FY2023

Consolidated Financial Statements
&
Notes to the Consolidated Financial Statements

Sumitomo Heavy Industries, Ltd.

Consolidated Financial Statements

1 Methods for Preparing the Consolidated Financial Statements

The consolidated financial statements of Sumitomo Heavy Industries, Ltd. (SHI) have been prepared in accordance with the "Regulation on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements" (Ministry of Finance Order No. 28 of 1976; hereinafter the "Consolidated Financial Statements Regulation").

2 Audit Certification

The consolidated financial statements of SHI for the current consolidated fiscal year (from January 1, 2023 to December 31, 2023) have been audited by KPMG AZSA LLC pursuant to the provisions of Article 193-2, paragraph (1) of the Financial Instruments and Exchange Act.

Consolidated Balance Sheets

Millions of yen

	December 31, 2022	December 31, 2023
ASSETS		
Current assets		
Cash and deposits	¥ 97,476	¥ 104,458
Notes and accounts receivable - trade, and contract assets	*1,*3 300,281	*1,*3 289,861
Finished goods	100,964	131,972
Work in process	*4 98,003	*4 101,787
Raw materials and supplies	76,561	87,327
Others	43,734	35,280
Allowance for doubtful accounts	(5,662)	(2,400)
Total current assets	711,358	748,285
Non-current assets		
Property, plant and equipment		
Buildings and structures	224,986	236,281
Accumulated depreciation	(130,775)	(138,118)
Buildings and structures, net	*2 94,211	*2 98,163
Machinery, equipment and vehicles	264,235	286,274
Accumulated depreciation	(184,150)	(198,035)
Machinery, equipment and vehicles, net	80,085	88,239
Land	*5 110,701	*5 111,169
Construction in progress	10,517	10,840
Others	77,731	79,480
Accumulated depreciation	(53,168)	(57,885)
Others, net	24,563	21,595
Total property, plant and equipment	320,077	330,007
Intangible assets		
Goodwill	19,223	19,312
Others	37,421	26,300
Total intangible assets	56,644	45,612
Investments and other assets		
Investment securities	*6 16,728	*2,*6 19,854
Long-term loans receivable	3,117	5,604
Deferred tax assets	20,552	22,456
Defined benefit asset	8,524	15,797
Others	*6 13,193	*6 21,151
Allowance for doubtful accounts	(1,322)	(7,909)
Total investments and other assets	60,792	76,953
Total non-current assets	437,512	452,572
Total assets	¥1,148,870	¥1,200,857

3 Change in the Accounting Period

With approval of "Partial change of the articles of incorporation" at the 126th Annual General Meeting of Shareholders held on June 29, 2022, SHI changed the closing date from March 31 to December 31, effective from FY 2022. For the previous consolidated fiscal year, which is the transitional period for the accounting period change, we adopted an irregular accounting period system, in which the consolidation period of SHI and its consolidated subsidiaries whose closing date was the last day of March is 9 months from April 1, 2022 to December 31, 2022, and that of consolidated subsidiaries whose closing date was the last day of December is 12 months from January 1, 2022 to December 31, 2022.

4 Efforts to Ensure the Adequacy of the Consolidated Financial Statements

SHI has been making efforts to ensure the adequacy of the consolidated financial statements. More concretely, SHI joined the Financial Accounting Standards Foundation and attends seminars in order to enhance its understanding of the accounting standards and develop a system that enables it to adapt to changes in accounting standards.

