

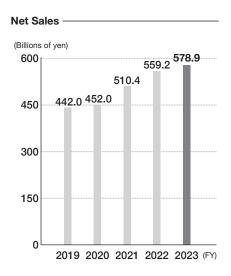
NGK INSULATORS, LTD. and Consolidated Subsidiaries

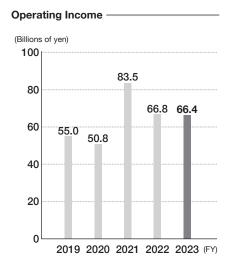
Consolidated Financial Statements for the Year Ended March 31, 2024, and Independent Auditor's Report

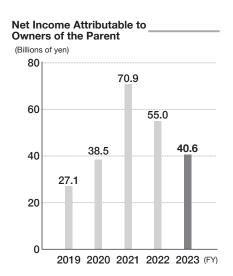
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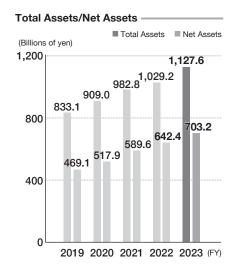
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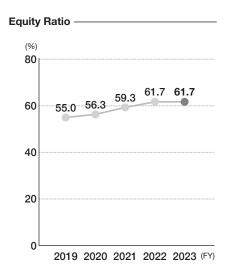
Financial Highlights

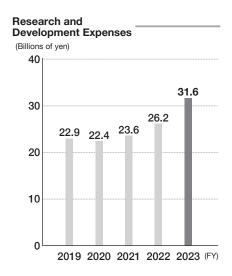




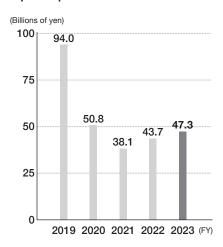




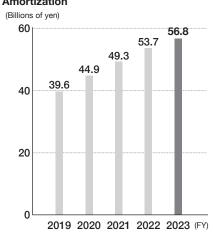




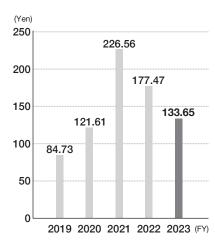
Capital Expenditures



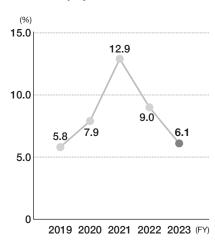
Depreciation and Amortization



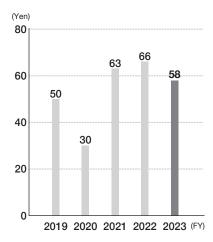
Net Income per Share



Return on Equity



Dividends



Stock Price

FY	2019	2020	2021	2022	2023
Highest (Yen)	1,994	2,153	2,106	2,038	2,085
Lowest (Yen)	1,168	1,171	1,539	1,638	1,642

Consolidated Balance Sheet

NGK INSULATORS, LTD. and Consolidated Subsidiaries March 31, 2024

		222	Thousands of U.S. Dollars
ASSETS	Million 2024	2023	(Note 1) 2024
CURRENT ASSETS:		2023	
Cash and cash equivalents (Note 14)	¥ 171,432	¥ 168,864	\$ 1,135,312
Time deposits (Note 14)	₹ 171,432 33,125	14,485	219,365
Marketable securities (Notes 4 and 14)	38,116	31,361	252,421
Notes and accounts receivable:	30,110	31,301	232,421
Trade notes and accounts (Notes 12 and 14)	117,763	111,074	779,888
Other	17,703	16,357	117,025
Allowance for doubtful accounts	(166)	(162)	(1,096)
Total	135,268	127,269	895,817
Inventories (Note 5)	239,063	214,423	1,583,202
Prepaid expenses and other current assets	25,148	17,317	166,544
Total current assets	642,152	573,719	4,252,661
10 111 00110110 0 00000	012,102	273,713	.,202,001
PROPERTY, PLANT AND EQUIPMENT (Notes 6):			
Land	33,376	30,756	221,030
Buildings and structures	268,360	253,605	1,777,217
Machinery and equipment	725,487	660,069	4,804,551
Construction in progress	23,298	25,394	154,289
Other	5,939	3,943	39,334
Total	1,056,460	973,767	6,996,421
Accumulated depreciation	(684,556)	(607,321)	(4,533,481)
	(00.1,000)	(007,021)	(1,000,101)
Net property, plant and equipment	371,904	366,446	2,462,940
INVESTMENTS AND OTHER ASSETS:			
Investment securities (Notes 4 and 14)	76,198	41,482	504,622
Investments in unconsolidated subsidiaries and			
associated companies	512	16,742	3,389
Intangible assets	6,659	6,414	44,101
Net defined benefit assets (Notes 3.a and 8)	16,319	12,887	108,076
Deferred tax assets (Notes 3.b and 11)	9,936	7,523	65,801
Other assets	3,897	3,955	25,807
Total investments and other assets	113,521	89,003	751,796
TOTAL	¥ 1,127,577	¥ 1,029,168	\$ 7,467,397

(Continued)

	Millior	ns of Yen	Thousands of U.S. Dollars (Note 1)
LIABILITIES AND EQUITY	2024	2023	2024
CURRENT LIABILITIES:			
Short-term borrowings (Note 7)	¥ 11,343	¥ 11,144	\$ 75,117
Current portion of long-term debt (Notes 7 and 14)	40,898	34,860	270,846
Notes and accounts payable:			
Trade notes and accounts	49,953	44,314	330,813
Other	15,289	16,042	101,253
Total	65,242	60,356	432,066
Accrued expenses	29,165	25,861	193,149
Income taxes payable (Note 11)	6,735	4,164	44,600
Other current liabilities	22,421	13,123	148,486
Total current liabilities	175,804	149,508	1,164,264
LONG-TERM LIABILITIES:			
Long-term debt (Notes 7 and 14)	207,086	207,354	1,371,432
Net defined benefit liability (Notes 3.a and 8)	20,907	20,284	138,456
Provision for product warranties	425	656	2,813
Deferred tax liabilities (Notes 3.b and 11)	13,464	4,078	89,169
Other long-term liabilities	6,665	4,842	44,139
Total long-term liabilities	248,547	237,214	1,646,009
CONTINGENT LIABILITIES (Note 16)			
EQUITY (Note 9):			
Common stock:			
Authorized — 735,030 thousand shares			
Issued — 311,957 thousand shares and			
311,830 thousand shares at March 31, 2024 and 2023	70,064	69,955	464,002
Capital surplus	70,397	70,306	466,206
Stock acquisition rights (Note 10)	853	882	5,647
Retained earnings (Note 18)	451,550	440,530	2,990,398
Treasury stock — at cost: 14,029 thousand shares and			
at March 31, 2024 and 2023, respectively (Note 9.c)	(25,155)	(10,295)	(166,591)
Accumulated other comprehensive income:			
Unrealized gain on available-for-sale securities	38,845	17,102	257,254
Deferred gain (loss) on derivatives under hedge accounting	6	(10)	41
Foreign currency translation adjustments	82,251	42,850	544,703
Defined retirement benefit plans	7,468	5,010	49,456
Total	696,279	636,330	4,611,116
Noncontrolling interests	6,947	6,116	46,008
Total equity	703,226	642,446	4,657,124
TOTAL	V 1 105 555	V 1.000.100	0 7 4/7 307
TOTAL	¥ 1,127,577	¥ 1,029,168	\$ 7,467,397

See notes to consolidated financial statements.

(Concluded)

Consolidated Statement of Income

NGK INSULATORS, LTD. and Consolidated Subsidiaries Year ended March 31, 2024

	Millior	ns of Yen	Thousands of U.S. Dollars (Note 1)
	2024	2023	2024
NET SALES (Note 12)	¥ 578,914	¥ 559,240	\$ 3,833,865
COST OF SALES (Note 13)	423,060	405,463	2,801,719
Gross profit	155,854	153,777	1,032,146
SELLING, GENERAL AND ADMINISTRATIVE EXPENSES (Note 13)	89,456	87,016	592,424
Operating income	66,398	66,761	439,722
OTHER INCOME (EXPENSES):			
Interest and dividends income	2,975	2,123	19,699
Interest expense	(4,016)	(3,861)	(26,594)
Loss on sales of and disposals of property, plant and equipment — net	(161)	(319)	(1,065)
Equity in earnings of unconsolidated subsidiary and associated company	1,567	1,522	10,378
Foreign exchange (loss) gain	(2,466)	694	(16,322)
Loss on valuation of derivatives	(1,060)	(205)	(7,021)
Gain on sales of investment securities — net	947	1,313	6,269
Impairment loss on long-lived assets (Notes 6)	(6,960)	(9,952)	(46,091)
Depreciation	(783)	(740)	(5,188)
Subsidy income	641	1,125	4,242
Interest on tax refund (Note 11)	_	551	_
Loss on liquidation of subsidiaries and an associated company	_	(964)	_
Loss on valuation of investment securities	(957)	_	(6,336)
	(377)	(532)	(2,497)
Loss on business of subsidiary	427	6	2,826
Other expenses net		(9,239)	
Other expenses — net	(10,223)	(9,239)	(67,700)
INCOME BEFORE INCOME TAXES	56,175	57,522	372,022
INCOME TAXES (Notes 3.b and 11):			
Current	17,997	15,254	119,195
Refund	(2)	(7,661)	(15)
Prior periods	_	(4,100)	_
Deferred	(2,524)	(1,223)	(16,718)
Total income taxes	15,471	2,270	102,462
NET INCOME	40,704	55,252	269,560
NET INCOME ATTRIBUTABLE TO NONCONTROLLING INTERESTS	141	203	932
NET INCOME ATTRIBUTABLE TO OWNERS OF THE PARENT	¥ 40,563	¥ 55,049	\$ 268,628
	Y	en	U.S. Dollars
PER SHARE OF COMMON STOCK (Notes 2.u and 18):			
Basic net income	¥ 133.65	¥ 177.47	\$ 0.885
Diluted net income	133.42	177.17	0.884
Cash dividends applicable to the year	58.00	66.00	0.384

Consolidated Statement of Comprehensive Income

NGK INSULATORS, LTD. and Consolidated Subsidiaries Year ended March 31, 2024

	Millions of Yen			Thousands of U.S. Dollars (Note 1)		
	2024	2	2023		2024	
NET INCOME	¥ 40,704	¥	55,252	\$	269,560	
OTHER COMPREHENSIVE INCOME (LOSS) (Note 17):						
Unrealized gain on available-for-sale securities	21,759		42		144,100	
Deferred gain on derivatives under hedge accounting	17		181		110	
Foreign currency translation adjustments	40,526		21,205		268,383	
Share of other comprehensive (loss) income in associated companies	(63)		392		(414)	
Defined retirement benefit plans	2,134		5,681		14,134	
Total other comprehensive income	64,373		27,501		426,313	
COMPREHENSIVE INCOME	¥ 105,077	¥	82,753	\$	695,873	
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO:						
Owners of the parent	¥ 104,181	¥	82,162	\$	689,939	
Noncontrolling interests	896		591		5,934	

Consolidated Statement of Changes in Equity

NGK INSULATORS, LTD. and Consolidated Subsidiaries Year ended March 31, 2024

	Thousands					
	Outstanding Number of Common Stock	Common Stock	Capital Surplus	Stock Acquisition Rights	Retained Earnings	Treasury Stock
Balance at March 31, 2022 (April 1, 2022, as previously reported)	311,641	¥ 69,849	¥ 70,199	¥ 941	¥ 416,205	¥ (10,945)
Net income attributable to owners of the parent	_	_	_	_	55,049	-
Cash dividends, ¥66 per share	-	-	-	-	(20,573)	-
Purchase of treasury stock	(5,500)	_	_	-	_	(9,635)
Disposal of treasury stock	32	_	(3)	-	_	63
Cancellation of treasury stock	=	-	(10,222)	-	-	10,222
Transfer from retained earnings to capital surplus	=	-	10,226	-	(10,226)	-
Restricted stock compensation	118	106	106	-	_	-
Change in scope of consolidation	=	-	=	=	75	=
Net change in the year	<u> </u>			(59)		
Balance at March 31, 2023	306,291	69,955	70,306	882	440,530	(10,295)
Net income attributable to owners of the parent	-	-	-	-	40,563	-
Cash dividends, ¥58 per share	_	_	_	-	(17,768)	-
Purchase of treasury stock	(8,502)	_	_	_	-	(14,882)
Disposal of treasury stock	12	-	7	-	-	22
Restricted stock compensation	127	109	109	-	_	-
Change in scope of equity method	_	_	_	_	(11,775)	-
Change in ownership interest of parent due to transactions with						
non-controlling interests	_	_	(25)	-	_	=
Net change in the year				(29)		
Balance at March 31, 2024	297,928	¥ 70,064	¥ 70,397	¥ 853	¥ 451,550	¥ (25,155)

		Common Stock	Capital Surplus	Ac	Stock equisition Rights	Retained Earnings	Treasury Stock
Balance at March 31, 2023	\$	463,281	\$ 465,601	\$	5,842	\$ 2,917,417	\$ (68,177)
Net income attributable to owners of the parent		-	-		-	268,628	_
Cash dividends, \$0.38 per share		-	-		-	(117,669)	-
Purchase of treasury stock		-	-		-	-	(98,559)
Disposal of treasury stock		-	49		-	-	145
Restricted stock compensation		721	721		-	_	-
Change in scope of equity method		-	_		-	(77,978)	_
Change in ownership interest of parent due to transactions with			4.60				
non-controlling interests		-	(165)		-	-	-
Net change in the year			 		(195)	 	
Balance at March 31, 2024	<u>S</u>	464,002	\$ 466,206	\$	5,647	\$ 2,990,398	\$ (166,591)

		Millions of	Yen										
			ulated Other Com	•									
Avail	Unrealized Gain on Available-for-Sale Derivatives Securities Hedge Acco		tives under	Foreign Currency Translation Adjustments		Defined Retirement Benefit Plans		Total		Noncontrolling Interests			Total Equity
¥	17,061	¥	(200)	¥	21,621	¥	(643)	¥	584,088	¥	5,506	¥	589,594
	_		-		-		_		55,049		-		55,049
	_		-		-		-		(20,573)		-		(20,573)
	_		-		-		-		(9,635)		-		(9,635)
	-		-		-		-		60		-		60
	_		-		_		-		_		_		-
	-		-		-		-		-		-		=
	_		-		_		-		212		_		212
	_		-		-		-		75		-		75
	41		190		21,229		5,653		27,054		610		27,664
	17,102		(10)		42,850		5,010		636,330		6,116		642,446
	_		-		-		-		40,563		-		40,563
	_		-		-		-		(17,768)		-		(17,768)
	_		-		-		-		(14,882)		-		(14,882)
	_		-		-		_		29		-		29
	_		-		-		-		218		-		218
	-		-		-		-		(11,775)		-		(11,775)
	-		-		-		-		(25)		-		(25)
	21,743		16		39,401		2,458		63,589		831		64,420
¥	38,845	¥	6	¥	82,251	¥	7,468	¥	696,279	¥	6,947	¥	703,226
	Thous	ands of U.S. Do											
			ulated Other Com										
Avail	ized Gain on able-for-Sale ecurities	Derivat	Gain (loss) on tives under Accounting	Tr	gn Currency anslation ljustments		d Retirement nefit Plans		Total		controlling nterests		Total Equity
\$	113,255	\$	(64)	\$	283,773	\$	33,178	\$	4,214,106	\$	40,504	\$	4,254,610
	_		_		-		_		268,628		_		268,628
			=-		-		-		(117,669)		-		(117,669)
	-		-		-		-		(98,559)		-		(98,559
	_		-		-		-		194		-		194
	-		-		-		-		1,442		-		1,442
	_		-		-		_		(77,978)		-		(77,978)

