

GLASS FOR FUTURE



Financial Report 2021

For the year ended December 31, 2021



Consolidated Financial Statements

Consolidated Balance Sheets

Nippon Electric Glass Co., Ltd. and Consolidated Subsidiaries
December 31, 2020 and 2021

ASSETS

	Millions of yen		Thousands of U.S. dollars (Note 1)
	December 31, 2020	December 31, 2021	December 31, 2021
Current assets:			
Cash and time deposits (Notes 7 and 10)	¥ 121,440	¥ 134,975	\$ 1,173,696
Notes and accounts receivable - trade (Note 7)	58,558	59,580	518,087
Electronically recorded monetary claims - operating	728	1,034	8,991
Allowance for doubtful receivables	(164)	(178)	(1,548)
Inventories (Note 11)	60,864	62,100	540,000
Other current assets (Notes 7 and 9)	4,974	7,001	60,879
Total current assets	246,400	264,512	2,300,105
Property, plant and equipment (Note 12):			
Land	11,400	11,582	100,713
Building and structures	163,577	176,477	1,534,583
Machinery and equipment	710,833	737,932	6,416,800
Construction in progress	19,532	25,260	219,652
Total property, plant and equipment	905,342	951,251	8,271,748
Accumulated depreciation	(549,614)	(570,970)	(4,964,957)
Net property, plant and equipment	355,728	380,281	3,306,791
Intangible assets (Note 12):			
Intangible assets	5,208	4,959	43,122
Investments and other assets:			
Investment securities (Notes 7 and 8)	43,833	40,519	352,339
Investment in affiliates (Note 8)	3,602	4,439	38,600
Deferred tax assets (Note 14)	1,847	1,896	16,487
Other assets	1,522	1,524	13,252
Total investments and other assets	50,804	48,378	420,678
Total assets	¥ 658,140	¥ 698,130	\$ 6,070,696

The accompanying notes to the consolidated financial statements are an integral part of these statements.

LIABILITIES AND NET ASSETS

	Millions of yen		Thousands of U.S. dollars (Note 1)
	December 31, 2020	December 31, 2021	December 31, 2021
Current liabilities:			
Short-term debt, including current portion of long-term debt (Notes 7 and 13)	¥ 49,019	¥ 36,911	\$ 320,965
Notes and accounts payable (Note 7):			
Trade	28,502	42,539	369,904
Construction and other	9,018	11,306	98,313
Accrued expenses	9,884	13,784	119,861
Accrued income taxes	1,534	8,705	75,696
Reserve for business structure improvement	1,270	129	1,122
Reserve for loss on plant closing	865	14	122
Other reserves	157	138	1,200
Other current liabilities (Notes 7 and 9)	3,328	4,409	38,339
Total current liabilities	103,577	117,935	1,025,522
Long-term liabilities:			
Long-term debt (Notes 7 and 13)	54,668	59,912	520,974
Deferred tax liabilities (Note 14)	9,226	7,575	65,870
Reserve for special repairs	9,342	8,671	75,400
Reserve for loss on plant closing	–	294	2,557
Other reserves	20	19	165
Net liabilities for severance and retirement benefits (Note 16)	1,036	1,213	10,548
Other long-term liabilities (Note 15)	3,351	2,768	24,069
Total long-term liabilities	77,643	80,452	699,583
Net assets (Note 17):			
Shareholders' equity:			
Common stock			
Authorized – 240,000,000 shares in Dec. 2020 and Dec. 2021			
Issued – 99,523,246 shares in Dec. 2020 and Dec. 2021	32,156	32,156	279,617
Capital surplus	34,311	34,295	298,217
Retained earnings	411,137	429,355	3,733,522
Treasury stock at cost			
2,882,008 shares in Dec. 2020			
6,495,982 shares in Dec. 2021	(10,178)	(20,121)	(174,965)
Total shareholders' equity	467,426	475,685	4,136,391
Accumulated other comprehensive income:			
Valuation difference on available-for-sale securities	18,776	17,105	148,739
Deferred gains on hedges	98	172	1,496
Foreign currency translation adjustments	(14,101)	2,108	18,330
Total accumulated other comprehensive income	4,773	19,385	168,565
Noncontrolling interests	4,721	4,673	40,635
Total net assets	476,920	499,743	4,345,591
Contingent liabilities (Note 18)			
Total liabilities and net assets	¥ 658,140	¥ 698,130	\$ 6,070,696

Consolidated Statements of Income

Nippon Electric Glass Co., Ltd. and Consolidated Subsidiaries
Years Ended December 31, 2020 and 2021

	Millions of yen		Thousands of U.S. dollars (Note 1)
	December 31, 2020	December 31, 2021	December 31, 2021
Net sales	¥ 242,886	¥ 292,034	\$ 2,539,426
Cost of sales	191,430	209,781	1,824,183
Gross profit	51,456	82,253	715,243
Selling, general and administrative expenses	33,795	49,473	430,200
Operating profit	17,661	32,780	285,043
Other income (expenses):			
Interest and dividend income	1,813	2,011	17,487
Interest expense	(587)	(504)	(4,383)
Depreciation of idle property, plant and equipment	(1,228)	(357)	(3,104)
Loss on disposal of fixed assets	(768)	(2,100)	(18,261)
Loss on impairment (Note 12)	(2,419)	(1,132)	(9,843)
Reversal of reserve for special repairs	2,942	—	—
Gain on sales of investment securities (Note 8)	2,592	1,994	17,339
Foreign exchange gains	936	9,339	81,209
Insurance claim income	377	1,422	12,365
Loss on accident	(1,526)	(6,999)	(60,861)
Restructuring expense	(1,336)	—	—
Other, net	1,440	2,685	23,348
Total other income	2,236	6,359	55,296
Profit before income taxes	19,897	39,139	340,339
Income taxes (Note 14):			
Current	3,937	12,203	106,113
Deferred	435	(1,299)	(11,296)
Total income taxes	4,372	10,904	94,817
Profit	15,525	28,235	245,522
Profit attributable to noncontrolling interests	272	330	2,870
Profit attributable to owners of the parent	¥ 15,253	¥ 27,905	\$ 242,652
	Yen		U.S. dollars (Note 1)
Amount per share of common stock:			
Profit attributable to owners of the parent (Note 2)	¥ 157.84	¥ 290.98	\$ 2.53
Diluted profit attributable to owners of the parent (Note 2)	—	—	—
Cash dividends applicable to the year (Note 17)	100.00	110.00	0.96

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated Statements of Comprehensive Income

Nippon Electric Glass Co., Ltd. and Consolidated Subsidiaries
Years Ended December 31, 2020 and 2021

	Millions of yen		Thousands of U.S. dollars (Note 1)
	December 31, 2020	December 31, 2021	December 31, 2021
Profit	¥ 15,525	¥ 28,235	\$ 245,522
Other comprehensive income (Note 6)			
Valuation difference on available-for-sale securities	(2,372)	(1,671)	(14,530)
Deferred gains on hedges	50	74	643
Foreign currency translation adjustments	(3,153)	15,853	137,852
Share of other comprehensive income of associates accounted for using equity method	33	356	3,096
Total other comprehensive income (loss)	(5,442)	14,612	127,061
Comprehensive income	¥ 10,083	¥ 42,847	\$ 372,583
Comprehensive income attributable to:			
Owners of the parent	¥ 9,811	¥ 42,517	\$ 369,713
Noncontrolling interests	272	330	2,870

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated Statements of Changes in Net Assets

Nippon Electric Glass Co., Ltd. and Consolidated Subsidiaries
Years Ended December 31, 2020 and 2021

