¥74,009	¥(24,900)	¥424,084	¥11,606	¥ —	¥ (1,497)	¥(712)	¥ 9,397	¥607,921	¥74,236	¥682,157
Net income	_	-	-	109,990	_	-	_	_	_	109,990	8,561	118,551
Other comprehensive income	_	_	-	_	3,341	2,162	23,408	451	29,362	29,362	2,787	32,149
Total comprehensive income	_	-	-	109,990	3,341	2,162	23,408	451	29,362	139,352	11,348	150,700
Purchase of treasury stock (Note 27) Disposal of treasury stock	-	-	(10,037)	_	-	_	-	-	_	(10,037)	_	(10,037)
(Note 27)	_	0	5	_	_	_	_	_	_	5	_	5
Dividends (Note 28)	-	-	_	(20,527)	_	-	_	_	_	(20,527)	(5,695)	(26,222)
Share-based payment transactions (Note 31)	83	83	_	_	_	_	_	_	_	166	_	166
Change in scope of consolidation (Note 7)	_	_	_	_	_	_	_	_	_	_	19,860	19,860
Transactions with non-controlling interests	_	(4,226)	_	_	_	_	_	_	_	(4,226)	(5,281)	(9,507)
Transfer from other components of equity to retained earnings	_	_	_	2,551	(389)	(2,162)	_	_	(2,551)	_	_	
Total transactions with owners, etc.	83	(4,143)	(10,032)	(17,976)	(389)	(2,162)	_	_	(2,551)	(34,619)	8,884	(25,735)
Balance as of March 31, 2022	¥125,414	¥69,866	¥(34,932)	¥516,098	¥14,558	¥ —	¥21,911	¥(261)	¥36,208	¥712,654	¥94,468	¥807,122

	Thousands of U.S. dollars (Note 4)											
				Equi	ty attributable to	owners of the p	arent					
						Other	r components of	equity		_		Total equity
	Share capital	Capital surplus	Treasury stock	Retained earnings	Financial assets measured at fair value through other comprehensive income	Remeasure- ments of defined benefit plans	Exchange differences on translation of foreign operations	Effective portion of net change in fair value of cash flow hedges	Total	Total equity attributable to owners of the parent	Non- controlling interests	
Balance as of April 1, 2021	\$1,024,030	\$604,698	\$(203,448)	\$3,465,022	\$94,828	\$ —	\$ (12,231)	\$(5,818)	\$ 76,779	\$4,967,081	\$606,552	\$5,573,633
Net income	-	-	-	898,685	-	_	_	_	_	898,685	69,948	968,633
Other comprehensive income	_	_	_	_	27,298	17,665	191,257	3,685	239,905	239,905	22,772	262,677
Total comprehensive income	_	-	-	898,685	27,298	17,665	191,257	3,685	239,905	1,138,590	92,720	1,231,310
Purchase of treasury stock (Note 27)	_	_	(82,008)	_	_	_	_	_	_	(82,008)	_	(82,008)
Disposal of treasury stock (Note 27)	_	0	41	_	_	_	_	_	_	41	_	41
Dividends (Note 28)	-	-	_	(167,718)	-	_	_	_	_	(167,718)	(46,532)	(214,250)
Share-based payment transactions (Note 31)	678	678	_	_	_	_	_	_	_	1,356	_	1,356
Change in scope of consolidation (Note 7)	_	_	_	_	_	_	_	_	_	_	162,268	162,268
Transactions with non-controlling interests	_	(34,530)	_	_	_	_	_	_	_	(34,530)	(43,147)	(77,677)
Transfer from other components of equity to retained earnings	_	_	_	20,843	(3,178)	(17,665)	_	_	(20,843)		_	
Total transactions with owners, etc.	678	(33,852)	(81,967)	(146,875)	(3,178)	(17,665)	_	_	(20,843)	(282,859)	72,589	(210,270)
Balance as of March 31, 2022	\$1,024,708	\$570,847	\$(285,415)	\$4,216,831	\$118,948	\$ —	\$179,026	\$(2,133)	\$295,841	\$5,822,812	\$771,861	\$6,594,673

For the year ended March 31, 2021

For the year ended March 31,	, 2021					Million	s of yen					
-		Equity attributable to owners of the parent										
-						Othe	r components of	equity				
	Share capital	Capital surplus	Treasury stock	Retained earnings	Financial assets measured at fair value through other comprehensive income	Remeasure- ments of defined benefit plans	Exchange differences on translation of foreign operations	Effective portion of net change in fair value of cash flow hedges	Total	Total equity attributable to owners of the parent	Non- controlling interests	Total equity
Balance as of April 1, 2020	¥125,298	¥79,320	¥(39,254)	¥359,794	¥11,894	¥ —	¥(6,591)	¥(1,241)	¥ 4,062	¥529,220	¥80,487	¥609,707
Net income	_	_	_	57,873	—	_	_	_	_	57,873	6,346	64,219
Other comprehensive income	_	_	_	_	814	24,664	5,094	529	31,101	31,101	552	31,653
Total comprehensive income	_	_	_	57,873	814	24,664	5,094	529	31,101	88,974	6,898	95,872
Purchase of treasury stock (Note 27)	_	_	(691)	_	_	_	_	_	_	(691)	_	(691)
Disposal of treasury stock (Note 27)	_	_	3	_	_	_	_	_	_	3	_	3
Dividends (Note 28)	_	_	_	(19,349)) —	_	_	_	_	(19,349)	(6,266)	(25,615)
Share-based payment transactions (Note 31)	33	33	_	_	_	_	_	_	_	66	_	66
Change in scope of consolidation	_	_	_	_	_	_	_	_	_	_	_	_
Transactions with non-controlling interests	_	(5,344)	15,042	_	_	_	_	_	_	9,698	(6,883)	2,815
Transfer from other components of equity to retained earnings		_	_	25,766	(1,102)	(24,664)	_	_	(25,766)	_		
Total transactions with owners, etc.	33	(5,311)	14,354	6,417	(1,102)	(24,664)	_	_	(25,766)	(10,273)	(13,149)	(23,422)
Balance as of March 31, 2021	¥125,331	¥74,009	¥(24,900)	¥424,084	¥11,606	¥ —	¥(1,497)	¥ (712)	¥ 9,397	¥607,921	¥74,236	¥682,157

Consolidated Statements of Cash Flows

For the years ended March 31, 2022 and 2021

	Millions	ofyen	Thousands of U.S. dollars
	Year ended	Year ended	Year ended
	March 31, 2022	March 31, 2021	March 31, 2022
Cash flows from operating activities			-
Income before income taxes	¥ 141,274	¥ 74,243	\$ 1,154,294
Depreciation and amortization	84,222	76,621	688,144
Impairment loss (Note 18)	16,183	8,050	132,225
Gain on bargain purchase (Note 7)	(7,246)	_	(59,204
Insurance income	(1,226)	(1,761)	(10,017
Interest and dividend income	(2,458)	(2,152)	(20,083
Interest expenses	3,932	4,634	32,127
Share of loss (profit) of investments accounted for			
using equity method	(25,819)	(5,989)	(210,957
Decrease (increase) in trade receivables	(62,942)	(7,113)	(514,274
Decrease (increase) in inventories	(81,582)	27,360	(666,574
Increase (decrease) in trade payables	39,968	(5,420)	326,563
Others	(3,098)	10,312	(25,314
Subtotal	101,208	178,785	826,930
Interest and dividends received	11,158	6,246	91,168
Proceeds from insurance income	1,226	1,761	10,017
Interest paid	(3,972)	(4,705)	(32,454
Income taxes paid	(17,036)	(7,764)	(139,194
Net cash provided by (used in) operating activities	92,584	174,323	756,467
Cash flows from investing activities			
Proceeds from sale and redemption of marketable securities	_	5,000	_
Purchase of property, plant and equipment	(107,067)	(74,904)	(874,802
Proceeds from sale of property, plant and equipment	1,588	591	12,975
Purchase of intangible assets	(9,149)	(1,677)	(74,753
Proceeds from sale of intangible assets	4	84	33
Purchase of investment securities	(2,510)	(877)	(20,508
Proceeds from sale and redemption of investment securities	2,939	161	24,013
Payments for acquisition of subsidiaries (Note 7)	(41,510)	(1,722)	(339,162
Proceeds from acquisition of subsidiaries (Note 7)	12,430		101,561
Payments for sale of subsidiaries	(1,749)	_	(14,290
Proceeds from sale of subsidiaries	5,547	_	45,322
Payments for acquisition of businesses (Note 7)	(10,694)	_	(87,376
Purchase of equity accounted investments (Note 7)	(58,826)	(4,460)	(480,644
Proceeds from equity accounted investments		99	(
Others	3,763	150	30,746
Net cash provided by (used in) investing activities	(205,234)	(77,555)	(1,676,885
Cash flows from financing activities	, , , ,		
Increase (decrease) in short-term borrowings (Note 23)	54,999	(8,498)	449,375
Increase (decrease) in commercial papers (Note 23)	70,000	(10,000)	571,942
Proceeds from long-term borrowings (Note 23)	40,289	19,542	329,185
Repayments of long-term borrowings (Note 23)	(45,566)	(42,963)	(372,302
Proceeds from issuance of bonds (Note 23)	35,000	15,000	285,971
Redemption of bonds (Note 23)	(10,432)	(10,426)	(85,236
Repayments of lease liabilities (Note 23)	(9,637)	(8,108)	(78,740
Proceeds from sale of treasury stock	6	3	49
Purchase of treasury stock	(10,037)	(691)	(82,008
Dividends paid (Note 28)	(20,527)	(19,349)	(167,718
Capital contribution from non-controlling interests	(20,327)	(17,547)	(107,10
Dividends paid to non-controlling interests	(5,617)	(6,266)	(45,894
Proceeds from sale of interests in subsidiaries to	(3,017)	(0,200)	(43,074
non-controlling interests	—	2,800	_
Payments for acquisition of interests in subsidiaries from non-controlling interests	(9,257)		(75,635
Net cash provided by (used in) financing activities	89,222	(68,956)	728,997
Effect of exchange rate changes on cash and cash equivalents	8,593	3,604	
			70,210
Net increase (decrease) in cash and cash equivalents	(14,835) 195,987	<u> </u>	(121,211) 1,601,332
Cash and cash equivalents at the beginning of period (Note 8)			

1. Reporting Entity

Mitsui Chemicals, Inc. (hereinafter the "Company") is a company incorporated in Japan and is listed on the Prime Market of the Tokyo Stock Exchange. The address of its registered head office is disclosed on the Company's website (https://jp.mitsuichemicals.com/en/).

The consolidated financial statements of the Company and its subsidiaries (hereinafter collectively the "Group") with a closing date as of March 31 comprise the Group and the Group's interests in associates and joint arrangements.

The Group is primarily engaged in business activities related to the manufacture and sale of goods or services in the Mobility, Health Care, Food & Packaging, and Basic Materials segments.

The details of businesses and principal business activities of the Group are stated in Note 6 "Segment Information (1) Overview of reportable segments."

2. Basis of Preparation

(1) Compliance with IFRS

The consolidated financial statements of the Group have been prepared in compliance with IFRS published by the International Accounting Standards Board. In addition, since the Company qualifies as a "specified company complying with designated international accounting standards" prescribed in Article 1-2 of the Regulation on Consolidated Financial Statements, the provisions of Article 93 of that Regulation are applied.

The Group's consolidated financial statements were approved on June 24, 2022 by Osamu Hashimoto, Representative Director, Member of the Board, President & CEO, and Hajime Nakajima, Member of the Board, Managing Executive Officer & CFO.

(2) Basis of measurement

The consolidated financial statements of the Group are prepared on a historical cost basis except for financial instruments, etc. measured at fair value as described in Note 3 "Significant Accounting Policies."

(3) Functional currency and presentation currency

The consolidated financial statements of the Group are presented in Japanese yen, which is the Company's functional currency, and figures are rounded to the nearest million yen. The translation of yen amounts into U.S. dollar amounts is included solely for the convenience of readers, using ¥122.39=US\$1.00, the approximate rate of exchange in effect on March 31, 2022. The translation should not be construed as a representation that yen amounts have been, or could in the future be, converted into U.S. dollars at the above or any other rate.

3. Significant Accounting Policies

(1) Basis of consolidation

(i) Subsidiaries

Subsidiaries are entities that are controlled by the Group. Control is deemed to be achieved when the Group is exposed or has rights to variable returns from its involvement with an entity and has the ability to affect those returns through its power over the entity.

The financial statements of subsidiaries are included in the consolidated financial statements of the Group from the date when control is obtained until the date when it is lost.

If any accounting policies applied by a subsidiary differ from those applied by the Company, adjustments are made to the subsidiary's financial statements where needed.

Subsidiaries whose fiscal year-end is different from the Group's consolidated fiscal year-end are consolidated based on their provisional financial statements as of the consolidated fiscal year-end.

All intergroup balances of receivables and payables and other internal transactions within the Group, as well as unrealized gains and losses arising from internal transactions are eliminated in preparing the consolidated financial statements.

Changes in ownership interests in subsidiaries that do not result in loss of control are accounted for as equity transactions. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity attributable to owners of the parent. Upon loss of control over a subsidiary, the Group remeasures any retained investment in the subsidiary at fair value at the date of loss of control and recognizes gains or losses resulting from the loss of control in profit or loss.

(ii) Associates and joint arrangements

Associates are entities in which the Group has significant influence over the financial and operating policies but does not have control or jointly control. The Group is presumed to have significant influence over another entity when it holds at least 20% but 50% or less of the voting rights of the entity.

Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. Investments in joint arrangements are classified as joint operations or joint ventures depending on the rights and obligations of the parties to the arrangement.

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement.

Investments in associates and equity interests in joint ventures are initially recognized at acquisition cost, and subsequently accounted for using the equity method. Investments in associates and joint ventures include goodwill identified on acquisition.

If the Group has an interest in a joint operation, the Group only recognizes an amount equivalent to its share of the assets, liabilities, revenues and expenses generated from the joint operation.

If any accounting policies applied by an associate, a joint venture or a joint operation differ from those applied by the Group, adjustments are made to their financial statements where needed.

When it is impracticable to unify the fiscal year-end of associates, joint ventures and joint operations due to certain reasons such as relationships with other shareholders, significant transactions or events between the fiscal year-end of the Group and that of the said entities' financial statements are reflected in the consolidated financial statements.

Unrealized gains or losses arising from transactions between the Group and its associates or joint ventures are adjusted in the Group's consolidated financial statements. The balances of receivables and payables and transactions among the Group and its joint operations, as well as unrealized gains or losses arising from these transactions are eliminated in preparing the consolidated financial statements.

When an entity ceases to be an associate or joint venture and is no longer accounted for using the equity method, the Group remeasures any retained investment in the entity at fair value at the date of discontinuing the use of the equity method and recognizes gains or losses resulting from the discontinued use of the equity method in profit or loss, except when the entity becomes a consolidated subsidiary.

(2) Business combinations

Business combinations are accounted for using the acquisition method. Identifiable assets and liabilities assumed of an acquiree are, in principle, measured at their acquisition-date fair value.

Goodwill is recognized as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree; over the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed. Conversely, any bargain purchase is immediately recognized in profit or loss.

The consideration transferred is measured as the sum of the fair values of the assets transferred by the acquirer, the liabilities incurred by the acquirer to former owners of the acquiree and the equity interests issued by the acquirer.

The Group elects to measure non-controlling interest in the acquiree for each business combination at either fair value or at the proportionate share of the recognized amounts of identifiable net assets.

Acquisition-related costs incurred for business combinations, such as agent commissions, legal fees and due diligence costs, are expensed as incurred.

If initial accounting for a business combination is incomplete by the end of the period in which the combination occurs, the items for which the accounting is incomplete are measured at provisional amounts. Those provisional amounts recognized at the acquisition date are retrospectively adjusted if new information obtained within one year from the acquisition date, i.e., measurement period, would have affected the measurement of the amounts recognized at the acquisition date.

If a business combination is achieved in stages, the Group remeasures its previously held equity interests in the acquiree at its acquisition-date fair value, and recognizes the resulting gains or losses, if any, in profit or loss or other comprehensive income.

Additional acquisition of non-controlling interests is accounted for as an equity transaction, and therefore goodwill is not recognized with respect to such a transaction.

(3) Foreign currency translation

(i) Foreign currency transactions

Foreign currency transactions are translated into respective functional currencies of the Company and its subsidiaries at the spot exchange rate at the date of the transaction or at the exchange rate that approximates the spot exchange rate at the date of the transaction.

Monetary assets and liabilities denominated in foreign currencies at the fiscal year-end are translated into each functional currency at the exchange rate at the fiscal year-end. Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are translated into the functional currencies at the exchange rate prevailing at the date that the fair value was determined.

Exchange differences arising from such translations and settlements are recognized in profit or loss. However, exchange differences arising from equity instruments measured through other comprehensive income and cash flow hedges are recognized in other comprehensive income.

(ii) Translation of foreign operations

Assets and liabilities of foreign operations are translated into Japanese yen at the prevailing exchange rate at the fiscal year-end. Revenues and expenses are translated into Japanese yen at the average exchange rate during the period, except when the exchange rate fluctuates significantly. Exchange differences arising from such translations are recognized in other comprehensive income.

On the disposal of the entire interest in a foreign operation, or on the partial disposal of an interest in a foreign operation that involves the loss of control of a subsidiary or loss of significant influence over an associate, the cumulative amount of the exchange differences relating to that foreign operation is recognized in profit or loss at the time of disposal.

(4) Financial instruments

(i) Financial assets (excluding derivatives)

i) Initial recognition and measurement

Under IFRS 15 "Revenue from Contracts with Customers," the Group initially recognizes trade receivables when it satisfies its performance obligations and acquires unconditional rights to consideration. All other financial assets are initially recognized on the transaction date when the Group becomes a party to the contractual provisions of the assets.

At initial recognition, the Group classifies financial assets into those measured at amortized cost, those measured at fair value through profit or loss and those measured at fair value through comprehensive income.

- Financial assets are classified as financial assets measured at amortized cost if both of the following conditions are met:
- the financial assets are held based on a business model whose objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Debt instruments are classified as financial assets measured at fair value through comprehensive income if both of the following conditions are met. All other debt instruments are classified as financial assets measured at fair value through profit or loss.

- the financial assets are held based on a business model whose objective is achieved by both collecting contractual cash flows and selling assets and;
- the contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Equity instruments, excluding those held for trading purposes, are classified as financial assets measured at fair value through profit or loss. However, except for those held for trading purpose, each equity instrument is designated as measured at fair value through profit or loss or as measured at fair value through comprehensive income. Such designations are applied consistently.

Financial assets are initially measured at fair value plus transaction costs that are directly attributable to the financial assets.

However, transaction costs attributable to financial assets measured at fair value through profit or loss are recognized in profit or loss as incurred.

ii) Subsequent measurement

After their initial recognition, financial assets are measured according to their classification as follows:

(a) Financial assets measured at amortized cost

Financial assets measured at amortized cost are measured at amortized cost using the effective interest method.

(b) Financial assets measured at fair value

Financial assets other than those measured at amortized cost are measured at fair value.

Changes in fair value of financial assets measured at fair value are recognized in profit or loss or other comprehensive income.

For equity instruments that are designated as measured at fair value through other comprehensive income, changes in fair value are recognized in other comprehensive income and reclassified to retained earnings in case of derecognition or significant decrease in fair value.

iii) Derecognition

The Group derecognizes financial assets when contractual rights to cash flows from the financial assets expire or when the contractual rights to receive cash flows from the financial assets are transferred and substantially all the risks and rewards of ownership of the financial asset are thereby transferred.

iv) Impairment

At each fiscal year-end, the Group assesses whether the credit risk on a financial asset measured at amortized cost or a financial guarantee contract has increased significantly since initial recognition.

The Group measures allowance for doubtful accounts for financial assets at an amount equal to the lifetime expected credit losses if the credit risk on those financial assets has increased significantly since initial recognition.

If the credit risk on the financial assets has not significantly increased since its initial recognition, the Group measures allowance for doubtful accounts for financial assets at an amount equal to 12-month expected credit losses.

However, the Group always measures allowance for doubtful accounts at an amount equal to lifetime expected credit losses for trade receivables and lease receivables.

When determining whether the credit risk of a financial asset has increased significantly since its initial recognition, the Group evaluates by comparing the risk of a default occurring on the financial assets at each fiscal year-end with the risk of a default occurring on the financial assets at each fiscal year-end with the risk of a default occurring on the financial assets at the date of initial recognition. The Group considers reasonable and supportable information about past events, current conditions and forecasts of future economic conditions that are available without excessive cost or effort (e.g., internal credit rating, external credit rating, etc.), as well as past due information.

Any financial assets are treated as credit-impaired financial assets if there is a request for changing terms and conditions for repayment from a debtor, serious financial difficulties of the debtor, or commencement of legal liquidation procedures due to bankruptcy and others of the debtor, etc. For any amount that cannot reasonably be expected to be recovered in the future, the carrying amount of financial assets is directly reduced, and the amount of corresponding allowance for doubtful accounts is also reduced.

Expected credit losses on financial instruments are measured as the present value of the difference between the contractual cash flows that are due to the Group and the cash flows that the Group expects to receive, and are recognized in profit or loss.

(ii) Financial liabilities (excluding derivatives)

i) Initial recognition and measurement

At initial recognition, financial liabilities are classified as financial liabilities measured at amortized cost and financial liabilities measured at fair value through profit or loss. All financial liabilities are measured at fair value at initial recognition. However, financial liabilities measured at amortized cost are measured at fair value less directly attributable transaction costs.

ii) Subsequent measurement

After initial recognition, financial liabilities are measured according to their classification as follows:

(a) Financial liabilities measured at amortized cost

After their initial recognition, financial liabilities measured at amortized cost are measured at amortized cost using the effective interest method. Amortization using the effective interest method and gains or losses arising in the case of derecognition are recognized in profit or loss.

(b) Financial liabilities measured at fair value through profit or loss

Financial liabilities measured at fair value through profit or loss are measured at fair value, and any changes in fair value are recognized in profit or loss.

iii) Derecognition

The Group derecognizes financial liabilities when they are extinguished; i.e., when the contractual obligation is performed or when the obligation specified in the contract is discharged, canceled or expires.

(iii) Derivatives and hedge accounting

The Group uses derivatives such as forward exchange contracts, currency swaps and interest rate swaps to hedge foreign exchange fluctuation risk and interest rate fluctuation risk. These derivatives are initially measured at fair value at the date the contracts are entered into and are subsequently remeasured at fair value.

Changes in fair value of derivatives are recognized in profit or loss. However, the effective portion of cash flow hedge is recognized in other comprehensive income in the consolidated statements of comprehensive income.

At the inception of the hedge, the Group formally designates and documents hedging relationships to which hedge accounting applies and the risk management objectives and strategies for undertaking the hedges. The documentation includes identifying hedging instruments, the hedged items or transactions, the nature of the risk being hedged, and the methods of assessing the effectiveness of changes in fair value of the hedging instruments (including methods for analyzing the causes of ineffective hedging and determining the hedge ratio) in offsetting the exposures to the changes in fair value or cash flows of hedged items attributable to hedged risks.

At the inception of the hedge and on an ongoing basis, the Group assesses whether a derivative used in the hedge transaction is effective in offsetting changes in fair value or cash flows of hedged items.

Hedges that meet the criteria for hedge accounting are classified and accounted for as follows.

i) Fair value hedges

Changes in fair value of hedging instruments are recognized in profit or loss. Changes in fair value of hedged items attributable to the hedged risks are recognized in profit or loss, adjusting the carrying amount of the hedged item.

ii) Cash flow hedges

The effective portion of changes in fair value of hedging instruments is recognized in other comprehensive income, while the ineffective portion is recognized in profit or loss.

The amounts associated with the hedging instruments recognized in other comprehensive income are reclassified to profit or loss when the hedged transactions affect profit or loss. If a hedged item results in the recognition of a non-financial asset or a non-financial liability, the associated amount recognized in other comprehensive income is reclassified as adjustment to the initial carrying amount of the non-financial asset or the non-financial liability.