Consolidated Statement of Cash Flows

NGK INSULATORS, LTD. and Consolidated Subsidiaries Year ended March 31, 2024

	Millions of Yen		Thousands of U.S. Dollars (Note 1)	
	2024	2023	2024	
OPERATING ACTIVITIES:				
Income before income taxes	¥ 56,175	¥ 57,522	\$ 372,022	
Adjustments for:			* * * * * * * * * * * * * * * * * * * *	
Income taxes — paid	(15,884)	(31,378)	(105,193)	
Income taxes — refund	62	11,107	408	
Depreciation and amortization	56,807	53,729	376,203	
Impairment loss on fixed assets	6,960	9,952	46,091	
Equity in earnings of unconsolidated subsidiary and associated company	(1,567)	(1,522)	(10,378)	
Gain on sales of investment securities — net	(947)	(1,313)	(6,269)	
Changes in assets and liabilities:	(217)	(1,515)	(0,20)	
Decrease in notes and accounts receivable — trade	1,234	15,452	8,174	
Increase in inventories	(10,092)	(19,614)	(66,832)	
Increase in other current assets	(6,781)	(403)	(44,905)	
Increase (decrease) in notes and accounts payable — trade	3,861	(497)	25,571	
Increase in other current liabilities	6,440	4,348	42,647	
Other — net	2,891	566	19,144	
		40,427		
Total adjustments Net cash provided by operating activities	42,984 99,159	97,949	284,661 656,683	
Net cash provided by operating activities	99,139	97,949	030,003	
INVESTING ACTIVITIES:				
Purchases of marketable securities	(73,899)	(69,639)	(489,400)	
Proceeds from sales and redemption of marketable securities	69,671	61,896	461,396	
Proceeds from sales and redemption of investment securities	2,226	3,955	14,743	
Purchases of investment securities	(3,229)	(382)	(21,383)	
Purchases of property, plant and equipment	(42,812)	(40,257)	(283,522)	
Proceeds from sale of property, plant and equipment	735	3,168	4,869	
Purchase of intangible assets	(2,324)	(2,896)	(15,394)	
Increase in time deposits	(18,566)	(7,319)	(122,957)	
Other — net	(395)	(533)	(2,611)	
Net cash used in investing activities	(68,593)	(52,007)	(454,259)	
FINANCING ACTIVITIES:				
(Decrease) increase in short-term borrowings — net	(783)	4,524	(5,183)	
Proceeds from long-term debt	35,250	25,125	233,444	
Repayments of long-term debt	(36,376)	(32,812)	(240,901)	
Purchase of treasury stock	(14,882)	(9,635)	(98,559)	
Cash dividends	(17,768)	(20,573)	(117,669)	
Other — net	(1,564)	(1,197)	(10,358)	
Net cash used in financing activities	(36,123)	(34,568)	(239,226)	
FOREIGN CURRENCY TRANSLATION ADJUSTMENTS				
ON CASH AND CASH EQUIVALENTS	8,125	2,561	53,812	
NET INCREASE IN CASH AND CASH EQUIVALENTS	2,568	13,935	17,010	
INCREASE IN CASH AND CASH EQUIVALENTS RESULTING				
FROM CHANGE IN SCOPE OF CONSOLIDATION	_	74	_	
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	168,864	154,855	1,118,302	
CASH AND CASH EQUIVALENTS, END OF YEAR	¥ 171,432	¥ 168,864	\$ 1,135,312	

Notes to Consolidated Financial Statements

NGK INSULATORS, LTD. and Consolidated Subsidiaries Year ended March 31, 2024

1. BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS

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

In preparing these consolidated financial statements, certain reclassifications and rearrangements have been made to the consolidated financial statements issued domestically in order to present them in a form which is more familiar to readers outside Japan. In addition, certain reclassifications have been made in the 2023 consolidated financial statements to conform to the classifications used in 2024.

The consolidated financial statements are stated in Japanese yen, the currency of the country in which NGK INSULATORS, Ltd. ("the Company") is incorporated and operates. The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of readers outside Japan and have been made at the rate of \(\frac{\pmathbf{\text{\tinte\tinx}\\ \text{\ti}}}\text{\tin}}\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tin}}\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\tint{\text{\text{\text{\text{\text{\text{\texi}\tinz}{\text{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\text{\text{\t should not be construed as representations that the Japanese yen amounts could be converted into U.S. dollars at that or any other rate.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Consolidation— The consolidated financial statements as of March 31, 2024 include the accounts of the Company and its 47 (47 in 2023) significant subsidiaries (together, the "Group").

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

The investment in one unconsolidated subsidiary is accounted for by the equity method.

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

All significant intercompany balances and transactions have been eliminated in consolidation. All material unrealized profit included in assets resulting from transactions within the Group is also eliminated. The fiscal years of subsidiaries are not necessarily the same as that of the Company. Eight foreign consolidated subsidiaries in China and Mexico, etc. have different fiscal years. Those subsidiaries prepared provisional financial information at March 31 for the consolidation.

Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements— Under Accounting Standards Board of Japan ("ASBJ") Practical Issues Task Force ("PITF") No. 18, "Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements," the accounting policies and procedures applied to a parent company and its subsidiaries for similar transactions and events under similar circumstances should in principle be unified for the preparation of the consolidated financial statements. However, financial statements prepared by foreign subsidiaries in accordance with either International Financial Reporting Standards ("IFRS") or generally accepted accounting principles in the United States of America ("US GAAP") tentatively may be used for the consolidation process, except for the following items that should be adjusted in the consolidation process so that net income is accounted for in accordance with Japanese GAAP, unless they are not material:

- (a) amortization of goodwill; (b) scheduled amortization of actuarial gain or loss of pensions that has been recorded in equity through other comprehensive income; (c) expensing capitalized development costs of R&D; (d) cancellation of the fair value model of accounting for property, plant and equipment and investment properties and incorporation of the cost model of accounting; and (e) recording a gain or loss through profit or loss on the sale of an investment in an equity instrument for the difference between the acquisition cost and selling price, and recording impairment loss through profit or loss for other-than-temporary declines in the fair value of an investment in an equity instrument, where a foreign subsidiary elects to present in other comprehensive income subsequent changes in the fair value of an investment in an equity instrument.
- Unification of Accounting Policies Applied to Foreign Associated Companies for the Equity Method— ASBJ Statement No. 16, "Accounting Standard for Equity Method of Accounting for Investments," requires adjustments to be made to conform the associate's accounting policies for similar transactions and events under similar circumstances to those of the parent company when the associate's financial statements are used in applying the equity method, unless it is impracticable to determine such adjustments. In addition, financial statements prepared by foreign associated companies in accordance with either IFRS or US GAAP tentatively may be used in applying the equity method if the following items are adjusted so that net income is accounted for in accordance with Japanese GAAP, unless they are not material: (a) amortization of goodwill; (b) scheduled amortization of actuarial gain or loss of pensions that has been recorded in equity through other comprehensive income; (c) expensing capitalized development costs of R&D; (d) cancellation of the fair value model of accounting for property, plant and equipment and investment properties and incorporation of the cost model of accounting; and (e) recording a gain or loss through profit or loss on the sale of an investment in an equity instrument for the difference between the acquisition cost and selling price, and recording impairment loss through profit or loss for other-than-temporary declines in the fair value of an investment in an equity instrument, where a foreign associate elects to present in other comprehensive income subsequent changes in the fair value of an investment in an equity instrument.
- Business Combinations— Business combinations are accounted for using the purchase method. Acquisition-related costs, such as advisory fees or professional fees, are accounted for as expenses in the periods in which the costs are incurred. If the initial accounting for a business combination is incomplete by the end of the reporting period in which the business combination occurs, an acquirer shall report in its financial statements provisional amounts for the items for which the accounting is incomplete. During the measurement period, which shall not exceed one year from the acquisition, the acquirer shall retrospectively adjust the provisional amounts recognized at the acquisition date to reflect new information obtained about facts and circumstances that existed as of the acquisition date and that would have affected the measurement of the amounts recognized as of that date. Such adjustments shall be recognized as if the accounting for the business combination had been completed at the acquisition date. A parent's ownership interest in a subsidiary might change if the parent purchases or sells ownership interests in its subsidiary. The carrying amount of noncontrolling interest is adjusted to reflect the change in the parent's ownership interest in its subsidiary while the parent retains its controlling interest in its subsidiary. Any difference between the fair value of the consideration received or paid and the amount by which the noncontrolling interest is adjusted is accounted for as capital surplus as long as the parent retains control over its subsidiary.
- Cash Equivalents— Cash equivalents are short-term investments that are readily convertible into cash and that are exposed to insignificant risk of changes in value.

Cash equivalents include time deposits, certificates of deposit, and investment trusts that represent short-term investments, all of which mature or become due within three months of the date of acquisition.

- *Inventories* Inventories are stated at the lower of cost, determined principally by the average method for finished products, work in process, and raw materials, or net selling value (see Note 5). Writedowns of inventories in the amounts of \(\pm\)1,570 million (\(\pm\)10,395 thousand) and \(\pm\)2,626 million for the years ended March 31, 2024 and 2023, respectively, were included in cost of sales. Costs of contracts in progress are stated at cost, determined by the specific identification method.
- Allowance for Doubtful Accounts— To provide for the loss from doubtful accounts, the allowance for doubtful accounts is calculated using the historical rate of actual losses for normal receivables and the estimated nonrecoverable amount for specific doubtful receivables after considering the recoverability of each account.
- Marketable and Investment Securities— Marketable and investment securities are classified and accounted for, depending on management's intent, as follows: (1) held-to-maturity debt securities, for which there is a positive intent and ability to hold to maturity, are reported at amortized cost; and (2) available-for-sale securities, which are not classified as held-to-maturity debt securities, are reported at fair value, with unrealized gains and losses, net of applicable taxes, reported in a separate component of equity.

Nonmarketable available-for-sale equity securities are stated at cost, determined by the movingaverage method. For other-than-temporary declines in fair value, investment securities are reduced to net realizable value by a charge to income.

Property, Plant and Equipment— Property, plant, and equipment are stated at cost. Depreciation of property, plant and equipment of the Company and its consolidated subsidiaries is computed by the straight-line method.

The range of useful lives is principally from 10 to 50 years for buildings and structures and from 3 to 12 years for machinery and equipment.

Long-Lived Assets— The Group reviews its long-lived assets for impairment whenever events or changes in circumstance indicate the carrying amount of an asset or asset group may not be recoverable. An impairment loss is recognized if the carrying amount of an asset or asset group exceeds the sum of the undiscounted future cash flows expected to result from the continued use and eventual disposition of the asset or asset group. The impairment loss would be measured as the amount by which the carrying amount of the asset exceeds its recoverable amount, which is the higher of the discounted cash flows from the continued use and eventual disposition of the asset, or the net selling price at disposition.

Intangible assets are amortized by the straight-line method.

Retirement and Pension Plans— Net defined benefit liability (asset) is accounted for based on the projected benefit obligations and plan assets at the balance sheet date. The projected benefit obligations are attributed to periods on a benefit-formula basis. Actuarial gains and losses and past service costs that are yet to be recognized in profit or loss are recognized within equity (accumulated other comprehensive income) after adjusting for tax effects.

Actuarial gains and losses are amortized and charged to expense on a straight-line basis over 10 years within the expected average remaining service period of the employees from the consolidated fiscal year following the year when they occur. Past service costs are amortized and charged to expense on a straight-line basis, mainly over 10 years, within the expected average remaining service period of the employees.

Certain domestic consolidated subsidiaries apply the simplified method to state the liability based on the amount that would be paid if employees retired at the consolidated balance sheet date.

- Stock Options— The cost of employee stock options is measured based on the fair value at the date of grant and recognized as compensation expenses over the vesting period as consideration for receiving goods or services. In the consolidated balance sheet, stock options are presented as stock acquisition rights as a separate component of equity until exercised.
- m. Research and Development Costs—Research and development costs are charged to income as incurred.
- Provision for Product Warranties Costs— The Company and certain consolidated subsidiaries estimate and accrue the costs of warranty repair for products sold in reserve for future expenses.

Revenue Recognition—

(i) Main performance obligations of major businesses. The Group applies its unique ceramic technology to manufacture and sell a variety of products that support the foundation of society and contribute to environmental conservation. The main performance obligations by business segment are as follows.

(Environment business)

The Group manufactures and sells automotive ceramics for exhaust gas purification and sensor. (Digital Society business)

The Group manufactures and sells components for semiconductor manufacturing equipment, as well as manufactures and sells ceramic components for electronics, mainly electronic industrial products, as well as metal-related products, mainly beryllium copper products and metal molds.

(Energy & Industry business)

The Group manufactures and sells products and provides services related to insulators, hardware for insulator assemblies, current limiting arching horn, bushing shells, fuse cut-outs, APM, line arrester, manufactures and sells products and provides services related to industrial equipment, primarily corrosion-resistant ceramic apparatuses for chemical industries, gas analyzer, industrial heating systems, refractory products and radioactive waste treatment systems, and manufactures and sells and provides services related to energy storage-related products, primarily NAS® (Sodium/Sulfur Batteries) batteries for electric power storage.

(ii) Normal point in time at which performance obligations are satisfied (normal point in time at which revenue is recognized)

Except for a and b below, the Group recognizes domestic sales revenue based on the judgment that the Group has the right to receive consideration for the provided assets, etc., which is mainly at the time when the product arrives at the customer or when the customer's acceptance inspection is completed. For export sales, the revenue is recognized mainly at the time when the risk is determined to have been transferred to the customer based on the trade conditions specified by Incoterms, etc., and that legal ownership, physical possession, material risks, etc. are transferred to the customer and hence the control over the assets has been transferred to the customer.

a. Service contract

The Group recognizes revenue over a certain period of time as it fulfills its performance obligations to transfer products or services to customers for service contracts concluded primarily in the energy infrastructure business and process technology business. Progress in meeting performance obligations is measured based on the ratio of costs incurred by the end of each reporting period to the total expected costs. In addition, the Group recognizes revenue on a cost recovery basis if it is not possible to reasonably estimate the progress in meeting performance obligations, but it is expected to recover costs incurred in meeting the performance obligations. For service contracts for which it is expected to completely fulfill performance obligations within a very short period of time from the transaction start date, the Group applies alternative treatment and does not recognize revenue over a certain period of time, and does so when the performance obligations are fully met.

b. Sale of products accompanied by the provision of services

With respect to the sales of products mainly in the energy infrastructure business and process technology business, even if the provision of services such as installation work and commissioning related to the sales of the products is concluded as a separate contract, the Group recognizes revenue based on the judgment that the sales of the products and the service provision contract attached thereto are considered as a single performance obligation, and the control over the assets, etc. has been transferred to the customer at the time of completing provision of the services.