Millions of yen

	December 31, 2022	December 31, 2023
LIABILITIES		
Current liabilities		
Notes and accounts payable - trade	*3 ¥ 186,282	*3 ¥ 180,822
Short-term loans payable	36,442	63,258
Current portion of bonds payable	10,000	10,000
Current portion of long-term loans payable	*2 16,985	*2 9,741
Commercial papers	25,000	—
Income taxes payable	3,177	13,980
Contract liabilities	60,473	48,029
Provision for bonuses	7,513	7,753
Provision for construction warranties	10,603	12,164
Provision for loss on construction contracts	*4 2,423	*4 1,288
Provision for loss on guarantees	1,754	908
Provision for loss on business liquidation	—	840
Others	57,585	67,545
Total current liabilities	418,238	416,329
Non-current liabilities		
Bonds payable	40,000	40,000
Long-term loans payable	*2 32,338	*2 39,231
Defined benefit liability	36,363	33,836
Deferred tax liabilities for land revaluation	*5 20,479	*5 20,408
Other provisions	158	161
Others	24,371	23,428
Total non-current liabilities	153,710	157,064
Total liabilities	571,948	573,393
NET ASSETS		
Shareholders' equity		
Share capital	30,872	30,872
Capital surplus	25,203	25,203
Retained earnings	413,570	433,579
Treasury shares	(1,149)	(1,177)
Total shareholders' equity	468,496	488,476
Accumulated other comprehensive income		
Valuation difference on available-for-sale securities	4,763	6,951
Deferred gains or losses on hedges	(752)	(956)
Revaluation reserve for land	*5 40,442	*5 40,307
Foreign currency translation adjustments	50,534	72,163
Remeasurements of defined benefit plans	5,780	12,831
Total accumulated other comprehensive income	100,767	131,295
Non-controlling interests	7,659	7,693
Total net assets	576,922	627,464
Total liabilities and net assets	¥1,148,870	¥1,200,857

Consolidated Statements of Income and Consolidated Statements of Comprehensive Income

Consolidated Statements of Income

Millions of yen

	For the year ended December 31, 2022	For the year ended December 31, 2023
Net sales	*1 ¥854,093	*1 ¥1,081,533
Cost of sales	*2,*3,*4 665,484	*2,*3,*4 826,286
Gross profit	188,609	255,247
Selling, general and administrative expenses	*4,*5 143,806	*4,*5 180,880
Operating profit	44,803	74,367
Non-operating income		
Interest income	799	1,562
Dividend income	437	277
Foreign exchange profit	89	381
Others	2,300	3,091
Total non-operating income	3,625	5,311
Non-operating expenses		
Interest expenses	1,126	2,487
Loss on retirement of non-current assets	602	1,644
Patent related expenses	927	1,400
Others	2,519	3,897
Total non-operating expenses	5,175	9,429
Ordinary profit	43,253	70,250
Extraordinary income		
Gain on amortization of past service cost	—	*6 1,271
Gain on sale of business	861	—
Total extraordinary profit	861	1,271
Extraordinary losses		
Impairment loss	*7 21,182	*7 19,237
Provision for loss on business liquidation	—	840
Loss on valuation of investment securities	*8 5,172	—
Total extraordinary losses	26,354	20,077
Profit before income taxes	17,761	51,444
Income taxes - current	10,994	23,530
Income taxes - deferred	2,233	(4,800)
Total income taxes	13,227	18,730
Net profit	4,534	32,714
Current net loss attributable to non-controlling interests(-)	(1,247)	(29)
Profit attributable to owners of parent	¥ 5,782	¥ 32,742

Consolidated Statements of Comprehensive Income

Millions of yen

	For the year ended December 31, 2022	For the year ended December 31, 2023
Profit	¥ 4,534	¥32,714
Other comprehensive income		
Valuation difference on available-for-sale securities	(1)	2,187
Deferred gains or losses on hedges	616	(204)
Foreign currency translation adjustments	27,471	22,157
Remeasurements of defined benefit plans	697	7,031
Share of other comprehensive income of entities accounted for using equity method	52	21
Total other comprehensive income	*1 28,835	*1 31,192
Comprehensive income	33,369	63,905
Comprehensive income attributable to:		
Comprehensive income attributable to owners of parent	34,085	63,405
Comprehensive income attributable to non-controlling interests	¥ (716)	¥ 500

Consolidated Statements of Changes in Equity

For the year ended December 31, 2022

Millions of yen

	Shareholders' equity				
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity
Balance at the beginning of the period	¥30,872	¥26,071	¥423,104	¥(1,123)	¥478,923
Changes during period					
Dividends of surplus			(15,315)		(15,315)
Profit attributable to owners of parent			5,782		5,782
Purchase of treasury shares				(213)	(213)
Disposal of treasury shares		13		188	200
Change in ownership interest of parent due to transactions with non-controlling interests		(880)			(880)
Net changes of items other than shareholders' equity					
Total changes of items during the period	—	(868)	(9,534)	(26)	(10,427)
Balance at the end of the period	¥30,872	¥25,203	¥413,570	¥(1,149)	¥468,496