Hedge accounting is discontinued when a forecast transaction is no longer deemed to have a high probability of occurring. Furthermore, when a forecast transaction is no longer expected to occur, the cumulative gain or loss recognized in other comprehensive income is reclassified to profit or loss.

(iv) Offsetting of financial assets and financial liabilities

The Group offsets financial assets and financial liabilities and presents them as a net amount only when it currently holds a legally enforceable right to offset the amounts recognized as assets and liabilities and intends either to settle them on a net basis or to realize the asset and settle the liability simultaneously.

(5) Cash and cash equivalents

Cash and cash equivalents consist of cash on hand, demand deposits, and short-term investments with maturities of three months or less from the date of acquisition that are readily convertible to cash and subject to an insignificant risk of changes in value.

(6) Inventories

Inventories are recognized at the lower of cost and net realizable value. The cost of inventories is determined mainly by using the weighted-average cost formula and comprises costs of purchase, costs of conversion and all costs incurred in bringing the inventories to the present location and condition. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated selling costs.

(7) Non-current assets or disposal groups classified as held for sale

The Group classifies non-current assets (or disposal groups) as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use.

The conditions for classifying non-current assets (or disposal groups) as held for sale are that they must be available for immediate sale in their present condition and the sale must be highly probable. The classification is also limited to when management of the Group is committed to executing the sale plan and the sale is expected to complete within one year.

Non-current assets (or disposal groups) classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell, and are not depreciated or amortized after they are classified as held for sale.

(8) Property, plant and equipment

(i) Recognition and measurement

Property, plant and equipment are measured using the cost model and stated at cost less any accumulated depreciation and any accumulated impairment loss.

The acquisition cost includes costs directly attributable to the acquisition of the asset and initially estimated costs of dismantling, removing and restoration of the asset. In addition, borrowing costs that are directly attributable to the acquisition and construction of assets and meet certain criteria for asset recognition are recognized as part of the acquisition cost.

(ii) Depreciation

Property, plant and equipment (excluding land and other non-depreciable assets) are depreciated on a straight-line basis over their respective estimated useful lives.

The estimated useful lives of major classes of assets are as follows:

- Buildings and structures: 2 to 75 years
- Machinery and vehicles: 2 to 25 years

The depreciation method, estimated useful lives, and residual values are reviewed at the end of each fiscal year, and if there are any changes made, those changes are applied prospectively as a change in an accounting estimate.

(9) Leases

Lessees

The Group determines that a contract is a lease or contains a lease at the time of entering into the contract. If the contract conveys the right to control the use of an identified asset for a certain period of time in exchange for consideration, the contract is determined to be a lease or contain a lease. When a contract is determined to be a lease or contain a lease, the Group recognizes a right-of-use asset and a lease liability at the commencement date of the lease.

At the commencement date, lease liabilities are measured at the present value of the lease payments that are not paid at that date. Right-of-use assets are initially measured at the amount of the initial measurement of lease liabilities, adjusted mainly by any initial direct costs and any prepaid lease payments, plus costs including obligations for restoration under the lease contract.

Lease payments are apportioned between financial expenses and reduction of the lease liability based on the interest method, and the financial expenses are recognized in profit or loss.

After initial recognition, depreciation is carried out on a straight-line basis over the shorter of its estimated useful life and the lease term. Regarding the lease term, in addition to the non-cancellable period of the lease, it includes both the period covered by an option to extend the lease when the lessee is reasonably certain to exercise that option and the period covered by an option to cancel the lease if the lessee is reasonably certain not to exercise that option.

The Group recognizes lease payments related to short-term leases whose lease term is 12 months or less and leases for which the underlying asset is of low value as expenses on a straight-line basis over the lease terms.

Lessor

Leases are classified as either operating leases or finance leases. If the bulk of the risks and economic value associated with the ownership of the underlying asset is transferred, the lease is classified as a finance lease, and if such risks and value are not transferred, it is classified as an operating lease. Whether the lease is a finance lease or an operating lease is determined according to the substance of the transaction, not the form of the contract.

When classifying subleases, the intermediate lessor is classified by reference to the right-of-use asset arising from the head lease.

(10) Goodwill and intangible assets

(i) Goodwill

Initial recognition and measurement of goodwill arising from the acquisition of a business are as stated in "(2) Business combinations."

Goodwill is stated at cost less any accumulated impairment loss. Goodwill is not amortized and is tested for impairment annually, or whenever there is an indication of impairment. Impairment loss on goodwill is recognized in the consolidated statements of income and no subsequent reversal is made.

(ii) Intangible assets

Intangible assets are measured using the cost model and stated at cost less any accumulated amortization and any accumulated impairment loss.

Separately acquired intangible assets are initially recognized at cost. Intangible assets acquired in a business combination are measured at fair value at the acquisition date. Expenditures on internally generated intangible assets are all recognized as expenses in the period when incurred, except for development expenses that satisfy the criteria for capitalization.

Intangible assets with finite useful lives are amortized on a straight-line basis over their respective estimated useful lives and are tested for impairment whenever there is an indication of impairment.

The estimated useful lives of major classes of assets are as follows:

• Software:	2 to 15 years
 Patents and technology license: 	2 to 23 years
• Customer value:	5 to 30 years
• Trademarks:	5 to 20 years

The estimated useful lives and amortization method of intangible assets with finite useful lives are reviewed at the end of each fiscal year, and if there are any changes made, those changes are applied prospectively as a change in an accounting estimate.

Intangible assets with indefinite useful lives are not amortized and are tested for impairment annually, or whenever there is an indication of impairment.

(11) Investment property

Investment properties are properties held to earn rentals or for capital gains or both. They do not include properties held for sale in the ordinary course of business, for use in the production or sale of goods or services or for administrative purposes.

Investment properties are measured using the cost model. Investment properties, excluding land and other non-depreciable assets, are depreciated on a straight-line basis over their estimated useful lives, using the same estimated useful lives and depreciation method as those for property, plant and equipment.

(12) Impairment of non-financial assets

The Group assesses whether there is any indication that non-financial assets (excluding inventories, deferred tax assets, retirement benefit assets and non-current assets held for sale) may be impaired at the end of each fiscal year. If there is an indication of impairment, the Group estimates the recoverable amount of the asset or cash-generating unit (CGU) to which the asset belongs.

Goodwill and intangible assets with indefinite useful lives are tested for impairment annually, or whenever there is an indication of impairment.

The recoverable amount of the asset or CGU to which it belongs is the higher of its fair value less costs of disposal and its value in use. The value in use is determined by discounting the estimated future cash flows to the present value using a pre-tax discount rate that reflects the time value of money and the risks specific to the asset. If it is not possible to estimate the recoverable amount of the individual asset, the Group estimates the recoverable amount of each CGU to which the asset belongs.

On or after the acquisition date, goodwill is allocated to a CGU or group of CGUs that is expected to benefit from the synergies of the business combination.

Since the Group's corporate assets do not generate independent cash inflows, the recoverable amounts are determined for the CGU or group of CGUs to which the corporate assets belong if there is any indication of impairment of the corporate assets.

Impairment loss is recognized in profit or loss when the recoverable amount of a CGU (or group of CGUs) is less than its carrying amount. Impairment loss recognized for the CGU (or group of CGUs) is first allocated to extinguish the carrying amount of any goodwill

allocated to the unit (or group), and subsequently to reduce the carrying amount of other assets in the unit on a pro-rata basis. No reversal is made for impairment losses related to goodwill.

Impairment loss recognized in prior years for assets other than goodwill is assessed as to whether there is any indication that the losses may no longer exist or may have decreased. If any such an indication exists, the Group estimates the recoverable amount of the asset or the CGU.

If the recoverable amount exceeds the carrying amount of the asset or CGU, the impairment loss is reversed up to the carrying amount less depreciation or amortization that would have been determined had no impairment loss been recognized.

(13) Employee benefits

(i) Post-employment benefits

The Group has defined benefit plans and defined contribution plans as post-employment benefit plans for its employees. i) Defined benefit plans

Net defined benefit liabilities or assets are calculated by deducting the fair value of the plan assets from the present value of the defined benefit obligations. If a defined benefit plan is overfunded, the net value of the defined benefit assets is measured at the lower of the overfunded amount of the plan or the asset ceiling. The Group uses the projected unit credit method to determine the present value of the defined benefit obligations, the related current service cost and the past service cost. The discount rate is determined by reference to market yield on high-quality corporate bonds having maturity terms that approximate to the estimated term of the related benefit obligations at the end of the reporting period.

Service costs and net interest on the net defined benefit liabilities or assets are recognized in profit or loss. The past service costs are recognized immediately in profit or loss. Remeasurements of net defined liabilities or assets, including actuarial gains and losses, are recognized in other comprehensive income in the period incurred and immediately reclassified from other components of equity to retained earnings.

ii) Defined contribution plans

Payments to defined contribution plans are recognized as expenses over the period in which employees render services.

(ii) Short-term employee benefits

Short-term employee benefits are measured on an undiscounted basis, and are recognized as expenses when employees render the related service.

Bonuses and paid leave expenses are recognized as a liability in the amount estimated to be paid if the Group has a legal or constructive obligation to pay such employees and the obligation can be reliably estimated.

(14) Provisions

Provisions are recognized when the Group has a present legal or constructive obligation as a result of a past event, where it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and the amount of the obligation can be reliably estimated.

If the effect of the time value of money is significant, provisions are determined by discounting the expenditures expected to be required to settle the obligation to the present value using a pre-tax discount rate that reflects the time value of money and the risks specific to the liability.

(15) Equity

(i) Common stock

The proceeds from issuance of common stock issued by the Company are recorded in share capital and capital surplus, and costs directly attributable to the issuance (after tax effect adjustments) are recognized as a deduction from equity.

(ii) Treasury stock

When treasury stock is acquired, the acquisition costs, including costs directly attributable to the acquisition (after tax effect adjustments), are recognized as a deduction from equity.

When treasury stock is sold, the difference between the carrying amount and the consideration on sales is recognized in capital surplus.

(16) Revenue

The Group recognizes revenue in an amount that reflects the consideration to which the Group expects to be entitled in exchange for the transfer of goods and services to customers, based on the following five-step approach.

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 individual performance obligations in the contract.

Step 5: Recognize revenue when (or as) the performance obligations are satisfied.

The Group is primarily engaged in business activities related to the manufacture and sale of goods or services in the Mobility, Health Care, Food & Packaging and Basic Materials segments. In the sale of these products, revenue is recognized upon delivery or at the time of shipment of the products depending on when the customer obtains control of the products and the performance obligations are satisfied.

In addition, revenue is determined at the amount of consideration promised in the contract with the customer less returns, discounts, rebates and others. The amount of sales revenue including variable consideration is included in transaction prices only to the extent that a significant reversal of accumulated revenue recognized is very unlikely to occur when uncertainties over the variable consideration is later dispelled.

Considerations in product sales contracts are generally collected within one year after control of the product has transferred to the customer, and do not include a significant financing component (per IFRS15 and Note 29).

(17) Share-based payment

The Company has adopted a restricted stock compensation plan as an equity-settled share-based payment for directors and executive officers.

The consideration for services received is measured at fair value of the Company's shares at the grant date and is recognized as expenses in profit or loss together with a corresponding increase in equity.

(18) Government grants

Government grants are recognized at fair value when there is a reasonable assurance that the Group will comply with the attached conditions and receive the grants.

Government grants related to revenue are recognized in profit or loss on a systematic basis over the periods in which the Group recognizes expenses for the related costs for which the grants are intended to compensate.

The amount of government grants related to assets is deducted from the acquisition cost of the assets.

(19) Borrowing costs

For assets requiring a considerable period of time before intended use or sale is possible, borrowing costs directly resulting from the acquisition, construction, or manufacturing of the asset are capitalized as part of the acquisition cost of the asset. Other borrowing costs are recognized as expenses for the period incurred.

(20) Income taxes

Income taxes consist of current taxes and deferred taxes, and are recognized in profit or loss, except for taxes arising from business combinations, as well as taxes incurred from items directly recognized in other comprehensive income or equity.

Current taxes are measured at the amount expected to be paid to or recovered from the taxation authorities, using the tax rates and tax laws that have been enacted or substantively enacted at the end of reporting period.

Deferred taxes are recognized for temporary differences between the carrying amount of assets and liabilities for accounting purposes and their value for tax purposes at the end of reporting period, as well as tax loss carryforward and tax credit carryforward.

Deferred tax liabilities are recognized, in principle, for all taxable temporary differences. Deferred tax assets are recognized for deductible temporary differences, tax loss carryforward and tax credit carryforward to the extent that it is probable that taxable profit will be available. The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are not recognized for the following temporary differences:

- temporary differences arising on initial recognition of goodwill;
- temporary differences arising on initial recognition of an asset or liability in a transaction that is not business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss;
- deductible temporary differences arising from investments in subsidiaries and associates, and interest in joint arrangements to the extent that it is not probable that the temporary differences will reverse in the foreseeable future and taxable profits will be available against which the temporary differences can be utilized; and
- taxable temporary differences arising from investments in subsidiaries and associates, and interest in joint arrangements to the extent that the Group is able to control the timing of the reversal of the temporary differences and it is probable that they will not reverse in the foreseeable future.

Deferred tax assets and liabilities are measured at the tax rates and tax laws that are expected to be applied in the period when the asset is realized or the liability is settled based on tax rates and tax laws that have been enacted or substantively enacted at the end of reporting period.

Deferred tax assets and liabilities are offset when the Group has a legally enforceable right to offset current tax assets and liabilities and income taxes are levied by the same taxation authority on the same taxable entity.

The Company and part of its consolidated subsidiaries have adopted the consolidated taxation system.

(21) Earnings per share

Basic earnings per share are determined by dividing net income attributable to common shareholders of the parent by the weighted average number of shares of common stock outstanding during the period, adjusted for treasury stock held. Diluted earnings per share are not determined as there are no potential dilutive shares.

(22) Changes in accounting policies

Not applicable

4. Significant Accounting Estimates and Judgments

In order to prepare the consolidated financial statements, the Group is required to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, revenues and expenses. Actual operating results may differ from these accounting estimates and their underlying assumptions.

The estimates and underlying assumptions are reviewed on an ongoing basis. The effects of the review of accounting estimates are recognized in the reporting period in which the changes are made and in future periods.

The COVID-19 pandemic is expected to affect performance in the fiscal year ending March 31, 2023, but as countries experience gradual economic recovery, the Group expects continuing firmness in overseas markets. On the other hand, there is a risk that other factors, such as the prolonged rise in crude oil prices and a continued depreciation in the Japanese yen due to the crisis in Ukraine, could have a significant impact on the consolidated financial statements for the following fiscal year.

Accounting judgments, estimates and assumptions that could materially affect the Group's consolidated financial statements are as follows:

- Estimation of fair value of assets acquired and liabilities assumed through business combinations (see Note 7 "Business Combinations" below)
- Valuation of inventories (see Note 10 "Inventories" below)
- Impairment of non-financial assets (see Note 18 "Impairment of Non-Financial Assets" below)
- Measurement of defined benefit obligations (see Note 24 "Employee Benefits" below)
- Recoverability of deferred tax assets (see Note 35 "Income Taxes" below)
- Impairment of financial assets measured at amortized cost (see note 37 "Financial Instruments" below)

5. Accounting Standards or Interpretations Issued Not Yet Applied

None of the major IFRS standards and interpretations newly issued or amended by the date of approval of the Group's consolidated financial statements has a significant impact on the statements.

6. Segment Information

(1) Overview of reportable segments

The Group's business segments are components of the Group for which separate financial information is available and that are regularly reviewed by the Board of Directors (chief operating decision maker) to make decisions about management resources to be allocated to the segments and assess their performance.

The Group positions business sector distinguished by their products and services within its headquarters. Each business sector proposes comprehensive domestic and overseas strategies in addition to pursuing business expansion in its respective product and service area.

Comprehensively considering similarities such as the details of products and services and target markets, the four reportable segments (distinguished by products and services) that comprise the Group's operations without aggregating the business segments are: Mobility, Health Care, Food & Packaging, and Basic Materials. Business segments, which are not included in the reportable segments, are classified into "Others."

	Segments	Major products					
Reportable	Mobility	Elastomers, performance compounds, functional polymers, polypropylene compounds, and					
segments		comprehensive services regarding the development of automotive and industrial products					
		(Solution business)					
	Health Care	Vision care materials, nonwoven fabrics, dental materials, and personal care materials					
	Food & Packaging	Coating & engineering materials, performance films and sheets, and agrochemical products					
	Basic Materials	Ethylene, propylene, polyethylene, polypropylene, catalysts, phenols, purified terephthalic					
		acid, PET resin, polyurethane materials, and industrial chemical products					
Others	Others	Other related businesses, etc.					

Major products manufactured and sold by business segments are as follows:

(2) Methods to determine sales revenue, profit or loss, assets, and other items by reportable segment

The accounting methods by reportable business segment herein are generally the same as those described under Note 3 "Significant Accounting Policies."

Reportable segment income is presented in operating income before special items which stands for operating income or loss excluding non-recurring items (e.g., losses resulting from withdrawing from and downsizing businesses).

Intersegment transaction pricing and transfer pricing are negotiated and determined based on prevailing market prices.

(3) Information on sales revenue, profit or loss, assets, and other items by reportable segment

FY2021 (April 1, 2021 to March 31, 2022) Year ended March 31, 2022

					Millions of yer	۱ <u> </u>					
		Rep	oortable Segr	nent							
	Mobility	Healthcare	Food & Packaging	Basic Materials	Subtotal	Others (Note 1)	Total	Adjustment (Note 2)	Consolidated		
Sales revenue											
Sales revenue from											
external customers	¥411,622	¥164,544	¥235,167	¥786,330	¥1,597,663	¥ 15,025	¥1,612,688	¥ —	¥1,612,688		
Intersegment sales revenue	10,664	3,012	1,999	85,470	101,145	64,966	166,111	(166,111)	_		
Total	¥422,286	¥167,556	¥237,166	¥871,800	¥1,698,808	¥ 79,991	¥1,778,799	¥(166,111)	¥1,612,688		
Segment income											
(Operating income before											
special items)	¥ 49,015	¥ 19,789	¥ 26,557	¥ 75,153	¥ 170,514	¥ (1,157)	¥ 169,357	¥ (7,542)	¥ 161,815		
Segment assets	¥433,732	¥183,636	¥326,861	¥823,347	¥1,767,576	¥106,763	¥1,874,339	¥ 60,626	¥1,934,965		
Other items											
Depreciation and amortization Share of profit of investments accounted for using	¥ 21,184	¥ 10,709	¥ 11,395	¥ 34,643	¥ 77,931	¥ 5,675	¥ 83,606	¥ 616	¥ 84,222		
equity method	8,453	684	1,172	14,754	25,063	_	25,063	756	25,819		
		167	215					750			
Impairment loss	2,217	107	215	13,584	16,183	_	16,183		16,183		
Investments accounted for using equity method	26,767	12,168	1,857	71,119	111,911	21,246	133,157	_	133,157		
Capital expenditures (Note 3)	33,229	16,043	62,173	89,552	200,997	5,518	206,515	617	207,132		
	Thousands of U.S. dollars										
		Rep	oortable Segr	nent							
	Mobility	Healthcare	Food & Packaging	Basic Materials	Subtotal	Others (Note 1)	Total	Adjustment (Note 2)	Consolidated		
Sales revenue											
Sales revenue from											
external customers	\$3,363,200	\$1,344,424	\$1,921,456	\$6,424,789	\$13,053,869	\$122,763	\$13,176,632	\$ —	\$13,176,632		
Intersegment sales revenue	87,131	24,609	16,333	698,342	826,415	530,812	1,357,227	(1,357,227)	_		
Total	\$3,450,331	\$1,369,033	\$1,937,789	\$7,123,131	\$13,880,284	\$653,575	\$14,533,859	\$(1,357,227)	\$13,176,632		
Segment income											
(Operating income before											
special items)	\$ 400,482	\$ 161,688	\$ 216,987	\$ 614,045	\$ 1,393,202	\$ (9,453)	\$ 1,383,749	\$ (61,623)	\$ 1,322,126		
Segment assets	\$3,543,852	\$1,500,417	\$2,670,651	\$6,727,240	\$14,442,160	\$872,318	\$15,314,478	\$ 495,351	\$15,809,829		
Other items											
Depreciation and amortization	\$ 173,086	\$ 87,499	\$ 93,104	\$ 283,054	\$ 636,743	\$ 46,368	\$ 683,111	\$ 5,033	\$ 688,144		
Share of profit of investments accounted for using	,				, .	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	,	,		
equity method	69,066	5,589	9,576	120,549	204,780	—	204,780	6,177	210,957		
Impairment loss	18,114	1,364	1,757	110,990	132,225	_	132,225	_	132,225		
Investments accounted for											
using equity method	218,703	99,420	15,173	581,084	914,380	173,593	1,087,973	_	1,087,973		

Notes:

I. "Others" encompasses business segments not included in the reportable segments and includes other related businesses, etc.

2. The adjustment of negative ¥7,542 million for segment income includes corporate costs of negative ¥7,437 million, which are not allocated to each reportable segment, and elimination of intersegment transactions of negative ¥105 million. Corporate costs mainly comprise general and administrative expenses and research and development expenses for new businesses, which are not usually attributed to the reportable segments. In addition, the adjustment of ¥60,626 million for segment assets includes corporate assets of ¥217,361 million, which are not allocated to each reportable segment, and elimination of intersegment transactions of negative ¥156,735 million. Corporate assets mainly comprise the Company's surplus management funds (cash and deposits), long-term investment funds (investment securities), deferred tax assets, and assets of administrative departments.

3. Capital expenditures are related to property, plant and equipment, intangible assets, investment property, etc.

FY2020 (April 1, 2020 to March 31, 2021) Year ended March 31, 2021

					Millions of yer	ı			
		Rep	oortable Segn	nent					
	Mobility	Healthcare	Food & Packaging	Basic Materials	Total	Others (Note 1)	Total	Adjustment (Note 2)	Consolidated
Sales revenue									
Sales revenue from									
external customers	¥315,480	¥143,933	¥197,700	¥541,382	¥1,198,495	¥13,230	¥1,211,725	¥ —	¥1,211,725
Intersegment sales revenue	9,104	2,496	2,224	54,061	67,885	51,785	119,670	(119,670)	_
Total	¥324,584	¥146,429	¥199,924	¥595,443	¥1,266,380	¥65,015	¥1,331,395	¥(119,670)	¥1,211,725
Segment income									
(Operating income before special items)	¥ 30,177	¥ 19,852	¥ 21,989	¥ 19,642	¥ 91,660	¥ (1,045)	¥ 90,615	¥ (5,475)	¥ 85,140
Segment assets	¥346,837	¥199,251	¥253,218	¥606,146	¥1,405,452	¥80,790	¥1,486,242	¥ 71,883	¥1,558,125
Other items									
Depreciation and amortization	¥ 17,463	¥ 10,991	¥ 10,419	¥ 32,245	¥ 71,118	¥ 4,862	¥ 75,980	¥ 641	¥ 76,621
Share of profit of investments accounted for using									
equity method	1,999	(175)	272	3,482	5,578	_	5,578	411	5,989
Impairment loss	5,486	153	182	2,112	7,933	_	7,933	117	8,050
Investments accounted for using equity method	20,845	11,349	1,987	60,535	94,716	2,793	97,509	_	97,509
Capital expenditures (Note 3)	21,136	9,582	13,485	39,376	83,579	9,156	92,735	435	93,170

Notes:

1. "Others" encompasses business segments not included in the reportable segments and includes other related businesses, etc.