- Income Taxes— The provision for current income taxes is computed based on the pretax income included in the consolidated statement of income. The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Deferred taxes are measured by applying currently enacted income tax rates to the temporary differences.
- Leases— Foreign consolidated subsidiaries, which apply IFRS, recognize all leases as both assets and liabilities on their balance sheets in principle. Effective April 1, 2019, these subsidiaries adopted IFRS16, Leases. Foreign consolidated subsidiaries, which apply U.S. GAAP, recognize all operating leases as both assets and liabilities on their balance sheets in principle. Effective April 1, 2022, these subsidiaries adopted ASC Topic 842, Leases.
- Foreign Currency Transactions— All short-term and long-term monetary receivables and payables denominated in foreign currencies are translated into Japanese yen at the exchange rates at the balance sheet date. The foreign exchange gains and losses from translation are recognized in the consolidated statement of income to the extent that they are not hedged by forward exchange contracts.
- Foreign Currency Financial Statements— The balance sheet accounts of the consolidated foreign subsidiaries are translated into Japanese yen at the current exchange rate as of the balance sheet date except for equity, which is translated at the historical rate. Differences arising from such translation are shown as "Foreign currency translation adjustments" under accumulated other comprehensive income in a separate component of equity. Revenue and expense accounts of consolidated foreign subsidiaries are translated into yen at the average exchange rate.

Derivatives and Hedging Activities— The Group uses derivative financial instruments to manage its exposures to fluctuations in foreign exchange and interest rates. Foreign exchange forward contracts, interest rate and currency swaps, and interest rate swaps are utilized by the Group to reduce foreign currency exchange and interest rate risks. The Group does not enter into derivatives for trading or speculative purposes.

Derivative financial instruments are classified and accounted for as follows: (1) all derivatives are recognized as either assets or liabilities and measured at fair value, and gains or losses on derivative transactions are recognized in the consolidated statement of income; and (2) for derivatives used for hedging purposes, if such derivatives qualify for hedge accounting because of high correlation and effectiveness between the hedging instruments and the hedged items, gains or losses on derivatives are deferred until maturity of the hedged transactions.

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

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

Long-term debt denominated in foreign currencies for which currency and interest rate swaps are used to hedge the foreign currency and interest rate fluctuations is also translated at the contracted rate and the differential paid or received under the swap agreements is recognized and included in interest expense when currency and interest swaps meet the above criteria.

u. Per Share Information—Basic net income per share is computed by dividing net income attributable to common shareholders by the weighted-average number of common shares outstanding for the period, retroactively adjusted for stock splits.

Diluted net income per share reflects the potential dilution that could occur if securities were exercised or converted into common stock. Diluted net income per share of common stock assumes full exercise of outstanding stock acquisition rights.

Cash dividends per share presented in the accompanying consolidated statement of income are dividends applicable to the respective fiscal years, including dividends to be paid after the end of the year.

v. New Accounting Pronouncements

Income Taxes, Residential and Enterprise Taxes— The ASBJ issued ASBJ Statement No. 27, "Accounting Standard for Income Taxes, Residential and Enterprise Taxes," ASBJ Statement No. 25 "Accounting Standard for Presentation of Comprehensive Income" and ASBJ Guidance No. 28 "Implementation Guidance on Accounting Standard for Tax Effect Accounting" on October 28, 2022. Accounting treatments under this standard and guidance are as follows:

(1) Overview

The accounting standards are to set forth the treatment of tax effects related to sale of shares of a subsidiary, etc. in the case where the accounting classification of tax expenses and the group taxation system for the event of taxing other comprehensive income are applied.

(2) Scheduled application date

The standards are planned to be applied from the beginning of the fiscal year ending March 2025.

(3) Effects from the application of the relevant accounting standards, etc.

Evaluation is underway at the time of preparing the financial documents of the fiscal year under review.

Global Minimum Tax— The ASBJ issued Statement No.46, March 22, 2024.

Accounting treatments under this standard and guidance are as follows:

(1) Overview

In October 2021, member countries of the Inclusive Framework on Base Erosion and Profit Shifting (BEPS) led by the Organisation for Economic Co-operation and Development (OECD) and the Group of Twenty (G20) reached an agreement on a global minimum tax.

In response to this, in Japan, likewise, the treatment concerning the Income Inclusion Rule (IIR), among the internationally agreed global minimum tax rules, has been established in the Act for Partial Amendment to the Income Tax Act, etc. (Act No. 3 of 2023), enacted on March 28, 2023, and is to be applied from fiscal years beginning on or after April 1, 2024.

The global minimum tax rules aim to ensure that groups of multinational companies, etc., meeting certain criteria pay at least 15% corporate tax on a country-by-country basis, and it is considered a new tax system where the Company generating the taxable net income (profit) differs from the Company subject to tax obligations.

The Practical Solution on the Accounting for and Disclosure of Current Taxes Related to the Global Minimum Tax Rules, etc., sets forth the treatment of accounting for and disclosure of corporate and local corporate taxes related to the global minimum tax rules.

(2) Scheduled application date

The standards are planned to be applied from the beginning of the fiscal year ending March 2025.

(3) Effects from the application of the relevant accounting standards, etc.

Evaluation is underway at the time of preparing the financial documents of the fiscal year under review.

3. SIGNIFICANT ACCOUNTING ESTIMATES

a. Retirement and Pension Plans

(1) Carrying amounts

		Thousands of
	Millions of Yen	U.S. Dollars
	2024	2024
Net defined benefit assets	¥ 16,319	\$ 108,076
Net defined benefit liability	20,907	138,456

(2) Information on the significant accounting estimate

The Group accounts for net defined benefit liability (assets) by deducting the amount of plan assets from the projected benefit obligations ("PBO"). PBO is calculated by discounting projected contribution based on certain assumptions, such as turnover rate, mortality rate and salary increase rate. Plan assets are measured at fair value at the end of fiscal year. Significant assumptions in PBO, plan assets and pension cost are discount rate and expected rate of return. Discount rate is based on a net yield of high-grade long-term bond. Expected rate of return is based on components of plan assets, result of return and change in interest market. Variety of the actuarial premise such as drastic fluctuation in interest market and unforeseen change in management environment may affect the amount of profit and loss.

Deferred Tax Accounting

(1) Carrying amounts

		Thousands of
	Millions of Yen	U.S. Dollars
	2024	2024
Deferred tax assets	¥ 9,936	\$ 65,801
Deferred tax liabilities	13,464	89,169

(2) Information on the significant accounting estimate

The Group accounts for deferred tax assets (liabilities) based on the temporary difference between the carrying amount of assets or liabilities in the consolidated balance sheet and their tax base, and tax loss carryforward. Deferred tax assets are recorded when the future taxable profit is sufficient enough to utilize the future deductible temporary differences and tax loss carryforward. Deferred tax liabilities are recognized for all future taxable temporary differences. Deferred tax assets (liabilities) for the current period are measured at the tax rates that are expected to apply to the period when the assets are realized or the liabilities are settled, based on tax laws and tax rates that have been enacted or substantively enacted by the end of the reporting period. The Group compares the deductible temporary differences with future taxable profit estimated based on business plan authorized by management, taxable income in prior years and tax planning opportunities available. Variety of the factors such as both unforeseen change in management environment and tax reform, which the Group considered in evaluating the recoverability of deferred tax assets, may provoke additional impact to taxable profit or the temporary difference, consequently it affects the profit and loss.

4. MARKETABLE INVESTMENT SECURITIES

Marketable and investment securities as of March 31, 2024 and 2023, consisted of the following:

	Millions of Yen		Thousands of U.S. Dollars
	2024	2023	2024
Current:			
Investment trusts and other	¥ 18,615	¥ 13,459	\$ 123,279
Debt securities	19,501	17,902	129,142
Total	¥ 38,116	¥ 31,361	\$ 252,421
Noncurrent:			
Equity securities and other	¥ 76,198	¥ 41,482	\$ 504,622
Total	¥ 76,198	¥ 41,482	\$ 504,622

The costs and aggregate fair values of marketable and investment securities at March 31, 2024 and 2023, were as follows:

	Millions of Yen			
		Unrealized	Unrealized	Fair
March 31, 2024	Cost	Gains	Losses	Value
Securities classified as:				
Available-for-sale:				
Equity securities	¥ 19,290	¥ 53,873	¥ 2	¥ 73,161
Investment trusts and other	17,924	697	6	18,615
Held-to-maturity:				
Debt securities	19,501	_	6	19,495
			s of Yen	
		Unrealized	Unrealized	Fair
March 31, 2023	Cost	Gains	Losses	Value
Securities classified as:				
Available-for-sale:				
Equity securities	¥ 15,008	¥ 23,885	¥ 241	¥ 38,652
Investment trusts and other	13,187	291	20	13,459
Held-to-maturity:				
Debt securities	17,902	2	2	17,902
			f U.S. Dollars	
	~	Unrealized	Unrealized	Fair
March 31, 2024	Cost	Gains	Losses	Value
Securities classified as:				
Available-for-sale:				
Equity securities	\$ 127,747	\$ 356,771	\$ 15	\$ 484,503
Investment trusts and other	118,705	4,617	43	123,279
Held-to-maturity:				
Debt securities	129,143	_	34	129,109

Proceeds from sales of available-for-sale securities (including marketable securities and investment securities) for the years ended March 31, 2024 and 2023 were ¥3,002 million (\$19,883 thousand) and ¥2,080 million, respectively. Realized gains on these sales, computed on the moving-average cost basis, were ¥1,051 million (\$6,962 thousand) and ¥1,261 million for the years ended March 31, 2024 and 2023, respectively.

5. INVENTORIES

Inventories at March 31, 2024 and 2023, consisted of the following:

	Millions of Yen		Thousands of U.S. Dollars
	2024	2023	2024
Finished products	¥ 112,548	¥ 97,745	\$ 745,350
Work in process	20,821	22,462	137,889
Raw materials and supplies	99,346	93,211	657,923
Cost of contracts in progress	6,348	1,005	42,040
Total	¥ 239,063	¥ 214,423	\$ 1,583,202

6. LONG-LIVED ASSETS

The Group reviewed its long-lived assets for impairment as of March 31, 2024. As a result, the Group recognized an impairment loss of ¥6,960 million (\$46,091 thousand) as other expense mainly in the following group which included idle assets. The carrying amounts of the relevant assets were written down to their memorandum value for the year ended March 31, 2024.

Groups	Asset Category	Location	Millions of Yen 2024	Thousands of U.S. Dollars
Package Business	Machinery and equipment, Construction in progress and other	Japan and Malaysia	¥ 4,877	\$ 32,296
Industrial processes Business	Machinery and equipment, Construction in progress and other	Japan	941	6,231

The Group recognized impairment losses for the year ended March 31, 2024, as follows:

	Millions of Yen	Thousands of U.S. Dollars
Buildings and structures	¥ 457	\$ 3,028
Machinery and equipment	2,909	19,266
Construction in progress	2,576	17,058
Other	1,018	6,739
Total	¥ 6,960	\$ 46,091

The Group reviewed its long-lived assets for impairment as of March 31, 2023. As a result, the Group recognized an impairment loss of ¥9,952 million as other expense mainly in the following group which included idle assets. The carrying amounts of the relevant assets were written down to their memorandum value for the year ended March 31, 2023.

			Millions of Yen
Groups	Asset Category	Location	2023
Environment business	Machinery and equipment, Construction in progress	China	¥ 6,134
Insulator business	Buildings and structures, Machinery and equipment and other	Japan	2,616

The Group recognized impairment losses for the year ended March 31, 2023, as follows:

	Millions of Yen
	2023
Buildings and structures	¥ 1,256
Machinery and equipment	3,770
Construction in progress	4,235
Other	691
Total	¥ 9,952

7. SHORT-TERM BORROWINGS AND LONG-TERM DEBT

Short-term borrowings at March 31, 2024 and 2023, consisted of notes to banks. The weighted-average interest rates on short-term borrowings as of March 31, 2024 and 2023, were 3.5% and 2.4%, respectively.

Long-term debt at March 31, 2024 and 2023, consisted of the following:

	Millions of Yen		Thousands of U.S. Dollars
	2024	2023	2024
Borrowings from banks and other			
financial institutions due serially through 2036,			
with weighted-average interest rates of 1.6%			
(2024) and 1.6% (2023)	¥ 195,984	¥ 202,214	\$ 1,297,907
Unsecured 0.657% yen bonds due			
July 27, 2032	10,000	10,000	66,225
Unsecured 0.860% yen bonds due			
July 26, 2038	15,000	15,000	99,338
Unsecured 0.180% yen bonds due			
December 21, 2028	10,000	10,000	66,225
Unsecured 0.305% yen bonds due			
November 27, 2027	5,000	5,000	33,113
Unsecured 0.583% yen bonds due			
November 24, 2028	12,000	_	79,470
Total	247,984	242,214	1,642,278
Less: portion due within one year	(40,898)	(34,860)	(270,846)
Long-term debt, less current portion	¥ 207,086	¥ 207,354	\$ 1,371,432

Annual maturities of long-term debt at March 31, 2024, were as follows:

Millions of Yen	Thousands of U.S. Dollars
¥ 40,898	\$ 270,846
36,331	240,604
34,651	229,479
21,507	142,434
30,262	200,411
84,335	558,504
¥ 247,984	\$ 1,642,278
	¥ 40,898 36,331 34,651 21,507 30,262 84,335

8. RETIREMENT AND PENSION PLANS

The Company and certain consolidated subsidiaries have severance payment plans for employees.

The Company and certain domestic subsidiaries have unfunded lump-sum payment plans, defined benefit pension plans, and other.

Furthermore, additional retirement benefits that are not included in net defined benefit liability are paid in certain cases.

Certain subsidiaries have defined contribution plans such as smaller enterprise retirement allowance mutual aid plans.

The simplified calculation method was applied to measure the liability and the cost of defined benefit plans and lump-sum payment plans for insignificant domestic subsidiaries.