Millions of yen

	Accumulated other comprehensive income							
	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Revaluation reserve for land	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
Balance at the beginning of the period	¥4,763	¥(1,363)	¥40,442	¥23,601	¥5,022	¥ 72,464	¥15,456	¥566,843
Changes during period								
Dividends of surplus								(15,315)
Profit attributable to owners of parent								5,782
Purchase of treasury shares								(213)
Disposal of treasury shares								200
Change in ownership interest of parent due to transactions with non-controlling interests								(880)
Net changes of items other than shareholders' equity	0	611	—	26,933	758	28,303	(7,797)	20,507
Total changes of items during the period	0	611	—	26,933	758	28,303	(7,797)	10,079
Balance at the end of the period	¥4,763	¥ (752)	¥40,442	¥50,534	¥5,780	¥100,767	¥ 7,659	¥576,922

For the year ended December 31, 2023

Millions of yen

	Shareholders' equity				
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity
Balance at the beginning of the period	¥30,872	¥25,203	¥413,570	¥(1,149)	¥468,496
Changes during period					
Dividends of surplus			(12,869)		(12,869)
Profit attributable to owners of parent			32,742		32,742
Purchase of treasury shares				(29)	(29)
Disposal of treasury shares		0		1	1
Reversal of revaluation reserve for land			135		135
Net changes of items other than shareholders' equity					
Total changes of items during the period	—	0	20,009	(28)	19,980
Balance at the end of the period	¥30,872	¥25,203	¥433,579	¥(1,177)	¥488,476

Millions of yen

	Accumulated other comprehensive income							
	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Revaluation reserve for land	Foreign currency translation adjustments	Remea-surements of defined benefit plans	Total accumulated other com-prehensive income	Non-controlling interests	Total net assets
Balance at the beginning of the period	¥4,763	¥(752)	¥40,442	¥50,534	¥ 5,780	¥100,767	¥7,659	¥576,922
Changes during period								
Dividends of surplus								(12,869)
Profit attributable to owners of parent								32,742
Purchase of treasury shares								(29)
Disposal of treasury shares								1
Reversal of revaluation reserve for land								135
Net changes of items other than shareholders' equity	2,187	(204)	(135)	21,629	7,051	30,528	34	30,561
Total changes of items during the period	2,187	(204)	(135)	21,629	7,051	30,528	34	50,542
Balance at the end of the period	¥6,951	¥(956)	¥40,307	¥72,163	¥12,831	¥131,295	¥7,693	¥627,464

Consolidated Statements of Cash Flows

Millions of yen

	For the year ended December 31, 2022	For the year ended December 31, 2023
Cash flows from operating activities		
Profit before income taxes	¥ 17,761	¥ 51,444
Depreciation	29,634	36,374
Impairment loss	21,182	19,237
Loss on valuation of investment securities	5,172	—
Interest and dividend income	(1,236)	(1,839)
Interest expenses	1,126	2,487
Increase (decrease) in provision	5,155	2,926
Decrease (increase) in notes and accounts receivable - trade, and contract assets	13,865	6,697
Decrease (increase) in inventories	(33,015)	(37,683)
Increase (decrease) in notes and accounts payable - trade	4,268	(14,427)
Others	(22,032)	10,762
Subtotal	41,882	75,976
Interest and dividend income received	1,188	1,609
Interest expenses paid	(1,070)	(2,415)
Income taxes paid	(20,634)	(9,800)
Net cash provided by (used in) operating activities	21,366	65,370
Cash flows from investing activities		
Purchase of property, plant and equipment and intangible assets	(36,544)	(39,459)
Proceeds from sale of property, plant and equipment and intangible assets	100	719
Purchase of shares of subsidiaries and investments in capital resulting in change in the scope of consolidation	(395)	—
Purchase of shares of subsidiaries and associates	(65)	(518)
Purchases of investment securities	(16)	(120)
Proceeds from sale of investment securities	71	189
Net decrease (increase) in short-term loans receivable	35	(304)
Payments of loans receivable	(1,561)	(3,389)
Collection of loans receivable	1,839	1,084
Others	(743)	(1,474)
Net cash provided by (used in) investing activities	(37,279)	(43,271)
Cash flows from financing activities		
Net increase (decrease) in short-term loans payable	15,816	24,848
Net increase (decrease) in commercial papers	19,000	(25,000)
Proceeds from long-term loans payable	21,048	16,528
Repayments of long-term loans payable	(8,233)	(17,147)
Proceeds from issuance of bonds	—	10,000
Redemption of bonds payable	—	(10,000)
Cash dividends paid	(15,286)	(12,867)
Dividends paid to non-controlling interests	(615)	(467)
Purchase of shares of subsidiaries not resulting in change in the scope of consolidation	(7,346)	—
Others	(2,707)	(3,102)
Net cash provided by (used in) financing activities	21,677	(17,207)
Effect of exchange rate change on cash and cash equivalents	2,971	1,616
Net increase (decrease) in cash and cash equivalents	8,735	6,508
Cash and cash equivalents at the beginning of the period	84,992	93,727
Cash and cash equivalents at the end of the period	*1 ¥ 93,727	*1 ¥100,235