	Thousands of shares	Millions of yen								
	Number of shares of common stock issued	Common stock	Capital surplus	Retained earnings	Treasury stock	Valuation difference on available-for-sale securities	Deferred gains on hedges	Foreign currency translation adjustments	Non-controlling interests	Total net assets
Balance at January 1, 2020	99,523	¥ 32,156	¥ 34,358	¥ 405,560	¥ (10,258)	¥ 21,148	¥ 48	¥ (10,981)	¥ 5,124	¥ 477,155
Profit attributable to owners of the parent	—	—	—	15,253	—	—	—	—	—	15,253
Cash dividends paid	—	—	—	(9,663)	—	—	—	—	—	(9,663)
Acquisition of treasury stock	—	—	—	—	(1)	—	—	—	—	(1)
Disposition of treasury stock	—	—	(47)	—	81	—	—	—	—	34
Other	—	—	—	(13)	—	—	—	—	—	(13)
Net changes in items other than shareholders' equity	—	—	—	—	—	(2,372)	50	(3,120)	(403)	(5,845)
Balance at January 1, 2021	99,523	¥ 32,156	¥ 34,311	¥ 411,137	¥ (10,178)	¥ 18,776	¥ 98	¥ (14,101)	¥ 4,721	¥ 476,920
Profit attributable to owners of the parent	—	—	—	27,905	—	—	—	—	—	27,905
Cash dividends paid	—	—	—	(9,665)	—	—	—	—	—	(9,665)
Acquisition of treasury stock	—	—	—	—	(10,002)	—	—	—	—	(10,002)
Disposition of treasury stock	—	—	(16)	—	59	—	—	—	—	43
Other	—	—	—	(22)	—	—	—	—	—	(22)
Net changes in items other than shareholders' equity	—	—	—	—	—	(1,671)	74	16,209	(48)	14,564
Balance at December 31, 2021	99,523	¥ 32,156	¥ 34,295	¥ 429,355	¥ (20,121)	¥ 17,105	¥ 172	¥ 2,108	¥ 4,673	¥ 499,743

	Thousands of U.S. dollars (Note 1)									
	Common stock	Capital surplus	Retained earnings	Treasury stock	Valuation difference on available-for-sale securities	Deferred gains on hedges	Foreign currency translation adjustments	Non-controlling interests	Total net assets	
Balance at January 1, 2021	\$ 279,617	\$ 298,356	\$ 3,575,104	\$ (88,504)	\$ 163,269	\$ 853	\$ (122,618)	\$ 41,052	\$ 4,147,129	
Profit attributable to owners of the parent	—	—	242,652	—	—	—	—	—	242,652	
Cash dividends paid	—	—	(84,043)	—	—	—	—	—	(84,043)	
Acquisition of treasury stock	—	—	—	(86,974)	—	—	—	—	(86,974)	
Disposition of treasury stock	—	(139)	—	513	—	—	—	—	374	
Other	—	—	(191)	—	—	—	—	—	(191)	
Net changes in items other than shareholders' equity	—	—	—	—	(14,530)	643	140,948	(417)	126,644	
Balance at December 31, 2021	\$ 279,617	\$ 298,217	\$ 3,733,522	\$ (174,965)	\$ 148,739	\$ 1,496	\$ 18,330	\$ 40,635	\$ 4,345,591	

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated Statements of Cash Flows

Nippon Electric Glass Co., Ltd. and Consolidated Subsidiaries
Years Ended December 31, 2020 and 2021

	Millions of yen		Thousands of U.S. dollars (Note 1)
	December 31, 2020	December 31, 2021	December 31, 2021
Cash flows from operating activities:			
Profit before income taxes	¥ 19,897	¥ 39,139	\$ 340,339
Depreciation and amortization	24,932	26,721	232,357
Loss on impairment	2,419	1,132	9,843
Insurance claim income	(377)	(1,422)	(12,365)
Gain on sales of investment securities	(2,592)	(1,994)	(17,339)
Decrease in reserve for special repairs	(2,525)	(671)	(5,835)
Interest and dividend income	(1,813)	(2,011)	(17,487)
Interest expense	587	504	4,383
Foreign exchange gains	(769)	(7,581)	(65,922)
Decrease (increase) in notes and accounts receivable, trade	(5,442)	4,731	41,139
Decrease in inventories	20,208	1,324	11,513
Increase (decrease) in notes and accounts payable, trade	(7,391)	13,334	115,948
Other, net	1,883	(1,089)	(9,470)
Subtotal	49,017	72,117	627,104
Interest and dividends received	1,827	1,926	16,748
Interest paid	(631)	(515)	(4,478)
Proceeds from insurance claim income	377	1,422	12,365
Income taxes paid	(2,728)	(5,068)	(44,070)
Net cash provided by operating activities	47,862	69,882	607,669
Cash flows from investing activities:			
Proceeds from sales of marketable and investment securities	4,434	2,878	25,026
Purchases of property, plant and equipment	(25,171)	(35,058)	(304,852)
Other, net	977	425	3,696
Net cash used in investing activities	(19,760)	(31,755)	(276,130)
Cash flows from financing activities:			
Increase (decrease) in short-term debt, net	116	(1,531)	(13,313)
Proceeds from long-term borrowings	16,233	9,831	85,487
Repayment of long-term borrowings	(3,048)	(26,370)	(229,304)
Proceeds from issuance of unsecured bonds	–	10,000	86,957
Redemption of unsecured bonds	(10,000)	–	–
Purchase of treasury shares	–	(10,001)	(86,965)
Cash dividends paid	(9,660)	(9,663)	(84,026)
Cash dividends paid to noncontrolling interests	(674)	(353)	(3,070)
Other, net	(706)	(1,091)	(9,487)
Net cash used in financing activities	(7,739)	(29,178)	(253,721)
Effect of exchange rate changes on cash and cash equivalents	(125)	4,559	39,643
Net increase in cash and cash equivalents	20,238	13,508	117,461
Cash and cash equivalents at beginning of year	100,977	121,215	1,054,043
Cash and cash equivalents at end of year (Note 10)	¥ 121,215	¥ 134,723	\$ 1,171,504

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Notes to Consolidated Financial Statements

Nippon Electric Glass Co., Ltd. and Consolidated Subsidiaries

1. Basis of presenting consolidated financial statements

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

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

The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of the readers outside Japan, using the prevailing exchange rate at December 31, 2021, which was ¥115 to U.S. \$1.00. The translations, provided for convenience, should not be construed as representations that the Japanese yen amounts have been, could have been or could in the future be converted into U.S. dollars at this or any other rate of exchange.

2. Significant accounting policies

(a) Consolidation policies

Under Japanese GAAP, companies are required to consolidate all significant equity investments over which they have the power of control through a majority of voting rights or the existence of certain other conditions evidencing control.

The accompanying consolidated financial statements include the accounts of the Company and substantially all of its subsidiaries. All significant intercompany transactions and account balances are eliminated upon consolidation.

Investments in unconsolidated subsidiaries and affiliates are accounted for by the equity method or by cost. If the equity method of accounting had been applied to the investments in the companies accounted for by cost, the effect on the accompanying consolidated financial statements would not have been material.

(b) Translation of foreign currencies

All short-term and long-term monetary receivables and payables denominated in foreign currencies are translated into Japanese yen at the relevant exchange rates at the balance sheet date.

The financial statements of the Company's overseas consolidated subsidiaries are translated into Japanese yen at the current rates for assets and liabilities and at historical rates for shareholders' equity accounts. Average yearly rates are used for the translation of income and expense amounts. Foreign currency translation adjustments are recorded in net assets.

(c) Cash and cash equivalents

In preparing the consolidated statements of cash flows, cash on hand, deposits placed with banks on demand and short-term highly liquid investments with maturities of three months or less when deposited or purchased are considered to be cash and cash equivalents.

(d) Marketable and investment securities

Available-for-sale securities with observable fair market values are stated at fair market value. Unrealized gains and losses on these securities are reported, net of applicable income taxes, as a separate component of net assets. Realized gains and losses on the sale of such securities are calculated using moving average cost.

(e) Allowance for doubtful receivables

Allowance for doubtful receivables is provided in an amount sufficient to cover possible losses on collection. For regular receivables, it consists of an estimated amount based on the historical ratio of bad debt losses. For receivables from customers in financial difficulty, it consists of the estimated uncollectable amounts of specific doubtful receivables.

(f) Inventories

Inventories are stated principally at the lower of cost or net realizable value, with cost determined by the moving average method.

(g) Property, plant and equipment (except for leased property)

Property, plant and equipment are stated at cost.