Defined Benefit Pension Plans

(1) The changes in defined benefit obligation for the years ended March 31, 2024 and 2023 (except for the plans to which the simplified method was applied), were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2024	2023	2024
Balance at beginning of year	¥ 79,241	¥ 88,269	\$ 524,776
Current service cost	3,289	3,670	21,781
Interest cost	1,189	644	7,874
Actuarial losses	(1,026)	(9,590)	(6,792)
Benefits paid	(3,690)	(3,817)	(24,437)
Past service cost	_	(228)	_
Others	408	293	2,702
Balance at end of year	¥ 79,411	¥ 79,241	\$ 525,904

(2) The changes in plan assets for the years ended March 31, 2024 and 2023 (except for the plans to which the simplified method was applied), were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2024	2023	2024
Balance at beginning of year	¥ 74,079	¥ 75,723	\$ 490,592
Expected return on plan assets	569	568	3,771
Actuarial gains (losses)	2,380	(1,947)	15,763
Contributions from the employer	2,942	2,761	19,483
Benefits paid	(2,945)	(3,062)	(19,506)
Others	61	36	403
Balance at end of year	¥ 77,086	¥ 74,079	\$ 510,506

(3) The changes in net defined benefit liability, where the simplified method was applied to measure the liability, for the years ended March 31, 2024 and 2023, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2024	2023	2024
Balance at beginning of year	¥ 2,235	¥ 2,183	\$ 14,800
Pension costs	318	306	2,108
Benefits paid	(205)	(184)	(1,355)
Contributions to pension plans	(86)	(70)	(570)
Balance at end of year	¥ 2,262	¥ 2,235	\$ 14,983

(4) Reconciliation between the asset and the liability recorded in the consolidated balance sheet and the balances of defined benefit obligation and plan assets as of March 31, 2024 and 2023, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2024	2023	2024
Funded defined benefit obligation	¥ 62,829	¥ 63,265	\$ 416,088
Plan assets	(78,018)	(74,971)	(516,676)
	(15,189)	(11,706)	(100,588)
Unfunded defined benefit obligation	19,777	19,103	130,968
Net liability arising from defined benefit obligation	¥ 4,588	¥ 7,397	\$ 30,380
	Millions o	of Yen	Thousands of U.S. Dollars
	2024	2023	2024
Net defined benefit liability	¥ 20,907	¥ 20,284	\$ 138,456
Net defined benefit asset	(16,319)	(12,887)	(108,076)
Net liability arising from defined benefit			
obligation	¥ 4,588	¥ 7,397	\$ 30,380

(5) The components of net periodic benefit costs for the years ended March 31, 2024 and 2023, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2024	2023	2024
Service cost	¥ 3,289	¥ 3,670	\$ 21,781
Interest cost	1,189	644	7,874
Expected return on plan assets	(569)	(568)	(3,771)
Recognized actuarial losses	34	905	227
Amortization of past service cost	(398)	(626)	(2,633)
Benefit costs measured by the simplified			
method	318	306	2,108
Net periodic benefit costs	¥ 3,863	¥ 4,331	\$ 25,586

(6) Amounts recognized in other comprehensive income (before income tax effect) in respect of defined retirement benefit plans for the years ended March 31, 2024 and 2023, were as follows:

	Millions o	of Yen	Thousands of U.S. Dollars
	2024	2023	2024
Actuarial losses	¥ 3,537	¥ 8,495	\$ 23,423
Prior service cost	(398)	(398)	(2,634)
Total	¥ 3,139	¥ 8,097	\$ 20,789

(7) Amounts recognized in accumulated other comprehensive income (before income tax effect) in respect of defined retirement benefit plans as of March 31, 2024 and 2023, were as follows:

	Millions	of Yen	Thousands of U.S. Dollars
	2024	2023	2024
Unrecognized actuarial gains	¥ 8,246	¥ 4,709	\$ 54,606
Unrecognized past service cost	2,264	2,662	14,999
Total	¥ 10,510	¥ 7,371	\$ 69,605

(8) Plan assets

a. Components of plan assets

Plan assets as of March 31, 2024 and 2023, consisted of the following:

	2024	2023
Assets in an insurer's general account	48 %	43 %
Equity investments	13	11
Debt investments	31	31
Cash and cash equivalents	0	0
Others	8	15
Total	100 %	100 %

b. Method of determining the expected rate of return on plan assets

The expected rate of return on plan assets is determined considering the long-term rates of return that are expected currently and in the future from the various components of the plan

(9) Assumptions used for the years ended March 31, 2024 and 2023, were set forth as follows:

	2024	2023
Discount rate	Primarily 1.4%	Primarily 1.4%
Expected rate of return on plan assets	Primarily 0.75%	Primarily 0.75%
Expected rate of future salary increase	Primarily $3.0\% - 5.8\%$	Primarily 2.9%—5.2%

Defined Contribution Pension Plans

The Group's contributions to defined contribution pension plan funds for the years ended March 31, 2024 and 2023, were \(\frac{4}{690}\) million (\(\frac{5}{4}\),568 thousand) and \(\frac{4}{636}\) million, respectively.

9. EQUITY

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

a. Dividends

Under the Companies Act, companies can pay dividends at any time during the fiscal year in addition to the year-end dividend upon resolution at the shareholders' meeting. Additionally, for companies that meet certain criteria including (1) having a Board of Directors, (2) having independent auditors, (3) having an Audit & Supervisory Board, and (4) the term of service of the directors being prescribed as one year rather than the normal two-year term by its articles of incorporation, the Board of Directors may declare dividends (except for dividends-in-kind) at any time during the fiscal year if the Company has prescribed so in its articles of incorporation. However, the Company does not meet all the above criteria.

Semiannual interim dividends may also be paid once a year upon resolution by the Board of Directors if the articles of incorporation of the Company so stipulate. The Companies Act provides certain limitations on the amounts available for dividends or the purchase of treasury stock. The limitation is defined as the amount available for distribution to the shareholders, but the amount of net assets after dividends must be maintained at no less than \(\frac{1}{2}\)3 million.

b. Increases/Decreases and Transfer of Common Stock, Reserve, and Surplus

The Companies Act requires that an amount equal to 10% of dividends must be appropriated as a legal reserve (a component of retained earnings) or as additional paid-in capital (a component of capital surplus), depending on the equity account charged upon the payment of such dividends, until the aggregate amount of legal reserve and additional paid-in capital equals 25% of the common stock. Under the Companies Act, the total amount of additional paid-in capital and legal reserve may be reversed without limitation. The Companies Act also provides that common stock, legal reserve, additional paid-in capital, other capital surplus, and retained earnings can be transferred among the accounts within equity under certain conditions upon resolution of the shareholders.

Treasury Stock and Treasury Stock Acquisition Rights

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

10. STOCK OPTIONS

The stock options outstanding as of March 31, 2024 were as follows:

Stock Option Scheme	Persons Originally Granted	Number of Options Originally Granted	Date of Grant	Exercise Price	Exercise Period
2007 Stock Option	12 directors 10 officers	Common shares 62,000	August 30, 2007	¥1	From August 31, 2007 to
Scheme		shares		(\$0.01)	June 30, 2037
2008 Stock Option	11 directors 9 officers	Common shares 57,000	August 13, 2008	¥1	From August 14, 2008 to
Scheme		shares		(\$0.01)	June 30, 2038
2009 Stock Option	12 directors 10 officers	Common shares 62,000	August 17, 2009	¥1	From August 18, 2009 to
Scheme		shares		(\$0.01)	June 30, 2039
2010 Stock Option	12 directors 11 officers	Common shares 64,000	August 16, 2010	¥1	From August 17, 2010
Scheme		shares		(\$0.01)	to June 30, 2040
2011 Stock	11 directors 11 officers	Common shares 62,000	August 15, 2011	¥1	From August 16, 2011
Option Scheme		shares		(\$0.01)	to June 30, 2041
2012 Stock	10 directors 14 officers	Common shares	August 15, 2012	¥1	From August 16, 2012
Option Scheme		66,000 shares		(\$0.01)	to June 30, 2042
2013 Stock Option	9 directors 16 officers	Common shares 61,000	August 16, 2013	¥1	From August 17, 2013 to
Scheme		shares		(\$0.01)	June 30, 2043
2014 Stock Option	10 directors 13 officers	Common shares 57,000	August 19, 2014	¥1	From August 20, 2014 to
Scheme		shares		(\$0.01)	June 30, 2044
2015 Stock Option	10 directors 10 officers	Common shares 52,000	August 18, 2015	¥1	From August 19, 2015
Scheme		shares		(\$0.01)	to June 30, 2045

Stock Option Scheme	Persons Originally Granted	Number of Options Originally Granted	Date of Grant	Exercise Price	Exercise Period
2016 Stock Option	10 directors 13 officers	Common shares 60,000	August 16, 2016	¥1	From August 17, 2016 to
Scheme		shares		(\$0.01)	June 30, 2046
2017 Stock Option	10 directors 12 officers	Common shares 58,000	August 16, 2017	¥1	From August 17, 2017 to
Scheme		shares		(\$0.01)	June 30, 2047
2018 Stock Option	9 directors 13 officers	Common shares 55,000	July 12, 2018	¥1	From July 13, 2018 to
Scheme		shares		(\$0.01)	June 30, 2048
2019 Stock Option	9 directors 15 officers	Common shares 61,000	July 9, 2019	¥1	From July 10, 2019 to
Scheme		shares		(\$0.01)	June 30, 2049
2020 Stock Option	10 directors 15 officers	Common shares 64,000	July 15, 2020	¥1	From July 16, 2020 to
Scheme		shares		(\$0.01)	June 30, 2050
2021 Stock Option	6 directors 21 officers	Common shares 116,000	July 14, 2021	¥1	From July 15, 2021 to
Scheme		shares		(\$0.01)	June 30, 2051

The stock option activity is as follows:

	2007 Stock Option	2008 Stock Option	2009 Stock Option	2010 Stock Option	2011 Stock Option
For the year ended	l March 31	2023	(Shares)		
Non-vested	i iviaicii 51, 2	<u> </u>			
April 1, 2022					
Outstanding	_	_	_	_	_
Granted	_	_	_	_	_
Canceled	_	_	_	_	_
Vested	_	_	_	_	_
March 31, 2023 —Outstanding					
Vested	_	_	_	_	_
April 1, 2022					
Outstanding	4,000	6,000	6,000	11,000	14,000
Vested	_	_	_	_	_
Exercised	2,000	2,000	2,000	3,000	4,000
Canceled	_	_	_	_	_
March 31, 2023	2 000	4.000	4.000	0.000	10.000
—Outstanding	2,000	4,000	4,000	8,000	10,000
For the year ende	ed March 31	. 2024			
Non-vested					
March 31, 2023					
Outstanding	_	_	_	_	_
Granted	_	_	_	_	_
Canceled	_	_	_	_	_
Vested	_	_	_	_	_
March 31, 2024 —Outstanding					
Vested	_	_	_	_	_
March 31, 2023					
Outstanding	2,000	4,000	4,000	8,000	10,000
Vested	_	_	_	_	_
Exercised	_	_	_	_	_
Canceled	_	_	_	_	_
March 31, 2024	• • • •				40.000
-Outstanding	2,000	4,000 V1	4,000	8,000 ¥1	10,000 ¥1
Exercise price	¥1 (\$0.01)	¥1 (\$0.01)	¥1 (\$0.01)	(\$0.01)	(\$0.01)
Average stock	(\$0.01) ¥1,855	(50.01) ¥1,855	¥1,855	¥1,807	(50.01) ¥1,783
price at exercise	€1,633 (\$12.28)	\$1,633 (\$12.28)	₹1,833 (\$12.28)	(\$11.97)	(\$11.81)
Fair value price	¥3,658	¥1,434	¥2,072	¥1,289	¥1,100
at grant date	(\$24.23)	(\$9.50)	(\$13.72)	(\$8.54)	(\$7.28)
	(42)	(42.60)	(4200,2)	(43.6.1)	(4.120)

	2012 Stock Option	2013 Stock Option	2014 Stock Option	2015 Stock Option	2016 Stock Option
For the year ended M	farch 31 2023		(Shares)		
Non-vested	1a1ch 51, 2025				
April 1, 2022					
Outstanding	_	_	_	_	_
Granted	_	_	_	_	_
Canceled	_	_	_	_	_
Vested	_	_	_	_	_
March 31, 2023					
Outstanding	_	_	_	_	_
Vested					
April 1, 2022					
-Outstanding	16,000	20,000	27,000	38,000	50,000
Vested	_	_	_	_	_
Exercised	4,000	4,000	5,000	4,000	_
Canceled	_	_	_	_	_
March 31, 2023					
Outstanding	12,000	16,000	22,000	34,000	50,000
For the year ended Non-vested March 31, 2023	March 31, 2024	<u>1</u>			
Outstanding	_	_	_	_	_
Granted	_	_	_	_	_
Canceled	_	_	_	_	_
Vested	_	_	_	_	_
March 31, 2024					
-Outstanding	_	_	_	_	_
Vested					
March 31, 2023 —Outstanding	12,000	16,000	22,000	34,000	50,000
Vested	12,000	10,000	22,000	34,000	30,000
Exercised	_	_	_	- 6 000	- - 000
Canceled	_	_	_	6,000	6,000
March 31, 2024	_	_	_	_	_
Outstanding	12,000	16,000	22,000	28,000	44,000
Exercise price	¥1	¥1	¥1	¥1	¥1
•	(\$0.01)	(\$0.01)	(\$0.01)	(\$0.01)	(\$0.01)
Average stock	¥1,714	¥1,714	¥1,713	¥1,876	¥1,816
price at exercise	(\$11.35)	(\$11.35)	(\$11.34)	(\$12.42)	(\$12.03)
Fair value price	¥923	¥1,276	¥2,510	¥2,850	¥2,060
at grant date	(\$6.11)	(\$8.45)	(\$16.62)	(\$18.87)	(\$13.64)
-	(4011)	(40110)	(420102)	(420101)	(420101)

	2017 Stock Option	2018 Stock Option	2019 Stock Option (Shares)	2020 Stock Option	2021 Stock Option
For the year ended M	March 31, 2023		()		
Non-vested	·				
April 1, 2022					
Outstanding	_	_	_	_	_
Granted	_	_	_	_	_
Canceled	_	_	_	_	_
Vested	_	_	_	_	_
March 31, 2023					
-Outstanding	_	_	_	_	_
Vested					
April 1, 2022	53 000	55,000	(1,000	64.000	116,000
Outstanding Vested	52,000	55,000	61,000	64,000	116,000
Exercised	_	_	_	-	_
	_	_	_	3,000	_
Canceled	_	_	_	_	_
March 31, 2023 —Outstanding	52,000	55,000	61,000	61,000	116,000
Outstanding	32,000	33,000	01,000	01,000	110,000
For the year ended	March 31, 2024				
Non-vested	<u> </u>				
March 31, 2023					
Outstanding	_	_	_	_	_
Granted	_	_	_	_	_
Canceled	_	_	_	_	_
Vested	_	_	_	_	_
March 31, 2024					
Outstanding	_	_	_	_	_
Vested					
March 31, 2023					
-Outstanding	52,000	55,000	61,000	61,000	116,000
Vested	_	_	_	_	_
Exercised	_	_	_	_	_
Canceled	_	_	_	_	_
March 31, 2024					
Outstanding	52,000	55,000	61,000	61,000	116,000
Exercise price	¥1	¥1	¥1	¥1	¥1
	(\$0.01)	(\$0.01)	(\$0.01)	(\$0.01)	(\$0.01)
Average stock	_	_	_	¥1,855	_
price at exercise				(\$12.28)	
Fair value price	¥1,897	¥1,725	¥1,362	¥1,246	¥1,727
at grant date	(\$12.56)	(\$11.42)	(\$9.02)	(\$8.25)	(\$11.44)
	(+-=)	(+ -)	(+- *-)	(+3.20)	(+)

11. INCOME TAXES

The Company and its domestic subsidiaries are subject to Japanese national and local income taxes which, in the aggregate, resulted in a normal effective statutory tax rate of approximately 30.6% for the years ended March 31, 2024 and 2023.