2. The adjustment of negative ¥5,475 million for segment income includes corporate costs of negative ¥5,506 million, which are not allocated to each reportable segment, and elimination of intersegment transactions of ¥31 million. Corporate costs mainly comprise general and administrative expenses and research and development expenses for new businesses, which are not usually attributed to the reportable segments. In addition, the adjustment of ¥71,883 million for segment assets includes corporate assets of ¥230,719 million, which are not allocated to each reportable segment, and elimination of intersegment transactions of negative ¥158,836 million. Corporate assets mainly comprise the Company's surplus management funds (cash and deposits), long-term investment funds (investment securities), deferred tax assets, and assets of administrative departments.

3. Capital expenditures are related to property, plant and equipment, intangible assets, investment property, etc.

Adjustments from segment income to income before income taxes are as follows:

	Millions of yen		Thousands of U.S. dollars
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Segment income	¥161,815	¥85,140	\$1,322,126
Gain on bargain purchase	7,246	_	59,204
Impairment losses	(16,183)	(8,050)	(132,225)
Loss on disposal of non current asset	(1,524)	(698)	(12,452)
Loss on related businesses	(5,616)	(3)	(45,886)
Others	1,572	1,685	12,844
Operating income	147,310	78,074	1,203,611
Financial income	6,175	4,297	50,454
Financial expenses	(12,211)	(8,128)	(99,771)
Income before income taxes	¥141,274	¥74,243	\$1,154,294

(4) Geographical information

(i) Sales revenue

Sales revenue by region is as follows:

	Millions	Millions of yen	
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Japan	¥ 841,741	¥ 638,288	\$ 6,877,531
China	234,445	187,167	1,915,557
Asia	218,896	161,714	1,788,512
Americas	190,033	128,656	1,552,684
Europe	117,838	88,621	962,807
Other regions	9,735	7,279	79,541
Total	¥1,612,688	¥1,211,725	\$13,176,632

Notes:

Sales revenue is classified by country or region based on the locations of customers.
 Major countries and regions located in areas other than Japan and China are as follows:

(1) Asia: Taiwan, South Korea, Thailand, Malaysia, Singapore and India

(2) Americas: The United States, Mexico

(3) Europe: Germany, France

(4) Other regions: Oceania, Africa

(ii) Non-current assets

Components of non-current assets by region (excluding financial instruments, deferred tax assets, retirement benefit assets, etc.) are as follows:

	Millions of yen		Thousands of U.S. dollars
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Japan	¥516,565	¥430,276	\$4,220,647
Singapore	44,214	45,574	361,255
Asia	33,188	26,981	271,166
Other regions	49,310	48,358	402,892
Total	¥643,277	¥551,189	\$5,255,960

Notes:

1. Major countries and regions located in areas other than Japan and Singapore are as follows:

(1) Asia: China, Taiwan, South Korea, Thailand, Malaysia and India
 (2) Other regions: North America, Europe

2. Non-current assets are classified by country or region based on locations of assets.

(5) Information about main customer

	Millions of yen		Thousands of U.S. dollars
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Name	Mitsui & Co., Ltd.	Mitsui & Co., Ltd.	Mitsui & Co., Ltd.
Sales revenue	¥333,659	¥229,470	\$2,726,195
Related segments	Mobility, Health	Mobility, Health	Mobility, Health
	Care, Food &	Care, Food &	Care, Food &
	Packaging, Basic	Packaging, Basic	Packaging, Basic
	Materials, Others	Materials, Others	Materials, Others

7. Business Combination

Fiscal year ended March 31, 2022 (April 1, 2021–March 31, 2022)

(Acquisition of Honshu Chemical Industry Co., Ltd.)

(1) Outline of business combination

1 Name and description of acquired companies

Name of acquired company: Honshu Chemical Industry Co., Ltd. (hereinafter "Honshu Chemical") and two other companies Description of business: Manufacturing and selling various chemicals used as raw materials in high-performance resins such as liquid crystal polymers, special polycarbonate resins and special epoxy resins, electronic materials, pharmaceuticals and agricultural chemicals, etc.

2 Acquisition dateSeptember 16, 2021

- ③ Acquired ratio of holding capital with voting rights
 Ratio of voting rights owned at the beginning of the period: 27%
 Ratio of voting rights acquired through a series of procedures related to the tender offer: 24%
 Ratio of voting rights after acquisition: 51%
- 4 Primary reason for business combination

The Company believes Honshu Chemical possesses a range of high technologies in the field of high-performance monomers related to ICT, mobility, and healthcare, and has high growth potential. Viewing ICT as a key growth area in its management strategy, the Company acquired Honshu Chemical, having determined that the acquisition was in line with its management strategy of bolstering and expanding downstream businesses in its Basic Materials business segment. Going forward, the Company will promote collaboration between the Company and Honshu Chemical in product development and R&D, aiming to create new products and businesses through synergies between the two companies.

⑤ Acquisition method and type of consideration Acquisition of shares in exchange for a cash consideration

(2) Acquisition-date fair value of acquisition consideration

	Millions of yen As of March 31, 2022	Thousands of U.S. dollars
		As of March 31, 2022
Acquisition-date fair value of the equity interest held immediately before the acquisition date	¥ 5,766	\$47,112
Payment consideration (cash)	5,043	41,204
Fair value of acquisition consideration (total)	¥10,809	\$88,316

(3) Assets acquired, liabilities assumed, non-controlling interests, and gain on bargain purchase

	Millions of yen	Thousands of U.S. dollars As of March 31, 2022
	As of March 31, 2022	
Cash and cash equivalents	¥11,555	\$ 94,411
Trade receivables	5,226	42,700
Inventories	4,637	37,887
Property, plant and equipment	12,766	104,306
Intangible assets	4,520	36,931
Other assets	1,728	14,119
Trade payables	(2,346)	(19,168)
Other liabilities	(8,875)	(72,515)
Fair value (net) of assets acquired and liabilities assumed	29,211	238,671
Non-controlling interests	16,247	132,748
Gain on bargain purchase	¥ (2,155)	\$ (17,608)

Notes:

1. Non-controlling interests are calculated as the ratio of non-controlling interests to the fair value of identifiable net assets of the acquired company.

2. Because the fair value measurement of assets acquired and liabilities assumed had not been completed at the end of the third quarter, the fair value was calculated provisionally. However, purchase price allocation was completed at the end of the fiscal year ended March 31, 2022. The amounts of gain on bargain purchase have been revised accordingly as follows:

	Millions of yen	Thousands of U.S. dollars
	As of March 31, 2022	As of March 31, 2022
Gain on bargain purchase (before revision)	¥ (104)	\$ (850)
Increase in property, plant and equipment	(2,595)	(21,203)
Increase in intangible assets	(4,496)	(36,735)
Increase in non-controlling interests	3,110	25,411
Others	1,930	15,769
Gain on bargain purchase (after revision)	¥(2,155)	\$(17,608)

3. The gain on bargain purchase of ¥2,155 million was generated by the business combination because the fair value of the acquired net assets exceeded the acquisition consideration. The amount is recorded in "Other operating income" in the consolidated statements of income.

(4) Acquisition-related costs

The ¥262 million in acquisition-related costs incurred for the business combination are recorded under "Selling, general and administrative expenses" in the consolidated statements of income.

(5) Difference between acquisition cost of the acquired company and sum of acquisition costs for each transaction leading up to the acquisition

Before the acquisition date, the Company held shares of the acquired company, which was accounted for using the equity method as an associate of the Company.

The Company remeasured the equity interests of the acquired company held just prior to the acquisition date at fair value on the acquisition date, but the impact on earnings was immaterial.

(6) Impact on the business performance of the Group

Revenues and net income attributable to the acquired company from the acquisition date are not disclosed because the amounts were immaterial.

In addition, earnings information assuming that the business combination was carried out at the beginning of the period is not disclosed because the amounts were immaterial. Related proforma information has not been audited.

(Share Acquisition of Polyurethane Raw Materials Business Subsidiaries and Jointly Controlled Companies due to Dissolution of Joint Venture)

(1) Outline of business combination

- ① Names, description of business of acquired companies and acquired ratio of holding capital with voting rights
 - (i) Tianjin Cosmo Polyurethane Co., Ltd.
 Description of business: Manufacturing and selling polyurethane raw materials Acquired ratio of holding capital with voting rights: 100%
 - (ii) Thai Mitsui Specialty Chemicals Co., Ltd. Description of business: Manufacturing and selling polyurethane raw materials Acquired ratio of holding capital with voting rights: 52%
 - (iii) Foshan Mitsui Chemicals Polyurethanes Co., Ltd.
 - Description of business: Manufacturing and selling polyurethane raw materials
 - Acquired ratio of holding capital with voting rights: 100%
 - (iv) PT. Mitsui Chemicals Polyurethanes Indonesia
 - Description of business: Manufacturing and selling polyurethane raw materials
 - Acquired ratio of holding capital with voting rights: 81%
 - (v) Mitsui Chemicals Polyurethanes Malaysia Sdn. Bhd.
 Description of business: Manufacturing and selling polyurethane raw materials
 - Acquired ratio of holding capital with voting rights: 51%

In addition to the above, the Company acquired the shares of two joint ventures which are accounted for using the equity method.

In addition, as part of the dissolution of the joint venture agreement, the Company assumed the polyurethane raw materials manufacturing, sales, and research businesses of Mitsui Chemicals & SKC Polyurethanes Inc. Japan.

Acquisition date

Share acquisition due to dissolution of joint venture: December 23, 2021 Business transfer due to dissolution of joint venture: January 1, 2022

3 Primary reason for business combination

The Company and SKC Co., Ltd. (hereinafter "SKC") established Mitsui Chemicals & SKC Polyurethanes Inc. (hereinafter "MCNS") in July 2015 as a joint venture for their operations in polyurethane raw materials.

However, over this period, discrepancies gradually started to arise between the Company's policy of steadily improving earnings through its high-performance products and bio-products and SKC's policy of quickly expanding its global market in scale.

It has now been determined that if both companies are to further develop and grow their businesses, it would be beneficial for each party to run its own operations in line with its specific strategy. The decision to dissolve the current partnership then followed from this. The Company decided to receive transfer of the business in Japan of MCNS-J, a consolidated subsidiary of MCNS.

④ Acquisition method and type of consideration

Share acquisition and business transfer in exchange for a cash consideration.

The amount of investment in MCNS, which was accounted for using the equity method, has been transferred to assets held for sale in line with the loss of joint control. For details, please refer to Note 13 "Assets Held for Sale."

(2) Acquisition-date fair value of acquisition consideration

	Millions of yen As of March 31, 2022	Thousands of U.S. dollars
		As of March 31, 2022
Acquisition-date fair value of the equity interest held immediately before the acquisition date	¥ 3,304	\$ 26,995
Payment consideration (cash)	50,530	412,861
Fair value of acquisition consideration (total)	¥53,834	\$439,856

In the fiscal year ending March 31, 2023, the Company plans to receive a refund of its equity interest in MCNS through a paid-in capital reduction. The acquisition consideration is expected to change accordingly.

(3) Assets acquired, liabilities assumed, non-controlling interests, and gain on bargain purchase

	Millions of yen	Thousands of U.S. dollars As of March 31, 2022
	As of March 31, 2022	
Cash and cash equivalents	¥ 4,098	\$ 33,483
Trade receivables	19,304	157,725
Inventories	11,197	91,486
Property, plant and equipment	6,461	52,790
Investment accounted for using the equity method	45,322	370,308
Other assets	2,987	24,406
Trade payables	(18,935)	(154,710)
Other liabilities	(7,898)	(64,531)
Fair value (net) of assets acquired and liabilities assumed	62,536	510,957
Non-controlling interests	3,611	29,504
Gain on bargain purchase	¥ (5,091)	\$ (41,597)

Notes:

1. Non-controlling interests are calculated as the ratio of non-controlling interests to the fair value of identifiable net assets of the acquired companies.

2. Because the fair value measurement of assets acquired and liabilities assumed had not been completed at the end of the third quarter, fair value was calculated provisionally. However, purchase price allocation was completed at the end of the fiscal year ended March 31, 2022. In addition, on January 1, 2022, the Company assumed the polyurethane raw materials manufacturing, sales, and research businesses of Mitsui Chemicals & SKC Polyurethanes Inc. Japan. The amounts of gain on bargain purchase have been revised accordingly as follows:

	Millions of yen	Thousands of U.S. dollars As of March 31, 2022
	As of March 31, 2022	
Gain on bargain purchase (before revision)	¥ (6,220)	\$ (50,821)
Increase in acquisition consideration	10,694	87,376
Increase in trade receivables	(14,238)	(116,333)
Increase in inventories	(6,077)	(49,653)
Increased trade payables	14,791	120,851
Others	(4,041)	(33,017)
Gain on bargain purchase (after revision)	¥ (5,091)	\$ (41,597)

3. The gain on bargain purchase of ¥5,091 million was generated by the business combination because the fair value of the acquired net assets exceeded the acquisition consideration. The amount is recorded in "Other operating income" in the consolidated statements of income. The amount of goodwill expected to be deductible for tax purposes is ¥2,372 million.

(4) Acquisition-related costs

Of the ¥2,790 million in acquisition-related costs incurred for the business combination, the amount related to consolidated subsidiaries is recorded under "Selling, general and administrative expenses" in the consolidated statements of income. The amount related to associates accounted for using the equity method is included in the share acquisition cost.

(5) Difference between acquisition cost of the acquired company and sum of acquisition costs for each transaction leading up to the acquisition

The Company remeasured the equity interests of the acquired company held just prior to the acquisition date at fair value on the acquisition date, but the impact on earnings was immaterial.

(6) Impact on the business performance of the Group

Revenues and net income attributable to the acquired company from the acquisition date are not disclosed because the amounts were immaterial.

In addition, earnings information assuming that the business combination was carried out at the beginning of the period is not disclosed because the amounts were immaterial. Related proforma information has not been audited.

(Acquisition of Shares in a subsidiaries of Meiji Seika Pharma's Agrochemicals Business by Mitsui Chemicals Agro)

- (1) Outline of business combination
- ① Name and description of acquired companies and description of business Name of acquired companies: MMAG Co., Ltd. and two other companies Description of business: R&D, manufacturing and selling of agrochemicals
- Acquisition date January 4, 2022
- 3 Acquired ratio of holding capital with voting rights: 100%
- ④ Primary reason for business combination

Integrating Meiji Seika Pharma's agrochemicals business portfolio of active ingredients, domestic and international customer base and drug discovery, formulation, and natural product technologies with that of Mitsui Chemicals Agro, Inc. will enable the Company's subsidiary to enhance its presence in the Japanese market and speed up its expansion into agrochemical markets overseas, where future growth is anticipated. The move will also help bolster Mitsui Chemicals Agro's ongoing creation of new active ingredients along with its development of products that meet the needs of the market, promising then to accelerate the fulfillment of Mitsui Chemicals Agro's growth strategy and, more broadly, the Company's Long-Term Business Plan.

⑤ Acquisition method and type of consideration Acquisition of shares for a cash consideration

(2) Fair value of the acquisition consideration as of the acquisition date

	Millions of yen	Thousands of U.S. dollars
	As of March 31, 2022	As of March 31, 2022
Consideration paid (cash)	¥41,240	\$336,956
Fair value of acquisition consideration (total)	¥41,240	\$336,956

The actual acquisition consideration may change due to future price adjustments and other factors.

(3) Assets acquired, liabilities assumed, and goodwill

	Millions of yen	Thousands of U.S. dollars As of March 31, 2022
	As of March 31, 2022	
Cash and cash equivalents	¥ 745	\$ 6,087
Trade receivables	1,746	14,266
Inventories	4,175	34,112
Property, plant and equipment	3,452	28,205
Intangible assets	15,395	125,786
Other assets	5,946	48,582
Trade payables	(968)	(7,909)
Other liabilities	(6,033)	(49,292)
Fair value (net) of assets acquired and liabilities assumed	24,458	199,837
Goodwill	¥16,782	\$137,119

Notes:

1. Intangible assets consist mainly of technology assets of ¥5,275 million, customer-related assets of ¥3,196 million, and license agreements of ¥6,923 million. Fair value of these assets is measured by outside specialists, who identify and measure identifiable assets acquired and liabilities assumed (purchase price allocation) and calculate the fair value using a valuation model based on an income-approach method. The valuation model uses inputs such as future business plans and discount rates. Because the acquired agrochemicals company is an R&D type business, determination of future cash flows includes major assumptions by management, such as R&D periods, the timing of license registration, and sales prospects after registration. These assumptions may be affected by changes in uncertain economic conditions, including the impact of the COVID-19 pandemic. In addition, the selection of input data used to calculate the weighted average cost of capital before tax, which is the discount rate, the distribution amount of identifiable intangible assets, and determinations of their useful life include management judgments and estimates. If the actual situation differs from these estimates, this could have a significant impact on amounts recognized in the consolidated financial statements for the following fiscal year.

2. Goodwill consists mainly of synergies with existing businesses and excess earnings power expected from acquisitions that individually do not meet requirements for identification. The amount of goodwill expected to be deductible for tax purposes is ¥31,469 million.

(4) Costs related to acquisitions

Costs related to acquisitions for the business combinations are ¥291 million, the entirety of which is recorded in "Selling, general and administrative expenses" in the consolidated statements of income.

(5) Impact on operating performance of the Group

Revenues and net income attributable to the acquired company from the acquisition date are not disclosed because the amounts were immaterial.

In addition, earnings information assuming that the business combination was carried out at the beginning of the period is not disclosed because the amounts were immaterial. Related proforma information has not been audited.

8. Cash and Cash Equivalents

The breakdown of cash and cash equivalents is as follows:

Millions	Thousands of U.S. dollars	
As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
¥179,754	¥193,585	\$1,468,698
1,398	2,402	11,423
¥181,152	¥195,987	\$1,480,121
	As of March 31, 2022 ¥179,754 1,398	March 31, 2022 March 31, 2021 ¥179,754 ¥193,585 1,398 2,402

The balance of cash and cash equivalents in the consolidated statements of financial position matches the balance of cash and cash equivalents in the consolidated statements of cash flows.

9. Trade Receivables

The breakdown of trade receivables is as follows:

	Millions	Thousands of U.S. dollars	
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Notes receivable—trade	¥ 13,205	¥ 10,944	\$ 107,893
Accounts receivable—trade	358,482	276,360	2,929,014
Allowance for doubtful accounts	(1,261)	(1,458)	(10,304)
Total	¥370,426	¥285,846	\$3,026,603

Trade receivables are classified as financial assets measured at amortized cost.

10. Inventories

The breakdown of inventories is as follows:

	Millions	Thousands of U.S. dollars	
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Merchandise and finished goods	¥243,898	¥168,510	\$1,992,794
Work in process	9,409	7,483	76,877
Raw materials and supplies	115,702	82,821	945,355
Total	¥369,009	¥258,814	\$3,015,026

Inventories are recognized at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated selling costs. Inventories held by the Group tend to be affected by the economic environment, which is characterized by significant price fluctuations. As a result, losses may occur if the market environment deteriorates more than expected and the net realizable value drops significantly.

Write-downs of inventories recognized as expenses for the fiscal years ended March 31, 2022 and March 31, 2021 were ¥13,166 million and ¥13,389 million, respectively.

11. Other Financial Assets

The breakdown of other financial assets is as follows:

(1) Breakdown

	Millions	Thousands of U.S. dollars	
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Financial assets measured at amortized cost			
Accounts receivable—other	¥ 44,632	¥27,705	\$ 364,670
Bonds	10,569	9,561	86,355
Lease receivables	2,477	2,812	20,239
Loans receivable	3,413	3,597	27,886
Others	9,199	8,678	75,161
Allowance for doubtful accounts	(12,867)	(5,260)	(105,130)
Financial assets measured at fair value through profit or loss			
Shares and investments	2,861	2,368	23,376
Derivative assets	589	170	4,812
Equity instruments measured at fair value through other comprehensive income			
Shares and investments	38,380	35,008	313,588
Total	99,253	84,639	810,957
Current assets	43,496	27,176	355,389
Non-current assets	55,757	57,463	455,568
Total	¥ 99,253	¥84,639	\$ 810,957

(2) Equity instruments measured at fair value through other comprehensive income

The Company designates shares held for the main purpose of maintaining and strengthening transactions or business relationships as equity instruments measured at fair value through other comprehensive income.

(i) Major equity instruments at fair value

Fair values by major issues are as follows:

As of March 31, 2022

Issue	Millions of yen	Thousands of U.S. dollars
Iharabras, S.A	¥6,723	\$54,931
Japan Saudi Arabia Methanol Company	3,781	30,893

As of March 31, 2021

lssue	Millions of yen
Iharabras, S.A	¥4,341
Japan Saudi Arabia Methanol Company	3,534

(ii) Derecognition of equity instruments measured at fair value through other comprehensive income

The Company sold and derecognized a part of equity instruments measured at fair value through other comprehensive income, primarily to increase asset efficiency and make more effective use of its assets.

Fair value and cumulative gains or losses (before income taxes) when such equity instruments were sold are as follows:

	Millions	Millions of yen		
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022	
Fair value	¥2,840	¥433	\$23,205	
Cumulative gains or losses	1,294	92	10,573	

Cumulative gains or losses (after income taxes) recognized in other components of equity were transferred to retained earnings when such equity instruments were sold.

(iii) Dividend income

Dividend income recognized from equity instruments measured at fair value through other comprehensive income are as follows:

	Millions of yen		Thousands of U.S. dollars	
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022	
Derecognized investments during the reporting period	¥ 24	¥ 3	\$ 196	
Investments held at year-end	1,216	885	9,936	
Total	¥1,240	¥888	\$10,132	

12. Other Assets

The breakdown of other assets are as follows:

	Millions	Millions of yen		
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022	
Current assets				
Prepaid expenses	¥ 5,957	¥ 5,041	\$ 48,672	
Consumption taxes receivable	13,209	2,306	107,925	
Income taxes receivable	2,717	2,786	22,200	
Others	5,375	5,097	43,917	
Total	¥27,258	¥15,230	\$222,714	
Non-current assets				
Prepaid employee benefits	2,932	3,269	23,956	
Long-term prepaid expenses	751	848	6,136	
Others	1,142	1,089	9,330	
Total	¥ 4,825	¥ 5,206	\$ 39,422	

13. Assets Held for Sale

The breakdown of assets held for sale and liabilities directly associated with assets held for sale are as follows:

	Millions	Thousands of U.S. dollars	
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Assets held for sale			
Trade receivables	¥ —	¥ 120	\$ —
Inventories	_	896	—
Property, plant and equipment	_	2,735	—
Other financial assets	42,104	_	344,015
Others	—	768	_
Total	¥42,104	¥4,519	\$344,015
Liabilities directly associated with assets held for sale			
Trade and other payables	¥ —	¥ 65	\$ —
Others	—	477	_
Total	¥ —	¥ 542	\$ —

At the Board of Directors meeting held on September 29, 2021, it was decided to dissolve the joint venture agreement establishing Mitsui Chemicals & SKC Polyurethanes Inc. (MCNS) as a joint venture integrating the polyurethane raw materials operations of the Company and SKC Co., Ltd. On the same day, a contract was formed regarding the dissolution of the joint venture. Consequently, the remaining investment balance in MCNS, which was accounted for using the equity method in the Basic Materials segment, was reclassified into assets held for sale in the fiscal year ended March 31, 2022. In addition, the Company ceased applying the equity method at that point, and began measuring the assets using the carrying amount or fair value less the cost of sale, whichever is lower. The Company plans to receive a refund of its equity interest in MCNS through a paid-in capital reduction within a year from the fiscal year-end.

The Company entered into a contract to transfer its 100% interest in Mitsui Chemicals Nonwovens (Tianjin) Co., Ltd. (MCNT), a manufacturer and distributor of non-woven fabrics for protective materials based in China, which was included in the Health Care segment, to a third party. As a result, in the fiscal year ended March 31, 2021, assets and liabilities related to MCNT were reclassified into assets held for sale and liabilities directly associated with assets held for sale. The assets and liabilities were sold within a year from the fiscal year ended March 31, 2021.

The assets held for sale are measured at fair value less the cost of sale. Fair value is calculated based on price negotiations with the buyer, among other factors, and the fair value measurement is categorized within Level 3 of the fair value hierarchy. The fair value hierarchy is described in Note 37 "Financial Instruments (7) Fair value of financial instruments."