Notes to the Consolidated Financial Statements

(Basis of Preparation)

1 Basis of presenting consolidated financial statements

(1) Basis of accounting

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 conformity with accounting principles generally accepted in Japan ("Japanese GAAP"), which are different in certain aspects in terms of application and disclosure requirements of International Financial Reporting Standards.

The accounts of foreign consolidated subsidiaries are prepared in accordance with either International Financial Reporting Standards or U.S. generally accepted accounting principles. However, "Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries, etc. for Consolidated Financial Statements," issued by Practical Issues Task Force No.18 of the Accounting Standards Board of Japan (ASBJ) requires making adjustments for the following five specific items, 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) canceling revaluation model or fair value model of accounting for property, plant and equipment, and investment properties, as well as applying the cost model of accounting; and (e) subsequent changes in fair value of equity instruments presented as other comprehensive income.

The accompanying consolidated financial statements for Sumitomo Heavy Industries, Ltd. (SHI) and its subsidiaries (collectively, "the Company") have been reformatted and translated into English from the ones prepared in accordance with Japanese GAAP and filed with the appropriate Local Finance Bureau of the Ministry of Finance as required by the Financial Instruments and Exchange Act.

(2) Transactions eliminated on consolidation

All significant intercompany accounts and transactions have been eliminated in consolidation. Unrealized gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of SHI's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

2 Scope of consolidation

(1) Number of consolidated subsidiaries — 141 companies

Major consolidated subsidiaries: Shin Nippon Machinery Co., Ltd.
Sumitomo Heavy Industries Gearbox Co., Ltd.
Sumitomo Construction Machinery Co., Ltd.
Sumitomo Construction Machinery Sales Co., Ltd.
Sumitomo Heavy Industries Ion Technology Co., Ltd.
Sumitomo Heavy Industries Environment Co., Ltd.
Sumitomo Heavy Industries PTC Sales Co., Ltd.
Sumitomo Heavy Industries Material Handling Systems Co., Ltd.
Sumitomo Heavy Industries Process Equipment Co., Ltd.
Sumitomo Heavy Industries Marine & Engineering Co., Ltd.
Nihon Spindle Manufacturing Co., Ltd.
Sumitomo Heavy Industries Construction Crane Co., Ltd.
LBCE Holdings, Inc.
PT Sumitomo S.H.I. Construction Machinery Indonesia
SCM (America), Inc.
Sumitomo Heavy Industries (Vietnam) Co., Ltd.
Sumitomo Industrias Pesadas do Brasil Ltda.
Sumitomo Machinery Corporation of America
Sumitomo (SHI) Cryogenics of America, Inc.
Sumitomo (SHI) Cyclo Drive Germany GmbH
Sumitomo (SHI) Demag Plastics Machinery GmbH
Sumitomo SHI FW Energie B.V.
Lafert S.p.A.
Invertek Drives Ltd.
Sumitomo (S.H.I.) Construction Machinery (Tangshan) Co., Ltd.
Sumitomo Heavy Industries (China), Ltd.
Sumitomo Heavy Industries (Tangshan), Ltd.
Sumitomo (SHI) Cyclo Drive China, Ltd.

From the current consolidated fiscal year, SUMIJU CONSTRUCTION MACHINERY (SHANGHAI) CO., LTD., which was newly established, is included in the scope of consolidation. In addition, SUMIJU LOGITECH CO., LTD., which was dissolved through a merger, and three other companies are excluded from the scope of consolidation.

(2) Name of major non-consolidated subsidiaries
Major non-consolidated subsidiary: Sumitomo (SHI) Cryogenics Taiwan Co., Ltd.
(Reason for exclusion from the scope of consolidation)
All of the non-consolidated subsidiaries are small-scale companies and their aggregated total assets, net sales, and profit or loss (amount commensurate with equity interests) and retained earnings (amount commensurate with equity interests) do not have a material effect on SHI's consolidated financial statements.