Depreciation of property, plant and equipment of the Company and its domestic consolidated subsidiaries is calculated by the declining balance method at rates based on the estimated useful life of the assets. Buildings, excluding facilities attached to buildings, acquired after March 31, 1998, are depreciated using the straight-line method. Facilities attached to buildings and structures acquired after March 31, 2016 are also depreciated using the straight-line method. Depreciation of property, plant and equipment of overseas consolidated subsidiaries is calculated principally by the straight-line method based on the estimated useful life of the assets. The estimated useful life of machinery and equipment is generally from 6 to 9 years.

(h) Intangible assets (except for leased property)

Intangible assets are amortized by the straight-line method.

(i) Severance and retirement benefits

The Company and its consolidated subsidiaries, excluding certain consolidated subsidiaries, principally use a simplified method for calculating projected benefit obligation, which provides for accrued retirement benefits for voluntary retirement at the end of the fiscal year because few employees have applied for the defined benefit pension plans.

In certain consolidated subsidiaries, the allowance for employees' severance and retirement benefits is recognized in an amount after deducting plan assets from retirement benefits for the net defined benefit liability. Calculation methods for net defined benefit liability and retirement benefit costs are as follows:

(1) Allocation of projected retirement benefit obligation

In calculating the retirement benefit obligation, the benefit formula method is used to allocate the projected retirement benefit obligation to the estimated years of service of the eligible employees.

(2) Method for amortizing actuarial gain or loss

Depending on each company's situation, actuarial gain or loss is amortized at the time of occurrence.

(j) Reserve for special repairs

To prepare for the significant recurring repairs required of glass-melting furnaces, estimated costs for the next repairs are accrued within the period between the previous repair and the next envisioned repair.

(k) Reserve for loss on plant closing

To provide for loss on plant closing, the Company recorded the estimated cost of closing the plant.

(l) Reserve for business structure improvement

To provide for the expected loss associated with future reductions of the consolidated subsidiaries' workforce as part of business restructuring, the Company recorded the estimated cost of completing the business restructuring.

(m) Income taxes

The tax effects of loss carryforwards and temporary differences between the financial statement basis and the tax basis of assets and liabilities are recognized as deferred tax assets and liabilities. The provision for income taxes is computed based on the pretax income included in the consolidated statements of operations.

(n) Research and development

Costs related to research and development activities are charged to income as incurred and amounted to ¥6,259 million and ¥6,599 million (\$57,383 thousand) for the fiscal years ended December 31, 2020 and 2021, respectively.

(o) Profit attributable to owners of the parent per share

The computations of profit attributable to the owners of the parent per share are based on the average number of shares of common stock outstanding during each year. Diluted profit attributable to the owners of the parent per share of common stock is computed based on the average number of shares outstanding increased by the number of shares that would be outstanding assuming all dilutive convertible bonds were converted at the beginning of the year at the current conversion price.

Diluted profit attributable to the owners of the parent per share has not been presented for the years ended December 31, 2020 and 2021 because there were no potentially dilutive shares of common stock.

(p) Derivatives and hedge accounting

The Company and its consolidated subsidiaries state derivative financial instruments at fair value and recognize changes in the fair value as gain or loss, unless the derivative financial instruments are used for hedging purposes.

Forward foreign exchange contracts and interest rate swap contracts that meet the criteria for hedge accounting

as provided in the "Accounting Standard for Financial Instruments" are accounted for using deferral hedge accounting, which requires unrealized gain or loss to be deferred as net unrealized gain or loss on the contract as a component of net assets until the loss or gain related to the hedged item is actually recognized.

The Company and its consolidated subsidiaries enter into forward foreign exchange contracts and interest rate swap contracts to hedge the risk of exchange rate fluctuations in forecasted foreign currency transactions and fluctuations in interest rates on borrowings, respectively. For forecasted foreign currency transactions, the suitability for hedging is confirmed by pre-testing and post-testing with consideration for whether the execution of the transaction is highly likely. The Company and its consolidated subsidiaries use derivative transactions solely for the purpose of managing risks and not for speculation. The counterparties to the derivative transactions are major financial institutions. Therefore, the Company and its consolidated subsidiaries consider the credit risk to be minimal. The derivative transactions are entered into by each company in accordance with accounting policies and decisions made by each company's management.

(q) Reclassification

Certain prior period amounts have been reclassified to conform to the current year presentation. These reclassifications had no significant impact on the previously reported results of operations or retained earnings.

3. Significant accounting estimates

Consideration of impairment on fixed assets

(1) Amount recorded on the consolidated financial statements for the current consolidated fiscal year

The Company and its consolidated subsidiaries own the property, plant and equipment of ¥380,281 million (\$3,306,791 thousand) and intangible assets of ¥4,959 million (\$43,122 thousand) at the end of the current fiscal year, ¥5,612 million (\$48,800 thousand) of which was related to a certain plant owned by Electric Glass Fiber America, LLC ("EGFA"), a consolidated subsidiary. In addition, an impairment loss of ¥1,132 million (\$9,843 thousand) related to the fixed assets was reported in the consolidated statements of income for the current fiscal year.

(2) Other information for assisting users of consolidated financial statements in understanding the content of significant accounting estimates

EGFA prepares its financial statements in accordance with U.S. generally accepted accounting principles and groups assets on a plant basis. If an impairment indicator is identified and undiscounted future cash flows that are expected to be generated from an asset group are less than the carrying amount in the recoverability test, the difference between the carrying amount and the fair value is recognized as an impairment loss.

Since early 2020, EGFA was suffering deteriorated revenues as a result of decreased sales and low productivity due to production adjustments made in response to the deteriorated market caused by the spread of COVID-19. The market did recover afterwards, and EGFA strove to improve revenues as production was increased at facilities

in line with the market's recovery. Despite its effort, EGFA incurred an operating loss due to delays in recovery of production capacity resulting from a shortage of workers, as well as soaring logistics costs resulting from global supply chain disruption, and an impairment indicator was identified. Accordingly, a recoverability test was performed for its fixed assets. As a result of the test, it was determined that the carrying amount of a certain plant was unrecoverable, and the difference between the carrying amount and the fair value was recognized as an impairment loss.

The undiscounted future cash flows used for the recoverability test were derived from the business plan prepared by EGFA's management, and the estimates used in the business plan involved management's judgment. In estimating the fair value, the selection of a valuation approach, the measurement of replacement cost and the consideration of depreciation factors required a high degree of expertise in valuation.

If delays in recovery of production capacity resulting from a shortage of workers and soaring logistics costs caused by global supply chain disruption continue in the next fiscal year, it may be necessary to revise the valuation of EGFA's fixed assets.

4. Changes in presentation method

Adoption of "Accounting Standard for Disclosure of Accounting Estimates"

The Company and its consolidated subsidiaries adopted ASBJ Statement No. 31, "Accounting Standard for Disclosure of Accounting Estimates" (March 31, 2020), commencing with the consolidated financial statements for the current consolidated fiscal year. Therefore significant accounting estimates are disclosed in the note to the consolidated financial statements.

The note does not include information for the previous consolidated fiscal year in accordance with the transitional provision set out in paragraph 11 of the Accounting Standard.

5. Additional information

Impact of COVID-19

The COVID-19 pandemic is still ongoing, and its spread continues to be a concern. For the next fiscal year and subsequent years, the Company has developed estimates based on the assumption that COVID-19 will not significantly impact the businesses of the Company and its consolidated subsidiaries.

6. Accounting standards for presentation of comprehensive income

The components of other comprehensive income for the fiscal years ended December 31, 2020 and 2021 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2020/12	2021/12	2021/12
Valuation difference on available-for-sale securities			
Decrease during the year	¥ (769)	¥ (436)	\$ (3,791)
Reclassification adjustments	(2,487)	(1,994)	(17,339)
Subtotal, before tax	(3,256)	(2,430)	(21,130)
Tax benefit	884	759	6,600
Subtotal, net of tax	(2,372)	(1,671)	(14,530)
Deferred gains on hedges			
Increase during the year	164	258	2,243
Reclassification adjustments	(156)	(146)	(1,270)
Subtotal, before tax	8	112	973
Tax (expense) benefit	42	(38)	(330)
Subtotal, net of tax	50	74	643
Foreign currency translation adjustments			
Increase (decrease) during the year	(3,153)	15,853	137,852
Share of other comprehensive income of entities accounted for using equity method			
Increase during the year	33	356	3,096
Total other comprehensive income (loss)	¥ (5,442)	¥ 14,612	\$ 127,061

7. Financial instruments

(a) Status of financial instruments

(1) Policy on financial instruments

As a Group policy, the Company and its consolidated subsidiaries ("the Group") restrict investments of surplus cash, if any, to safe financial assets such as bank deposits. Funds required by the Company are obtained mainly through bank borrowings and the issuance of bonds. Derivatives are used to avoid the risks described below and are not entered into for speculative purposes.