14. Property, Plant and Equipment

(1) Change in property, plant and equipment

The acquisition cost, changes in accumulated depreciation and impairment, and carrying amount of property, plant and equipment are as follows:

(i) Acquisition cost

	Millions of yen					
	Land	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Construction in progress	Total
Balance as of April 1, 2020	¥149,605	¥376,073	¥1,121,802	¥74,269	¥ 31,727	¥1,753,476
Acquisition	34	304	1,455	516	68,244	70,553
Acquisition through business combinations	167	44	243	6	9	469
Sale or disposal	(11)	(3,285)	(30,215)	(3,147)	(274)	(36,932)
Transfer	79	7,762	45,298	3,523	(60,222)	(3,560)
Exchange differences on translation of foreign operations	11	1,359	4,029	573	193	6,165
Others	(1)	102	1,244	(44)	(1,614)	(313)
Balance as of March 31, 2021	¥149,884	¥382,359	¥1,143,856	¥75,696	¥ 38,063	¥1,789,858
Acquisition	1	477	2,446	630	115,898	119,452
Acquisition through business combinations	5,416	10,728	47,413	2,409	2,860	68,826
Sale or disposal	(1,844)	(8,794)	(40,147)	(3,269)	(591)	(54,645)
Transfer	1,757	14,457	80,283	4,623	(102,568)	(1,448)
Exchange differences on translation of foreign operations	107	5,081	18,393	1,071	495	25,147
Others	1	(274)	(380)	(26)	(593)	(1,272)
Balance as of March 31, 2022	¥155,322	¥404,034	¥1,251,864	¥81,134	¥ 53,564	¥1,945,918

		Thousands of U.S. dollars				
	Land	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Construction in progress	Total
Balance as of March 31, 2021	\$1,224,643	\$3,124,103	\$ 9,345,992	\$618,482	\$ 310,998	\$14,624,218
Acquisition	8	3,897	19,985	5,147	946,958	975,995
Acquisition through business combinations	44,252	87,654	387,393	19,683	23,368	562,350
Sale or disposal	(15,067)	(71,852)	(328,025)	(26,710)	(4,829)	(446,483)
Transfer	14,356	118,122	655,960	37,773	(838,042)	(11,831)
Exchange differences on translation of foreign operations	874	41,515	150,282	8,751	4,044	205,466
Others	8	(2,238)	(3,104)	(212)	(4,847)	(10,393)
Balance as of March 31, 2022	\$1,269,074	\$3,301,201	\$10,228,483	\$662,914	\$ 437,650	\$15,899,322

(ii) Accumulated depreciation and impairment

_			Million	s of yen		
	Land	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Construction in progress	Total
Balance as of April 1, 2020	¥13,605	¥262,452	¥ 963,813	¥60,418	¥—	¥1,300,288
Depreciation and amortization	_	9,223	50,220	4,434	_	63,877
Impairment losses	273	589	2,172	68	_	3,102
Sale or disposal	_	(2,802)	(28,892)	(3,080)	_	(34,774)
Transfer	_	(655)	(2,434)	(71)	_	(3,160)
Exchange differences on translation of foreign operations	_	620	3,076	342	_	4,038
Others		(28)	867	(101)	—	738
Balance as of March 31, 2021	¥13,878	¥269,399	¥ 988,822	¥62,010	¥—	¥1,334,109
Depreciation and amortization	—	9,819	56,102	4,665	—	70,586
Impairment losses	36	3,628	9,015	335	—	13,014
Sale or disposal	(527)	(7,351)	(37,723)	(3,230)	—	(48,831)
Acquisition through business combinations	6	5,952	38,145	1,991	_	46,094
Transfer	_	27	418	14	—	459
Exchange differences on translation of foreign operations	_	2,410	13,947	814	_	17,171
Others	—	(96)	(572)	34	—	(634)
Balance as of March 31, 2022	¥13,393	¥283,788	¥1,068,154	¥66,633	¥—	¥1,431,968

	Thousands of U.S. dollars							
	Land	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Construction in progress	Total		
Balance as of March 31, 2021	\$113,392	\$2,201,152	\$8,079,271	\$506,659	\$—	\$10,900,474		
Depreciation and amortization	_	80,227	458,387	38,116	_	576,730		
Impairment losses	294	29,643	73,658	2,737	_	106,332		
Sale or disposal	(4,306)	(60,062)	(308,220)	(26,391)	_	(398,979)		
Acquisition through business combinations	49	48,631	311,668	16,268	_	376,616		
Transfer	_	221	3,415	114	_	3,750		
Exchange differences on translation of foreign operations	_	19,691	113,955	6,651	_	140,297		
Others	—	(784)	(4,673)	278	_	(5,179)		
Balance as of March 31, 2022	\$109,429	\$2,318,719	\$8,727,461	\$544,432	\$—	\$11,700,041		

(iii) Carrying amount

		Millions of yen					
	Land	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Construction in progress	Total	
Balance as of April 1, 2020	¥136,000	¥113,621	¥157,989	¥13,851	¥31,727	¥453,188	
Balance as of March 31, 2021	136,006	112,960	155,034	13,686	38,063	455,749	
Balance as of March 31, 2022	¥141,929	¥120,246	¥183,710	¥14,501	¥53,564	¥513,950	
			Thousands o	of U.S. dollars			
	Land	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Construction in progress	Total	
Balance as of March 31, 2022	\$1,159,645	\$982,482	\$1,501,022	\$118,482	\$437,650	\$4,199,281	

Depreciation of property, plant and equipment is included in "Cost of sales" and "Selling, general and administrative expenses" in the consolidated statements of income.

Expenditures incurred for property, plant and equipment under construction are stated as construction in progress.

(2) Borrowing costs

In the fiscal year ended March 31, 2022, borrowing costs arising from the acquisition of property, plant and equipment were capitalized as part of the acquisition cost, at ¥50 million, applying a 0.12% capitalization rate.

15. Leases

Lessees

The Group has entered into lease agreements as a lessee for land, buildings and other properties to use them mainly as an office and a site for a factory.

The Group does not enter into a lease agreement that has a material purchase option, escalation clauses, restrictions placed by the lease agreement (e.g., dividends, additional borrowings, restrictions on additional leases, etc.), variable lease payments, a termination option, and a residual value guarantee, or no lease transaction or sale and leaseback transaction has been started yet although the Group has entered into such lease agreement.

(1) Income or expenses and cash outflows associated with lease transactions

Income or expenses and cash outflows associated with lease transactions are as follows:

	Millions	of yen	Thousands of U.S. dollars
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Depreciation of right-of-use assets			
Land	¥ 753	¥ 788	\$ 6,152
Buildings and structures	6,993	6,660	57,137
Machinery and vehicles	1,112	1,124	9,086
Tools, furniture and fixtures	115	85	940
Total	8,973	8,657	73,315
Interest expense on lease liabilities	791	799	6,463
Expenses incurred for short-term leases and leases of low value	1,185	1,192	9,682
Total expenses associated with leases, net	1,976	1,991	16,145
Total of cash outflows associated with leases	¥10,729	¥10,083	\$87,662

(2) Right-of-use assets

The breakdown of the carrying amounts of right-of-use assets is as follows:

	Millions	Thousands of U.S. dollars	
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Right-of-use assets			
Land	¥ 6,314	¥ 6,534	\$ 51,589
Buildings and structures	28,535	31,746	233,148
Machinery and vehicles	4,476	7,735	36,572
Tools, furniture and fixtures	309	196	2,525
Total	¥39,634	¥46,211	\$323,834

Increases in right-of-use assets for the fiscal years ended March 31, 2021 and March 31, 2022 were ¥11,987 million and ¥6,973 million, respectively.

The maturity analysis of lease liabilities is described in Note 37 "Financial Instruments (4) Liquidity risk management."

(3) Extension options

The Group's lease agreements primary for land and buildings have extension options with which the lessee can extend a lease term.

The Group exercises the extension option as considering it necessary to do so by taking into overall account the profitability of relevant assets in the agreement, changes in neighboring market environments, conditions to exercise the option, and other factors, and only when such exercise is reasonably certain, the Group includes such extended period in the lease term and includes lease payments for the lease term in the measurement of lease liabilities.

The extendible period when the option is exercised and lease payments for the extendible period are generally same as or similar to the original contract term and lease payments.

The Group reviews the possibility of exercising the option to extend the lease every reporting period. The financial impact of this review for the fiscal years ended March 31, 2021 and March 31, 2022 is immaterial.

Lessors

The Group provides rental housing as a part of its benefits package for employees, and the transactions involved correspond to a sublease. Since the lease terms of the subleases and the lease terms of the head leases are deemed to be the same, such subleases are classified as finance leases. The total amount of uncollected lease investments is insignificant.

16. Goodwill and Intangible Assets

(1) Change in goodwill and intangible assets

The acquisition cost, changes in accumulated amortization and impairment, and carrying amount of goodwill and intangible assets are as follows:

(i) Acquisition cost

		Millions of yen						
	_			Intangib	e assets			
	Goodwill	Software	Patents and technology license	Customer value	Trademarks	Others	Total	
Balance as of April 1, 2020	¥24,782	¥48,660	¥15,255	¥15,140	¥ 9,693	¥6,387	¥ 95,135	
Acquisition	_	1,501	6	_	_	170	1,677	
Acquisitions through business combinations	523	_	223	83	43	_	349	
Sale or disposal		(1,268)	(101)	(51)	—	(111)	(1,531)	
Exchange differences on translation of foreign operations	1,880	208	399	633	682	32	1,954	
Others	(1,006)	(82)	(18)	(9)	19	9	(81)	
Balance as of March 31, 2021	¥26,179	¥49,019	¥15,764	¥15,796	¥10,437	¥6,487	¥ 97,503	
Acquisition	_	2,693	6,504	_	_	50	9,247	
Acquisitions through business combinations	16,782	62	13,212	6,678	_	_	19,952	
Sale or disposal	_	(1,124)	(22)	_	_	(488)	(1,634)	
Exchange differences on translation of foreign operations	3,034	435	660	1,024	695	228	3,042	
Others	(2)	600	30	19		(31)	618	
Balance as of March 31, 2022	¥45,993	¥51,685	¥36,148	¥23,517	¥11,132	¥6,246	¥128,728	

			Thous	ands of U.S. d	ollars					
				Intangib	le assets					
	Goodwill	Software	Patents and technology license	Customer value	Trademarks	Others	Total			
Balance as of March 31, 2021	\$213,898	\$400,515	\$128,801	\$129,063	\$85,277	\$53,002	\$ 796,658			
Acquisition	_	22,003	53,142	_	_	409	75,554			
Acquisitions through business combinations	137,119	507	107,950	54,563	_	_	163,020			
Sale or disposal	_	(9,184)	(180)	_	_	(3,987)	(13,351)			
Exchange differences on translation of foreign operations	24,790	3,554	5,393	8,367	5,678	1,863	24,855			
Others	(16)	4,903	245	155		(254)	5,049			
Balance as of March 31, 2022	\$375,791	\$422,298	\$295,351	\$192,148	\$90,955	\$51,033	\$1,051,785			

(ii) Accumulated amortization and impairment loss

			1	Villions of yen			
	_			Intangib	e assets		
	Goodwill	Software	Patents and technology license	Customer value	Trademarks	Others	Total
Balance as of April 1, 2020	¥23,306	¥40,627	¥10,587	¥ 9,890	¥4,298	¥4,974	¥70,376
Amortization	_	2,444	287	145	5	143	3,024
Impairment loss	1,006	47	_	3,675	_	147	3,869
Sale or disposal	_	(1,215)	(100)	(51)	_	(18)	(1,384)
Exchange differences on translation of foreign operations	1,857	187	205	596	338	25	1,351
Others	(1,113)	(268)	169	256	380	52	589
Balance as of March 31, 2021	¥25,056	¥41,822	¥11,148	¥14,511	¥5,021	¥5,323	¥77,825
Amortization	_	2,462	716	157	7	171	3,513
Impairment loss	_	47	49	_	_	_	96
Sale or disposal	_	(1,043)	(18)	_	_	(432)	(1,493)
Acquisitions through business combinations	_	30	_	_	_	_	30
Exchange differences on translation of foreign operations	2,956	359	448	746	350	129	2,032
Others	_	330	468	209	381	(4)	1,384
Balance as of March 31, 2022	¥28,012	¥44,007	¥12,811	¥15,623	¥5,759	¥5,187	¥83,387

			Thous	ands of U.S. d	ollars		
	_			Intangib	le assets		
	Goodwill	Software	Patents and technology license	Customer value	Trademarks	Others	Total
Balance as of March 31, 2021	\$204,723	\$341,711	\$ 91,086	\$118,564	\$41,025	\$43,491	\$635,877
Amortization	_	20,116	5,850	1,283	57	1,397	28,703
Impairment loss	_	384	400	_	_	_	784
Sale or disposal	_	(8,522)	(147)	_	_	(3,530)	(12,199)
Acquisitions through business combinations	_	245	_	_	_	_	245
Exchange differences on translation of foreign operations	24,152	2,933	3,660	6,095	2,860	1,055	16,603
Others	_	2,697	3,825	1,707	3,112	(32)	11,309
Balance as of March 31, 2022	\$228,875	\$359,564	\$104,674	\$127,649	\$47,054	\$42,381	\$681,322

(iii) Carrying amount

	Millions of yen								
	_			Intangib	le assets				
	Goodwill	Software	Patents and technology license	Customer value	Trademarks	Others	Total		
Balance as of April 1, 2020	¥ 1,476	¥8,033	¥ 4,668	¥5,250	¥5,395	¥1,413	¥24,759		
Balance as of March 31, 2021	1,123	7,197	4,616	1,285	5,416	1,164	19,678		
Balance as of March 31, 2022	¥17,981	¥7,678	¥23,337	¥7,894	¥5,373	¥1,059	¥45,341		

		Thousands of U.S. dollars							
		Intangible assets							
	Goodwill	Software	Patents and technology license	Customer value	Trademarks	Others	Total		
Balance as of March 31, 2022	\$146,916	\$62,734	\$190,677	\$64,499	\$43,901	\$8,652	\$370,463		

Amortization is included in "Cost of sales" and "Selling, general and administrative expenses" in the consolidated statements of income. There are no significant internally generated intangible assets for each reporting period.

The carrying amounts of intangible assets with indefinite useful lives as of March 31, 2021 and March 31, 2022 were ¥689 million and ¥757 million, respectively.

Among those, major intangible assets are the trademarks of SDC Technologies, Inc. belonging to the Health Care business segment.

As these trademarks basically exist as long as the entity's business continues, the Group determined that their useful lives are indefinite. The impairment tests for these assets are described in Note 18 "Impairment of Non-Financial Assets."

17. Investment Property

The carrying amount and fair value of investment property are as follows:

(1) Carrying amount

	Millions	of yen	Thousands of U.S. dollars	
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022	
Balance at beginning of period	¥23,222	¥23,250	\$189,738	
Acquisition		53	_	
Acquisitions through business combinations	336	_	2,745	
Sale or disposal	(1,137)	(81)	(9,290)	
Others	(875)	—	(7,149)	
Balance at end of period	¥21,546	¥23,222	\$176,044	
Accumulated depreciation		—	_	
Acquisition cost	¥21,546	¥23,222	\$176,044	

(2) Fair value

	Millions	Millions of yen	
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Fair value	¥21,759	¥23,895	\$177,784

The Group does not have contractual obligations to purchase, construct or develop investment property or those for repairs, maintenance or enhancements.

The fair value of investment property is mainly based on the valuation presented by an independent real estate appraiser using the discounted cash flow method or on the market transaction price of a similar asset. The fair value is categorized within Level 3 of the fair value hierarchy because it includes significant unobservable inputs. The fair value hierarchy is described in Note 37 "Financial Instruments (7) Fair value of financial instruments."

(3) Profit or loss of investment property

	Millions of yen		Thousands of U.S. dollars	
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022	
Rental income	¥ 585	¥ 619	\$4,780	
Direct operating expenses arising from investment property that generated rental income	(113)	(149)	(923)	

18. Impairment of Non-Financial Assets

The Group examines whether there are any indicators of impairment of non-financial assets (excluding inventories, deferred tax assets, assets related to retirement benefits, and assets held for sale) at the end of each fiscal year. If there are indicators of impairment, the Group estimates the recoverable amount of the asset or the cash-generating unit (CGU) to which the asset belongs. Assets provided for business use are categorized by entity, business sector, or similar unit. Of these, assets to be disposed of due to business withdrawal or other reason are assessed on an individual basis. Idle properties and properties not in use are also assessed on an individual basis.

The recoverable amount of the asset or CGU to which the asset belongs is the higher of the fair value less costs of disposal and the value in use.

The fair value less costs of disposal and the value in use are calculated by discounting the estimated future cash flow to the present value using the time value of money and the pre-tax discount rate that reflects the risks inherent in the asset. If it is not possible to estimate the recoverable amount for an individual asset, the recoverable amount is estimated for each CGU to which the asset belongs.

In calculating the fair value less costs of disposal and the value in use, certain assumptions are made regarding the useful life of the asset, future cash flow discount rate, growth rate, and other factors.

These assumptions are determined by management's best estimates and judgments, but changes in uncertain future economic conditions, such as the impact of the COVID-19 pandemic or the crisis in Ukraine on production activities and capital spending among customers may affect these assumptions. If such assumptions have to be revised, this could have a significant impact on amounts recognized in the consolidated financial statements for the following fiscal year.

Impairment loss for the fiscal years ended March 31, 2021 and March 31, 2022 was as follows. Impairment loss is included in "Other operating expenses" in the consolidated statements of income.

	Millions	Thousands of U.S. dollars	
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Property, plant and equipment			
Buildings and structures	¥ 3,628	¥ 589	\$ 29,643
Machinery and vehicles	9,015	2,172	73,658
Tools, furniture and fixtures	335	68	2,737
Land	36	273	294
Construction in progress	617	17	5,041
Right-of-use assets	2,452	55	20,034
Goodwill and Intangible assets	96	4,876	784
Other non-current assets	4	_	34
Total impairment losses	¥16,183	¥8,050	\$132,225

Major assets for which an impairment loss was recognized are as follows:

For the year ended March 31, 2022

				Millions of yen	Thousands of U.S. dollars
Use	Location	Asset category	Reportable segment	Impairment loss	Impairment loss
Production facilities	Oomuta City, Fukuoka Prefecture, Japan	Machinery and vehicles	Basic Materials	¥13,267	\$108,399
Production facilities	Netherlands	Machinery and vehicles	Mobilty	1,507	12,313
			Others	1,409	11,513
			Total	¥16,183	\$132,225

Breakdown of impairment loss

• Production facilities in Oomuta City, Fukuoka Prefecture, Japan

In the polyurethane raw materials business, the Group ships tolylene diisocyanate (TDI), a raw material, to markets in Japan and overseas. Highly volatile export prices make overseas sales revenue forecasts for this product difficult. Meanwhile, soaring crude oil prices are driving up manufacturing costs of naphtha, the main raw material in polyurethane, as well as of various other raw materials and utilities. Costs related to maintenance of production facilities and other costs are also increasing. The Group thus anticipated that production of this raw material would generate an ongoing operating loss for the following fiscal year, and judged that there were indications of impairment in the relevant asset group. The carrying amount was thus reduced to the recoverable amount. The recoverable amount is measured by value in use, but given that future cash flows are negative, the amount was assessed at zero.

Determination of future cash flows is based on the business plan approved by management. The business plan includes major assumptions by management, such as the sales prices and manufacturing costs of TDI in Japan and overseas. These assumptions may be affected by changes in uncertain economic conditions, including the impact of long-term oil price increases brought about by the crisis in Ukraine.

• Production facilities in the Netherlands

The Group impaired these business assets by reducing the carrying amount to the recoverable amount because the profitability of these assets became significantly lower due to the deteriorating market environment, and a return could no longer be expected. The recoverable amount was measured at the value in use calculated by discounting the future cash flows with a weighted average cost of capital before tax of 10.3%.

Individually immaterial impairment loss other than those above is mainly on property, plant and equipment, such as buildings and structures, machinery and equipment, and intangible assets for business activities. The Group recorded such impairment loss because the recoverable amount became lower than the carrying amount as the expected return became low.

For the year ended March 31, 2021

Use	Location	Asset category	Reportable segment	Millions of yen
Goodwill and Intangible assets	—	Goodwill and Intangible assets	Mobilty	¥4,868
Production facilities	Iwakuni City, Yamaguchi Prefecture,	Machinery and vehicles	Basic Materials	
	Japan			1,954
			Others	1,228
			Total	¥8,050

Breakdown of impairment loss

ARRK Group goodwill and intangible assets

The Group impaired the goodwill and intangible assets related to ARRK Group by reducing the carrying amount to the recoverable amount, because of the deterioration of profitability due to a decrease in the number of development projects amid weak corporate earnings in the automotive industry and the manufacturing industry in general. The recoverable amount was measured at the value in use calculated by discounting the future cash flows with a weighted average cost of capital before tax of 14.1%.

Cash flow used to calculate value in use is calculated on the basis of the Company's five-year business plan leading up to the fiscal year ending March 31, 2026, which includes the expansion of market share by means of a reinforced management system, development of human resources, and new processing technology achieved through research and development on new materials processing, and is estimated based on terminal value in the fiscal year ending March 31, 2027 and after. The business plan includes major assumptions by management, such as prospects for the recovery of existing businesses and for the acquisition of new development projects, based on factors such as the development budgets of automobile and home appliance manufacturers, demand forecasts based on model change cycles, and other factors. These assumptions may be affected by changes in uncertain economic conditions, including the impact of the COVID-19 pandemic.

• Production facilities in Iwakuni City, Yamaguchi Prefecture, Japan

The Group impaired these business assets by reducing the carrying amount to the recoverable amount because the profitability of these assets became significantly lower due to the deteriorating market environment, and a return could no longer be expected. The recoverable amount was assessed at zero, given that future cash flows will be negative.
The carrying amounts of goodwill to cash-generating units (groups of cash-generating units) are as follows. Because the balance of intangible assets with indefinite useful lives is not significant, it is omitted.

Goodwill

		Millions of yen	
Cash-generating units (Groups of cash-generating units)	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
MMAG Co. Ltd	¥16,782	¥ —	\$137,119
Others	1,199	1,123	9,797
Total	¥17,981	¥1,123	\$146,916
	(Groups of cash-generating units) MMAG Co. Ltd Others	Cash-generating unitsAs of March 31, 2022MMAG Co. Ltd¥16,782Others1,199	Cash-generating unitsAs ofAs of(Groups of cash-generating units)March 31, 2022March 31, 2021MMAG Co. Ltd¥16,782¥Others1,1991,123

Goodwill allocated to each cash-generating unit in the fiscal year ended March 31, 2022 primarily relates to MMAG Co. Ltd. The following impairment tests have been conducted for this goodwill.

Of the recoverable amounts of goodwill and intangible assets with indefinite useful lives allocated to groups of cash-generating units (CGUs), major amounts were measured at fair value less costs of disposal.

Fair value less costs of disposal is calculated by discounting estimated future cash flow to the present value based on a business plan approved by management, which was created reflecting past experience and external sources of information. In calculating the going concern value (terminal value) in excess of the business plan, the long-term average growth rate in the industry or country to which the CGU group belongs is taken into consideration, and the value is determined within a range that does not exceed this. The fair value measurement is categorized within Level 3 of the fair value hierarchy. The fair value hierarchy is described in Note 37 "Financial Instruments (7) Fair value of financial instruments."

If some or all of the carrying amount of goodwill is allocated across multiple CGU (groups of units), and the amount so allocated to each unit (group of units) is not significant in comparison with the entity's total carrying amount of goodwill, such carrying amount is aggregated in "Others."