3 Application of the equity method

(1) Number of non-consolidated subsidiaries accounted for using the equity method: nil

(2) The number of affiliated companies accounted for using the equity method: 3
Name of the major company: Sumitomo NACCO Forklift Co., Ltd.
From the current consolidated fiscal year, Invertek Cz, s.r.o., whose shares we had held were sold, is excluded from the scope application of the equity method.

(3) The non-consolidated subsidiaries (including Sumitomo (SHI) Cryogenics Taiwan Co., Ltd.) and affiliated companies (including Krones-Izumi Processing Pte. Ltd.) not accounted for using the equity method are excluded from the scope of application of the equity method because these companies have an immaterial effect on SHI's consolidated financial statements and are insignificant as a whole in light of factors such as their respective profits or losses (amount commensurate with equity interests) and retained earnings (amount commensurate with equity interests).

4 Fiscal years of consolidated subsidiaries

The closing date of Sumi-Cyclo Drive India Private Limited, which is among the consolidated subsidiaries, is March 31. In preparing consolidated financial statements, SHI uses financial statements that are based on provisional account settlement, which was conducted as of the consolidated closing date.
The closing date of other consolidated subsidiaries is December 31, which is consistent with SHI.

5 Accounting policies

(1) Basis of and methods for valuation of significant assets
(i) Securities
(a) Bonds held to maturity
Amortized cost method (straight-line depreciation method)
(b) Available-for-sale securities
Securities other than shares, etc. with no active market price
Fair value method
(Valuation difference is reported as a component of shareholders' equity, and the cost of sales is calculated using the moving-average method.)
Shares, etc. with no active market price
Cost method based on the moving-average method

(ii) Derivatives
Fair value method

(iii) Inventories
(a) Works in process
Mainly the cost method based on the specific identification method
(Carrying amounts in the balance sheet are measured after the consideration of write-down to reflect decreased profitability.)
(b) Finished goods, raw materials and supplies
Mainly the cost method based on the weighted average method
(Carrying amounts in the balance sheet are measured after the consideration of write-down to reflect decreased profitability.)

(2) Methods for depreciation of significant depreciable assets

(i) Property, plant and equipment (excluding leased assets)

The straight-line method is used.

Depreciable lives of major assets are as follows:

Buildings and structures: 10 to 50 years

Machinery, equipment and vehicles: 5 to 12 years

(ii) Intangible assets (excluding leased assets)

The straight-line method is used.

Depreciable lives of in-house software are based on the useful life estimated by the Company (5 years).

(iii) Leased assets

The straight-line method is used for leased assets for financial lease transactions without the transfer of ownership, in which the lease period is considered the depreciable life and the residual value is zero.

(3) Basis of accounting for significant provisions

(i) Allowance for doubtful accounts

The allowance is provided based on historical bad debts losses from general accounts receivable. For doubtful accounts receivable, claims provable in bankruptcy, claims provable in rehabilitation and others, the required allowance is determined to be an amount estimated as uncollectible on an individual basis.

(ii) Provision for bonuses

SHI allocates an amount to be borne in the current consolidated fiscal year for the estimated amount to be paid, in order to appropriate it for the payment of bonuses to its employees.

(iii) Provision for construction warranties

In order to provide for free repair work expenditures after the delivery of finished goods, the required allowance is provided for based on historical data.

(iv) Provision for loss on construction contracts

For undelivered construction works at the end of the consolidated fiscal year that are highly likely to generate losses subsequent to the fiscal year, if the losses can be reliably estimated, the estimated amount of those losses is recognized as provision for loss on construction contracts.

(v) Provision for loss on guarantees

In order to provide for future losses related to debt guarantees in connection with the lease agreement, financial conditions, etc., of the guaranteed parties are individually taken into account, and the estimated amount of those losses is recognized as provision for loss on guarantees.

(vi) Provision for loss on business liquidation

In order to provide for loss resulting from business liquidation, an estimated loss is calculated and recognized.

(4) Methods for accounting retirement benefits

(i) Method of attributing expected retirement benefits

With respect to retirement benefit obligations, the benefit formula basis is used to calculate the expected retirement benefits for the term that elapsed at the end of the consolidated fiscal year.