(2) Details of financial instruments, associated risks and risk management structure

Notes and accounts receivable - trade, which are operating receivables, are exposed to customer credit risk. The Company, pursuant to the Company's Credit Control Regulations, manages credit risk by managing the due dates and outstanding balances of each counterparty and by monitoring the credit status of major counterparties. Consolidated subsidiaries perform similar procedures in conformity with the Company's Credit Control Regulations.

Operating receivables denominated in foreign currencies, which arise from the Company's global business development, are exposed to foreign exchange fluctuation risk. The Group enters into forward foreign exchange contracts mainly for accounts receivable associated with export transactions of finished goods to manage fluctuations in future foreign exchange rates.

Investment securities consist mainly of equity securities of companies with which companies in the Group have business relationships and are exposed to market price fluctuation risk. The Company, pursuant to the Company's Shareholdings Regulations, monitors the fair values of such securities and regularly reviews its holdings.

Notes and accounts payable - trade, which are operating debt, are settled within one year.

Regarding borrowings, short-term debt is issued mainly to obtain funds for operating transactions, and bonds and long-term debt are issued mainly for capital expenditures. Some borrowings have floating interest rates and are exposed to interest rate fluctuation risk against which long-term debt is partially hedged through interest rate swap contracts.

For details regarding hedge accounting of derivatives, such as hedging instruments and hedged items, and hedging policy, refer to Note 2 (p), "Significant accounting policies - Derivatives and hedge accounting."

Matters regarding derivative transactions are determined by executives in charge of accounting at each consolidated Group company in accordance with the regulations of each company. Approval for transactions that exceed a certain scope is granted by the Company's management committee. Operations and management pertaining to the execution of derivative transactions are carried out by each company's accounting department, and such operations are managed through a check and balance system. With derivative transactions, the Company enters into contracts only with financial institutions with high ratings to reduce credit risk.

Operating debt and borrowings are exposed to liquidity risks. The Group manages such risks by cash management forecasting at each Group company.

(3) Supplementary explanation for fair values of financial instruments

The notional amounts of derivatives in Note 9, "Derivatives," do not indicate the market risks pertaining to the derivatives themselves.

(b) Fair values of financial instruments

The tables below show the book values of financial instruments recorded in the consolidated balance sheet, their fair values and any differences between the book values and fair values as of December 31, 2020 and 2021. Financial instruments whose fair values were deemed to be extremely difficult to estimate were not included. (See in the notes to the tables below – Note 3, “Financial instruments whose fair values are deemed to be extremely difficult to estimate.”)

2020/12	Millions of yen		
	Book value	Fair value	Difference
(1) Cash and time deposits	¥ 121,440	¥ 121,440	¥ –
(2) Notes and accounts receivable - trade	58,558	58,558	–
(3) Investment securities:			
Other securities	43,831	43,831	–
(4) Short-term debt:			
Short-term debt	(22,712)	(22,712)	–
Current portion of long-term debt	(26,307)	(26,350)	(43)
(5) Notes and accounts payable – trade	(28,502)	(28,502)	–
(6) Long-term debt:			
Unsecured bonds	(20,000)	(20,033)	(33)
Long-term borrowings	(34,668)	(34,983)	(315)
(7) Derivatives			
Derivatives accounted for with hedge accounting	282	282	–

2021/12	Millions of yen		
	Book value	Fair value	Difference
(1) Cash and time deposits	¥ 134,975	¥ 134,975	¥ –
(2) Notes and accounts receivable - trade	59,580	59,580	–
(3) Investment securities:			
Other securities	40,517	40,517	–
(4) Short-term debt:			
Short-term debt	(21,725)	(21,725)	–
Current portion of long-term debt	(5,186)	(5,254)	(68)
Current portion of unsecured bonds	(10,000)	(10,043)	(43)
(5) Notes and accounts payable – trade	(42,539)	(42,539)	–
(6) Long-term debt:			
Unsecured bonds	(20,000)	(20,062)	(62)
Long-term borrowings	(39,912)	(40,111)	(199)
(7) Derivatives			
Derivatives accounted for with hedge accounting	294	294	–

2021/12	Thousands of U.S. dollars		
	Book value	Fair value	Difference
(1) Cash and time deposits	\$ 1,173,696	\$ 1,173,696	\$ –
(2) Notes and accounts receivable - trade	518,087	518,087	–
(3) Investment securities:			
Other securities	352,322	352,322	–
(4) Short-term debt:			
Short-term debt	(188,913)	(188,913)	–
Current portion of long-term debt	(45,095)	(45,687)	(592)
Current portion of unsecured bonds	(86,957)	(87,330)	(373)
(5) Notes and accounts payable – trade	(369,904)	(369,904)	–
(6) Long-term debt:			
Unsecured bonds	(173,913)	(174,452)	(539)
Long-term borrowings	(347,061)	(348,791)	(1,730)
(7) Derivatives			
Derivatives accounted for with hedge accounting	2,557	2,557	–

Notes: Fair value measurements of financial instruments and matters regarding marketable securities and derivatives

1. Amounts for “Book value” and “Fair value” in parentheses indicate net liabilities.
2. Measurements of fair value for financial instruments and matters regarding marketable securities and derivatives
 - (1) Cash and time deposits and (2) Notes and accounts receivable - trade
The fair value of these items approximates the book value because of their short-term nature. Thus, the book value is used as the fair value.
 - (3) Investment securities
The fair value of equity securities is based on market prices on public exchanges.
For information on investment securities, refer to Note 8, “Marketable and investment securities.”
 - (4) Short-term debt and (5) Notes and accounts payable - trade
The fair value of these items, excluding the current portion of long-term debt and unsecured bonds, approximates the book value because of their short-term nature. Thus, the book value is used as the fair value. The current portion of long-term debt and unsecured bonds, which are included in short-term debt, is measured by the methods used in Subsection (6) below, “Long-term debt” and classified as such.
 - (6) Long-term debt
The fair value of unsecured bonds issued by the Company is based on the market price if available. If market price is not available, the fair value is based on the present value calculated by discounting the total amount of principle and interest outstanding at an appropriate rate considering the time to maturity and the credit risk.
The fair value of long-term borrowings is measured by discounting the total amount of principle and interest outstanding at an estimated interest rate for similar new borrowings.
 - (7) Derivatives
Refer to Note 9, “Derivatives.”
3. Financial instruments whose fair values are deemed to be extremely difficult to estimate

Equity securities issued by affiliates, investments in capital of subsidiaries and associates and nonlisted equity securities are not included in Subsection (3) above, “Investment securities” because their fair values were deemed extremely difficult to estimate, they had no quoted market prices and it was not possible to estimate their future cash flows. For information related to these securities, refer to Note 8, “Marketable and investment securities.”