The tax effects of significant temporary differences and tax loss carryforwards which resulted in deferred tax assets and liabilities at March 31, 2024 and 2023, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
-	2024	2023	2024
Deferred tax assets:	·		
Inventories	¥ 8,629	¥ 9,012	\$ 57,148
Accounts payable and accrued expenses	3,405	3,449	22,548
Enterprise taxes payable	561	498	3,714
Property, plant and equipment	15,125	12,784	100,166
Pension and severance cost	6,123	6,535	40,549
Tax loss carryforwards	12,486	9,908	82,689
Investment securities	1,661	1,374	10,999
Tax deduction of foreign subsidiaries	929	_	6,155
Provision for product warranties	171	251	1,129
Other	6,439	4,381	42,645
Total	55,529	48,192	367,742
Less: valuation allowance	(21,234)	(17,768)	(140,624)
Deferred tax assets	¥ 34,295	¥ 30,424	\$ 227,118
Deferred tax liabilities:			
Unrealized gain on			
available-for-sale securities	¥ 15,799	¥ 6,833	\$ 104,629
Deferred gains on sales of property	1,063	1,086	7,039
Undistributed earnings of foreign subsidiaries	9,782	8,396	64,780
Fixed assets	5,007	4,646	33,160
Net defined benefit assets	4,951	4,278	32,786
Securities contributed to			
retirement benefit trust	1,082	1,082	7,168
Other	139	658	924
Deferred tax liabilities	37,823	26,979	250,486
Net deferred tax (liabilities) assets	¥ (3,528)	¥ 3,445	\$ (23,368)

Valuation allowance increased by ¥3,466 million (\$22,955 thousand) mainly due to recognizing ¥1,147 million (\$7,594 thousand) in connection with tax loss carryforward of NGK Electronics Device, INC. and ¥898 million (\$5,946 thousand) in connection with impairment loss on fixed assets of the consolidated subsidiaries.

A reconciliation between the normal effective statutory tax rates and the actual effective tax rates reflected in the accompanying consolidated statement of income for the year ended March 31, 2024, with the corresponding figures for 2023, is as follows:

	2024	2023
Normal effective statutory tax rate	30.6 %	30.6 %
Expenses not deductible for income tax purposes	1.3	2.6
Income excluded from income tax, such as		
dividends received	(5.2)	(1.4)
Change in valuation allowance	6.2	0.3
Undistributed earnings of foreign subsidiaries	2.8	0.4
Lower income tax rates applicable to income in		
certain foreign countries	(1.0)	(1.3)
Tax credit of foreign subsidiaries	(1.6)	(0.7)
Tax credits such as research and development		
costs	(5.2)	(5.8)
Equity in earnings of unconsolidated		
subsidiaries and associated companies	(0.8)	(0.8)
Sales of shares of subsidiaries and associates	(0.1)	0.9
Transfer pricing adjustment	(0.0)	(20.5)
Other — net	0.5	(0.4)
Actual effective tax rate	27.5 %	3.9 %

Note:

Regarding filing action for the revocation of correction based on transfer pricing taxation

In June 2017, the Company received correction based on transfer pricing taxation from the Nagoya Regional Taxation Bureau regarding the transactions between the Company and its subsidiary in Poland from the fiscal year ended March 31, 2011 through the fiscal year ended March 31, 2015 and the Company paid an additional tax of approximately ¥8.5 billion including local taxes. A request for re-examination was submitted to the Nagoya National Tax Tribunal in July 2018 requesting for cancellation of the correction, and the Company received a written verdict that partially rescinded the correction in July 2019. However, it only provided refund of approximately \(\frac{\pmathbf{4}}{0.4}\) billion of corporate taxes and local taxes, etc. at this stage. Because the Company took the position that the entire amount should be rescinded, the Company filed an action with the Tokyo District Court for the revocation of the correction in December 2019.

Subsequently, in October 2022, the Company received a notice of correction ("the Revision of the Correction") from the Nagoya Regional Taxation Bureau stating that the amount of the correction would be reduced. As a result, during the fiscal year, the Company recorded the refund of approximately \(\frac{\pmathbf{F}}{2}.7\) billion as income taxes-refund and interest on such refund as non-operating income. In addition, the Company withdrew the revocation of correction, comprehensively considering that the significant amount of the back taxes paid will be refunded due to the Revision of the Correction.

12. REVENUE

(1) Disaggregation of Revenue

Revenues from contracts with customers on a disaggregated basis for the years ended March 31, 2024, and 2023, were as follows:

	Millions of Yen			
	2024			
	Reportable Segment			
	Environment	Digital Society	Energy & Industry	Total
Products and services: Automotive ceramics for exhaust gas purification	¥ 297,299			¥ 297,299
Sensors Components for semiconductor	64,638	_	-	64,638
manufacturing equipment	_	¥ 86,455	_	86,455
Electronics components	_	26,129	_	26,129
Metal related	_	25,567	_	25,567
Energy storage	_		¥ 2,089	2,089
Insulators	_	_	47,929	47,929
Industrial processes			28,808	28,808
Total =	¥ 361,937	¥ 138,151	¥ 78,826	¥ 578,914
Geographical areas:				
Japan	¥ 28,983	¥ 44,516	¥ 59,099	¥ 132,598
North America	71,878	39,088	12,593	123,559
Europe	136,055	3,969	394	140,418
Asia	117,477	50,430	3,110	171,017
Other	7,544	148	3,630	11,322
Total	¥ 361,937	¥ 138,151	¥ 78,826	¥ 578,914
Timing of revenue recognition: Goods and services				
transferred at a point in time	¥ 361,937	¥ 138,151	¥ 63,466	¥ 563,554
Goods and services transferred over time			15,360	15,360
Total	¥ 361,937	¥ 138,151	¥ 78,826	¥ 578,914

	Millions of Yen				
	2023				
	Reportable Segment				
	Energy &				
	Environment	Digital Society	Industry	Total	
Products and services:			_	_	
Automotive ceramics for					
exhaust gas purification	¥ 262,044	_	_	¥ 262,044	
Sensors	58,740	_	_	58,740	
Components for					
semiconductor manufacturing equipment		¥ 106,965		106,965	
Electronics components	_	28,564	_	28,564	
Metal related	_	27,635	_	27,635	
Energy storage	_	27,033	V 2749		
Insulators	_	_	¥ 2,748	2,748	
Industrial processes	_	_	44,212	44,212	
industrial processes			28,332	28,332	
Total	¥ 320,784	¥ 163,164	¥ 75,292	¥ 559,240	
Geographical areas:					
Japan	¥ 28,276	¥ 49,088	¥ 52,223	¥ 129,587	
North America	65,891	61,178	9,288	136,357	
Europe	121,634	3,629	530	125,793	
Asia	98,290	49,171	9,060	156,521	
Other	6,693	98	4,191	10,982	
Total	¥ 320,784	¥ 163,164	¥ 75,292	¥ 559,240	
Timing of revenue recognition: Goods and services					
transferred at a point in time	¥ 320,784	¥ 163,164	¥ 61,622	¥ 545,570	
Goods and services transferred over time			13,670	13,670	
Total	¥ 320,784	¥ 163,164	¥ 75,292	¥ 559,240	

		Thousands of	U.S. Dollars	
		200	24	
		Reportable		
			Energy &	
	Environment	Digital Society	Industry	Total
Products and services:				
Automotive ceramics for	0 1 0/0 0/0			0 1 0/0 0/0
exhaust gas purification	\$ 1,968,869	_	_	\$ 1,968,869
Sensors	428,065	_	_	428,065
Components for semiconductor				
manufacturing equipment	_	\$ 572,552	_	572,552
Electronics components	_	173,040	_	173,040
Metal related	_	169,310	_	169,310
Energy storage	_	_	\$ 13,836	13,836
Insulators	_	_	317,410	317,410
Industrial processes			190,783	190,783
Total	\$ 2,396,934	\$ 914,902	\$ 522,029	\$ 3,833,865
		_ 		
Geographical areas:				
Japan	\$ 191,938	\$ 294,809	\$ 391,386	\$ 878,133
North America	476,016	258,856	83,399	818,271
Europe	901,027	26,286	2,606	929,919
Asia	777,993	333,973	20,599	1,132,565
Other	49,960	978	24,039	74,977
Total	\$ 2,396,934	\$ 914,902	\$ 522,029	\$ 3,833,865
Timing of revenue				
Timing of revenue recognition: Goods and services				
transferred at a point in time Goods and services	\$ 2,396,934	\$ 914,902	\$ 420,304	\$ 3,732,140
transferred over time			101,725	101,725
Total	\$ 2,396,934	\$ 914,902	\$ 522,029	\$ 3,833,865
1 otal	Ψ 4,370,734	φ J17,JU2	\$ 344,047	\$ 2,022,003

Thousands of U.S. Dollars

(2) Basic Information to Understand Revenues from Contracts with Customers

a. Information on contracts with customers and performance obligations

The Group has transactions with product warranty obligations to repair or replace products that have failed due to defects, etc. developed after delivery without charge. The warranty obligations provide customers with a guarantee that the product, etc. will function as intended in accordance with the specifications set forth in contracts with customers. Therefore, the Group estimates the costs of repair or replacement as necessary as provision for product warranties.

The Group receives consideration approximately three months after the product is delivered to or accepted by the customer. For certain performance obligations that fall under the category of service contracts, the Group receives consideration in stages according to the initial payment or the progress in meeting performance obligations.

Since contracts the Group concludes do not include any significant financial elements, the Group does not make any adjustments equivalent to interest rates.

b. Information on the calculation of the transaction prices

As certain contracts of the Group include transactions with the following variable consideration, the Group reflects them in the transaction prices.

(i) Provisional unit price

Until the formal transaction unit price is settled, the Group has performance obligations to conduct transactions at the provisional unit price based on the agreement with the customer. With respect to the performance obligations carried out at the provisional unit price, the Group estimates the transaction unit price expected to be settled and recognizes revenue.

(ii) Rebate

Based on contracts with customers, the Group offers volume rebates, etc. that provide discounts when customers purchase a certain amount within a certain period of time. For volume rebates, etc. the Group recognizes revenue at a value that reflects a discount in accordance with a target quantity that is estimated to be highly likely to be achieved.

c. Information on the time of fulfillment of the performance obligations

For transactions applicable to service contracts of the Group, as the Group has the enforceable right to receive consideration for assets that cannot be converted to other uses and for the portion of the obligations that have been fulfilled, the Group judges that the performance obligations are to be fulfilled over a certain period of time, estimates the progress of fulfillment of the performance obligations, and recognizes revenue based on the progress.

As the progress of cost accrual for such service contracts is similar to the fulfillment of the Group's performance obligations, the Group recognizes revenue over a certain period of time based on inputs built on cost accrual.

Progress is measured for each performance obligation based on the ratio of costs incurred by the balance sheet date to the estimated total costs. If progress cannot be reasonably estimated, the Group recognizes revenue in the same amount as the portion of costs incurred that is expected to be recovered (revenue recognition on a cost recovery basis).

(3) Contract Balances

Receivables from contract with customers, contract assets and contract liabilities at the beginning and end of the years ended March 31, 2024 and 2023 were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2024	2023	2024
Receivables from contracts with customers:			
Balance at beginning of year	¥ 111,074	¥ 122,213	\$ 735,589
Balance at end of year	117,763	111,074	779,888
Contract assets:			
Balance at beginning of year	9,045	9,573	59,898
Balance at end of year	16,499	9,045	109,265
Contract liabilities:			
Balance at beginning of year	6,080	1,829	40,262
Balance at end of year	12,687	6,080	84,021

A contract asset is the consideration for which the Company has not issued an invoice to its customer although the Company satisfied part or all of its performance obligation for goods or services that are the objects of the concluded agreement, typically a work contract (to complete a certain task), etc. on the final day of a fiscal year. A contract asset is reclassified as a type of accounts receivable that has arisen from the contract with the customer at the time when the right to receive consideration becomes unconditional. A contract liability is related to a payment that the Company has received before its performance obligation based on a work contract, etc. is satisfied. A contract liability is reversed as the revenue is recognized.

Revenue recognized for the fiscal year ended March 31, 2024 that was included in the contract liability balance as of March 31, 2023 was \(\frac{\pmax}{3}\),571 million (\(\frac{\pmax}{2}\)3,650 thousand).

In addition, contract assets increased \(\frac{\pmathbf{7}}{454}\) million (\(\frac{\pmathbf{49}}{367}\) thousand) from the beginning balance in the fiscal year under review. The main reason was an increase in the consideration for a large transaction falling under the category of work contracts, for which the Company has not issued an invoice to its customer, although it satisfied all or part of its performance obligations by the fiscal year end date.

In addition, contract liabilities increased ¥6,607 million (\$43,759 thousand) from the beginning balance in the fiscal year under review. The main reason was that advance money was received from the customer, associated with the conclusion of the contract for a large project.

The amount of revenue arising from performance obligations satisfied (or partially satisfied) in prior periods that was recognized in the fiscal year under review is immaterial.

Revenue recognized for the fiscal year ended March 31, 2023 that was included in the contract liability balance as of March 31, 2022 was \(\frac{\pmathbf{1}}{1}\),507 million.

Additionally, contract assets decreased ¥4,250 million from the beginning balance in the previous fiscal year. The main reason was advance money was received from the customer, associated with the conclusion of the contract for a large project.

The amount of revenue arising from performance obligations satisfied (or partially satisfied) in prior periods that was recognized in the fiscal year under review is immaterial.

(4) Transaction Prices Allocated to Remaining Performance Obligations

thousand) at March 31, 2024. Approximately 60% of the performance obligations are recognized as revenue within one year after the balance sheet date, approximately 35% within one to three years after the balance sheet date, and approximately 5% over three years after the balance sheet date. In addition, the Group applies a practical expedient to the notes on the transaction value allocated to the remaining performance obligations, and excludes contracts with an initial expected term of one year or less in the notes.

Remaining (or partially remaining) performance obligations were \(\frac{1}{4}\)36,620 million at March 31, 2023. Approximately 60% of the performance obligations are recognized as revenue within one year after the balance sheet date, approximately 35% within one to three years after the balance sheet date, and approximately 5% over three years after the balance sheet date. In addition, the Group applies a practical expedient to the notes on the transaction value allocated to the remaining performance obligations, and excludes contracts with an initial expected term of one year or less in the notes.

13. RESEARCH AND DEVELOPMENT COSTS

Research and development costs charged to income were \(\frac{\pma}{3}\)1,605 million (\(\frac{\pma}{2}\)209,305 thousand) and \(\frac{\pma}{2}\)26,157 million for the years ended March 31, 2024 and 2023, respectively, which included consigned research costs of ¥1,686 million (\$11,169 thousand) and ¥867 million for the years ended March 31, 2024 and 2023, respectively.