(ii) Method of amortization of actuarial difference and past service costs

Past service costs are mainly amortized with the straight-line method over a period within the historical average remaining service period of employees when those costs are incurred.

Actuarial difference is amortized proportionally from the consolidated fiscal year following the incurrence of actuarial difference using the straight-line method over a period within the average remaining service period of employees when the actuarial difference was incurred.

(5) Basis of recognition of material revenues and expenses

The Company has adopted Accounting Standards Board of Japan (ASBJ) Statement No. 29 "Accounting Standard for Revenue Recognition" (March 31, 2020) and other relevant standards, and details on main performance obligations in the major businesses of the Company and its ordinary point of time to recognize revenues are as follows.

The Company engages in the sale of, among others, gear reducers and transmissions, plastics machinery, hydraulic excavators, material handling machinery, ships and energy plant systems, and the provision of services relevant thereto.

For the sale of finished goods, the relevant performance obligation is principally determined to be satisfied at the time of delivery of the goods since it is the time when the customer assumes control over the goods. Accordingly, in an ordinary case, revenue is recognized at the time of goods delivery. For finished goods which the Company assumes no obligation to install, in cases where the period from the shipment of such finished goods to the time when control over those finished goods is transferred to the customer is an ordinary period of time, the revenue is recognized at the time of shipment. For the implementation of construction contracts and the provision of services, the relevant performance obligation is principally determined to be satisfied over a period of time, and accordingly the revenue is recognized through estimation of the progress of satisfaction of the performance obligation to provide the customer with the subject matter of construction or relevant service. The cost-to-cost method is mainly used for estimation of construction progress. In the application of the cost-to-cost method, the percentage of costs incurred for construction work to estimated total construction costs is used to determine the progress toward the completion of construction.

(6) Method of significant hedge accounting

(i) Method of hedge accounting

The Company adopts deferred hedge accounting. However, for interest swap transactions that meet the requirements for simplified accounting treatment, the Company adopts such simplified accounting treatment.

If forward exchange contracts meet the requirements for allocation, the Company adopts the allocation accounting method.

(ii) Hedge instruments and hedged items

Forward exchange contracts:	Foreign currency-denominated accounts receivable, contract assets, foreign currency-denominated accounts payable and forecast transactions
Interest swap transactions:	Loans

(iii) Hedge policy

Under the "Market Risk Management Policy" stipulated by the Board of Directors, the Company's objective for hedging transactions is to mitigate foreign currency and interest rate fluctuation risks, and not to execute speculative transactions.

(iv) Method of assessing hedge effectiveness

The Company compares the aggregated fluctuation in the cash flow or market condition of the hedged items against the aggregated fluctuation in the cash flow or market condition of the hedged instruments every six months, and assesses hedge effectiveness based on the fluctuations. The Company, however, does not assess the hedge effectiveness of those interest swap transactions which are subject to simplified accounting treatment.

(7) Method and period of amortization of goodwill

Goodwill is amortized using the straight-line method over a period of up to 20 years. However, any insignificant amount of goodwill is amortized in full upon its recognition.

(8) Cash and cash equivalents in the consolidated statements of cash flows

Cash and cash equivalents consist of cash on hand, immediately available cash, and short-term investments that are highly liquid, have an insignificant risk of changes in value with maturities of three months or less.

(9) Other significant matters for preparation of consolidated financial statements

SHI and some of its consolidated subsidiaries apply the group tax sharing system.

(Significant Accounting Estimates)

1 Valuation of goodwill

(1) Carrying amounts in the current fiscal year's financial statements

In the consolidated balance sheet as of December 31, 2023, goodwill of ¥19,312 million is recognized, and it includes the following goodwill of Lafert S.p.A.

Millions of yen

	December 31, 2022	December 31, 2023
Goodwill of Lafert S.p.A.	¥11,071	¥11,195

(2) Information that assists in understanding the nature of the estimates

The Company groups its assets into units for determination of whether to recognize and measure impairment losses on fixed assets on the basis of this grouping and determines whether to actually recognize impairment losses on assets or asset groups whenever there is an impairment indication. With respect to goodwill, each business unit to which goodwill belongs is tested for impairment. The impairment test is performed by comparing the total amount of undiscounted future cash flows of each business unit with the aggregated amount consisting of the carrying amount of asset groups related to the business unit and the carrying amount of goodwill. If the recognition of an impairment loss is deemed necessary, the carrying amount is reduced to a recoverable amount, and the resulted decrease in the carrying amount is recognized as an impairment loss.