Discount rates (weighted average cost of capital before tax) used to calculate the recoverable amounts are as follows:

		Millions of yen	
Reportable segment	Cash-generating units (Groups of cash-generating units)	As of March 31, 2022	As of March 31, 2021
Food & Packaging	MMAG Co. Ltd.	9.8%	_
Mobility	ARRK Group		14.1%

As the result of an impairment test, if the discount rate had increased by 1.0%, the recoverable amount of goodwill and intangible assets with indefinite useful lives associated with MMAG Co. Ltd. could have fallen below the carrying amount in the fiscal year ended March 31, 2022.

For goodwill and intangible assets with indefinite useful lives associated with other cash-generating units, the Group determined that any material impairment would be unlikely to occur in the cash-generating units even if the growth rate and discount rate used for the impairment tests changed within a reasonably foreseeable range.

19. Investments Accounted for Using the Equity Method

(1) Investments in associates

The carrying amount of investments in individually immaterial associates accounted for using the equity method are as follows:

	Millions of yen		Thousands of U.S. dollars
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Carrying amount of investments	¥44,812	¥30,782	\$366,141

The aggregate amounts of the Group's share of comprehensive income of investments in associates accounted for using the equity method are as follows:

	Millions of yen		Thousands of U.S. dollars
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Net income	¥6,478	¥2,460	\$52,929
Other comprehensive income	(98)	(45)	(801)
Comprehensive income	¥6,380	¥2,415	\$52,128

(2) Investments in joint ventures

(i) Material joint ventures

Material joint ventures for the Group are as follows:

			Percentage	of interests
Name	Major business	Location	As of March 31, 2022	As of March 31, 2021
Kumho Mitsui Chemicals	Manufacturing and sales of polyurethane materials	South Korea	50%	_
Shanghai Sinopec Mitsui Chemicals Co., Ltd.	Manufacturing and sales of phenols	China	50%	50%

The Group disclosed the summarized financial statements of Mitsui Chemicals & SKC Polyurethanes Inc. in the fiscal year ended March 31, 2021, but following the dissolution of the joint venture agreement with SKC Co., Ltd., the Group reclassified its shares of the company into assets held for sale in the fiscal year ended March 31, 2022 and ceased applying the equity method. For details, see Note 13 "Assets Held for Sale."

The Group disclosed the summarized financial statements of Kumho Mitsui Chemicals, which became a joint venture of the Group in the fiscal year ended March 31, 2022, due to its materiality in relation to the consolidated financial statements of the Group. The Group also disclosed the summarized financial statements of Shanghai Sinopec Mitsui Chemicals, Co., Ltd., because its materiality in relation to the consolidated financial statements of the Group increased in the fiscal year ended March 31, 2022.

Since it is not feasible to harmonize the reporting periods of both companies, the equity method is applied to the financial statements with a three-month difference in reporting period. These summarized financial statements also include a three-month difference in reporting period. In addition, these statements were prepared by adding reconciliations in line with both Group's accounting policies.

Kumho Mitsui Chemicals

Adjustments between the summarized financial statements of Kumho Mitsui Chemicals and the carrying amount of the investment are as follows.

	Millions of yen		Thousands of U.S. dollars
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Current assets	¥74,193	¥	\$606,201
Non-current assets	40,000	—	326,824
Current liabilities	28,958	_	236,604
Non-current liabilities	2,849	_	23,278
Total equity	82,386	_	673,143
Group interest in total assets	41,193	_	336,572
Consolidated adjustment within the Group	(113)	_	(923)
Carrying amount of investments	41,080	_	335,648
Material accounts included in above			
Cash and cash equivalents	2,800	_	22,878
Financial liabilities included in current liabilities	10,850	_	88,651
Financial liabilities included in non-current liabilities	¥ 1,413	¥—	\$ 11,545

	Millions of yen		Thousands of U.S. dollars
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Sales revenue	¥122,088	¥—	\$997,532
Net income(loss)	27,641	—	225,844
Other comprehensive income	80	_	653
Comprehensive income	27,721	—	226,497
Material accounts included in above			
Depreciation and amortization	(3,180)	_	(25,983)
Interest income	371	_	3,031
Interest expenses	(59)	_	(482)
Income tax expense	(10,168)	_	(83,079)
Dividends received by the Group	¥ 3,908	¥—	\$ 31,931

Shanghai Sinopec Mitsui Chemicals Co., Ltd.

The summarized financial statements of Shanghai Sinopec Mitsui Chemicals Co., Ltd. are as follows.

	Millions of yen		Thousands of U.S. dollars
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Current assets	¥31,717	¥ 5,382	\$259,147
Non-current assets	18,855	18,104	154,057
Current liabilities	5,787	3,230	47,283
Non-current liabilities	221	1,423	1,806
Total equity	44,564	18,833	364,115
Carrying amount of investments	22,282	9,417	182,057
Material accounts included in above			
Cash and cash equivalents	27,258	2,435	222,714
Financial liabilities included in current liabilities	1,559	2,481	12,738
Financial liabilities included in non-current liabilities	¥ 221	¥ 1,423	\$ 1,806

	Millions of yen		Thousands of U.S. dollars
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Sales revenue	¥78,596	¥37,837	\$642,177
Net income (loss)	21,825	6,144	178,323
Other comprehensive income	3,905	325	31,907
Comprehensive income	25,730	6,469	210,230
Material accounts included in above			
Depreciation and amortization	(2,231)	(2,414)	(18,229)
Interest income	216	37	1,765
Interest expenses	(30)	(431)	(245)
Income tax expense	(2,880)	(71)	(23,531)
Dividends received by the Group	¥ —	¥ —	\$ —

(ii) Individually immaterial joint ventures

The carrying amount of investments in individually immaterial joint ventures are as follows:

	Millions of yen		Thousands of U.S. dollars
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Carrying amount of investments	¥24,983	¥57,310	\$204,126

The amount of equity shares on comprehensive income of investments in individually immaterial joint ventures is as follows:

	Millions of yen		Thousands of U.S. dollars
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Net income	¥ 8,429	¥ 456	\$68,870
Other comprehensive income	2,083	(134)	17,019
Comprehensive income	¥10,512	¥322	\$85,889

Shanghai Sinopec Mitsui Chemicals Co., Ltd. was included in individually immaterial joint ventures in the fiscal year ended March 31, 2021. Because its materiality in relation to the Group has increased, the joint venture was excluded from the carrying amount of investments for the fiscal year ended March 31, 2021 and from the amounts of the Group's share of comprehensive income of investments in associates accounted for using the equity method for the fiscal year ended March 31, 2022. In addition, the Company ceased applying the equity method for Mitsui Chemicals & SKC Polyurethanes Inc. the fiscal year ended March 31, 2022, and included it in individually immaterial joint ventures for the fiscal year ended March 31, 2021.

The Group does not have unrecognized commitments relating to each joint venture that could result in the outflow of economic resources in the future.

20. Trade Payables

The breakdown of trade payables is as follows:

	Millions of yen		Thousands of U.S. dollars	
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022	
Notes payable—trade	¥ 1,074	¥ 897	\$ 8,775	
Accounts payable—trade	171,958	116,853	1,405,000	
Contract liabilities	1,812	1,962	14,806	
Total	¥174,844	¥119,712	\$1,428,581	

Trade payables are categorized as financial liabilities measured at amortized cost.

21. Bonds and Borrowings

The breakdown of bonds and borrowings is as follows:

		Thousands of U.S. dollars		
	As of March 31, 2022	Average interest rate (%)	As of March 31, 2021	As of March 31, 2022
Short-term borrowings	¥177,437	0.43%	¥112,182	\$1,449,767
Commercial papers	120,000	(0.04%)	50,000	980,472
Current portion of bonds payable	284	0.19%	10,432	2,320
Current portion of long-term borrowings	48,894	0.98%	44,106	399,493
Bonds payable	115,296	0.37%	80,580	942,038
Long-term borrowings (Note 3)	204,175	0.60%	212,916	1,668,233
Total	¥666,086	_	¥510,216	\$5,442,323
Current liabilities	346,615	_	216,721	2,832,053
Non-current liabilities	319,471	_	293,495	2,610,270
Total	¥666,086		¥510,216	\$5,442,323

Notes:

1. Bonds and borrowings are categorized as financial liabilities measured at amortized cost.

2. The weighted average interest rate on the outstanding balance as of March 31, 2022 is stated for the average interest rate.

3. Long-term borrowings will be due in 2023 through 2035.

The contractual terms of bonds are as follows:

			Millions	s of yen	Thousands of U.S. dollars			
Company name	lssue name	Date of issue	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022	- Interest rate (%)	Collatoral	Date of maturity
Mitsui Chemicals		July 28, 2011	¥ —	¥ 10,000	\$ _	1.354 / year		July 28, 2021
Inc.	Unsecured Corporate Bond	July 20, 2011	+ —	(10,000)	₽ —	1.5547 year	N/A	July 20, 202 I
	The 45th Unsecured Corporate Bond	July 24, 2017	5,000	5,000	40,853	0.26 / year	N/A	July 24, 2024
	The 46th Unsecured Corporate Bond	July 24, 2017	5,000	5,000	40,853	0.37 / year	N/A	July 23, 2027
	The 47h Unsecured Corporate Bond	June 19, 2018	10,000	10,000	81,706	0.26 / year	N/A	June 19, 2025
	The 48th Unsecured Corporate Bond	June 19, 2018	15,000	15,000	122,559	0.39 / year	N/A	June 19, 2028
	The 49th Unsecured Corporate Bond	June 19, 2018	10,000	10,000	81,706	0.9 / year	N/A	June 19, 2038
	The 50th Unsecured Corporate Bond	December 5, 2019	10,000	10,000	81,706	0.27 / year	N/A	December 5, 2029
	The 51st Unsecured Corporate Bond	December 5, 2019	10,000	10,000	81,706	0.68 / year	N/A	December 5, 2039
	The 52nd Unsecured Corporate Bond	December 2, 2020	15,000	15,000	122,559	0.13 / year	N/A	December 2, 2025
	The 53rd Unsecured Corporate Bond	June 16, 2021	15,000	_	122,559	0.09 / year	N/A	June 16, 2026
	The 54th Unsecured Corporate Bond	December 3, 2021	10,000	_	81,706	0.28 / year	N/A	December 3, 2031
	The 55th Unsecured Corporate Bond	December 3, 2021	10,000	_	81,706	0.68 / year	N/A	December 3, 2041
Mitsui Chemicals Tohcello, Inc.	The 7th Unsecured Straight Bond	October 24, 2014	—	148 (148)	—	0.49 / year	N/A	October 22, 2021
ARRK CORPORATION	The 1st Unsecured Corporate Bond	March 30, 2017	150 (70)	220 (70)	1,226 (572)	0.07 / year	N/A	March 29, 2024
	The 2nd Unsecured Corporate Bond	March 30, 2017	140 (72)	212 (72)	1,144 (588)	0.31 / year	N/A	March 29, 2024
	The 3rd Unsecured Corporate Bond	March 30, 2017	150 (70)	220 (70)	1,226 (572)	0.07 / year	N/A	March 29, 2024
	The 4th Unsecured Corporate Bond	March 30, 2017	140 (72)	212 (72)	1,143 (588)	0.31 / year	N/A	March 29, 2024
Total			115,580 ¥ (284)	91,012 ¥(10,432)	944,358 \$ (2,320)	_		

Note: The figures in brackets represent the current portion.

Assets pledged as collateral and secured debt are as follows:

Assets pledged as collateral

	Millions	Thousands of U.S. dollars	
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Inventories	¥ —	¥ 44	\$ —
Property, plant and equipment	1,036	1,204	8,465
Other financial assets	117	105	956
Total	¥1,153	¥1,353	\$9,421

Secured debt

	Millions	Thousands of U.S. dollars	
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Bonds and borrowings (current)	¥290	¥ 848	\$2,369
Other financial liabilities	28	16	229
Bonds and borrowings (non-current)	298	1,602	2,435
Total	¥616	¥2,466	\$5,033

22. Other Financial Liabilities

The breakdown of other financial liabilities is as follows:

	Millions	Thousands of U.S. dollars	
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Financial liabilities measured at amortized cost			
Accounts payable—other	¥116,603	¥ 74,272	\$ 952,717
Others	9,679	8,611	79,083
Financial liabilities measured at fair value through profit or loss			
Derivative liabilities	493	988	4,028
Lease liabilities	48,973	53,575	400,139
Others	1,157	14,518	9,453
Total	176,905	151,964	1,445,420
Current liabilities	127,608	84,242	1,042,634
Non-current liabilities	49,297	67,722	402,786
Total	¥176,905	¥151,964	\$1,445,420

23. Changes in Liabilities Arising from Financing Activities

Changes in liabilities arising from financing activities for the fiscal years ended March 31, 2021 and March 31, 2022 are as follows:

(i) For the year ended March 31, 2022

		Millions of yen					
			Nor	n-cash transactio	ons		
	Balance as of April 1, 2021	Cash flow	Business combinations	New leases	Foreign currency translation, etc.	Balance as of March 31, 2022	
Bonds payable (Note)	¥ 91,012	¥ 24,568	¥ —	¥ —	¥ —	¥115,580	
Commercial papers	50,000	70,000	_	_	_	120,000	
Short-term borrowings	112,182	54,999	3,704	_	6,552	177,437	
Long-term borrowings (Note)	257,022	(5,277)	_	_	1,324	253,069	
Lease liabilities	53,575	(9,637)	1,414	7,004	(3,383)	48,973	
Total	¥563,791	¥134,653	¥5,118	¥7,004	¥4,493	¥715,059	

	Thousands of U.S. dollars					
			Nor	n-cash transactio	ons	
	Balance as of April 1, 2021	Cash flow	Business combinations	New leases	Foreign currency translation, etc.	Balance as of March 31, 2022
Bonds payable (Note)	\$ 743,623	\$ 200,735	\$ —	\$ —	\$ —	\$ 944,358
Commercial papers	408,530	571,942	—	_	_	980,472
Short-term borrowings	916,594	449,375	30,264	_	53,534	1,449,767
Long-term borrowings (Note)	2,100,025	(43,117)) —	_	10,818	2,067,726
Lease liabilities	437,740	(78,740)	11,553	57,227	(27,641)	400,139
Total	\$4,606,512	\$1,100,195	\$41,817	\$57,227	\$ 36,711	\$5,842,462

Note: Current portions are included.

(ii) For the year ended March 31, 2021

		Millions of yen					
			Noi	n-cash transactio	ons		
	Balance as of April 1, 2020	Cash flow	Business combinations	New leases	Foreign currency translation, etc.	Balance as of March 31, 2021	
Bonds payable (Note)	¥ 86,438	¥ 4,574	¥ —	¥ —	¥ —	¥ 91,012	
Commercial papers	60,000	(10,000)	_	_	_	50,000	
Short-term borrowings	119,829	(8,498)	_	_	851	112,182	
Long-term borrowings (Note)	279,764	(23,421)	_	_	679	257,022	
Lease liabilities	53,357	(8,108)	283	12,222	(4,179)	53,575	
Total	¥599,388	¥(45,453)	¥283	¥12,222	¥(2,649)	¥563,791	

24. Employee Benefits

The Company and its major Japanese consolidated subsidiaries have established and maintained contract-type corporate pension plans and lump-sum retirement benefit plans as defined benefit plans. Some of its foreign consolidated subsidiaries also have established and maintained defined benefit plans. In addition, the Company and some of its Japanese consolidated subsidiaries have established and maintained defined contribution plans.

(1) Defined benefit plans

A retirement benefit trust has been set up for the plan assets of funded retirement benefit plans.

In contract-type corporate pension plans, the amount of benefits is calculated by the accumulated points mainly based on an occupational ability-based grading system and other similar systems.

In accordance with the Defined-benefit Corporate Pension Act, the Company has an obligation to make contributions to the Corporate Pension Fund (hereinafter the "Fund") that manages corporate pension plans.

A trustee manages plan assets in accordance with contract terms specified based on a management policy that resolved by the Board of Directors of the Company. The Fund developed a basic policy on the management of plan assets, developed management guidelines in line with the basic policy, and issued these documents to the trustee. This helps the trustee to fulfill its obligation to manage plan assets safely and efficiently.

The Company has an obligation to make contributions at the amount set by the Fund over the future years. The amount of contributions is regularly reviewed to the extent permitted by laws and regulations.

In addition to the pension plans above, employees are qualified for receiving a lump-sum retirement payment when leaving the Company for reasons other than dismissals. The amount of payment is calculated based on factors such as the accumulated points based on occupational ability-based grading system and other similar system at the time of retirement as well as a payment rate based on the number of years of service. If the reason to leave the Company is an involuntary termination or death, the amount of payment exceeds the one in case of voluntary termination.

Additionally, the Company may provide increased retirement payments to its employees when they retire.

The Group's major plans are exposed to actuarial risks such as investment risk, interest rate risk, and longevity risk.

(i) Assets and liabilities recognized in the consolidated statements of financial position

The amounts of assets and liabilities recorded in the consolidated statements of financial position for the defined benefit plans are as follows:

	Millions	Thousands of U.S. dollars	
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Present value of defined benefit obligations	¥ 168,895	¥ 170,289	\$ 1,379,974
Fair value of plan assets	(210,788)	(208,964)	(1,722,265)
Total	(41,893)	(38,675)	(342,291)
Amounts presented in the consolidated statements of financial position			
Retirement benefit liability	18,857	16,384	154,073
Retirement benefit asset	(60,750)	(55,059)	(496,364)
Net defined benefit liability/asset	¥ (41,893)	¥ (38,675)	\$ (342,291)

(ii) Present value of defined benefit obligations

Changes in present value of defined benefit obligations are as follows:

	Millions	Thousands of U.S. dollars	
-	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Balance at beginning of period	¥170,289	¥171,355	\$1,391,364
Current service cost	5,303	5,076	43,329
Interest expenses	1,026	1,019	8,383
Remeasurements of defined benefit plans			
Actuarial gains and losses arising from changes in demographic assumptions	78	267	637
Actuarial gains and losses arising from changes in financial assumptions	(249)	638	(2,034)
Actuarial gains and losses arising from experience adjustment	(1,832)	789	(14,969)
Payment of benefits	(10,220)	(9,636)	(83,504)
Effects of business combination and disposal	4,674	50	38,189
Others	(174)	731	(1,421)
Balance at end of period	¥168,895	¥170,289	\$1,379,974

The weighted average duration of defined benefit obligations of the Company and its major consolidated subsidiaries at March 31, 2021 and March 31, 2022 is 15 years.

Defined benefit obligations and service costs are calculated based on actuarial assumptions such as discount rates and mortality rates. Making such assumptions necessitates estimates and judgments. The discount rate is based on the market yield on high-quality corporate bonds, and the mortality rate used is the latest mortality rate released by the Ministry of Health, Labour and Welfare.

Actuarial assumptions are determined by management's best estimates and judgments, but may be affected by changes in uncertain economic conditions. If such assumptions have to be revised, this could have a significant impact on amounts recognized in the consolidated financial statements for the following fiscal year.

The significant actuarial assumptions used in determining the present value of defined benefit obligations are as follows:

	As of March 31, 2022	As of March 31, 2021
Discount rate	0.7%	0.6%

If actuarial assumptions change significantly, the impact on the present value of defined benefit obligations is as follows. Negative values indicate a decrease in defined benefit obligations, and positive values indicate an increase in defined benefit obligations:

		Impact on defined benefit obligations			
		Millions of yen		Thousands of U.S. dollars	
Assumptions	Changes in assumptions	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022	
Discount rate	0.5 percentage point increase	¥(7,746)	¥(8,504)	\$(63,289)	
	0.5 percentage point decrease	8,609	9,399	70,341	

The above analysis shows the impact on the defined benefit obligations when one of the significant actuarial assumptions changes to the extent reasonable with the assumption that all the rest of the actuarial assumptions are constant, however, another actuarial assumption change may impact the defined benefit obligations as well.

(iii) Fair value of plan assets

The Company developed a basic policy on the management of plan assets and continues to monitor compliance with and appropriateness of the policy to ensure adequate plan assets to provide pension benefits to pensioners in the future. Given the risk of plan assets, the Company also developed a standard portfolio to achieve expected returns. Based on the standard portfolio, the Company manages plan assets by making investments in shares and bonds. The Company examines every year a range of gaps between long-term expected returns on plan assets and actual returns in order to determine whether or not the Company needs to revise the standard portfolio. The Company reviews the standard portfolio as necessary to achieve the expected returns on plan assets.

Changes in the fair value of plan assets are as follows:

	Millions	Thousands of U.S. dollars	
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Balance at beginning of period	¥208,964	¥180,148	\$1,707,362
Interest income	1,358	1,039	11,096
Remeasurements of defined benefit plans			
Return on plan assets	1,094	34,197	8,939
Contributions by the employer	5,408	405	44,187
Benefits	(7,007)	(7,061)	(57,251)
Others	971	236	7,932
Balance at end of period	¥210,788	¥208,964	\$1,722,265

The Group plans to make contributions of ¥1,977 million in the fiscal year ending March 31, 2023.

The fair value of plan assets by asset category is as follows:

		Millions of yen				Thousands of U.S. dollars				
	A	s of March 31, 2	022	4	As of March 31, 20	21	A	As of March 31, 2022		
	With quoted market price in an active market	With no quoted market price in an active market	: Total	With quoted market price in an active market	With no quoted market price in an active market	Total	With quoted market price in an active market	With no quoted market price in an active market	Total	
Cash and cash equivalents	¥ 11,707	¥ —	¥ 11,707	¥ 6,105	¥ —	¥ 6,105	\$ 95,653	\$ —	\$ 95,653	
Equity instruments										
Shares issued by Japanese companies	64,195	_	64,195	69,980	_	69,980	524,512	_	524,512	
Shares issued by foreign companies	42,189	_	42,189	41,197	_	41,197	344,710	_	344,710	
Debt instruments										
Bonds issued by Japanese companies	2,669	_	2,669	2,845	_	2,845	21,807	_	21,807	
Bonds issued by foreign companies	56,536	_	56,536	57,916	_	57,916	461,933	_	461,933	
Others (Note 1)	170	33,322	33,492	217	30,704	30,921	1,389	272,261	273,650	
Total	¥177,466	¥33,322	¥210,788	¥178,260	¥30,704	¥208,964	\$1,450,004	\$272,261	\$1,722,265	

Notes: 1. "Others" mainly includes investments of fund of funds and equity long-short hedge funds.

(2) Defined contribution plans and public plans

Amounts recognized as expenses in defined contribution plans and public plans are as follows:

	Millions	ofyen	Thousands of U.S. dollars
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Expenses in defined contribution plans	¥924	¥838	\$7,550
Expenses in public plans	100	114	817

(3) Employee benefits expenses

The total amounts of employee benefits expenses (excluding ones for employees who are engaged on research and development) included in "Cost of sales" and "Selling, general and administrative expenses" in the consolidated statements of income for the fiscal years ended March 31, 2021 and March 31, 2022 were ¥150,848 million and ¥167,600 million, respectively.