14. FINANCIAL INSTRUMENTS AND RELATED DISCLOSURES

(1) Group Policy for Financial Instruments

The Group raises funds through borrowings from banks or other financial institutions. Temporary excess funds are invested mainly in low-risk financial assets. It is the Group's policy to use derivatives not for speculation, but for hedging the risks from operating receivables, payables, and borrowings.

(2) Nature and Extent of Risks Arising from Financial Instruments and Risk Management for Financial Instruments

The credit risks from receivables, such as trade notes and trade accounts, are managed by each business unit according to the characteristics of the customers. Although receivables in foreign currencies are exposed to the market risk of fluctuation in foreign currency exchange rates, a certain percentage of the position, net of payables in foreign currencies, is hedged by using forward foreign currency contracts.

Marketable and investment securities, which consist mainly of held-to-maturity bonds and the capital stocks of customers or suppliers, are exposed to market risk. The risk is insignificant with respect to the held-to-maturity bonds because investments in bonds are limited to highly rated bonds. To manage the risk, the market price and the financial position of the issuers are reviewed constantly. Moreover, with respect to those other than held-to-maturity, the portfolio is constantly reviewed considering market circumstances and relationships with the issuers.

Payment terms of most trade payables, including notes and accounts, are less than four months.

The borrowings from banks, other financial institutions, and debenture bonds are principally raised for capital investment, and their maximum maturities do not exceed 20 years after the balance sheet date.

Derivatives consist of forward currency contracts, which are for hedging currency risks from the trade receivables and payables denominated in foreign currencies; currency and interest rate swaps, which are for hedging foreign exchange risks from the borrowings denominated in foreign currencies and interest rate risk; and interest rate swaps, which are for reducing cash outflow from interest payments of borrowings. The Company's management believes that the credit risks from those transactions are not significant because the transactions are entered into only with highly rated financial institutions. Derivative transactions are strictly managed complying with internal policies for approval and reporting. For more details about hedge accounting, including hedging instruments, hedged items, hedge policies, and hedge effectiveness, please see Note 2.t.

(3) Fair Values of Financial Instruments

The contract or notional amounts of derivatives that are shown in Note 15 do not represent the amounts exchanged by the parties and do not measure the Group's exposure to credit or market risk.

Fair value of financial instruments

		Millions of Yen	
	Carrying		Unrealized
March 31, 2024	Amount	Fair Value	Gain/Loss
Marketable and investment securities	¥ 111,276	¥ 111,271	¥ (5)
Long-term debt, including current portion	(247,984)	(242,091)	5,893
Derivatives	(1,180)	(1,180)	_
		V4.11. C24	
		Millions of Yen	TT 1' 1
Nr. 1 21 2022	Carrying	D ' 1/ 1	Unrealized
March 31, 2023	Amount	Fair Value	Gain/Loss
Marketable and investment securities	¥ 86,249	¥ 85,763	¥ (486)
Long-term debt, including current portion	(242,214)	(237,435)	4,779
Derivatives	(386)	(386)	_
		usands of U.S. Dol	
	Carrying		Unrealized
March 31, 2024	Amount	Fair Value	Gain/Loss
Marketable and investment securities	\$ 736,924	\$ 736,891	\$ (33)
Long-term debt, including current portion	(1,642,278)	(1,603,253)	39,025
Derivatives	(7,812)	(7,812)	_

Carrying amount of investments in equity instruments that do not have a quoted market price in an active market

	Millions of Yen		Thousands of U.S. Dollars
	2024	2023	2024
Unlisted equity instruments:		_	
Stock of associated companies	¥ 512	¥ 506	\$ 3,390
Other	3,038	2,830	20,119

(4) Maturity Analysis for Financial Assets and Securities with Contractual Maturities

	Millions of Yen			
		Due after One	Due after Five	
35 3 34 3034	Due in One Year	Year through	Years through	Due after
March 31, 2024	or Less ¥ 171,432	Five Years	10 Years	10 years
Cash and cash equivalents	,	_	_	_
Time deposits	33,125	_	_	_
Notes and accounts receivable:	448.800	V 4 m 4		
Trade notes and accounts	117,592	¥ 171	_	_
Held-to-maturity securities:	40 =04			
Debt securities	19,501	_	_	_
Available-for-sale securities:				
Debt securities	_	_	_	_
Investment trusts and other	16,000			
Total	¥ 357,650	¥ 171		
		3 C:11:	CXI	
		Due after One	s of Yen Due after Five	
	Due in One Year	Year through	Years through	Due after
March 31, 2023	or Less	Five Years	10 Years	10 years
Cash and cash equivalents	¥ 168,864			
Time deposits	14,485	_	_	_
Notes and accounts receivable:				
Trade notes and accounts	111,034	¥ 40	_	_
Held-to-maturity securities:	,			
Debt securities	17,900	_	_	_
Available-for-sale securities:	. ,			
Debt securities	_	_	_	_
Investment trusts and other	11,000	_	_	_
Total	¥ 323,283	¥ 40		
			f U.S. Dollars	
	Due in One Year	Due after One	Due after Five Years through	Due after
March 31, 2024	or Less	Year through Five Years	10 Years	10 years
Cash and cash equivalents	\$ 1,135,312			
Time deposits	219,365	_	_	_
Notes and accounts receivable:	- 7			
Trade notes and accounts	778,757	\$ 1,131	_	_
Held-to-maturity securities:	770,707	ψ 1,101		
Debt securities	129,143	_	_	_
Available-for-sale securities:	147,170		_	_
Debt securities	_	_	_	_
Investment trusts and other	105,960	_	_	_
Total	\$ 2,368,537	<u> </u>		
10141	\$ 4,500,55 <i>1</i>	Д 1,131		

Financial Instruments Categorized by Fair Value Hierarchy

The fair value of financial instruments is categorized into the following three levels, depending on the observability and significance of the inputs used in making fair value measurements:

- Level 1: Fair values measured by using quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: Fair values measured by using inputs other than quoted prices included within Level 1 that are observable for the assets or liabilities, either directly or indirectly.
- Level 3: Fair values measured by using unobservable inputs for the assets or liabilities.

If multiple inputs are used that have a significant impact on the measurement of fair value, fair value is categorized at the lowest level in the fair value measurement among the levels to which each of these inputs belongs.

(1) The financial assets and liabilities measured at the fair values in the consolidated balance sheet

	Millions of Yen				
March 31, 2024	Level 1	Level 2	Level 3	Total	
Marketable and investment securities: Available-for-sale securities:					
Equity securities	¥ 69,074	¥ 4,086	_	¥ 73,160	
Other	, <u> </u>	2,615	_	2,615	
Total assets	¥ 69,074	¥ 6,701		¥ 75,775	
Derivative transactions:					
Foreign currency forward contracts	_	¥ 1,180	_	¥ 1,180	
Interest rate swaps	_	(0)	_	(0)	
Total liabilities		¥ 1,180		¥ 1,180	
	Millions of Yen				
March 31, 2023	Level 1	Level 2	Level 3	Total	
Marketable and investment securities: Available-for-sale securities:					
Equity securities	¥ 35,975	¥ 2,677	_	¥ 38,652	
Other	_	2,458	_	2,458	
Total assets	¥ 35,975	¥ 5,135		¥ 41,110	
Derivative transactions:					
Foreign currency forward contracts	_	¥ 365	_	¥ 365	
Interest rate swaps	_	21	_	21	
Total liabilities		¥ 386	_	¥ 386	

	Thousands of U.S. Dollars				
March 31, 2024	Level 1	Level 2	Level 3	Total	
Marketable and investment securities:					
Available-for-sale securities:					
Equity securities	\$ 457,444	\$ 27,059	_	\$ 484,503	
Other	_	17,318	_	17,318	
Total assets	\$ 457,444	\$ 44,377		\$ 501,821	
Derivative transactions:					
Foreign currency forward contracts	_	\$ 7,814	_	\$ 7,814	
Interest rate swaps	_	(2)	_	(2)	
Total liabilities		\$ 7,812		\$ 7,812	

(2) The financial assets and liabilities not measured at the fair values in the consolidated balance sheet

	Millions of Yen				
March 31, 2024	Level 1	Level 2	Level 3	Total	
Marketable and investment securities:			_	_	
Held-to-maturity securities:					
Corporate bonds	_	¥ 19,495	_	¥ 19,495	
Available-for-sale securities:					
Other		27,900		27,900	
Total assets		¥ 47,395	<u> </u>	¥ 47,395	
Long-term debt, including current portion	_	¥ 242,091	_	¥ 242,091	
Total liabilities	_	¥ 242,091	_	¥ 242,091	
		Millions	of Yen		
March 31, 2023	Level 1	Level 2	Level 3	Total	
Marketable and investment securities:					
Held-to-maturity securities:					
Corporate bonds	_	¥ 17,902	_	¥ 17,902	
Available-for-sale securities:					
Equity securities	¥ 15,750	_	_	15,750	
Other		25,900		25,900	
Total assets	¥ 15,750	¥ 43,802	<u> </u>	¥ 59,552	
Long-term debt, including current portion	_	¥ 237,434	_	¥ 237,434	
Total liabilities	_	¥ 237,434		¥ 237,434	

	Thousands of U.S. Dollars			
March 31, 2024	Level 1	Level 2	Level 3	Total
Marketable and investment securities:				
Held-to-maturity securities:				
Corporate bonds	_	\$ 129,109	_	\$ 129,109
Available-for-sale securities:				
Other	_	184,768	_	184,768
Total assets		\$ 313,877		\$ 313,877
Long-term debt, including current portion	_	\$ 1,603,253	_	\$ 1,603,253
Total liabilities		\$ 1,603,253		\$ 1,603,253

The following is a description of valuation methodologies and inputs used for measurement of the fair value of assets and liabilities:

Marketable and Investment Securities

The fair values of listed equity securities, government bonds, municipal bonds and corporate bonds are measured at the quoted market prices. Since listed equity securities and government bonds are traded in active markets, the fair values of listed equity securities and government bonds are categorized as Level 1. As the quoted market prices of municipal bonds and corporate bonds are not considered to be in active markets due to low market transactions, the fair values of municipal bonds and corporate bonds are categorized as Level 2.

Derivatives

The fair values of interest rate swaps and foreign currency forward contracts are measured by using discounted present value techniques considering observable inputs such as interest rates and foreign currency exchange rate, and are categorized as Level 2.

Long-Term Debt

The fair values of long-term debt are measured by using discounted present value techniques considering assumptions including expected future cash flows and discount rates taking into account maturity and credit risk, and are categorized as Level 2.

15. DERIVATIVES

The Group enters into derivative financial instruments ("derivatives"), including foreign exchange forward contracts, interest rate and currency swaps, and interest rate swap contracts. The foreign exchange forward contracts are entered into in order to hedge foreign exchange risk associated with certain assets and liabilities denominated in foreign currencies. The interest rate and currency swaps are entered into as a means of managing interest rate risk and foreign exchange risk for loans denominated in foreign currencies. The interest rate swap contracts are entered into as a means of managing the interest rate risk for loans from financial institutions. The Group does not hold or issue derivatives for trading or speculative purposes.

Because the counterparties to these derivatives are limited to major international financial institutions, the Group does not anticipate any losses arising from credit risk.

Derivative transactions entered into by the Group have been made in accordance with internal policies that require approval and reporting of all derivative transactions.

Derivative transactions to which hedge accounting is not applied at March 31, 2024 and 2023, were as follows:

	Millions of Yen			
		Contract		
March 31, 2024	Contract	Amount Due	Fair Value	Unrealized Gain/(Loss)
Foreign currency forward contracts:	Amount	after One Year	raii vaiue	Gaill/(Loss)
Selling U.S.\$	¥ 23,141		¥ (754)	¥ (754)
Selling Euro	₹ 23,141 2,430	_	∓ (734) 7	∓ (734) 7
Buying U.S.\$	2,430 159	_	•	•
Buying Japanese yen	2	_	(0) (0)	(0) (0)
Currency swaps:	2	_	(0)	(0)
U.S.\$ payment, Thai baht receipt	4,635	¥ 3,599	(433)	(433)
Total	¥ 30,367	¥ 3,599	¥ (1,180)	¥ (1,180)
10111	± 50,507	<u> </u>	+ (1,100)	+ (1,100)
		Millions	of Yen	
		Contract		
March 31, 2023	Contract	Amount Due	Fair Walna	Unrealized
Foreign currency forward contracts:	Amount	after One Year	Fair Value	Gain/(Loss)
Selling U.S.\$	¥ 23,605		V (100)	¥ (199)
Selling Euro	₹ 23,003 4,248	_	¥ (199) (69)	, ,
Buying U.S.\$	215	_	` /	(69)
Buying Euro	1,004	_	(2) 10	(2) 10
Buying Japanese yen	1,004	_	(0)	(0)
Currency swaps:	11	_	(0)	(0)
U.S.\$ payment, Thai baht receipt	4,356	¥ 4,356	(105)	(105)
Total	¥ 33,439	¥ 4,356		
Total	<u> </u>	± 4,330	¥ (365)	¥ (365)
		Thousands of	U.S. Dollars	
		Contract		TT 1' 1
March 31, 2024	Contract Amount	Amount Due after One Year	Fair Value	Unrealized Gain/(Loss)
Foreign currency forward contracts:	- Timount	unter one rear	Tun vuide	Guilf (E033)
Selling U.S.\$	\$ 153,253	_	\$ (4,993)	\$ (4,993)
Selling Euro	16,091	_	48	48
Buying U.S.\$	1,053	_	(1)	(1)
Buying Japanese yen	16	_	(0)	(0)
Currency swaps:	_		(-)	(-)
U.S.\$ payment, Thai baht receipt	30,695	\$ 23,833	(2,869)	(2,869)
Total	\$ 201,108	\$ 23,833	\$ (7,815)	\$ (7,815)

The fair value of derivative transactions is measured at the quoted price obtained from the financial institutions.

	Millions of Yen			
March 31, 2024	Contract Amount	Contract Amount Due after One Year	Fair Value	Unrealized Gain/(Loss)
Interest rate swaps:				
(Fixed rate payment, fixed rate receipt)	¥ 5,000	¥ 5,000	¥ (17)	¥ (17)
Total	¥ 5,000	¥ 5,000	¥ (17)	¥ (17)
		Millions	of Yen	
		Contract		
	Contract	Amount Due		Unrealized
March 31, 2023	Amount	after One Year	Fair Value	Gain/(Loss)
Interest rate swaps:				
(Fixed rate payment, fixed rate receipt)	¥ 5,000	¥ 5,000	¥ (20)	¥ (20)
Total	¥ 5,000	¥ 5,000	¥ (20)	¥ (20)
		Thousands of	U.S. Dollars	
	~	Contract		
M 21 2024	Contract	Amount Due	E ' W 1	Unrealized
March 31, 2024	Amount	after One Year	Fair Value	Gain/(Loss)
Interest rate swaps:				
(Fixed rate payment, fixed rate receipt)	\$ 33,113	\$ 33,113	\$ (110)	\$ (110)
Total	\$ 33,113	\$ 33,113	\$ (110)	\$ (110)

The fair value of derivative transactions is measured at the quoted price obtained from the financial institutions.