8. Marketable and investment securities

(a) Acquisition cost and book value of securities with observable market values at December 31, 2020 and 2021 were as follows:

2020/12	Millions of yen		
	Acquisition cost	Book value	Difference
Available-for-sale securities:			
Securities with book value exceeding acquisition cost:			
Equity securities	¥ 17,661	¥ 43,198	¥ 25,537
Securities with book value not exceeding acquisition cost:			
Equity securities	682	633	(49)
	¥ 18,343	¥ 43,831	¥ 25,488

2021/12	Millions of yen		
	Acquisition cost	Book value	Difference
Available-for-sale securities:			
Securities with book value exceeding acquisition cost:			
Equity securities	¥ 15,976	¥ 39,087	¥ 23,111
Securities with book value not exceeding acquisition cost:			
Equity securities	1,483	1,430	(53)
	¥ 17,459	¥ 40,517	¥ 23,058

2021/12	Thousands of U.S. dollars		
	Acquisition cost	Book value	Difference
Available-for-sale securities:			
Securities with book value exceeding acquisition cost:			
Equity securities	\$ 138,922	\$ 339,887	\$ 200,965
Securities with book value not exceeding acquisition cost:			
Equity securities	12,896	12,435	(461)
	\$ 151,818	\$ 352,322	\$ 200,504

(b) Book values of securities with no available market values at December 31, 2020 and 2021 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2020/12	2021/12	2021/12
Available-for-sale securities:			
Equity securities issued by affiliates	¥ 1,684	¥ 1,684	\$ 14,643
Investments in capital of subsidiaries and associates	1,918	2,755	23,957
Nonlisted equity securities, other	2	2	17
	¥ 3,604	¥ 4,441	\$ 38,617

(c) Sales of available-for-sale securities sold in the years ended December 31, 2020 and 2021 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2020/12	2021/12	2021/12
Total sales amounts	¥ 4,434	¥ 2,878	\$ 25,026
Gains on sales	2,592	1,994	17,339

(d) Impairment loss on investment securities

The Company recognized impairment loss of ¥106 million on investment securities for the fiscal year ended December 31, 2020. There was no impairment loss on investment securities in the year ended December 31, 2021.

If the fair market value as of the end of each financial quarter has declined by more than 30% from the acquisition cost, impairment loss on investment securities is recognized.

9. Derivatives

The fair values of derivative contracts used by the Company and its consolidated subsidiaries at December 31, 2020 and 2021 were as follows:

Derivative transactions to which hedge accounting has been applied

(a) Currency related transactions

2020/12			Millions of yen		
Method of hedge accounting	Type of transaction	Hedged items	Notional amount	Portion due after 1 year	Fair value
Deferral hedge accounting	Forward foreign exchange				
	Sell	Forecasted transactions for accounts receivable denominated in foreign currencies	¥ 35,154	¥ 6,174	¥ 294
	Buy	Forecasted transactions for accounts payable denominated in foreign currencies	129	–	(1)
			¥ 35,283	¥ 6,174	¥ 293

2021/12			Millions of yen		
Method of hedge accounting	Type of transaction	Hedged items	Notional amount	Portion due after 1 year	Fair value
Deferral hedge accounting	Forward foreign exchange				
	Sell	Forecasted transactions for accounts receivable denominated in foreign currencies	¥ 45,924	¥ 9,512	¥ 294
			¥ 45,924	¥ 9,512	¥ 294

2021/12			Thousands of U.S. dollars		
Method of hedge accounting	Type of transaction	Hedged items	Notional amount	Portion due after 1 year	Fair value
Deferral hedge accounting	Forward foreign exchange				
	Sell	Forecasted transactions for accounts receivable denominated in foreign currencies	\$ 399,339	\$ 82,713	\$ 2,557
			\$ 399,339	\$ 82,713	\$ 2,557

Note: Fair value is based on prices obtained from financial institutions.

(b) Interest related transactions

2020/12			Millions of yen		
Method of hedge accounting	Type of transaction	Hedged items	Notional amount	Portion due after 1 year	Fair value
Deferral hedge accounting	Interest rate swap	Interest on borrowings	¥ 10,000	¥ –	¥ (11)

Note: Fair value is based on prices obtained from financial institutions.

There were no interest related transactions for the year ended December 31, 2021.

10. Cash and cash equivalents

Cash and cash equivalents at December 31, 2020 and 2021 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2020/12	2021/12	2021/12
Cash and time deposits on consolidated balance sheets	¥ 121,440	¥ 134,975	\$ 1,173,696
Time deposits due over three months	(225)	(252)	(2,192)
Cash and cash equivalents in consolidated statements of cash flows	¥ 121,215	¥ 134,723	\$ 1,171,504

11. Inventories

Inventories at December 31, 2020 and 2021 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2020/12	2021/12	2021/12
Finished and purchased goods	¥ 35,318	¥ 32,045	\$ 278,652
Work-in-process	2,359	1,341	11,661
Raw materials and others	23,187	28,714	249,687
	¥ 60,864	¥ 62,100	\$ 540,000

12. Loss on impairment

(a) Grouping

The Company and its consolidated subsidiaries group operating assets by business unit for which the profit or loss is continually controlled to measure any impairment of the assets. Important idle assets which are not used for business are grouped by project.

(b) Details of loss on impairment by fiscal year

(1) Fiscal year ended December 31, 2020

Use	Location	Type	Loss on impairment
			Millions of yen
			2020/12
Business assets for glass tubing for pharmaceutical and medical use, glass tubing for lighting and heat resistant glass	Otsu plant, Shiga-Takatsuki plant, other	Machinery and equipment	¥ 472
		Others	69
		Subtotal	541
Business assets for glass fiber	Electric Glass Fiber America, LLC	Trademarks	267
		Subtotal	267
Significant idle assets	Electric Glass Fiber America, LLC, Shiga-Takatsuki plant, OLED Material Solutions Co., Ltd.	Machinery and equipment	1,312
		Building and structures	295
		Others	4
		Subtotal	1,611
Total			¥ 2,419

- i. Business assets for glass tubing for pharmaceutical and medical use, glass tubing for lighting and heat resistant glass
 1. Reason to recognize impairment
For the manufacturing of glass tubing for pharmaceutical and medical use, glass tubing for lighting and heat resistant glass, the improvements in production efficiency could not sufficiently offset the reduction in sales of some products. Therefore, the book values of the production facilities of these products were written down to their recoverable values.
 2. Assessment of recoverable values
The recoverable values of business assets for glass tubing for pharmaceutical and medical use, glass tubing for lighting and heat resistant glass were based on the value in use. The value in use was calculated by discounting the future cash flows to be derived from the assets to the present value.
- ii. Business assets for glass fiber
 1. Reason to recognize impairment
The impairment tests performed based on the accounting principles generally accepted in the U.S. revealed that the fair values of the trademarks of Electric Glass Fiber America, LLC, the Company's subsidiary, were below their book values. As a result, the book values were written down to the fair values.
 2. Assessment of recoverable values
The recoverable values of business assets for the glass fiber business were based on the fair value.

In Sections i and ii above, the discount rates used for calculating the value in use and the fair value were 8.2% (before tax) and 8.0% (after tax).

- iii. Significant idle assets
 1. Reason to recognize impairment
Since there was no plan to use certain idle assets, the book values of the assets were written down to the recoverable values.
 2. Assessment of recoverable values
The recoverable values of significant idle assets were based on net selling price. No recoverable values were expected for part of the production facilities of the glass manufacturing line due to the low probability of future diversion and sales. Net selling price was measured reasonably by market value.

(2) Fiscal year ended December 31, 2021

Use	Location	Type	Loss on impairment	
			Millions of yen	Thousands of U.S. dollars
			2021/12	2021/12
Business assets for glass fiber	Electric Glass Fiber America, LLC	Machinery and equipment	¥ 629	\$ 5,470
		Building and structures	457	3,974
		Land	43	374
		Others	3	25
		Subtotal	1,132	9,843
Total			¥ 1,132	\$ 9,843

- i. Business assets for glass fiber
 1. Reason to recognize impairment
As explained in Note 3, "Significant accounting estimates," EGFA, the Company's consolidated subsidiary in the U.S. operating a glass fiber business, incurred an operating loss related to decreased profitability due to delays in recovery of production capacity resulting from a shortage of workers, and soaring logistics costs caused by global supply chain disruption. Accordingly, a recoverability test based on U.S. generally accepted accounting standards was performed for its fixed assets. As a result of the test, it was determined that the fair value of certain fixed assets was below the carrying value and the difference between the carrying amount and fair value was recognized as impairment loss.
 2. Assessment of recoverable values
The fair values of certain business assets used in the glass fiber business were based on the replacement cost with consideration for depreciation factors.

13. Short-term and long-term debt

Short-term debt, including the current portion of long-term debt, at December 31, 2020 and 2021 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2020/12	2021/12	2021/12
Short-term bank borrowings, average interest rate 0.2% per annum	¥ 20,712	¥ 19,725	\$ 171,522
Commercial paper, average interest rate -0.1% per annum	2,000	2,000	17,391
Current portion of long-term borrowings, average interest rate 1.1% per annum	26,307	5,186	45,095
Current portion of unsecured bonds, average interest rate 0.6% per annum	–	10,000	86,957
	¥ 49,019	¥ 36,911	\$ 320,965

Average interest rate is the weighted average interest rate for amounts outstanding as of the fiscal year end.