25. Provisions

The breakdown of changes in provisions for the fiscal year ended March 31, 2022 is as follows:

		Millions of yen						
	Asset retirement obligations	Provision for environmental measures	Others	Total				
Balance as of April 1, 2021	¥2,678	¥295	¥1,882	¥4,855				
Increase during period	674	423	2,052	3,149				
Decrease during period (utilization)	_	(80)	(622)	(702)				
Decrease during period (reversal)	_	_	(82)	(82)				
Interest expense by discounting	48	_	_	48				
Others	241	_	16	257				
Balance as of March 31, 2022	3,641	638	3,246	7,525				
Current liabilities	_	420	2,054	2,474				
Non-current liabilities	3,641	218	1,192	5,051				
Total	¥3,641	¥638	¥3,246	¥7,525				

	Thousands of U.S. dollars						
	Asset retirement obligations	Provision for environmental measures	Others	Total			
Balance as of April 1, 2021	\$21,881	\$2,410	\$15,377	\$39,668			
Increase during period	5,507	3,456	16,766	25,729			
Decrease during period (utilization)	_	(653)	(5,083)	(5,736)			
Decrease during period (reversal)	_	_	(670)	(670)			
Interest expense by discounting	392	_	_	392			
Others	1,969	_	132	2,101			
Balance as of March 31, 2022	29,749	5,213	26,522	61,484			
Current liabilities	_	3,432	16,782	20,214			
Non-current liabilities	29,749	1,781	9,740	41,270			
Total	\$29,749	\$5,213	\$26,522	\$61,484			

The breakdown of changes in provisions for the fiscal year ended March 31, 2021 is as follows:

	Millions of yen						
	Asset retirement obligations	Provision for environmental measures	Others	Total			
Balance as of April 1, 2020	¥3,166	¥ 412	¥2,544	¥ 6,122			
Increase during period	184	1	709	894			
Decrease during period (utilization)	(642)	(118)	(833)	(1,593)			
Decrease during period (reversal)	(37)	_	(150)	(187)			
Interest expense by discounting	82	_	_	82			
Others	(75)	—	(388)	(463)			
Balance as of March 31, 2021	2,678	295	1,882	4,855			
Current liabilities	_	_	1,157	1,157			
Non-current liabilities	2,678	295	725	3,698			
Total	¥2,678	¥295	¥1,882	¥4,855			

Asset retirement obligations

Provisions for asset retirement obligations are mainly for dismantling and removal costs of plant facilities and offices held on land leased out to the Group overseas, to fulfill the obligation to restore the property to its original state. These expenses are mainly expected to be incurred after one year or longer from the lease; however, they are subject to the influence of a business plan or other aspects in the future.

Provision for environmental measures

The provision for environmental measures is an estimate of the total costs of equipment maintenance and treatment work related to measures to address soil pollution detected at the Company's manufacturing sites. Most of these costs are expected to be paid after a year or more, but this will be affected by future business plans.

26. Other Liabilities

The breakdown of other liabilities is as follows:

	Millions	Millions of yen		
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022	
Accrued bonuses	¥18,254	¥15,076	\$149,146	
Accrued paid leave	7,958	8,177	65,022	
Accrued expenses	9,021	7,366	73,707	
Consumption taxes payable	1,656	3,733	13,531	
Advances received	1,282	1,858	10,475	
Others	4,419	2,056	36,105	
Total	42,590	38,266	347,986	
Current liabilities	42,125	37,736	344,187	
Non-current liabilities	465	530	3,799	
Total	¥42,590	¥38,266	\$347,986	

27. Equity

(1) Share capital and treasury stock

The total number of shares authorized and the number of shares issued are as follows:

	Shar	Shares			
	Year ended March 31, 2022	Year ended March 31, 2021			
The total number of shares authorized to be issued	600,000,000	600,000,000			
The number of shares issued					
Balance at beginning of period	204,608,615	204,580,115			
Changes during the period	44,700	28,500			
Balance at end of period	204,653,315	204,608,615			

All the shares the Company issued are no-par value common stock and are fully paid.

Changes in the number of shares of treasury stock during the period are as follows:

	Shar	Shares		
	Year ended March 31, 2022	Year ended March 31, 2021		
At the beginning of the period	8,664,390	13,557,163		
Increase (Note 1)	2,754,652	343,073		
Decrease (Note 2)	1,667	5,235,846		
At the end of the period	11,417,375	8,664,390		

Notes:

1. The increase in the number of shares of treasury stock for the fiscal year ended March 31, 2021 is due to the purchase of 17,673 shares less than one unit and the acquisition of 325,400 shares through a resolution of the Board of Directors. The increase in the number of shares of treasury stock for the fiscal year ended March 31, 2022 is due to the purchase of 10,952 shares less than one unit and the acquisition of 2,743,700 shares through a resolution of the Board of Directors.

2. The decrease in the number of shares of treasury stock for the fiscal year ended March 31, 2021 is due to the sale of 1,089 shares less than one unit and the transfer of 5,234,757 shares due to the share exchange with ARRK CORPORATION for the purpose of making ARRK CORPORATION a wholly owned subsidiary of the Group. The decrease in the number of shares of treasury stock for the fiscal year ended March 31, 2022 is due to the sale of 1,667 shares less than one unit.

(2) Capital surplus and retained earnings

The capital surplus account is composed of amounts arising from equity transactions that are not included in share capital. Major components of the capital surplus account are legal capital surplus and other capital surplus. The retained earnings account is composed of legal retained earnings and other retained earnings.

The Companies Act of Japan requires that at least 50% of the contribution for share issue be appropriated as share capital and the rest be appropriated as legal capital surplus. The Companies Act of Japan also requires that 10% of surplus appropriated for dividends be reserved either as legal capital surplus or legal retained earnings until the total amount of legal capital surplus and legal retained earnings reaches 25% of the amount of share capital. Legal capital surplus and legal retained earnings cannot be the source of dividends, however, these can be transferred to capital surplus, other surplus or share capital upon approval at the General Meeting of Shareholders.

In addition, acquired treasury stock must be excluded in calculating the amount available for distribution. Acquired treasury stock of ¥24,900 million, and ¥34,932 million at March 31, 2021, and March 31, 2022, respectively, was excluded in calculating the amount available for distribution.

(3) Other components of equity

Other components of equity are as follows:

Financial assets measured at fair value through other comprehensive income

It is valuation difference on financial assets measured at fair value through other comprehensive income.

Remeasurement of defined benefit plans

Remeasurement of defined benefit plans represents the effect of gaps between actuarial assumptions at the beginning of the year and actual results as well as the effect of changes in actuarial assumptions. These effects were recognized in other comprehensive income when incurred and were immediately transferred from other components of equity to retained earnings.

Exchange differences on translation of foreign operations

These exchange differences occurred when foreign operations' financial statements prepared in foreign currencies were consolidated.

Effective portion of net changes in fair value of cash flow hedges It is the amount of accumulated effective portion of gains or losses arising from changes in the fair value of hedging instruments for cash flow hedges.

The breakdown of each item of other comprehensive income and related amount of tax effects (including non-controlling interests) are as follows:

For the year ended March 31, 2022

	Millions of yen				
	Amount arising during the year	Reclassification adjustments	Before tax effects	Tax effects	After tax effects
Items that will not be reclassified to profit or loss					
Financial assets measured at fair value through other comprehensive income	¥ 3,929	¥ —	¥ 3,929	¥ (855)	¥ 3,074
Remeasurements of defined benefit plans	3,101	_	3,101	(952)	2,149
Share of other comprehensive income of investments accounted for using equity method	210	_	210	_	210
Total of items that will not be reclassified to profit or loss	7,240	—	7,240	(1,807)	5,433
Items that may be reclassified to profit or loss					
Exchange differences on translation of foreign operations	22,195	301	22,496	_	22,496
Effective portion of net change in fair value of cash flow hedges	1,094	(455)	639	(145)	494
Share of other comprehensive income of investments accounted for using equity method	3,726	_	3,726	—	3,726
Total of items that may be reclassified to profit or loss	27,015	(154)	26,861	(145)	26,716
Total	¥34,255	¥(154)	¥34,101	¥(1,952)	¥32,149

	Thousands of U.S. dollars				
	Amount arising during the year	Reclassification adjustments	Before tax effects	Tax effects	After tax effects
Items that will not be reclassified to profit or loss					
Financial assets measured at fair value through other comprehensive income	\$ 32,102	\$ —	\$ 32,102	\$ (6,986)	\$ 25,116
Remeasurements of defined benefit plans	25,337	_	25,337	(7,778)	17,559
Share of other comprehensive income of investments accounted for using equity method	1,716	_	1,716	—	1,716
Total of items that will not be reclassified to profit or loss	59,155	—	59,155	(14,764)	44,391
Items that may be reclassified to profit or loss					
Exchange differences on translation of foreign operations	181,347	2,459	183,806	_	183,806
Effective portion of net change in fair value of cash flow hedges	8,938	(3,717)	5,221	(1,185)	4,036
Share of other comprehensive income of investments accounted for using equity method	30,444	_	30,444	—	30,444
Total of items that may be reclassified to profit or loss	220,729	(1,258)	219,471	(1,185)	218,286
Total	\$279,884	\$(1,258)	\$278,626	\$(15,949)	\$262,677

For the year ended March 31, 2021

	Millions of yen				
	Amount arising during the year	Reclassification adjustments	Before tax effects	Tax effects	After tax effects
Items that will not be reclassified to profit or loss					
Financial assets measured at fair value through other comprehensive income	¥ 156	¥	¥ 156	¥ 514	¥ 670
Remeasurements of defined benefit plans	32,533	_	32,533	(7,928)	24,605
Share of other comprehensive income of investments accounted for using equity method	263	_	263	_	263
Total of items that will not be reclassified to profit or loss	32,952		32,952	(7,414)	25,538
Items that may be reclassified to profit or loss					
Exchange differences on translation of foreign operations	6,201	(385)	5,816	_	5,816
Effective portion of net change in fair value of cash flow hedges	52	589	641	(62)	579
Share of other comprehensive income of investments accounted for using equity method	(280)	_	(280)	_	(280)
Total of items that may be reclassified to profit or loss	5,973	204	6,177	(62)	6,115
Total	¥38,925	¥ 204	¥39,129	¥(7,476)	¥31,653

28. Dividends

For the year ended March 31, 2022

i) Dividends paid

Dividends paid are as follows:

Resolution	Type of shares	Total cash dividends paid (Millions of yen)	Source of dividends	Cash dividends per share (Yen)	Record date	Effective date
Annual General Meeting of Shareholders on June 25, 2021	Common stock	¥ 9,797	Retained earnings	¥50.00	March 31, 2021	June 28, 2021
Board of Directors' meeting held on November 5, 2021	Common stock	10,730	Retained earnings	¥55.00	September 30, 2021	December 2, 2021
		Total cash dividends paid		Cash dividends		
Resolution	Type of shares	(Thousands of U.S. dollars)	Source of dividends	per share (U.S. dollars)	Record date	Effective date
Resolution Annual General Meeting of Shareholders on June 25, 2021	Type of shares Common stock	(· · · · · · ·	Source of dividends Retained earnings	per share	Record date March 31, 2021	Effective date June 28, 2021

ii) Dividends whose record date is within the fiscal year ended March 31, 2022, however, whose effective date is in the fiscal year ending March 31, 2023

Dividends whose record date is within the fiscal year ended March 31, 2022, however, whose effective date is in the fiscal year ending March 31, 2023 are as follows:

Resolution	Type of shares	Total cash dividends paid (Millions of yen)	Source of dividends	Cash dividends per share (Yen)	Record date	Effective date
Annual General Meeting of Shareholders on June 24, 2022	Common stock	¥12,560	Retained earnings	¥65.00	March 31, 2022	June 27, 2022
		Total cash dividends paid (Thousands of		Cash dividends		

Resolution	Type of shares	(Thousands of U.S. dollars)	Source of dividends	per share (U.S. dollars)	Record date	Effective date
Annual General Meeting of Shareholders on June 24, 2022	Common stock	\$102,623	Retained earnings	\$0.531	March 31, 2022	June 27, 2022

For the year ended March 31, 2021

i) Dividends paid

Dividends paid are as follows:

Resolution	Type of shares	Total cash dividends paid (Millions of yen)	Source of dividends	Cash dividends per share (Yen)	Record date	Effective date
Annual General Meeting of Shareholders on June 24, 2020	Common stock	¥9,551	Retained earnings	¥50.00	March 31, 2020	June 25, 2020
Board of Directors' meeting held on November 11, 2020	Common stock	9,798	Retained earnings	¥50.00	September 30, 2020	December 2, 2020

ii) Dividends whose record date is within the fiscal year ended March 31, 2021, however, whose effective date is in the fiscal year ended March 31, 2022

Dividends whose record date is within the fiscal year ended March 31, 2021, however, whose effective date is in the fiscal year ended March 31, 2022 are as follows:

Resolution	Type of shares	Total cash dividends paid (Millions of yen)	Source of dividends	Cash dividends per share (Yen)	Record date	Effective date
Annual General Meeting of Shareholders on June 25, 2021	Common stock	¥9,797	Retained earnings	¥50.00	March 31, 2021	June 28, 2021

29. Sales Revenue

(1) Disaggregation of revenue

The Group is composed of the following business segments: Mobility, Health Care, Food & Packaging, Basic Materials, and Others, whose operating results are regularly reviewed by the Board of Directors of the Company to make decisions about management resource allocation and assess their performance. Therefore, turnover recognized from these businesses is presented as sales revenue. The Group further disaggregates revenue from contracts with customers into the sale of products and merchandise, license income, and other based on the contracts with customers.

The relationship between these disaggregated sales revenue and sales revenue of each reportable segment is as follows:

For the year ended March 31, 2022

				Millions of yen			
	Mobility	Health Care	Food & Packaging	Basic Materials	Total of reportable segments	Others	Total
Sale of products and merchandise	¥411,214	¥164,329	¥234,414	¥786,010	¥1,595,967	¥12,067	¥1,608,034
License income	408	215	753	320	1,696	5	1,701
Others	_	_	_	_	_	2,953	2,953
Total	¥411,622	¥164,544	¥235,167	¥786,330	¥1,597,663	¥15,025	¥1,612,688
			The	ousands of U.S. de	ollars		
			Food &		Total of		

			Food &		reportable		
	Mobility	Health Care	Packaging	Basic Materials	segments	Others	Total
Sale of products and merchandise	\$3,359,866	\$1,342,667	\$1,915,304	\$6,422,174	\$13,040,011	\$ 98,593	\$13,138,604
License income	3,334	1,757	6,152	2,615	13,858	40	13,898
Others		_		_		24,130	24,130
Total	\$3,363,200	\$1,344,424	\$1,921,456	\$6,424,789	\$13,053,869	\$122,763	\$13,176,632

Notes:

1. The above amounts are net of internal transactions among Group companies.

2. Most of the Group's sales revenue is recognized from contracts with customers. Revenue recognized from other sources is immaterial.

For the year ended March 31, 2021

				Millions of yen			
	Mobility	Health Care	Food & Packaging	Basic Materials	Total of reportable segments	Others	Total
Sale of products and merchandise	¥315,309	¥143,780	¥197,498	¥540,606	¥1,197,193	¥10,076	¥1,207,269
License income	171	153	202	776	1,302	2	1,304
Other	_	_	_	_	_	3,152	3,152
Total	¥315,480	¥143,933	¥197,700	¥541,382	¥1,198,495	¥13,230	¥1,211,725

Notes:

1. The above amounts are net of internal transactions between Group companies.

2. Most of the Group's sales revenue is recognized from contracts with customers. Revenue recognized from other sources is immaterial.

The Group is primarily engaged in business activities related to the manufacture and sale of goods or services in the Mobility, Healthcare, Food & Packaging, and Basic Materials segments. Revenue from these businesses is measured based on the consideration clearly stated in contracts with customers, and excludes amounts collected for third parties. The amount of sales revenue including variable consideration is included in transaction prices only to the extent that a significant reversal of accumulated revenue recognized is very unlikely to occur when uncertainties over the variable consideration are later dispelled.

The Group recognizes revenue from the manufacture and sale of products upon the delivery of the products because it is when the Group deems that customers have obtained control of the products and performance obligations have been satisfied. The consideration of a transaction is generally received within one year after the performance obligation is satisfied. The contract for the transaction does not include a significant financing component.

Of license income, the Group records revenue from patent license agreements at the time the assignment or provision agreement takes effect. The Group also recognizes revenue from net sales-based royalties promised in exchange for the license of intellectual property at the time either of the following occurs, whichever is later:

- Subsequent sales or use occurs, or

- The performance obligation to which some or all net sales-based or usage-based royalties are allocated is satisfied (or partially satisfied).

(2) Contract balances

Information on receivables from contracts with customers and contract liabilities is as follows:

In the consolidated statements of financial position, receivables from contracts with customers are included in "Trade receivables," and contract liabilities are included in "Trade payables" and "Other non-current liabilities."

	Millions of yen			Thousands of U.S. dollars
	As of March 31, 2022	As of March 31, 2021	As of April 1, 2020	As of March 31, 2022
Receivables from contracts with customers	¥370,426	¥285,846	¥273,894	\$3,026,603
Contract liabilities	1,812	1,962	3,280	14,805

Contract liabilities are mainly related to advance consideration received from customers.

Of revenue recognized for the fiscal years ended March 31, 2021 and March 31, 2022, amounts included in the beginning balance of contract liabilities were ¥2,159 million and ¥1,382 million, respectively. In the fiscal year ended March 31, 2021 and the fiscal year ended March 31, 2022, the amount of revenue recognized from performance obligations satisfied (or partially satisfied) in the previous period was insignificant.

There were no contract assets as of March 31, 2021 or March 31, 2022.

(3) Transaction price allocated to the remaining performance obligations

Since the Group does not have any significant transactions whose expected individual contract term exceeds one year, practical expedients have been applied and information regarding remaining performance obligations is omitted.

(4) Assets recognized from the costs to obtain or fulfill contracts with customers

There were no costs to obtain or fulfill contracts with customers for the fiscal years ended March 31, 2021 or March 31, 2022.

30. Selling, General and Administrative Expenses

The breakdown of selling, general and administrative expenses is as follows:

	Millions	Thousands of U.S. dollars	
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Personnel expenses	¥ 63,096	¥ 57,427	\$ 515,532
Research and development expenses	38,124	33,802	311,496
Transportation and storage fees	68,644	58,164	560,863
Depreciation and amortization	12,950	12,498	105,809
Others	56,542	50,089	461,983
Total	¥239,356	¥211,980	\$1,955,683

31. Share-Based Payment

(1) Overview of restricted stock compensation plan

The Company has introduced a restricted stock compensation plan (hereinafter the "Plan") for directors (excluding outside directors), executive officers, and chief senior directors (hereinafter collectively "Eligible Directors, etc.") for the purposes of granting Eligible Directors, etc. incentives for sustainable improvement of corporate value of the Company and promoting greater shared value with shareholders, and accounts for as equity-settled payments. In the Plan, shares are issued on a grant date, and a period over which shares are subject to a restriction on transfer lasts three to five years from the grant date.

The Plan does not contain vesting conditions, and vesting will be on the grant date.

(2) The number of shares of the Company granted during the period based on the restricted stock compensation plan, and the weighted-average fair value

The number of shares of the Company granted during the period and the weighted-average fair value per share are as follows:

		Year ended March 31, 2022	Year ended March 31, 2021
The number of shares granted during the year		44,700 shares	28,500 shares
	Ye	n	U.S. dollars
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
The weighted-average fair value per share	¥3,710	¥2,328	\$30,313

The fair value of share-based payment is measured with reference to the share price on the grant date.

(3) Expenses for share-based payment

The total amount of expenses recognized under the restricted stock compensation plan is as follows:

	Millions	of yen	Thousands of U.S. dollars
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Equity-settled payment	¥166	¥66	\$1,356

The expenses above were recorded in "Selling, general and administrative expenses" in the consolidated statements of income.

32. Research and Development Expenses

Research and development expenses recognized as expenses for the fiscal years ended March 31, 2021 and March 31, 2022 are as follows:

	Millions	Millions of yen	
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Research and development expenses	¥38,124	¥33,802	\$311,496

33. Other Operating Income and Other Operating Expenses

The breakdown of other operating income and other operating expenses is as follows:

	Millions	Millions of yen		
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022	
Gain on sale of fixed assets	¥ 323	¥ 249	\$ 2,639	
Insurance income	1,226	2,361	10,017	
Rental income	383	353	3,129	
Gain on sale of subsidiaries	638	238	5,213	
Gain on bargain purchase	7,246	_	59,204	
Others	3,296	1,205	26,931	
Total of other operating income	13,112	4,406	107,133	
Loss on sale and retirement of fixed assets	5,373	3,641	43,901	
Impairment losses	16,183	8,050	132,225	
Loss on related businesses	5,616	3	45,886	
Loss on disaster	1	515	8	
Others	3,832	1,974	31,310	
Total of other operating expenses	¥31,005	¥14,183	\$253,330	

34. Financial Income and Financial Expenses

(1) Financial income

The breakdown of financial income is as follows:

	Millions	I housands of U.S. dollars	
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Dividend income	¥1,240	¥ 888	\$10,132
Interest income	1,217	1,264	9,944
Others	3,718	2,145	30,378
Total	¥6,175	¥4,297	\$50,454

(2) Financial expenses

The breakdown of financial expenses is as follows:

	Millions	Thousands of U.S. dollars	
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Interest expenses			
Financial liabilities measured at amortized cost	¥ 3,292	¥4,012	\$26,898
Lease obligations	791	799	6,463
Accrual of allowance for doubtful accounts	7,311	2,565	59,735
Others	817	752	6,675
Total	¥12,211	¥8,128	\$99,771

35. Income Taxes

(1) Deferred tax

(i) The breakdown of deferred tax assets and liabilities, and the details of changes

The details of deferred tax assets and liabilities by major reasons and movements are as follows:

i) For the year ended March 31, 2022

			Millions of yen		
	April 1, 2021	Recognized through profit or loss	Recognized in other comprehensive income	Others (Note)	March 31, 2022
Deferred tax assets	·				
Accrued bonuses	¥ 4,243	¥ 833	¥ —	¥ 112	¥ 5,188
Retirement benefit liability	11,964	(1,204)	43	775	11,578
Tax loss carryforward	1,449	608	_	34	2,091
Excess depreciation	5,745	630	_	188	6,563
Inventories	1,545	(236)	_	143	1,452
Adjustment accounts	_	(409)	_	6,107	5,698
Others	13,938	6,374	(535)	(469)	19,308
Total deferred tax assets	¥38,884	¥6,596	¥ (492)	¥6,890	¥51,878
Deferred tax liabilities					
Retirement benefit asset	19,340	1,112	531	241	21,224
Gain on contribution of securities to retirement benefit trust	8,350	_	(224)	_	8,126
Financial assets measured at fair value through other comprehensive income	4,967	_	786	(1)	5,752
Retained earnings of subsidiaries, associates, etc.	7,102	642	_	_	7,744
Property, plant and equipment	6,103	2,002	_	231	8,336
Valuation difference	3,721	(320)	7,308	_	10,709
Others	7,802	953	102	684	9,541
Total deferred tax liabilities	¥57,385	¥4,389	¥8,503	¥1,155	¥71,432

	Thousands of U.S. dollars				
	April 1, 2021	Recognized through profit or loss	Recognized in other comprehensive income	Others (Note)	March 31, 2022
Deferred tax assets	·				
Accrued bonuses	\$ 34,668	\$ 6,806	\$ —	\$ 915	\$ 42,389
Retirement benefit liability	97,753	(9,837)	351	6,332	94,599
Tax loss carryforward	11,839	4,968	_	278	17,085
Non-current assets	46,940	5,147	_	1,537	53,624
Inventories	12,624	(1,928)	_	1,168	11,864
Adjustment accounts	_	(3,342)	_	49,898	46,556
Others	113,882	52,079	(4,371)	(3,833)	157,757
Total deferred tax assets	\$317,706	\$53,893	\$(4,020)	\$56,295	\$423,874
Deferred tax liabilities					
Retirement benefit asset	158,019	9,086	4,339	1,969	173,413
Gain on contribution of securities to retirement benefit trust	68,225	_	(1,830)	_	66,395
Financial assets measured at fair value through other comprehensive income	40,583	_	6,422	(8)	46,997
Retained earnings of subsidiaries, associates, etc.	58,028	5,246	_	_	63,274
Property, plant and equipment	49,865	16,358	_	1,887	68,110
Valuation difference on land	30,403	(2,615)	59,711	_	87,499
Others	63,747	7,786	833	5,588	77,954
Total deferred tax liabilities	\$468,870	\$35,861	\$69,475	\$ 9,436	\$583,642

ii) For the year ended March 31, 2021

			Millions of yen		
	April 1, 2020	Recognized through profit or loss	Recognized in other comprehensive income	Other (Note)	March 31, 2021
Deferred tax assets					
Accrued bonuses	¥ 4,258	¥ (13)	¥ —	¥ (2)	¥ 4,243
Retirement benefit liability	11,882	(12)	(3)	97	11,964
Tax loss carryforward	641	800	_	8	1,449
Excess depreciation	6,309	(546)	_	(18)	5,745
Inventories	1,396	105	_	44	1,545
Others	14,247	(455)	(92)	238	13,938
Total deferred tax assets	¥38,733	¥ (121)	¥ (95)	¥367	¥38,884
Deferred tax liabilities					
Retirement benefit asset	12,155	(852)	8,037	_	19,340
Gain on contribution of securities to retirement benefit trust	8,690	_	(340)	_	8,350
Financial assets measured at fair value through other comprehensive income	5,244	_	(277)	_	4,967
Retained earnings of subsidiaries, associates, etc.	6,567	535	_	_	7,102
Property, plant and equipment	7,743	(1,723)	—	83	6,103
Valuation difference on land	4,779	—	(1,058)	—	3,721
Others	7,475	(508)	2	833	7,802
Total deferred tax liabilities	¥52,653	¥(2,548)	¥ 6,364	¥916	¥57,385

Note: "Others" includes exchange differences on translation of foreign operations.