Derivative transactions to which hedge accounting is applied at March 31, 2024 and 2023, were as follows:

			Millions of Yen	
		Contract	Contract Amount Due	
March 31, 2024	Hedged Item	Amount	after One Year	Fair Value
Interest rate swaps:				
(Fixed rate payment, floating rate receipt)	Long-term debt	¥ 2,759	¥ 2,210	¥ 17
Total		¥ 2,759	¥ 2,210	¥ 17
			Millions of Yen	
		Contract	Contract Amount Due	
March 31, 2023	Hedged Item	Amount	after One Year	Fair Value
Interest rate swaps:				
(Fixed rate payment, floating rate receipt)	Long-term debt	¥ 3,199	¥ 2,683	¥(1)
Interest rate swaps:				
(Fixed rate payment, floating rate receipt)*	Long-term debt	15,000	_	_
Total		¥ 18,199	¥ 2,683	¥(1)
		Tho	ousands of U.S. Do	llars
		a	Contract	
March 31, 2024	Hedged Item	Contract Amount	Amount Due after One Year	Fair Value
Interest rate swaps:				
(Fixed rate payment,	Long-term debt	\$ 18,271	\$ 14,634	\$ 112
floating rate receipt)			· 	
Total		\$ 18,271	\$ 14,634	\$ 112

^{*} The above interest rate swaps that qualify for hedge accounting and meet specific matching criteria are not premeasured at market value, but the differential paid or received under the swap agreements is recognized and included in interest expense or income. In addition, the fair value of such interest rate swaps is included in that of hedged items (i.e., long-term debt) in Note 14.

			Millions of Yen	
March 31, 2024	Hedged Item	Contract Amount	Contract Amount Due after One Year	Fair Value
Currency swaps:				
(Japanese yen payment,	Long-term debt	¥ 1,500	¥ 1,500	_
U.S.\$ receipt)* Total		V 1 500	V 1 500	
Total		¥ 1,500	¥ 1,500	
			Millions of Yen	
			Contract	_
March 31, 2023	Hedged Item	Contract Amount	Amount Due after One Year	Fair Value
Currency swaps:	Treaged Item	Amount	atter One Tear	Tan value
(Japanese yen payment,	Long-term debt	¥ 1,500	¥ 1,500	_
U.S.\$ receipt)*	8	,	,	
Total		¥ 1,500	¥ 1,500	_
		Tho	usands of U.S. Do Contract	llars
		Contract	Amount Due	
March 31, 2024	Hedged Item	Amount	after One Year	Fair Value
Currency swaps:				
(Japanese yen payment, U.S.\$ receipt)*	Long-term debt	\$ 9,934	\$ 9,934	_
Total		\$ 9,934	\$ 9,934	

^{*} The above currency swaps that qualify for hedge accounting are not remeasured at market value, but the fair value of the swap is included in that of hedged items (i.e., long-term debt) in Note 14.

The fair value of derivative transactions is measured at the quoted price obtained from the financial institution.

The contract or notional amounts of derivatives which are shown in the above table do not represent the amounts exchanged by the parties and do not measure the Group's exposure to credit or market risk.

Forward exchange contracted amounts, which are assigned to associated assets or liabilities and are reflected in the balance sheet at year-end, are not subject to the disclosure of market value information.

16. GUARANTEES OBLIGATION

(1) Guarantee Obligations

At March 31, 2024, the Group had guarantee obligations as follows:

		Thousands of
	Millions of Yen	U.S. Dollars
Guarantee for deposit of subsidiary	¥ 2,137	\$ 14,150
Guarantees for bank borrowings of		
a business-related company	56	371

(2) Contingent Liabilities

On July 6, 2021, a lawsuit was filed against the Company in Nagoya District court and the Company received the complaint on October 29, 2021 that P.T.Paiton Energy ("Paiton"), its insurance companies and their reinsurer companies ("the plaintiffs") filed a claim against the Company for compensation for damages of US\$151,392,337.48 (¥16.828,772,234) and the amount of the relevant delay charges. Thereafter, the plaintiffs issued petition for amendment of claim on January 11, 2022, the amount of the claim increased by US\$41.36 (¥4,796) to US\$151,392,378.84 (¥16,828,777,030) and the relevant delay changes.

In January 2018, a fire incident allegedly occurred in a transformer ("Transformer") installed in a thermal power plant ("Power Plant") in Indonesia operated by Paiton. In connection with this accident, the plaintiffs filed a claim against the Company for damages and relevant delay charges based on alleged product liability and torts.

The Company is a distributor of the bushing (manufactured in 2010) incorporated in the Transformer. The Company delivered the bushing to a third-party transformer manufacturer that incorporated the same into the Transformer. The Transformer was then delivered to the Power Plant through a plant engineering manufacturer.

The Company believes that it is not liable for the incident described above. Therefore, the Company will take necessary actions in response to the claim to demonstrate the quality of the bushings and the adequacy of the Company's operations.

The Company will make timely disclosures in relation to this lawsuit upon the occurrence of any incident that may have a material impact on the Company's financial results.

The number in yen terms for the damage compensation in the text is the amount stated in the complaint and is converted into yen at a different exchange rate from that used by the Company to prepare the consolidated financial statements.

17. OTHER COMPREHENSIVE INCOME (LOSS)

The components of other comprehensive income (loss) for the years ended March 31, 2024 and 2023, were as follows:

	Millions	of Yen	Thousands of U.S. Dollars
	2024	2023	2024
Unrealized gain on available-for-sale securities:			
Gains arising during the year	¥ 31,575	¥ 1,178	\$ 209,106
Reclassification adjustments to profit or loss	(862)	(1,076)	(5,706)
Amount before income tax effect	30,713	102	203,400
Income tax effect	(8,954)	(60)	(59,300)
Total	¥ 21,759	¥ 42	\$ 144,100
Deferred gain on derivatives under hedge accounting:			
Gains arising during the year	¥ 19	¥ 22	\$ 121
Reclassification adjustments to profit or loss		153	
Amount before income tax effect	19	175	121
Income tax effect	(2)	6	(11)
Total	¥ 17	¥ 181	\$ 110
Foreign currency translation adjustments: Adjustments arising during the year Reclassification adjustments to profit or loss Total	¥ 40,364 162 ¥ 40,526	¥ 17,501 3,704 ¥ 21,205	\$ 267,311 1,072 \$ 268,383
Share of other comprehensive (loss) income in associates:			
(Losses) gains arising during the year	¥ (63)	¥ 392	\$ (414)
Defined retirement benefit plans:			
Gains arising during the year	¥ 3,503	¥ 7,818	\$ 23,196
Reclassification adjustments to profit or loss	(364)	279	(2,407)
Amount before income tax effect	3,139	8,097	20,789
Income tax effect	(1,005)	(2,416)	(6,655)
Total	¥ 2,134	¥ 5,681	\$ 14,134
Total other comprehensive income	¥ 64,373	¥ 27,501	\$ 426,313

18. NET INCOME PER SHARE

Reconciliation of the differences between basic and diluted net income per share ("EPS") for the years ended March 31, 2024 and 2023, were as follows:

	Millions of Yen	Thousands of Shares	Yen	U.S. Dollars
Year Ended March 31, 2024	Net Income Attributable to Owners of the Parent	Weighted- Average Shares	E	PS
Basic EPS—Net income available to common shareholders	¥ 40,563	303,510	¥ 133.65	\$ 0.885
Effect of dilutive securities: Stock options		503		
Diluted EPS—Net income for computation	¥ 40,563	304,013	¥ 133.42	\$ 0.884
Year Ended March 31, 2023 Basic EPS—Net income available to common shareholders	¥ 55,049	310,189	¥ 177.47	
Effect of dilutive securities: Stock options		526		
Diluted EPS—Net income for computation	¥ 55,049	310,715	¥ 177.17	

19. SUBSEQUENT EVENTS

Appropriation of Retained Earnings

The following appropriation of retained earnings at March 31, 2024, was approved at the Company's shareholders' meeting held on June 26, 2024:

	Millions of Yen	Thousands of U.S. Dollars
Year-end cash dividends, ¥25 (\$0.17) per share	¥ 7,448	\$ 49,325,762

20. SEGMENT INFORMATION

Under ASBJ Statement No. 17, "Accounting Standard for Segment Information Disclosures" and ASBJ Guidance No. 20, "Guidance on Accounting Standard for Segment Information Disclosures," an entity is required to report financial and descriptive information about its reportable segments. Reportable segments are operating segments or aggregations of operating segments that meet specified criteria. Operating segments are components of an entity about which separate financial information is available and such information is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance. Generally, segment information is required to be reported on the same basis as is used internally for evaluating operating segment performance and deciding how to allocate resources to operating segments.

(1) Description of Reportable Segments

The Group's reportable business segments are components of the Group for which separate financial information is available that is evaluated regularly by the Company's management in deciding how to allocate resources and in assessing performance. The Group develops and conducts its operations under three business segments: the Environment Business Segment, Digital Society Business Segment, Energy & Industry Business Segment, while planning a comprehensive strategy for domestic and overseas markets. Consequently, the Group defines those three business segments as its reportable business segments.

Business Segment	Main products
Environment	Automotive ceramics for exhaust gas purification and sensors
Digital Society	Components for semiconductor manufacturing equipment, ceramic components for electronics, beryllium copper products, and molds
Energy & Industry	NAS® (sodium-sulfur) batteries, insulators, hardware for insulator assemblies, current limiting arching horn, bushing shells, fuse cut-outs, APM, line arrester, corrosion-resistant ceramic apparatuses, for chemical industries, gas analyzer, industrial heating systems, refractory products and radioactive waste treatment systems

(2) Methods of Measurement for the Amounts of Sales, Profit (Loss), Assets, and Other Items for Each Reportable Segment

The accounting policies of each reportable segment are consistent with those disclosed in Note 2, "SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES."

(3) Information about Sales, Profit (Loss), Assets, and Other Items

			Millions			
			20	24		
		Reportable				
	Environment	Digital Society	Energy & Industry	Total	Reconciliations	Consolidated
Sales: Sales to customers	¥ 361,937	¥ 138,150	¥ 78,827	¥ 578,914	_	¥ 578,914
Intersegment sales or transfers	7	25	2,016	2,048	¥ (2,048)	_
Total	¥ 361,944	¥ 138,175	¥ 80,843	¥ 580,962	¥ (2,048)	¥ 578,914
Segment profit	¥ 63,565	¥ 2,285	¥ 532	¥ 66,382	¥ 16	¥ 66,398
Segment assets	497,934	209,412	110,578	817,924	309,653	1,127,577
Other: Depreciation and amortization	39,199	15,161	2,447	56,807	_	56,807
Impairment losses on assets	22	5,363	1,575	6,960	_	6,960
Increase in property, plant, and equipment and intangible assets	15,465	17,656	3,252	36,373	10,924	47,297
			Millions	s of Yen		
			20.	23		
		Reportable				
	Environment	Digital Society	Energy & Industry	Total	Reconciliations	Consolidated
Sales: Sales to customers Intersegment sales or	¥ 320,784	¥ 163,164	¥ 75,292	¥ 559,240	_	¥ 559,240
transfers	4	29	2,476	2,509	¥ (2,509)	_
Total	¥ 320,788	¥ 163,193	¥ 77,768	¥ 561,749	¥ (2,509)	¥ 559,240
Segment profit (loss)	¥ 50,729	¥ 17,557	¥ (1,536)	¥ 66,750	¥ 11	¥ 66,761
Segment assets	478,676	199,077	92,741	770,494	258,674	1,029,168
Other:						
Depreciation and amortization Impairment losses	37,238	13,665	2,826	53,729	-	53,729
on assets Increase in property, plant, and	6,285	_	3,333	9,618	334	9,952
equipment and						

			Thousands of	of U.S. Dollars		
			20	024		
		Reportable S	Segments			
			Energy &	_		
	Environment	Digital Society	Industry	Total	Reconciliations	Consolidated
Sales:						
Sales to customers	\$ 2,396,935	\$ 914,902	\$ 522,028	\$ 3,833,865	_	\$ 3,833,865
Intersegment sales or						
transfers	48	162	13,353	13,563	\$ (13,563)	
Total	\$ 2,396,983	\$ 915,064	\$ 535,381	\$ 3,847,428	\$ (13,563)	\$ 3,833,865
Segment profit	\$ 420,958	\$ 15,131	\$ 3,529	\$ 439,618	\$ 104	\$ 439,722
Segment assets	3,297,574	1,386,832	732,308	5,416,714	2,050,683	7,467,397
Other:						
Depreciation and						
amortization	259,595	100,403	16,205	376,203	_	376,203
Impairment losses						
on assets	146	35,515	10,430	46,091	_	46,091
Increase in property,						
plant, and						
equipment and						
intangible assets	102,416	116,930	21,537	240,883	72,342	313,225

Notes:

- 1. Reconciliation of segment profit is the adjustment of intersegment transactions.
- 2. The amount of general corporate assets included in the reconciliation of segment assets was ¥318,307 million (\$2,107,994 thousand) and \(\frac{\pmathrm{2}}{265,525}\) million at March 31, 2024 and 2023, respectively, mainly consisting of surplus funds (cash and marketable securities), long-term investment funds (investment securities), and the assets of administrative departments.
- 3. The increase in property, plant, and equipment and intangible assets in reconciliations relates to the increase in corporate departments.

Information about Geographical Areas

(1) Sales

				2024				
	North A	merica	Eur	ope	As	sia	Other	
Japan	USA	Others	Germany	Others	China	Others	Areas	Total
¥ 132,598	¥ 113,690	¥ 9,869	¥ 51,811	¥ 88,607	¥ 99,447	¥ 71,570	¥ 11,322	¥ 578,914
				Millions of Yer	1			
				2023				
	North A	merica	Eur	ope	As	sia	Other	
Japan	USA	Others	Germany	Others	China	Others	Areas	Total
¥ 129,587	¥ 128,286	¥ 8,072	¥ 50,446	¥ 75,348	¥ 82,429	¥ 74,092	¥ 10,980	¥ 559,240
			Thous	sands of U.S. D	Oollars			
				2024				
	North A	merica	Eur	ope	As	sia	Other	
Japan	USA	Others	Germany	Others	China	Others	Areas	Total
\$ 878,133	\$ 752,915	\$ 65,358	\$ 343,117	\$ 586,802	\$ 658,591	\$ 473,973	\$ 74,976	\$ 3,833,865

Sales are attributed to countries based on the location of the customers.