Long-term debt at December 31, 2020 and 2021 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2020/12	2021/12	2021/12
Borrowings, principally from banks and insurance companies due from 2022 through 2027, average interest rate 0.6% per annum	¥ 60,975	¥ 45,098	\$ 392,156
0.6% unsecured bonds, due in 2022	10,000	10,000	86,957
0.3% unsecured bonds, due in 2026	10,000	10,000	86,957
0.3% unsecured bonds, due in 2028	–	10,000	86,956
	80,975	75,098	653,026
Less current portion of long-term borrowings	(26,307)	(5,186)	(45,095)
Less current portion of unsecured bonds	–	(10,000)	(86,957)
	¥ 54,668	¥ 59,912	\$ 520,974

The aggregate annual maturities of long-term debt at December 31, 2021 were as follows:

Years ending December 31	Millions of yen	Thousands of U.S. dollars
2022	¥ 15,186	\$ 132,052
2023	15,861	137,922
2024	4,630	40,261
2025	19,401	168,705
2026	10,010	87,043
2027 and thereafter	10,010	87,043
	¥ 75,098	\$ 653,026

For flexible financing purposes, the Company has committed credit facilities with certain banks. The maximum aggregate credit facility available to the Company was ¥25,000 million (\$217,391 thousand) as of December 31, 2021. The credit facility had not been used as of December 31, 2021.

14. Income taxes

The Company is subject to a number of taxes based on income, which, in the aggregate, indicate a statutory tax rate in Japan of approximately 30.5% for each of the fiscal years ended December 31, 2020 and 2021.

The significant differences between the statutory tax rate in Japan and the effective tax rate of the Company and its consolidated subsidiaries for financial statement purposes for the fiscal years ended December 31, 2020 and 2021 were as follows:

	2020/12	2021/12
Statutory tax rate in Japan	30.5%	30.5%
Dividend income, other nontaxable income and expenses	(9.3)	(3.8)
Difference in tax rates for overseas consolidated subsidiaries	(2.8)	(2.8)
Undistributed profit of overseas consolidated subsidiaries	2.6	2.6
Effect of elimination of dividend income	7.0	3.7
Adjustments based on mutual agreements	(4.4)	–
Overseas withholding tax	1.6	(1.2)
Effect of elimination of unrealized gains	0.5	2.0
Movement of valuation allowance	(2.9)	(1.4)
Tax credits for experimentation and research expenses	(0.7)	(0.7)
Others	(0.1)	(1.0)
Effective tax rate	22.0%	27.9%

Significant components of the Company's and its consolidated subsidiaries' deferred tax assets and liabilities as of December 31, 2020 and 2021 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2020/12	2021/12	2021/12
Deferred tax assets:			
Tax losses carried forward	¥ 7,786	¥ 8,973	\$ 78,026
Depreciation in excess of tax limit	4,894	5,494	47,774
Capital allowances	2,522	3,773	32,809
Goodwill	3,622	3,669	31,904
Unrealized gain on property, plant and equipment	2,181	3,357	29,191
Reserve for special repairs	2,849	2,645	23,000
Loss on devaluation of inventories	2,310	2,384	20,730
Loss on valuation of investment securities	1,118	1,118	9,722
Unrealized gain on inventories	567	990	8,609
Accrued bonuses	358	470	4,087
Others	3,411	4,461	38,791
Subtotal deferred tax assets	31,618	37,334	324,643
Valuation allowance for tax losses carried forward	(6,958)	(8,375)	(72,826)
Valuation allowance for deductible temporary differences	(14,825)	(13,802)	(120,017)
Total valuation allowance	(21,783)	(22,177)	(192,843)
Total deferred tax assets	9,835	15,157	131,800
Deferred tax liabilities:			
Depreciation of overseas consolidated subsidiaries	(6,879)	(9,629)	(83,730)
Valuation difference on available-for-sale securities	(6,712)	(5,953)	(51,765)
Undistributed profit of overseas consolidated subsidiaries	(3,108)	(4,135)	(35,957)
Others	(515)	(1,119)	(9,731)
Total deferred tax liabilities	(17,214)	(20,836)	(181,183)
Net deferred tax liabilities	¥ (7,379)	¥ (5,679)	\$ (49,383)

Notes:

Tax losses carried forward and their deferred tax assets by expiration period as of December 31, 2020 and 2021 were as follows:

2020/12

	Millions of yen		
	Tax losses carried forward	Valuation allowance for tax losses carried forward	Deferred tax assets
2021	¥ 146	¥ (113)	¥ 33
2022	—	—	—
2023	—	—	—
2024	273	(273)	—
2025	385	(385)	—
2026 and thereafter	6,982	(6,187)	795
Total	¥ 7,786	¥ (6,958)	¥ 828

2021/12

	Millions of yen		
	Tax losses carried forward	Valuation allowance for tax losses carried forward	Deferred tax assets
2022	¥ —	¥ —	¥ —
2023	—	—	—
2024	324	(324)	—
2025	387	(33)	354
2026	167	(167)	—
2027 and thereafter	8,095	(7,851)	244
Total	¥ 8,973	¥ (8,375)	¥ 598

	Thousands of U.S. dollars		
	Tax losses carried forward	Valuation allowance for tax losses carried forward	Deferred tax assets
2022	\$ —	\$ —	\$ —
2023	—	—	—
2024	2,817	(2,817)	—
2025	3,365	(287)	3,078
2026	1,452	(1,452)	—
2027 and thereafter	70,392	(68,270)	2,122
Total	\$ 78,026	\$ (72,826)	\$ 5,200

The amount of tax losses carried forward in the above table is after multiplying by the statutory tax rate.

15. Asset retirement obligations

(a) Asset retirement obligations recorded on the consolidated balance sheets

(1) Outline of asset retirement obligations

Recorded asset retirement obligations are expenses, such as the costs for the disposal of machinery and equipment owned by the Company that contain PCB (polychlorinated biphenyl) and the costs for the removal of asbestos from buildings owned by the Company when they are demolished.

(2) Basis for calculating asset retirement obligations

Asset retirement obligations are based on estimates provided by companies specializing in making such estimates, such as construction companies.

(3) Changes in the total amount of asset retirement obligations during the fiscal years ended December 31, 2020 and 2021 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2020/12	2021/12	2021/12
Beginning balance	¥ 277	¥ 254	\$ 2,209
Decrease due to the fulfillment of asset retirement obligations	(1)	—	—
Change in estimated asset retirement obligations	(22)	2	17
Ending balance	¥ 254	¥ 256	\$ 2,226

(b) Asset retirement obligations not recorded on the consolidated balance sheets

Regarding some plant sites and other properties used under real estate leasing agreements, the Company and its consolidated subsidiaries have obligations related to the cost of restoring such properties to their original state at the time of business termination or moving out. However, since there are uncertainties regarding the lease periods of the properties to which such obligations apply, because there are no plans to terminate or move out at this time, it is impossible to reasonably estimate the related asset retirement obligations. Therefore, no asset retirement obligations are recorded in connection with such obligations.

16. Severance and retirement benefits

The Company and its domestic consolidated subsidiaries provide mainly defined contribution pension plans. However, certain employees are provided unfunded lump-sum payment plans. The overseas consolidated subsidiaries provide funded lump-sum payment plans, defined contribution pension plans and defined benefit pension plans.