In recognizing deferred tax assets, the Group considers the extent to which it is probable that taxable income will be available against which the deductible temporary differences and unused tax loss carryforwards can be utilized.

The recoverability of deferred tax assets is determined based on the sufficiency of taxable income based on profitability in the consolidated tax group with the Company as consolidated parent, tax planning opportunities, and the sufficiency of taxable temporary differences. Estimates of future taxable income based on profitability are based on Group's business plan, which includes growth and expansion through the investment of resources to strengthen the foundation of Group global management. The business plan includes major assumptions made by management, such as forecasts for sales revenue, raw material and fuel price trends, and foreign exchange market trends.

These assumptions may be affected by changes in uncertain economic conditions, including the impact of the COVID-19 pandemic and the crisis in Ukraine. If future taxable income results differ from initial estimates, this could have a significant impact on amounts recognized in the consolidated financial statements for the following fiscal year.

The bulk of the balance of deferred tax assets of the Group is related to the consolidated tax group with the Company as consolidated parent, and the Company records most of them on its books.

For some subsidiaries that posted a net loss for whom the recoverability of deferred tax assets depends on their future taxable income, the Group recognized deferred tax assets of ¥864 million at March 31, 2021 and ¥601 million at March 31, 2022. The future taxable income used by these companies in recognizing deferred tax assets is based on the assumptions of a business plan approved by management and deemed to be highly feasible based on past plans and performance trends. Therefore, the recoverability of the deferred tax assets is considered unproblematic.

(ii) Deductible temporary differences and tax loss carryforward for which no deferred tax assets are recognized

The amounts of deductible temporary differences and tax loss carryforward for unrecognized deferred tax assets as well as the expiration year of such tax loss carryforward and tax credit carryforward are as follows:

	Millions	Thousands of U.S. dollars	
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Tax loss carryforward	¥ 18,164	¥ 60,227	\$ 148,410
Due within one year	3,065	8,447	25,041
Due after one year through five years	5,836	34,063	47,683
Due after five years	9,263	17,717	75,686
Deductible temporary differences	205,138	157,971	1,676,101
Total	¥223,302	¥218,198	\$1,824,511

The Group in Japan has adopted the consolidated taxation system.

Deferred tax assets related to local taxes (resident tax and business tax), which are not applicable under the consolidated taxation system in Japan, are included in "Deductible temporary differences and tax loss carryforward for which no deferred tax assets are recognized" above.

(iii) Taxable temporary differences on investments in subsidiaries and other entities that do not recognize deferred tax liabilities The total amount of taxable temporary differences on investments in subsidiaries and other entities that do not recognize deferred tax liabilities was ¥1,946 million, and ¥1,955 million at March 31, 2021 and March 31, 2022, respectively. The Group does not recognize deferred tax liabilities if it can control the timing of the reversal of the temporary differences and it is probable that the temporary differences will not be reversed in the foreseeable future.

(2) Income tax expense

(i) Breakdown of income tax expense

The breakdown of income taxes is as follows:

	Millions	Thousands of U.S. dollars	
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Current tax expenses	¥24,733	¥13,436	\$202,084
Prior period restatement	(127)	204	(1,038)
Deferred tax expenses			
Origination and reversal of temporary differences, etc.	(1,597)	(3,422)	(13,048)
Revision to and reversal of deferred tax assets	(286)	(194)	(2,337)
Total of deferred tax expenses	(1,883)	(3,616)	(15,385)
Total income tax expense	¥22,723	¥10,024	\$185,661

(ii) Reconciliation of applicable tax rate

The Company is subject to income tax, corporate inhabitant tax, and corporate enterprise tax. The effective statutory tax rates used to calculate these taxes for the fiscal years ended March 31, 2021 and March 31, 2022 were 30.6% for both years. For its foreign subsidiaries, they are subject to income taxes in their locations.

The breakdown of major reconciling items between the effective statutory tax rate and the average actual tax rate is as follows:

	Year ended March 31, 2022	Year ended March 31, 2021
Effective statutory tax rate	30.6%	30.6%
Expenses not subject to deduction, such as entertainment expenses	1.3	1.4
Income not subject to tax, such as dividend income	0.2	0.5
Differences in tax rates of consolidated foreign subsidiaries	(8.5)	(10.8)
Changes in unrecognized deferred tax assets	(0.9)	(8.9)
Share of profit (loss) of investments accounted for using equity method	(4.2)	(1.0)
Others	(2.4)	1.7
Actual tax rate	16.1%	13.5%

36. Per Share Information

The basis for calculation of basic earnings per share is as follows:

	Millions of yen		Thousands of U.S. dollars	
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022	
Net income attributable to common shareholders of the parent	¥109,990	¥57,873	\$898,685	

	Sha	res	
	Year ended March 31, 2022	Year ended March 31, 2021	
The average number of common shares during the period	194,516,547	194,202,034	
	Ye	n	U.S. dollars
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Basic earnings per share	¥565.45	¥298.00	\$4.62

Note: Diluted earnings per share are not stated as potential dilutive shares do not exist.

37. Financial Instruments

(1) Capital management

While the Company's top priority is the enhancement of corporate value through business growth and expansion, the Company also sees the return of profit to its shareholders as a key management priority.

To this end, the Company uses operating income before special items, net income attributable to owners of the parent, ROIC (return on invested capital), net debt to equity, and ROE (return on equity) as key indicators for capital management with a basic policy of ensuring financial soundness and optimizing the capital efficiency of business activities.

The Company is not subject to any material capital restrictions.

(2) Financial risk management policy

The Company is exposed to various financial risks (credit risk, liquidity risk and market risk) in the course of performing business activities and performs risk management in accordance with relevant policies to avoid or mitigate these risks.

The Company uses derivatives to avoid the risks explained below and does not engage in speculative transactions. The finance division executes and manages the Company's derivative transactions upon approval of the officer in charge. The finance division reports the results of such transactions to the Management Committee every six months. The Company's consolidated subsidiaries also execute and manage derivative transactions in accordance with their management standards.

(3) Credit risk management

Notes and accounts receivable—trade, i.e., trade receivables, and receivables other than trade receivables are exposed to credit risks of customers. Trade receivables denominated in foreign currencies arising from doing business overseas are exposed to foreign exchange fluctuation risk, and a certain amount of such receivables is hedged using forward exchange contracts and other instruments, except for those within outstanding balance of accounts payable—trade denominated in the same foreign currencies.

In accordance with the internal credit management rules, the Company regularly monitors the status of trade receivables of counterparties and manages due dates and balances for each business partner, while working to early identify and mitigate any concerns about collections due to deterioration in their financial position and other factors. The Company's consolidated subsidiaries also manage credit risk in the same manner in accordance with the Company's credit management rules.

The Company and its consolidated subsidiaries engage in derivative transactions with creditworthy financial institutions and therefore believe that it is exposed to minimal credit risk arising from default of counterparties.

The maximum exposure to the credit risk as of the end of the fiscal year is the carrying amount of financial assets less allowance for doubtful accounts stated in the consolidated statements of financial position. The maximum exposure to the credit risk associated with debt guarantees is the amount of guaranteed liabilities stated in Note 41 "Contingent Liabilities."

In connection with these credit risk exposures, the Company mainly holds deposits as collateral for some trade receivables. The Company has neither significant exposure to credit risk related to particular counterparties nor excessive concentration of credit risk that requires special attention.

The amount of allowance for doubtful accounts is calculated as follows:

• Trade receivables

The allowance is calculated by multiplying the carrying amount of receivables by the provision rate calculated by considering future prospects of economic conditions and relevant factors in addition to the historical rate of credit losses. Provided, however, that if the asset meets criteria for credit-impaired financial assets, the amount of allowance is calculated on an individual basis by considering future prospects of economic conditions and other factors in addition to the financial conditions of counterparty.

• Receivables other than trade receivables

For assets for which credit risk is not considered to have increased significantly, the amount of allowance is calculated by multiplying the carrying amount by the provision rate that is determined by considering future prospects of economic conditions and other factors in addition to the historical rate of credit losses of similar assets.

For financial assets and credit-impaired financial assets whose credit risk is considered to have increased significantly from the time of initial recognition, anticipated credit losses over a 12-month period or for the entire period are estimated. Such estimates are based on numerous assumptions and estimates, including the possibility of default, timing of credit recovery, forecasts regarding the future amount of loss incurred, discount rates, and the impact of the crisis in Ukraine. Management of the Group determines that actual losses may be more or less than expected losses. If underlying assumptions change, initial estimates and assumptions may differ significantly from the actual amount of impairment loss on financial assets measured at amortized cost, which could have a significant impact on amounts recognized in the consolidated financial statements for the following fiscal year.

The allowance for doubtful accounts for financial assets is included in "Trade receivables" and "Other financial assets" in the consolidated statements of financial position.

Changes in allowance for doubtful accounts are as follows:

Year ended March 31, 2022

	Millions of yen							
	Trade receivables	R	Receivables other than trade receivables					
	Financial assets always measured at an amount equal to lifetime expected credit losses	Financial assets measured at an amount equal to 12-month expected credit losses	Financial assets whose credit risk has increased significantly	Credit-impaired financial assets	Total			
Balance at beginning of period	¥1,458	¥11	¥3,660	¥ 1,589	¥ 6,718			
Increase during period	348	0	38	7,574	7,960			
Decrease during period (utilization)	(88)	(8)	_	_	(96)			
Decrease during period (reversal)	(466)	(0)	_	_	(466)			
Others	9	_	(3,229)	3,232	12			
Balance at end of period	¥1,261	¥ 3	¥ 469	¥12,395	¥14,128			

	Thousands of U.S. dollars							
	Trade receivables	Trade receivables Receivables other than trade rec						
	Financial assets always measured at an amount equal to lifetime expected credit losses	Financial assets measured at an amount equal to 12-month expected credit losses	Financial assets whose credit risk has increased significantly	Credit-impaired financial assets	Total			
Balance at beginning of period	\$11,913	\$ 90	\$ 29,904	\$ 12,983	\$ 54,890			
Increase during period	2,843	0	310	61,885	65,038			
Decrease during period (utilization)	(719)	(65)	_	_	(784)			
Decrease during period (reversal)	(3,808)	(0)	_	_	(3,808)			
Others	75	_	(26,382)	26,405	98			
Balance at end of period	\$10,304	\$ 25	\$ 3,832	\$101,273	\$115,434			

The increase in allowance for doubtful accounts for the fiscal year ended March 31, 2022 is mainly for credit-impaired financial assets.

Year ended March 31, 2021

			Millions of yen								
	Trade receivables	R	Receivables other than trade receivables								
	Financial assets always measured at an amount equal to lifetime expected credit losses	Financial assets measured at an amount equal to 12-month expected credit losses	Financial assets whose credit risk has increased significantly	Credit-impaired financial assets	Total						
Balance at beginning of period	¥ 3,624	¥11	¥1,215	¥1,582	¥ 6,432						
Increase during period	481	_	2,767	85	3,333						
Decrease during period (utilization)	(250)	_	_	_	(250)						
Decrease during period (reversal)	(2,630)	_	(322)	(78)	(3,030)						
Others	233	_	_	—	233						
Balance at end of period	¥ 1,458	¥11	¥3,660	¥1,589	¥ 6,718						

(4) Liquidity risk management

Liquidity risk is the risk that the Group is unable to perform its repayment obligations of financial liabilities on the due date. The Company manages liquidity risk by having the finance division prepare and update a cash flow management plan in a timely manner based on cash flow schedules of respective departments taking capital efficiency into account, as well as by preparing for alternative means of financing such as commitment line and overdraft facility.

The balances of major financial liabilities (including derivative financial instruments) by due date at March 31, 2021 and March 31, 2022 are as follows:

(i) As of March 31, 2022

					М	illions	of yen							
		Carrying amount	Contractual cash flows	Due within one year	one thro	after year ough years	Due two y thro three	/ears ugh	three thrc	after years ugh years	Due foury thro five y	years ugh		after years
Non-derivative financial liabilitie	s													
Trade payables	¥	174,844	¥ 174,844	¥174,844	¥	_	¥	_	¥	_	¥	—	¥	_
Short-term borrowings		177,437	177,437	177,437		_						_		_
Commercial papers		120,000	120,000	120,000		_		_		_		_		_
Long-term borrowings		253,069	258,067	50,221	43	,848	29	,017	4	,028	21	,112	10	9,841
Bonds payable		115,580	120,552	715		707	5	,437	25	,372	20	,340	6	7,981
Lease liabilities		48,973	52,834	9,232	7	,279	6	,263	5	,398	4	,940	19	9,722
Others		127,304	127,304	119,144		525		532		2		_		7,101
Derivative financial liabilities														
Currency-related		4	4	4						_		_		_
Interest rate-related		489	489	77		264		148		_		_		_
Total	¥1,	017,700	¥1,031,531	¥651,674	¥52	,623	¥41	,397	¥34	,800	¥46	,392	¥20	4,645

		Thousands of U.S. dollars								
	Carrying amount	Contractual cash flows	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years		
Non-derivative financial liabilities	5									
Trade payables	\$1,428,581	\$1,428,581	\$1,428,581	\$ —	\$ —	\$ —	\$ —	\$ —		
Short-term borrowings	1,449,767	1,449,767	1,449,767	_	_	_	_	_		
Commercial papers	980,472	980,472	980,472	_	_	_	_	_		
Long-term borrowings	2,067,726	2,108,563	410,336	358,265	237,086	32,911	172,498	897,467		
Bonds payable	944,358	984,982	5,842	5,777	44,424	207,305	166,190	555,444		
Lease liabilities	400,139	431,686	75,431	59,474	51,172	44,105	40,363	161,141		
Others	1,040,151	1,040,150	973,478	4,289	4,347	16	_	58,020		
Derivative financial liabilities										
Currency-related	33	33	33	_	_	_	_	_		
Interest rate-related	3,995	3,995	629	2,157	1,209	_	_	_		
Total	\$8,315,222	\$8,428,229	\$5,324,569	\$429,962	\$338,238	\$284,337	\$379,051	\$1,672,072		

(ii) As of March 31, 2021

_				Millions	of yen			
	Carrying amount	Contractual cash flows	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Non-derivative financial liabilities								
Trade payables	¥119,712	¥119,712	¥119,712	¥ —	¥ —	¥ —	¥ —	¥ —
Short-term borrowings	112,182	112,182	112,182	_	_	_	_	_
Commercial papers	50,000	50,000	50,000	_	_	_	_	_
Long-term borrowings	257,022	262,723	45,916	50,033	43,628	29,102	3,978	90,066
Bonds payable	91,012	94,942	10,751	606	617	5,314	25,295	52,359
Lease liabilities	53,575	57,965	8,727	8,453	6,742	5,791	5,131	23,121
Others	83,543	83,541	75,940	305	_	_	—	7,296
Derivative financial liabilities								
Currency-related	19	19	19	_	_	_	_	_
Interest rate-related	969	969	30	191	496	252	—	
Total	¥768,034	¥782,053	¥423,277	¥59,588	¥51,483	¥40,459	¥34,404	¥172,842

Financial guarantee contracts are not included in the tables above. The obligation to pay under financial guarantee contracts arises upon request. The details of financial guarantee contracts are stated in Note 41 "Contingent Liabilities."

(5) Market risk management

(i) Foreign currency risk

Receivables and payables denominated in foreign currencies arising from the Group's global business development are exposed to foreign exchange fluctuation risk. The Group enters into forward exchange contracts and currency swap contracts to hedge foreign exchange fluctuation risk identified by currency for certain trade receivables and payables and borrowings denominated in foreign currencies.

Foreign exchange sensitivity analysis

For the financial instruments denominated in foreign currencies held by the Group at the end of each reporting period, the impact of a 1% appreciation of Japanese yen against US dollar, Euro and Chinese yuan as of the end of period on income before income taxes in the consolidated statements of income is as follows.

This analysis does not include the impact of translating financial instruments denominated in the functional currency and translating assets, liabilities, revenue and expenses of foreign operations into Japanese yen. The analysis is based on the assumption that all other variables (balance, interest rate, etc.) are constant.

	Millions	Millions of yen		
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022	
US dollar	¥(276)	¥(355)	\$(2,255)	
Euro	(112)	(103)	(915)	
Chinese yuan	(8)	(16)	(65)	

(ii) Interest rate risk

Borrowings issued by the Group are mainly for the purpose of raising funds for capital investment. A portion of the Group's borrowings are floating-rate instruments and therefore exposed to interest rate fluctuation risk. The Group hedges the risk of interest rate hikes by using interest rate swap contracts to mitigate the interest rate fluctuation risk related to borrowings.

Sensitivity analysis of interest rate fluctuation risk

For financial instruments held by the Group at the end of each reporting period, the impact of a 100-basis point increase in interest rates on income before income taxes in the consolidated statements of income is as follows.

This analysis is limited to financial instruments affected by interest rate fluctuations and is based on the assumption that all other variables (balance, exchange rate, etc.) are constant.

	Millions	Millions of yen Year ended Year ended			
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022		
Income before income taxes	¥(1,551)	¥(918)	\$(12,673)		

(iii) Market price fluctuation risk

Marketable securities and investment securities held by the Group are primarily shares in companies with which the Group has business relationships and are exposed to market price fluctuation risk. With regard to marketable securities and investment securities, the Group regularly assesses fair value and financial conditions of issuers (business partners), and constantly reviews the holding of such securities other than held-to-maturity debt securities, taking market conditions into account and the Group's relationships with the business partners. The Company's consolidated subsidiaries also manage market price fluctuation risk in the same manner.

(6) Derivatives and hedge accounting

As of March 31, 2022, the periods when cash flows from hedging instruments are expected to occur and when they are expected to affect profit or loss are, at maximum of, 1 years from March 31, 2022 for foreign currency risk and 3 years from March 31, 2022 for interest rate risk.

The principal rates on forward exchange contracts and currency swap contracts, and principal interest rates on interest rate swap contracts and other swap contracts are as follows:

	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Cash flow hedges			
Foreign currency risk			
Forward exchange contracts			
US dollar	¥122–¥124	¥105–¥108	\$1–\$1
Interest rate risk			
Interest rate swap contracts			
Pay fixed rate, receive floating rate	0.86%–1.19%	1.02%-1.07%	0.86%–1.19%
Interest rate currency swap contracts			
Pay fixed rate, receive floating rate	0.11%	(0.08%)–0.11%	0.11%

Amounts of items designated as hedging instruments are as follows:.

As of March 31, 2022

		Million	is of ven	
	Carrying			Changes in fair
 Contract amount	Assets	Liabilities	- Items in the consolidated statements of financial position	value used to calculate the ineffective portior of hedges for the fiscal year
			· · · · · · · · · · · · · · · · · · ·	-
¥ 782	¥ —	¥ 4	Other financial liabilities	¥—
			Other financial assets	
52,894	589	489	Other financial liabilities	_
			of U.S. dollars	
_	Carrying	amount	-	Changes in fair value used to calculate the ineffective portior of hedges for the
Contract amount	Assets	Liabilities	statements of financial position	fiscal year
\$ 6,389	\$ —	\$ 33	Other financial liabilities	\$—
			Other financial assets	
432,176	4,812	3,995		_
		N 4111	,	
	Corrigo		s of yen	Changes in fair
Contract amount			Items in the consolidated	value used to calculate the ineffective portion of hedges for the fiscal year
	,	2.62.11100		
¥ 357	¥ —	¥ 2	Other financial liabilities	¥—
	•	. 2		
			Other financial assets	
	¥ 782 52,894 	Contract amount Assets ¥ 782 ¥ 52,894 589	Carrying amount Contract amount Assets Liabilities ¥ 782 ¥ — ¥ 4 52,894 589 489	Contract amount Assets Liabilities Items in the consolidated statements of financial position ¥ 782 ¥ — ¥ 4 Other financial liabilities 52,894 589 489 Other financial assets 52,894 589 489 Other financial liabilities

Amounts of items designated as hedged items are as follows:

		Millions	Thousands of U.S. dollars			
	As of Ma	rch 31, 2022	As of Ma	arch 31, 2021	e Cash flow	rch 31, 2022
	Cash flow hedge reserve	Changes in fair value used to calculate the ineffective portion of hedges for the fiscal year	Cash flow hedge reserve	Changes in fair value used to calculate the ineffective portion of hedges for the fiscal year	Cash flow hedge reserve	Changes in fair value used to calculate the ineffective portion of hedges for the fiscal year
Cash flow hedges						
Foreign currency risk						
Forecast purchases	¥—	¥ 53	¥—	¥ 3	\$—	\$ 433
Payables denominated in foreign currencies	_	_	_	_	_	_
Interest rate risk						
Interest on borrowings	_	(314)		(715)		(2,566)

The details of cash flow hedges are as follows:

Year ended March 31, 2022

	Millions of yen							
	Changes in fair value of hedging instruments recognized in other comprehensive income	Ineffective portion of hedges recognized in profit or loss	Items in the consolidated statements of income in which ineffective portion of hedges are included in profit or loss	Reclassification adjustments to profit or loss	Items in the consolidated statements of income including profit or loss from reclassification adjustments			
Foreign currency risk								
Forward exchange contracts	¥ 82	¥—	¥—	¥ —	_			
Interest rate risk								
Interest rate swap contracts	478	_	_	532	Financial expenses			
Interest rate currency swap contracts	17	_	_	(1,049)	Financial income			

	Thousands of U.S. dollars				
	Changes in fair value of hedging instruments recognized in other comprehensive income	Ineffective portion of hedges recognized in profit or loss	Items in the consolidated statements of income in which ineffective portion of hedges are included in profit or loss	Reclassification adjustments to profit or loss	Items in the consolidated statements of income including profit or loss from reclassification adjustments
Foreign currency risk					
Forward exchange contracts	\$ 670	\$—	\$—	\$ —	—
Interest rate risk					
Interest rate swap contracts	3,906	_	—	4,347	Financial expenses
Interest rate currency swap contracts	139	_	_	(8,571)	Financial expenses

Year ended March 31, 2021

	Millions of yen					
	Changes in fair value of hedging instruments recognized in other comprehensive income	Ineffective portion of hedges recognized in profit or loss	Items in the consolidated statements of income in which ineffective portion of hedges are included in profit or loss	Reclassification adjustments to profit or loss	Items in the consolidated statements of income including profit or loss from reclassification adjustments	
Foreign currency risk						
Forward exchange contracts	¥ (5)	¥—	¥—	¥ —		
Interest rate risk						
Interest rate swap contracts	572	_	—	754	Financial expenses	
Interest rate currency swap contracts	74	_	—	(165)	Financial income	

(7) Fair value of financial instruments

The fair value hierarchy of financial instruments is categorized as follows, according to the external observability of the inputs used in the fair value measurement.

- Level 1: Fair value measured at the unadjusted quoted price in an active market for the same asset or liability.
- Level 2: Fair value calculated directly or indirectly using observable prices other than Level 1
- Level 3: Fair value calculated from valuation techniques, including inputs that are not based on significant observable market data.