(2) Property, plant, and equipment

				Millions of Ye	ı			
				2024				
	North A	merica	Eur	ope	As	sia	Other	
Japan	USA	Others	Poland	Others	China	Others	Areas	Total
¥ 164,167	¥ 37,650	¥ 14,908	¥ 79,025	¥ 15,337	¥ 37,428	¥ 23,028	¥ 361	¥ 371,904
				Millions of Yer	ı			
				2023				
	North A	merica	Eur	ope	As	sia	Other	
Japan	USA	Others	Poland	Others	China	Others	Areas	Total
¥ 168,471	¥ 29,598	¥ 14,520	¥ 77,814	¥ 12,736	¥ 38,376	¥ 24,545	¥ 386	¥ 366,446
			Thou	sands of U.S. Γ	Oollars			
				2024				
	North A	America	Eur	ope	As	sia	Other	
Japan	USA	Others	Poland	Others	China	Others	Areas	Total
\$ 1,087,196	\$ 249,340	\$ 98,726	\$ 523,347	\$ 101,571	\$ 247,866	\$152,504	\$ 2,390	\$ 2,462,940

(4) Reclassifications in Segments

The Company decided to change the categories of its business segment at the meeting of the directors of the company held on January 31, 2024. The change of organization effective on April 1, 2024, the Industrial Process Business which included in the "Energy & Industry" has been changed to the "Environment" from the fiscal year ending March 31, 2025.

Listed below are main products of the respective new business segments.

Business Segment	Main products
Environment	Automotive ceramics for exhaust gas purification and sensors, corrosion-resistant ceramic apparatuses, for chemical industries, gas analyzer, industrial heating systems, refractory products and radioactive waste treatment systems
Digital Society	Components for semiconductor manufacturing equipment, ceramic components for electronics, beryllium copper products, and molds
Energy & Industry	NAS® (sodium-sulfur) batteries, insulators, hardware for insulator assemblies, current limiting arching horn, bushing shells, fuse cut-outs, APM, line arrester

The segment information for the year ended March 31, 2024 using the new operating segments is as

a. Information about Sales and Profit (Loss) by Business Segment

			Million	s of Yen		
			20	24		
		Reportable	Segments			
	Environment	Digital Society	Energy & Industry	Total	Reconciliations	Consolidated
Sales:						
Sales to customers	¥ 390,746	¥ 138,150	¥ 50,018	¥ 578,914	_	¥ 578,914
Intersegment sales or transfers	200	25	777	1,002	¥ (1,002)	
Total	¥ 390,946	¥ 138,175	¥ 50,795	¥ 579,916	¥ (1,002)	¥ 578,914
Segment profit (loss)	¥ 64,596	¥ 2,285	¥ (480)	¥ 66,401	¥ (3)	¥ 66,398
				01.1 a D 11		
				f U.S. Dollars		
		Panortahla	20	f U.S. Dollars		
		Reportable :	20 Segments			
	Environment	•	Segments Energy &		Reconciliations	Consolidated
Sales:	Environment	Reportable S	20 Segments	24	Reconciliations	Consolidated
Sales: Sales to customers	Environment \$ 2,587,717	•	Segments Energy &	24	Reconciliations	
		Digital Society	Segments Energy & Industry	Total		
Sales to customers		Digital Society	Segments Energy & Industry	Total	\$ (6,638)	
Sales to customers Intersegment sales or	\$ 2,587,717	Digital Society \$ 914,902	Segments Energy & Industry \$ 331,246	Total \$ 3,833,865		

b. Disaggregation of Revenue

	Millions of Yen				
	2024 Reportable Segment				
	Energy &				
	Environment	Digital Society	Industry	Total	
Products and services:					
Automotive ceramics for					
exhaust gas purification	¥ 297,299	_	_	¥ 297,299	
Sensors	64,638	_	_	64,638	
Industrial processes	28,808	_	_	28,808	
Components for					
semiconductor					
manufacturing equipment	_	¥ 86,455	_	86,455	
Electronics components	_	26,129	_	26,129	
Metal related	_	25,567	_	25,567	
Energy storage	_	_	¥ 2,089	2,089	
Insulators	_	_	47,929	47,929	
Total _	¥ 390,745	¥ 138,151	¥ 50,018	¥ 578,914	
_					
Geographical areas:					
Japan	¥ 55,978	¥ 44,516	¥ 32,104	¥ 132,598	
North America	73,458	39,088	11,013	123,559	
Europe	136,152	3,969	297	140,418	
Asia	117,539	50,430	3,048	171,017	
Other	7,618	148	3,556	11,322	
	.,,,,,				
Total	¥ 390,745	¥ 138,151	¥ 50,018	¥ 578,914	
Timing of november					
Timing of revenue recognition:					
Goods and services					
transferred at a point in					
time	¥ 376,176	¥ 138,151	¥ 49,227	¥ 563,554	
Goods and services					
transferred over time	14,569		791	15,360	
Total	¥ 390,745	¥ 138,151	¥ 50,018	¥ 578,914	
1 Otal	+ 370,743	+ 130,131	+ 30,010	+ 3/0,/14	

	Thousands of U.S. Dollars				
	2024				
	Reportable Segment				
	Energy &				
	Environment	Digital Society	Industry	Total	
Products and services: Automotive ceramics for exhaust gas purification Sensors Industrial processes	\$ 1,968,869 428,065 190,783	- - -	- - -	\$ 1,968,869 428,065 190,783	
Components for semiconductor manufacturing equipment Electronics components Metal related Energy storage Insulators	- - - -	\$ 572,552 173,040 169,310	- - \$ 13,836 317,410	572,552 173,040 169,310 13,836 317,410	
Total	\$ 2,587,717	\$ 914,902	\$ 331,246	\$ 3,833,865	
Geographical areas: Japan North America Europe Asia Other	\$ 370,712 486,479 901,669 778,405 50,452	\$ 294,809 258,856 26,286 333,973 978	\$ 212,612 72,936 1,964 20,187 23,547	\$ 878,133 818,271 929,919 1,132,565 74,977	
Total	\$ 2,587,717	\$ 914,902	\$ 331,246	\$ 3,833,865	
Timing of revenue recognition: Goods and services transferred at a point in time Goods and services	\$ 2,491,234	\$ 914,902	\$ 326,004	\$ 3,732,140	
transferred over time	96,483	_	5,242	101,725	
Total	\$ 2,587,717	\$ 914,902	\$ 331,246	\$ 3,833,865	

Deloitte.

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INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of NGK INSULATORS, Ltd.:

< Audit of Consolidated Financial Statements >

Opinion

We have audited the consolidated financial statements of NGK INSULATORS, Ltd. and its consolidated subsidiaries (the "Group"), which comprise the consolidated balance sheet as of March 31, 2024, and the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies, all expressed in Japanese yen.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of March 31, 2024, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

Convenience Translation

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

Basis for Opinion

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

Key Audit Matter

A key audit matter is a matter that, in our professional judgment, was of most significance in our audit of the consolidated financial statements of the current period. The matter was addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on the matter.

> Member of Deloitte Touche Tohmatsu Limited

Revenue recognition for product sales

Key Audit Matter Description

Our audit procedures over the appropriateness of the Company's revenue recognition for products sales included the following, among others:

How the Key Audit Matter Was

Addressed in the Audit

By using its one-of-a-kind ceramic technology, the Group manufactures and sells products, such as ceramics for purifying automobile exhaust emissions and components for semiconductor manufacturing equipment. Furthermore, the parent company of the consolidated group, NGK INSULATORS, Ltd. (the "Company"), is the core company of the consolidated group, and its sales are quantitatively material for the Group's consolidated sales.

The process of recognizing revenue for product sales is largely divided into the following three procedures: (1) input order data; (2) register product delivery information and other relevant information; and (3) record sales. The Company uses an ERP system to carry out these procedures. However, for certain sales routes, the Company uses other systems that are used by individual departments or shipping companies to "(2) register product delivery information and other relevant information." This means that a framework has been established in which data are linked between these systems and the ERP system (hereinafter collectively referred to as the "IT Systems") to ultimately "(3) record sales." For all sales routes, the process of recognizing revenue for product sales has been built on the assumption that the IT Systems will function as designed, making

As seen above, the Company's revenue recognition for product sales is an operating process rooted in the automatic links that have been established between the IT Systems. Furthermore, each department generally sells products at stable unit prices, but the number of transaction types and the volume of transactions are extremely large. If sales are not properly recorded or are recorded in the wrong fiscal year, the impact of such errors on the financial statements may be significant.

the Company dependent on the IT Systems over a wide area.

Therefore, we identified the appropriateness of the Company's revenue recognition for products sales as a key audit matter.

(1) Internal control evaluation

- With the assistance of our IT specialists, we evaluated the design and operating effectiveness of the internal controls described below:
 - For the IT Systems used for the sales operating process, we evaluated the design and operating effectiveness of the general IT controls such as controls over development and change management, security management, operations management, and service level management.
 - We evaluated the design and operating effectiveness of the IT application controls mainly by conducting control total checks for the interfaces established between several relevant IT Systems.
 - We evaluated the design and operating effectiveness of the IT application controls in place for ensuring the accuracy of sales, such as the edit validation checks that are conducted when inputting order data.
- We obtained an understanding of the sales process, including the internal controls established by the Company over the recording of sales, examined the division of duties for the process, and evaluated the design and operating effectiveness of relevant internal controls.

(2) Sales transaction test

- We conducted an analysis comparing the monthly budget against the actual results of each department and analyzed the sales trends of each department.
- We selected high unit price transactions, examined the reasonableness of the content of the transactions by conducting interviews to obtain an understanding of the sales routes, client characteristics, and other topics, and traced their accounting records to vouchers that served as evidence for recording sales.
- For the sales of products sold that were not selected above, we first sampled sales transactions and then traced vouchers that served as evidence for recording sales (e.g., purchase orders sent from customers and goods receipts) to the accounting records.

Other Information

Management is responsible for the other information. Audit & Supervisory Board members and the Audit & Supervisory Board are responsible for overseeing the Directors' execution of duties relating to the design and operating effectiveness of the controls over the other information. The other information comprises the information included in the Annual Report, but does not include the consolidated financial statements and our auditor's report thereon.

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

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

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

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

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

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

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

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

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

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

Identify and assess the risks of material misstatement of the consolidated financial statements,
whether due to fraud or error, design and perform audit procedures responsive to those risks. The
procedures selected depend on the auditor's judgment. In addition, we obtain audit evidence that is
sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material
misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve
collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

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

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

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

From the matters communicated with Audit & Supervisory Board members and the Audit & Supervisory Board, 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.

<Fee-Related Information>

Fees for audit and other services for the year ended March 31, 2024, which were charged by us and our network firms to NGK INSULATORS, Ltd. and its subsidiaries were ¥298 million and ¥259 million, respectively.

Our firm and its design to be disclosed pursu	gnated engage uant to the pro	ement partners do not have any interest in the Group which is required visions of the Certified Public Accountants Act of Japan.
		To unoutale LLC
July 31, 2024		

Subsidiaries and Affiliated Companies

As of March 31, 2024

JAPAN	Company's Direct and Indirect Ownership (%)	Principal Products and Services	
■ ENERGY SUPPORT CORPORATION	100	Power distribution equipment	
AKECHI INSULATORS, LTD.	100	Electrical insulators	
NGK CHEM-TECH, LTD.	100	Chemical equipment and maintenance	
NGK FILTECH, LTD.	100	Membrane separation systems	
NGK ADREC CO., LTD.	100	Refractories/kiln furniture	
■ NGK KILNTECH CORPORATION	100	Thermal process engineering & products	
NGK OKHOTSK, LTD.	100	Jig for ceramics production	
,	100	Beryllium copper wrought products	
NGK METEX CORPORATION	100	Molds	
NGK FINE MOLDS, LTD.	100		
■ NGK CERAMIC DEVICE CO., LTD.		Ceramic peckages for components	
■ NGK ELECTRONICS DEVICES, INC.	100	Ceramic packages for semiconductors and ceramic electronic component	
■ Ena Electric Power CO., LTD.	75	Electricity	
Abashiri Electric Power CO., LTD.	85.7	Electricity	
NGK LIFE CO., LTD.	100	Insurance agency service and golf course management	
Other Group Companies			
■ HOKURIKU ENERGYS CORPORATION ■ F	YUSYU ENERGYS CORPORATION	NGK TECHNICA, LTD.	
■ ENERGYS SANGYO CORPORATION	NGK YU-SERVICE CO., LTD.	NGK LOGISTICS, LTD.	
KANSAI ENERGYS CORPORATION		NR-Power Lab Co., LTD.	
NORTH AMERICA	Company's Direct and Indirect Ownership (%)	Principal Products and Services	
■ NGK NORTH AMERICA, INC.	100	Holding company	
· ·	100	Electrical insulators	
NGK-LOCKE, INC.	100	Automotive ceramics	
■ NGK CERAMICS USA, INC.			
■ NGK AUTOMOTIVE CERAMICS USA, INC.	100	Automotive ceramics	
■ NGK CERAMICS MEXICO, S. DE R.L. DE C.V.	95	Automotive ceramics	
■ NGK METALS CORPORATION	100	Beryllium copper products	
■ NGK ELECTRONICS USA, INC.	100	Ceramics for semiconductor manufacturing equipment	
■ FM INDUSTRIES, INC.	100	Modules for semiconductor production equipment	
	O a service Direct and		
EUROPE AND AFRICA	Company's Direct and Indirect Ownership (%)	Principal Products and Services	
■ NGK CERAMICS EUROPE S.A.	100	Automotive ceramics	
■ NGK EUROPE GMBH	100	Ceramic products	
■ NGK CERAMICS POLSKA SP. Z O.O.	95	Automotive ceramics	
■ NGK BERYLCO FRANCE	100	Beryllium copper products	
■ NGK BERYLCO U.K. LTD.	100	Beryllium copper products	
■ NGK DEUTSCHE BERYLCO GMBH	100	Beryllium copper products	
	Company's Direct and		
ASIA PACIFIC	Indirect Ownership (%)	Principal Products and Services	
■ NGK STANGER PTY. LTD.	100	Power distribution equipment	
■ NGK INSULATORS (CHINA) INVESTMENT CO., LTD.	100	Electrical insulators and beryllium copper products	
■ P.T. NGK CERAMICS INDONESIA	97.8	Automotive ceramics	
SIAM NGK TECHNOCERA CO., LTD.	100	Refractories/kiln furniture	
■ NGK CERAMICS (THAILAND) CO., LTD.	95	Automotive ceramics	
■ NGK CERAMICS SUZHOU CO., LTD.	100	Automotive ceramics	
■ NGK TECHNOCERA SUZHOU CO., LTD.	100	Thermal process engineering & products, refractories/kiln furniture	
Other Group Companies			
■ ENERGY ELECTRIC (SHANGHAI) CORPORATION	NGK AUTOMOTIVE CERAMICS KOREA	A CO., LTD.	
■ NGK MATERIAL USA, INC.	NGK TECHNOLOGIES INDIA PVT. LTD.		
■ NGK AUTOMOTIVE CERAMICS MEXICO, S. DE R.L. DE C.V.	NGK ITALY S.R.L.		
■ NGK ELECTRONICS DEVICES (M) SDN. BHD.	NGK ENERGYS MYANMAR CO., LTD.		
■ NGK GLOBETRONICS TECHNOLOGY SDN. BHD.	FM INDUSTRIES (MALAYSIA) SDN. BH	ID.	
= GEODETHORIOG TECHNOLOGI ODIN. DIID.			

■ LOCKE INSULATORS, INC. ■ NGK INSULATORS OF CANADA, LTD. ■ NGK CERAMICS SOUTH AFRICA (PTY) LTD.

Affiliated companies accounted for by the equity method