For defined benefit pension plans, the reconciliation of opening and ending balances for projected benefit obligation for the fiscal years ended December 31, 2020 and 2021 was as follows:

	Millions of yen		Thousands of U.S. dollars
	2020/12	2021/12	2021/12
Projected benefit obligation at beginning of year	¥ (967)	¥ (1,065)	\$ (9,261)
Service cost	(88)	(87)	(757)
Interest cost	(15)	(15)	(130)
Actuarial differences	(27)	(27)	(235)
Benefits paid	28	58	504
Others	4	(111)	(964)
Projected benefit obligation at end of year	¥ (1,065)	¥ (1,247)	\$ (10,843)

For defined benefit pension plans, the reconciliation of opening and ending balances for plan assets for the fiscal years ended December 31, 2020 and 2021 was as follows:

	Millions of yen		Thousands of U.S. dollars
	2020/12	2021/12	2021/12
Plan assets at beginning of year	¥ 27	¥ 29	\$ 252
Expected return on plan assets	0	0	0
Actuarial differences	1	0	0
Contributions paid by employer	1	1	9
Benefits paid	–	(1)	(9)
Others	0	5	43
Plan assets at end of year	¥ 29	¥ 34	\$ 295

For defined benefit pension plans, the reconciliation of ending balances for projected benefit obligations and plan assets and the balances for net defined benefit liability recognized in the consolidated balance sheets for the fiscal years ended December 31, 2020 and 2021 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2020/12	2021/12	2021/12
Projected benefit obligations of funded plans	¥ (746)	¥ (894)	\$ (7,773)
Plan assets	29	34	295
	(717)	(860)	(7,478)
Projected benefit obligation of unfunded plans	(319)	(353)	(3,070)
Net liabilities for severance and retirement benefits recognized in the consolidated balance sheets	(1,036)	(1,213)	(10,548)
Net defined benefit liability	(1,036)	(1,213)	(10,548)
Net liabilities for severance and retirement benefits recognized in the consolidated balance sheets	¥ (1,036)	¥ (1,213)	\$ (10,548)

For defined benefit pension plans, components of severance and retirement benefit expense for the fiscal years ended December 31, 2020 and 2021 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2020/12	2021/12	2021/12
Service cost	¥ 88	¥ 87	\$ 757
Interest cost	15	15	130
Expected return on plan assets	(0)	(0)	(0)
Amortization of actuarial differences	26	26	226
Others	(4)	(6)	(52)
Severance and retirement benefit expense for defined benefit pension plans	¥ 125	¥ 122	\$ 1,061

For defined benefit pension plans, the percentage composition by asset class of total plan assets for the fiscal years ended December 31, 2020 and 2021 was as follows:

	2020/12	2021/12
Equity securities	48%	43%
Bonds	9%	11%
Others	43%	46%
Total	100%	100%

The current and expected allocation of plan assets and the current and expected long-term rates of return for the various assets that constitute the plan assets are considered when determining the long-term expected rate of return on plan assets.

For defined benefit pension plans, principal actuarial assumptions for the fiscal years ended December 31, 2020 and 2021 were as follows:

	2020/12	2021/12
Discount rates	0.8–4.5%	0.5–4.5%
Long-term expected rates of return on plan assets	0.8%	0.5%
Expected rates of pay raises	2.0–5.0%	2.0–5.0%

The total amounts that the Company and its consolidated subsidiaries needed to contribute to the defined contribution pension plans were ¥1,888 million and ¥1,801 million (\$15,661 thousand) for the fiscal years ended December 31, 2020 and 2021, respectively.

17. Net assets

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

Under The Japanese Corporate Law (“the Law”), in cases in which a dividend distribution of surplus takes place, the smaller of an amount equal to 10% of the dividend or the excess, if any, of 25% of common shares over the total of additional paid-in capital and legal earnings reserve must be set aside as additional paid-in capital or legal earnings reserve. The legal earnings reserve is included in retained earnings in the accompanying consolidated balance sheets. Under the Law, both of these appropriations generally require a resolution of the shareholders’ meeting.

Additional paid-in capital and legal earnings reserve may not be distributed as dividends. Under the Law, all additional paid-in capital and all legal earnings reserve may be transferred to other capital surplus and retained earnings, which are potentially available for dividends, by a resolution of a shareholders’ meeting.

The maximum amount that the Company can distribute as dividends is calculated based on the nonconsolidated financial statements of the Company in accordance with the Law.

The Company purchased treasury stock of 3,630,100 shares based on the resolution of the Board of Directors held on September 29, 2021.

At the annual shareholders’ meeting held on March 30, 2022, the shareholders approved cash dividends amounting to ¥5,582 million (\$48,539 thousand), or ¥60.00 per share. In addition, the Company paid interim cash dividends of ¥4,833 million (\$42,026 thousand), or ¥50.00 per share, on August 31, 2021.

18. Contingent liabilities

Contingent liabilities at December 31, 2020 and 2021 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2020/12	2021/12	2021/12
Notes receivable discounted	¥ 140	¥ 280	\$ 2,435
Guarantees of employees' housing loans	71	52	452
Guarantees of bank loans for affiliated company accounted for by the equity method	2,371	2,140	18,609

19. Segment information

Information by segment for the fiscal years ended December 31, 2020 and 2021 was as follows:

(a) Segment information (management approach)

Outline of reportable segment

The Company has adopted a business division system in which each business division develops a comprehensive strategy for the products it handles and conducts business activities based on that strategy. The Board of Directors periodically reviews decisions regarding the allocation of management resources to each business division and evaluates business performance.

Although the Group may be considered to consist of multiple business segments that are handled by various business divisions, in general the "glass products" made by the Group companies are similar in terms of product characteristics, manufacturing methods, market and industry, customer type and marketing factors. Therefore, the Group has consolidated these segments into a single "Glass Business" segment. Accordingly, except for information given in the "Outline of reportable segment," information for other segments has been omitted.

(b) Related information

(1) Information by products and services

2020/12	Millions of yen		
Sales to external customers	Glass Business		Total
	Electronics and Information Technology	Performance Materials and Others	
	¥ 136,197	¥ 106,689	¥ 242,886

2021/12	Millions of yen		
Sales to external customers	Glass Business		Total
	Electronics and Information Technology	Performance Materials and Others	
	¥ 154,557	¥ 137,477	¥ 292,034

2021/12	Thousands of U.S. dollars		
Sales to external customers	Glass Business		Total
	Electronics and Information Technology	Performance Materials and Others	
	\$ 1,343,974	\$ 1,195,452	\$ 2,539,426

(2) Geographical information

Net sales

2020/12						
Millions of yen						
Japan	China	South Korea	U.S.	Europe	Other areas	Total
¥ 38,117	¥ 77,108	¥ 38,314	¥ 30,859	¥ 27,313	¥ 31,175	¥ 242,886

2021/12						
Millions of yen						
Japan	China	South Korea	U.S.	Europe	Other areas	Total
¥ 42,535	¥ 86,606	¥ 48,461	¥ 38,017	¥ 43,022	¥ 33,393	¥ 292,034

2021/12						
Thousands of U.S. dollars						
Japan	China	South Korea	U.S.	Europe	Other areas	Total
\$ 369,870	\$ 753,096	\$ 421,400	\$ 330,583	\$ 374,104	\$ 290,373	\$ 2,539,426

Notes: 1. The classifications of countries and areas are based on the location of customers.
2. The main country classified as "Other areas" is Taiwan.

Property, plant and equipment

2020/12				
Millions of yen				
Japan	China	Malaysia	Other areas	Total
¥ 191,395	¥ 57,935	¥ 40,666	¥ 65,732	¥ 355,728

2021/12				
Millions of yen				
Japan	China	Malaysia	Other areas	Total
¥ 185,343	¥ 88,061	¥ 44,617	¥ 62,260	¥ 380,281

2021/12				
Thousands of U.S. dollars				
Japan	China	Malaysia	Other areas	Total
\$ 1,611,678	\$ 765,748	\$ 387,974	\$ 541,391	\$ 3,306,791

Notes: 1. The classifications of countries and areas are based on the location of property, plant and equipment.
2. The main countries classified as "Other areas" are South Korea and the U.S.