There was not significant transfer of financial instruments among levels for the fiscal years ended March 31, 2021 and March 31, 2022.

The level in the fair value measurement hierarchy to measure the fair value of each financial instrument is based on the lowest level input that is significant to the entire fair value measurement.

The breakdowns of financial instruments measured at fair value as of March 31, 2021 and March 31, 2022 are as follows:

- (i) Financial instruments measured at fair value on a recurring basis
 - i) As of March 31, 2022

	Millions of yen					
	Level 1	Level 2	Level 3	Total		
Financial assets:						
Financial assets measured at fair value through profit or loss						
Shares and investments	¥ —	¥ 504	¥ 2,357	¥ 2,861		
Derivative assets	—	589	—	589		
Financial assets measured at fair value through other comprehensive income						
Shares and investments	5,094	_	33,286	38,380		
Total	5,094	1,093	35,643	41,830		
Financial liabilities:						
Financial liabilities measured at fair value through profit or loss						
Derivative liabilities	_	493	_	493		
Total	¥ —	¥ 493	¥ —	¥ 493		
	Thousands of U.S. dollars					
	Level 1	Level 2	Level 3	Total		
Financial assets:						
Financial assets measured at fair value through profit or loss						
Shares and investments	\$ —	\$4,118	\$ 19,258	\$ 23,376		
Derivative assets	_	4,812	_	4,812		
Financial assets measured at fair value through other comprehensive income						
Shares and investments	41,621	—	271,967	313,588		
Total	41,621	8,930	291,225	341,776		
Financial liabilities:						
Financial liabilities measured at fair value through profit or loss						
Derivative liabilities		4,028		4,028		
Total	\$ —	\$4,028	\$ —	\$ 4,028		

ii) As of March 31, 2021

	Millions of yen				
	Level 1	Level 2	Level 3	Total	
Financial assets:					
Financial assets measured at fair value through profit or loss					
Shares and investments	¥ 4	¥479	¥ 1,885	¥ 2,368	
Derivative assets	_	170	_	170	
Financial assets measured at fair value through other comprehensive income					
Shares and investments	7,233		27,775	35,008	
Total	7,237	649	29,660	37,546	
Financial liabilities:					
Financial liabilities measured at fair value through profit or loss					
Derivative liabilities	2	986	—	988	
Total	¥ 2	¥986	¥ —	¥ 988	

Shares and investments

The fair value of marketable shares classified as Level 1 is calculated based on unadjusted quoted prices in an active market for identical assets or liabilities.

The fair value of Level 3 unlisted shares and investments for which quoted prices in an active market is unavailable is calculated by using comparable company comparisons or valuation techniques based on net asset value. In measuring such fair value, the Group uses unobservable inputs such as discount rates and valuation multiples and takes certain liability discount into account as needed.

Derivative assets and derivative liabilities

The fair value of Level 2 derivative assets and liabilities is calculated based on such observable inputs as prices provided by counterparty financial institutions or exchange and interest rates.

The fair value of Level 3 financial instruments is calculated by valuation specialists determining valuation methods for each relevant financial instrument in accordance with valuation policies and procedures that include valuation methods for fair value measurement approved by appropriately authorized person. The results are reviewed and approved by suitably authorized personnel.

The breakdowns of changes in financial instruments measured at fair value on a recurring basis that are classified as Level 3 of the fair value measurement hierarchy for the fiscal years ended March 31, 2021 and March 31, 2022 are as follows:

	Millions	Thousands of U.S. dollars	
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Balance at beginning of period	¥29,660	¥29,938	\$242,340
Total gains or losses	4,498	(227)	36,751
Profit or loss	21	(85)	172
Other comprehensive income (Note)	4,477	(142)	36,579
Purchases	2,633	806	21,513
Sales	(1,043)	(433)	(8,522)
Others	(105)	(424)	(857)
Balance at end of period	¥35,643	¥29,660	\$291,225

Note: Gains and losses recognized in other comprehensive income are included in "Financial assets measured at fair value through other comprehensive income" in the consolidated statements of comprehensive income.

The Company has granted written put options to non-controlling interests of its subsidiaries. The Company transferred non-controlling interests subject to the put options to financial liabilities arising from the put options, and treated the difference between non-controlling interests and financial liabilities as a decrease in capital surplus. The financial liabilities were measured at the present value of the amount that may be required to be paid to the contracting party, and were ¥13,646 million as of March 31, 2021. As of March 31, 2022, the financial liabilities were treated as accounts payable due to determination of the Group's payment obligation.

These financial liabilities are not included in the table above.

(ii) Financial instruments measured at amortized cost

The carrying amounts and fair values of financial instruments measured at amortized cost are as follows: i) As of March 31, 2022

			Millions of yen			
	Carrying _		Fair va	lue		
	amount	Level 1	Level 2	Level 3	Total	
Financial assets:						
Other financial assets						
Public and corporate bonds, etc.	¥ 10,569	¥—	¥ —	¥10,569	¥ 10,569	
Total	10,569	_	_	10,569	10,569	
Financial liabilities:						
Bonds and borrowings						
Bonds payable	115,580	_	113,980	_	113,980	
Long-term borrowings	253,069	_	256,595	_	256,595	
Total	¥368,649	¥—	¥370,575	¥ —	¥370,575	
	Thousands of U.S. dollars					
	Carrying _		Fair va	lue		
	amount	Level 1	Level 2	Level 3	Total	
Financial assets:						
Other financial assets						
Public and corporate bonds, etc.	\$ 86,355	\$—	\$ —	\$86,355	\$ 86,355	
Total	86,355	_		86,355	86,355	
Financial liabilities:						
Bonds and borrowings						
Bonds payable	944,358	_	931,285	_	931,285	
Long-term borrowings	2,067,726	_	2,096,536	_	2,096,536	
Total	\$3,012,084	\$—	\$3,027,821	\$ —	\$3,027,821	

ii) As of March 31, 2021

	Millions of yen					
	Carrying -		Fair va	alue		
	amount	Level 1	Level 2	Level 3	Total	
Financial assets:						
Other financial assets						
Public and corporate bonds, etc.	¥ 9,561	¥—	¥ —	¥9,561	¥ 9,561	
Total	9,561		_	9,561	9,561	
Financial liabilities:						
Bonds and borrowings						
Bonds payable	91,012	_	90,707	_	90,707	
Long-term borrowings	257,022	_	261,802	_	261,802	
Total	¥348,034	¥—	¥352,509	¥ —	¥352,509	

Public and corporate bonds, etc.

The fair value of Level 3 public and corporate bonds, etc. is calculated with reference to prices provided by financial institutions.

Bonds payable

The fair value of Level 2 bonds payable is calculated based on quoted prices when quoted prices are readily available, and the fair value of those without quoted prices is measured at the present value calculated by discounting the combined total of principal and interest at a rate taking the remaining period and credit risk of the bonds payable into account.

Long-term borrowings

The fair value of Level 2 long-term borrowings is calculated by discounting to the present value of the combined total of principal and interest at a rate assumed to be applied if the same borrowings were newly executed.

For other financial assets and liabilities other than above, relevant notes are omitted as they are mainly settled for a short period of time and the fair value approximates the carrying amount.

38. Major Subsidiaries

Major subsidiaries as of March 31, 2021 and 2022 are as follows:

(1) Consolidated subsidiaries with material non-controlling interests

The summarized financial information of consolidated subsidiaries that the Company recognizes their material non-controlling interests is as follows. The summarized financial information shows amounts before transactions within the Group are eliminated.

Prime Polymer Co., Ltd.

(i) Percentage of non-controlling interests and accumulated non-controlling interests

	Percentage of non-co	Percentage of non-controlling interests (%)		
	As of	As of		
Name of Subsidiary	March 31, 2022	March 31, 2021		
Prime Polymer Co., Ltd.	35%	35%		

	Accum	Accumulated non-controlling interests		
	Millions	of yen	Thousands of U.S. dollars	
Name of Subsidiary	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022	
	Warch 51, 2022	March 31, 2021		
Prime Polymer Co., Ltd.	¥38,777	¥38,188	\$316,831	

(ii) Profit or loss attributed to non-controlling interests and dividends paid to non-controlling interests

	Millions	Thousands of U.S. dollars	
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Profit or loss attributed to non-controlling interests	¥1,327	¥1,211	\$10,842
Comprehensive income allocated to non-controlling interests	1,250	1,275	10,213
Dividends paid to non-controlling interests	661	1,571	5,401

(iii) Summarized financial information

i) Summarized statements of financial position

	Millions	Thousands of U.S. dollars	
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Current assets	¥159,151	¥131,155	\$1,300,360
Non-current assets	39,850	29,535	325,598
Total assets	199,001	160,690	1,625,958
Current liabilities	92,575	56,991	756,393
Non-current liabilities	7,873	7,084	64,328
Total liabilities	100,448	64,075	820,721
Total equity	98,553	96,615	805,237
Total liabilities and equity	¥199,001	¥160,690	\$1,625,958

ii) Summarized statements of income and comprehensive income Summarized statements of income

	Millions	Thousands of U.S. dollars	
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Sales revenue	¥255,935	¥193,413	\$2,091,143
Net income	3,989	3,433	32,593

Summarized statements of comprehensive income

	Millions of yen		Thousands of U.S. dollars	
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022	
Other comprehensive income	¥ (162)	¥ 221	\$ (1,324)	
Comprehensive income	3,827	3,654	31,269	

iii) Summarized statements of cash flows

	Millions of yen		Thousands of U.S. dollars
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Cash flows from operating activities	¥(10,554)	¥24,067	\$ (86,233)
Cash flows from investing activities	(12,526)	(3,857)	(102,345)
Cash flows from financing activities	(2,028)	(4,631)	(16,569)
Net increase (decrease) in cash and cash equivalents	¥(25,108)	¥15,579	\$(205,147)

(2) Changes in ownership interests in subsidiaries that do not result in loss of control

The Group additionally acquired 25.6% of the total number of issued shares of ARRK CORPORATION in a share exchange in the fiscal year ended March 31, 2021. As a result, the Group's percentage of ownership in ARRK CORPORATION became 100%.

In the fiscal year ended March 31, 2022, Advanced Composites, Inc. acquired and canceled the treasury shares. As a result, the Group's percentage of ownership in Advanced Composites, Inc. increased from 61.75% to 68.75%.

The effect of changes in ownership interests in subsidiaries that do not result in loss of control is as follows.

	Millions of yen		Thousands of U.S. dollars
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
The carrying amount of non-controlling interests acquired	¥ —	¥ 8,183	\$ —
Consideration paid to non-controlling shareholders	—	15,042	_
Changes in the Company's ownership interests	¥(3,739)	¥ (6,859)	\$(30,550)

39. Related Parties

(1) Transactions with associates and joint ventures

For the year ended March 31, 2022

Significant transactions with related parties to be disclosed are as follows:

					Ν	/lillions of ye	n	Thousands o	f U.S. dollars
Status	Company	Ownership of voting rights, etc.	Relationship with related parties	Type of transaction	Transaction amount	Balance at March 31, 2022	Accounting item	Transaction amount	Balance at March 31, 2022
	Mitsui Chemicals		Purchase of shares and equity interests due to dissolution of joint venture	Purchase of shares and equity interests (Note 1)	¥43,118	_		\$352,300	—
Subsidiary of joint venture	& SKC Polyurethanes Inc.	_		Transfer of all business assets (Note 2)	25,435	_		207,819	_
	(Japanese company)		Transfer of business due to dissolution of joint venture	Transfer of all business liabilities (Note 2)	16,265	-		132,895	_
			joint venture	Consideration for business transfer (Note 2)	10,694	_		87,376	_

Notes:

1. Purchase price of shares and equity interests is decided after negotiation based on a consideration calculated by the Company.

2. The amount of business assets and business liabilities transferred is determined based on a proper evaluation. The consideration for business transfer is determined by projecting the excess earning power expected from future businesses.

For the year ended March 31, 2021

There are no material transactions to disclose.

(2) Remuneration for key management personnel

Remuneration for key management personnel of the Company is as follows:

	Millions	Millions of yen	
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Remuneration and bonuses	¥570	¥482	\$4,657
Share-based payment	61	25	498
Total	¥631	¥507	\$5,155

40. Commitments

Commitments related to expenditures on and after the closing date are as follows:

	Millions of yen		Thousands of U.S. dollars
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Purchase of property, plant and equipment and intangible assets	¥102,392	¥53,421	\$836,604

41. Contingent Liabilities

Debt guarantees

The Group has guaranteed and made guarantee commitments for companies outside the Group for loans from financial institutions and entities. In case of default by the entities for which the Company conducts debt guarantees, the Company will need to bear repayments that such entities have failed to make, as well as related losses.

The status of debt guarantees at March 31, 2021, and March 31, 2022 is as follows:

	Millions of yen		Thousands of U.S. dollars
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
Nghi Son Refinery&Petrochemical LLC	¥21,800	¥20,545	\$178,119
Solar and wind power generation cooperative in Tahara (Note 1)	7,730	9,310	63,159
Shanghai Sinopec Mitsui Elastomers, Co., Ltd.	2,092	6,399	17,093
Formosa Mitsui Advanced Chemicals Co., Ltd.	1,705	_	13,931
Others (Note 2)	751	625	6,136
Total	¥34,078	¥36,879	\$278,438

(i) As of March 31, 2022

Notes:

1. Of which, the amount of ¥4,252 million has been re-guaranteed by Mitsui & Co., Ltd.

2. Of which, the amount of \pm 383 million has been re-guaranteed by another entity.

(ii) As of March 31, 2021

Notes:

3. Of which, the amount of $\pm5,121$ million has been re-guaranteed by Mitsui & Co., Ltd.

4. Of which, the amount of ¥292 million has been re-guaranteed by another entity.

42. Subsequent Events

Not applicable

Other Information

Quarterly information for the fiscal year ended March 31,2022

	Millions of yen			
(Cumulative period)	First three months	First six months	First nine months	FY2021
Sales revenue	¥370,591	¥743,535	¥1,165,079	¥1,612,688
Income (loss) before income taxes	51,885	92,356	129,579	141,274
Net income (loss) attributable to owners of the parent	42,624	73,940	100,067	109,990
Basic earnings (loss) per share (Yen)	217.53	377.64	513.32	565.45
(Fiscal period)	First quarter	Second quarter	Third quarter	Fourth quarter
Earnings per share (Yen)	¥217.53	¥160.07	¥135.21	¥51.35
		Thousands o	f U.S. dollars	
(Cumulative period)	First three months	First six months	First nine months	FY2021
Sales revenue	\$3,027,952	\$6,075,129	\$9,519,397	\$13,176,632
Income (loss) before income taxes	423,932	754,604	1,058,738	1,154,294
Net income (loss) attributable to owners of the parent	348,264	604,134	817,608	898,685
Basic earnings (loss) per share (Dollar)	1.777	3.086	4.194	4.620
(Fiscal period)	First quarter	Second quarter	Third quarter	Fourth quarter
Basic earnings (loss) per share (Dollar)	\$1,777	\$1.308	\$1.105	\$0.420



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Independent Auditor's Report

The Board of Directors Mitsui Chemicals, Inc.

Opinion

We have audited the accompanying consolidated financial statements of Mitsui Chemicals, Inc., and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at March 31, 2022, and the consolidated statements of income, comprehensive income, changes in equity, and cash flows for the year then ended, and notes to the consolidated financial statements.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at March 31, 2022, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for Opinion

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

Key Audit Matters

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



Valuation of identifiable intangible assets and goodwill associated with the acquisition of Meiji Seika Pharma's Agrochemicals Business

Description of Key Audit Matter	Auditor's Response
As described in Note 7, "Business Combination," (Acquisition of Shares in a subsidiaries of Meiji Seika Pharma's Agrochemicals Business by Mitsui Chemicals Agro) in the Notes to Consolidated Financial Statements, Mitsui Chemicals Agro, Inc., a subsidiary of Mitsui Chemicals, Inc. (the "Company"), acquired shares in subsidiaries in the agrochemicals business of Meiji Seika Pharma Co., Ltd. ("Meiji Seika Pharma") for \pm 41,240 million during the year ended March 31, 2022. For the acquisition, the Company engaged external experts in conducting a fair value measurement to recognize and measure the identifiable assets acquired and liabilities assumed, and allocated the cost of the acquisition (purchase price allocation, "PPA"). As a result of the allocation, the Company recorded technology assets of \pm 5,275 million, customer-related assets of \pm 3,196 million, license agreements of \pm 6,923	We performed the following audit procedures for Mitsui Chemicals Agro, Inc.'s ("Mitsui Chemicals Agro") acquisition of shares in subsidiaries in the agrochemicals business of Meiji Seika Pharma Co., Ltd. ("Meiji Seika Pharma"), among others. We gained an understanding of the transaction and terms of the acquisition by inspecting management meeting documents, board meeting minutes, and agreements regarding the acquisition of shares in subsidiaries in the agrochemicals business of Meiji Seika Pharma. We made inquiries of the management of Mitsui Chemicals, Inc. (the "Company") and Mitsui Chemicals Agro about the business environment and corporate strategy behind the acquisition of shares in subsidiaries in the agrochemicals business of Meiji Seika Pharma, and considered how management assessed the reasonableness of
million, and goodwill of ¥16,782 million. The Company determines the fair values of the technology assets, customer-related assets, and license agreements using a valuation model based on an income approach-method, which uses inputs such as future business plans and discount rates, etc. Since the agrochemicals business is an R&D type business, future business plans include key assumptions made by management such as R&D periods, the timing of the license registration, and sales prospects after the registration. In addition, the selection of input data for calculating the weighted average cost of capital before tax, which is the discount rate, and the determination of allocation amounts of identifiable intangible assets and their useful lives through the PPA include estimates, therefore these require significant management judgment.	business. We inspected the materials concerning the consideration for the acquisition of shares in subsidiaries in the agrochemicals business of Meiji Seika Pharma, discussed with the management of the Company and Mitsui Chemicals Agro about the methods used to calculate the purchase price and the future business plans used to calculate the purchase price to understand management's estimate process, and evaluated management's assumptions used to make estimates, including R&D periods, the timing of the license registration, and sales prospects after the registration. We involved valuation specialists from our network firm and assessed the valuation model for the business value measurement, including discount rates, based on business plans for the agrochemicals business acquired from Meiji Seika Pharma.
license agreements, and goodwill identified	We also performed the following audit procedures

license agreements, and goodwill identified through the acquisition of shares in subsidiaries in the agrochemicals business of Meiji Seika Pharma are materially significant significance and the

We also performed the following audit procedures in considering the fair value of technology assets, customer-related assets, license agreements, and



determination of the allocation amounts and useful lives of identifiable intangible assets through the PPA involves the judgment and estimates by management. Therefore, we have determined it to be a key audit matter.	goodwill through the recognition and measurement of the identifiable assets acquired and liabilities assumed, recorded associated with Mitsui Chemicals Agro's acquisition of shares in subsidiaries in the agrochemicals business of Meiji Seika Pharma.
	For R&D periods, the timing of the license registration, and sales prospects after the registration included in future business plans approved by management, we discussed with the relevant departments of the Company and Mitsui Chemicals Agro, to gain an understanding of sales forecasts of the Company and Mitsui Chemicals Agro based on Meiji Seika Pharma's sales plans, assessed the consistency between management's estimates and materials for future sales plans, and considered management's evaluation of uncertainties.
	We involved valuation specialists from our network firm and assessed the valuation models for intangible assets identified through the PPA and input data used in calculating the weighted average cost of capital before tax.

Impairment loss on non-current assets of the polyurethane raw material operation			
Description of Key Audit Matter	Auditor's Response		
As described in Note 18, "Impairment of Non- Financial Assets" in the Notes to Consolidated Financial Statements, the Company recorded an impairment loss of ¥13,267 million on non-current assets of the polyurethane raw materials operation in the Basic Materials Business Segment for the year ended March 31, 2022. As described in Note 7, "Business Combination," (Share Acquisition of Polyurethane Raw Materials Business Subsidiaries and Jointly Controlled Companies due to Dissolution of Joint Venture) in the Notes to Consolidated Financial Statements, the Company and SKC Co., Ltd. established Mitsui Chemicals & SKC Polyurethanes Inc. (MCNS) as a joint venture for their operations in polyurethane raw materials in July 2015. However, the joint venture agreement was dissolved during	We performed the following audit procedures to evaluate the impairment losses on non-current assets in the Polyurethanes Division of the Company, among others. We assessed whether the groupings of non-current assets are in line with the financial reporting framework by inspecting documents related to decisions for asset groupings pertaining to considerations for impairment losses on non- current assets. We had discussions with the Polyurethanes Division's management and assessed the judgment regarding indications of impairment of non-current assets by understanding estimate methods of the business plan approved by management along with identifying assumptions for business revenue and expenses.		



the year ended March 31, 2022, and as a result, the Company decided to receive transfer of the business in Japan of MCNS-J, a consolidated subsidiary of MCNS.

The Company produces toluene diisocyanate ("TDI"), which is a polyurethane raw material, for markets in Japan and overseas. Export prices to overseas market are highly volatile and it makes sales revenue forecasts for this product difficult. Meanwhile, soaring crude oil prices are driving up manufacturing costs of naphtha, the main raw material in polyurethane, as well as of various other raw materials and utilities. Costs related to maintenance of production facilities and other costs are also increasing.

As operating losses were expected to continue for the following fiscal year in the polyurethane raw material operation, the Company determined that there was an indication of impairment of related non-current assets. As a result of conducting an impairment test, the recoverable amount was lower than the carrying amount, thus the Company recorded an impairment loss on the non-current assets in the polyurethane raw material operation.

The Company measures recoverable amount at value in use when performing the impairment test for the non-current assets in the polyurethane raw material operation. Value in use is estimated using future cash flows based on the business plan approved by management. The business plan includes TDI business' domestic and overseas selling prices and sales volume, and variable cost of sales as management's key assumptions. The estimates of future cash flows based on the business plan involve uncertainty such as the prolonged rise in crude oil prices due to the crisis in Ukraine and require management's judgment. Therefore, we have determined it to be a key audit matter. We compared the remaining useful lives of relevant assets with future cash flow forecast periods used in measurement of value in use.

We evaluated consistency of domestic and overseas selling prices of toluene diisocyanate ("TDI") in the calculation of value in use by comparing publicly available data including revised selling prices of TDI announced by the Company.

We also evaluated TDI's manufacturing costs in the calculation of value in use by comparing actual costs in the current year and considered if these costs reflected the increase of manufacturing costs due to prolonged rise in crude oil prices due to the crisis in Ukraine and so on.

We retroactively evaluated the estimate process in the business plan by inspecting TDI's actual domestic and overseas selling prices and manufacturing costs after year end.



Other Information

The other information comprises the information included in the Annual Report that contains audited consolidated financial statements but does not include the consolidated financial statements and our audit report thereon. Management is responsible for preparation and disclosure of the other information. The Corporate Auditor and the Board of Corporate Auditors are responsible for overseeing the Group's reporting process of the other information.

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

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

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

We have nothing to report in this regard.

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

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

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern and disclosing, as required by IFRSs, matters related to going concern.

The Corporate Auditor and the Board of Corporate Auditors are responsible for overseeing the Group's financial reporting process.

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

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

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

• Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.



- Consider internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances for our risk assessments, while the purpose of the audit of the consolidated financial statements is not 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 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 in accordance with IFRSs.
- 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 the Corporate Auditor and the Board of Corporate Auditors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Corporate Auditor and the Board of Corporate Auditors with a statement that we have complied with the ethical requirements regarding independence that are relevant to our audit of the consolidated financial statements in Japan, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

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

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.



Convenience Translation

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended March 31, 2022 are presented solely for convenience. Our audit also included the translation of Japanese yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 2 to the consolidated financial statements.

Ernst & Young ShinNihon LLC Tokyo, Japan

June 24, 2022

Tomohisa Yura Designated Engagement Partner Certified Public Accountant



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Tsuyoshi Nakano Designated Engagement Partner Certified Public Accountant

Satoshi Kanazawa Designated Engagement Partner Certified Public Accountant