(3) Information by major customers

Sales

	Millions of yen		Thousands of U.S. dollars	Related segment
	2020/12	2021/12	2021/12	
LG Display Co., Ltd.	¥ 31,754	¥ 41,898	\$ 364,330	Glass Business

(c) Information on impairment of fixed assets

2020/12:		
Millions of yen		
	Glass Business	Total
Loss on impairment	¥ 2,419	¥ 2,419

2021/12:		
Millions of yen		
	Glass Business	Total
Loss on impairment	¥ 1,132	¥ 1,132

2021/12:		
Thousands of U.S. dollars		
	Glass Business	Total
Loss on impairment	\$ 9,843	\$ 9,843

20. Related party transactions

Transactions of the Company with related companies and others

(a) Transactions between the Company and affiliates of the Company

The following transactions with a related party took place in the year ended December 31, 2020:

Type of related party	Affiliate
Name	Fuzhou Xufu Optoelectronic Technology Co., Ltd.
Address	Fujian, China
Capital	CNY 240 million
Type of business	Glass business
Voting rights (percent of shares owned)	Direct 40%
Business relationship	Sales and purchasing of glass products, interlocking directorate, obligation guarantees
Description of transactions	Sales of products and other items
Amount of transactions	¥3,708 million
Account	Accounts receivable
Year-end balance	¥1,153 million

Notes: 1. The amounts shown above exclude consumption tax.

2. Transaction conditions are determined through price negotiations, taking market prices and costs into account.

There were no significant transactions with related parties for the year ended December 31, 2021.

(b) Transactions between the consolidated subsidiaries and affiliates of the Company

The following related party transactions took place in the year ended December 31, 2020:

Type of related party	Affiliate
Name	Fuzhou Xufu Optoelectronic Technology Co., Ltd.
Address	Fujian, China
Capital	CNY 240 million
Type of business	Glass business
Voting rights (percent of shares owned)	Direct 40%
Business relationship	Sales and purchasing of glass products
Description of transactions	Sales of products and other items
Amount of transactions	¥8,821 million
Account	Accounts receivable
Year-end balance	¥6,318 million

Notes: 1. The amounts shown above exclude consumption tax.

2. Transaction conditions are determined through price negotiations, taking market prices and costs into account.

There were no related party transactions for the year ended December 31, 2021.

(c) Transactions with corporate officers and major shareholders (individual shareholders only)

There were no related party transactions for the year ended December 31, 2020.

The following related party transactions took place in the year ended December 31, 2021:

Type of related party	Corporate officer	Corporate officer
Name of the company or individual	Masayuki Arioka	Motoharu Matsumoto
Address	-	-
Capital	-	-
Type of business or occupation	Chairman of the Board (Nippon Electric Glass Co., Ltd.)	President (Nippon Electric Glass Co., Ltd.)
Voting right share owing (percent of shares owned)	Direct 0.0%	Direct 0.0%
Business relationship	-	-
Description of transactions	In-kind contribution of monetary remuneration claims	In-kind contribution of monetary remuneration claims
Amount of transactions	¥11 million (\$96 thousand)	¥10 million (\$87 thousand)
Account	-	-
Year-end balance	-	-

This refers to contributions in kind for monetary compensation claims based on the Restricted Stock Compensation plan.

21. Significant subsequent events

Borrowing of significant funds

Electric Glass (Xiamen) Co., Ltd., the Company's consolidated subsidiary, agreed with its financial institutions on the borrowing of funds as summarized below.

(1) Purpose for funding	Capital investments
(2) Lending institutions	Mizuho Bank (China), Ltd. and other 2 financial institutions
(3) Loan amount	¥6,900 million (\$60,000 thousand) and CNY 170 million (\$26,609 thousand)
(4) Interest rate	Based on market interest rates and other
(5) Date of borrowing	January 2022 - February 2023
(6) Repayment due date	December 31, 2025
(7) Repayment method	Equal principal repayment
(8) Assets pledged as collateral or guarantee	None



Independent auditor's report

To the Board of Directors of Nippon Electric Glass Co., Ltd.:

Opinion

We have audited the accompanying consolidated financial statements of Nippon Electric Glass Co., Ltd. ("the Company") and its consolidated subsidiaries (collectively referred to as "the Group"), which comprise the consolidated balance sheets as at December 31, 2021 and 2020, the consolidated statements of income, comprehensive income, changes in net assets and cash flows for the years then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2021 and 2020, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with accounting principles generally accepted in 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 ethical requirements that are relevant to our audit of the consolidated financial statements in Japan, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of 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 these matters.

Appropriateness of the valuation of fixed assets owned by Electric Glass Fiber America, LLC

The key audit matter	How the matter was addressed in our audit
As described in Note 3, "Significant accounting estimates, Consideration of impairment on fixed assets" to the consolidated financial statements, of the property, plant and equipment of ¥380,281 million and intangible assets of ¥4,959 million recognized in the consolidated balance sheet of	The primary procedures we performed to assess whether the valuation of fixed assets owned by EGFA was appropriate included the following items. We requested the component auditors of EGFA to perform an audit as part of our audit procedures and evaluated the results of the audit

the Company and its consolidated subsidiaries for the current fiscal year, ¥5,612 million was related to a certain plant owned by Electric Glass Fiber America, LLC ("EGFA"), a consolidated subsidiary. In addition, an impairment loss of ¥1,132 million related to the fixed assets was reported in the consolidated statement of income for the current fiscal year.

EGFA prepares its financial statements in accordance with U.S. generally accepted accounting principles and groups assets on a plant basis. If an impairment indicator is identified and undiscounted future cash flows that are expected to be generated from an asset group are less than the carrying amount in the recoverability test, the difference between the carrying amount and the fair value is recognized as an impairment loss.

EGFA incurred an operating loss due to delays in the recovery of production capacity resulting from a shortage of workers and soaring logistics costs resulting from global supply chain disruption, leading to an impairment indicator being identified. Accordingly, a recoverability test was performed for its fixed assets. As a result of the test, it was determined that the carrying amount of a certain plant was unrecoverable, and the difference between the carrying amount and the fair value was recognized as an impairment loss.

The undiscounted future cash flows used for the recoverability test were derived from the business plan prepared by EGFA's management, and the estimates used in the business plan involved management's judgment. In estimating the fair value, the selection of a valuation approach, the measurement of replacement cost and the consideration of depreciation factors required a high degree of expertise in valuation.

We, therefore, determined that our assessment of the appropriateness of the valuation of fixed assets owned by EGFA was the most significant matter in our audit of the consolidated financial statements for the current fiscal year, and accordingly, a key audit matter.

procedures set forth below, among others, reported from the component auditors to determine on whether sufficient and appropriate audit evidence was obtained.

(1) Internal control testing

We tested the design and operating effectiveness of certain of EGFA's internal controls relevant to the valuation of fixed assets.

(2) Assessment by the component auditors on the recoverability test and the estimated fair value

- Assessing the reliability of the estimated undiscounted future cash flows derived from EGFA's business plan used in the recoverability test.
- Involving valuation specialists within the network firms of the component auditors who assisted in the assessment related to the estimated fair value on the following items:
 - assessment of the competence, ability and objectivity of external valuation specialists engaged by management;
 - assessment of the appropriateness of the valuation approach used to calculate fair value, the measurement of replacement cost and consideration of depreciation factors in light of the requirements of the relevant accounting standards; and
 - comparison of the fair value measured independently based on information published by external organizations with the fair value measured by management.

Responsibilities of Management and Corporate Auditors and the Board of Corporate Auditors 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.

Corporate auditors and the board of corporate auditors are responsible for overseeing the directors' performance of their duties with regard to the design, implementation and maintenance of 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 our audit in accordance with auditing standards generally accepted in Japan, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. 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 an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, while the objective of the audit is not to express 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 presentation and disclosures in the consolidated financial statements are in accordance with accounting standards generally accepted in Japan, 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 corporate auditors and the board of corporate auditors regarding, among other matters, the planned scope and timing of the audit, significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

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

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

Convenience Translation

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended December 31, 2021 are presented solely for convenience. Our audit also included the translation of yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 1 to the consolidated financial statements.

Interest required to be disclosed by the Certified Public Accountants Act of Japan

We do not have any interest in the Group which is required to be disclosed pursuant to the provisions of the Certified Public Accountants Act of Japan.

Sung-Jung Hong

Designated Engagement Partner

Certified Public Accountant

Johta Mizo

Designated Engagement Partner

Certified Public Accountant

Yohei Onishi

Designated Engagement Partner

Certified Public Accountant

KPMG AZSA LLC

Kyoto Office, Japan

April 18, 2022

Notes to the Reader of Independent Auditor's Report:

This is a copy of the Independent Auditor's Report and the original copies are kept separately by the Company and KPMG AZSA LLC.

GLASS FOR FUTURE



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