For Lafert S.p.A., there are indications of impairment in the asset group including goodwill on the grounds that there was a deviation from the initial business plan when we acquired control over it, and its recurring operating losses after recording amortization of goodwill. Therefore, we determined whether or not it was necessary to recognize any impairment loss during the current consolidated fiscal year.

As a result, it determined that the recognition of impairment losses was not necessary for the company as its total amount of the undiscounted future cash flows exceeded its carrying amount of the asset group including goodwill.

The undiscounted future cash flows used for the impairment test was estimated based on the business plans prepared by management. We formulate business plans based on factors such as data published by external organizations including the projected growth rate of the industrial motor market, and respective expected market shares.

Therefore, the relevant estimates may potentially be impacted by such factors as unforeseeable changes in the business environment in the future. Consequently, if the estimated future cash flows deteriorate, it may be necessary to recognize impairment losses in the consolidated financial statements for the subsequent fiscal year.

2 Estimate of total construction costs based on performance obligations to be satisfied over a period of time

(1) Carrying amounts in the current fiscal year's financial statements

The Company recognized net sales of ¥1,081,533 million in the Consolidated Statement of Income for the year ended December 31, 2023, which include the following construction revenue (sales) based on performance obligations to be satisfied over a period of time.

Millions of yen

	For the year ended December 31, 2022	For the year ended December 31, 2023
Construction revenue (sales) based on performance obligations to be satisfied over a period of time	¥113,818	¥141,642

(2) Information that assists in understanding the nature of the estimates

For performance obligations to be satisfied over a period of time in each segment of "Industrial Machinery," "Logistics & Construction" and "Energy & Lifelines," the Company has estimated the progress of satisfaction of such performance obligations and recognized the relevant revenue over a period of time according to such progress. For the method of estimating the progress of satisfaction of performance obligations, the cost-to-cost method is mainly used. In the application of the cost-to-cost method, the percentage of costs incurred for construction work to estimate total construction costs is used to determine the progress toward the completion of construction. The preparation and revision of a project budget, which provides the basis for estimating total construction costs, involves estimation uncertainty since construction works are significantly different in nature depending on their contracts. Specifically, the determination of whether all the work necessary to complete a specific construction contract is identified and estimated costs are included in its project budget, and whether various factors, such as unexpected changes in the economic environment, actual costs exceeding the initially estimated costs due to design or process disruption and any penalty payment resulting from problems with any product function or delivery date, are reflected within the project budget in a timely and appropriate manner, has a significant effect on the estimation of total construction costs. For that reason, estimated total construction costs constitute a significant accounting estimate, which is reviewed, in principle, quarterly. Nonetheless, if there is a revision in the estimate of total construction cost due to an event that affects the Company's judgments, such as those events mentioned above, it may have an impact on the amount of construction revenue (sales) to be recognized for the subsequent consolidated fiscal year.

(Unapplied Accounting Standards)

- "Accounting Standard for Current Income Taxes" (ASBJ Statement No.27, October 28, 2022)
- "Accounting Standard for Presentation of Comprehensive Income" (ASBJ Statement No.25, October 28, 2022)
- "Guidance on Accounting Standard for Tax Effect Accounting" (ASBJ Statement No.28, October 28, 2022)

(1) Outline

In the course of deliberations at the time of transferring the practical guidelines on tax effect accounting at the Japanese Institute of Certified Public Accountants (JICPA) to the ASBJ, it was decided that the following two issues would be considered again after the release of ASBJ Statement No. 28 "Partial Amendments to Accounting Standard for Tax Effect Accounting," etc. in February 2018. The results of the consideration are as follows.

- Category of tax expense (taxation on other comprehensive income)
- Income tax effects on sales of shares of subsidiaries (shares of a subsidiary or an affiliate) when group taxation regime is applied.

(2) Scheduled date of application

The new accounting standard will be applied from the beginning of the fiscal year ended December 31, 2025.

(3) Impact of the application of said accounting standards, etc.

The impact of the application of the "Accounting Standard for Current Income Taxes, etc." and other related standards on consolidated financial statements is currently under evaluation.

(Changes in Presentation Methods)

(Consolidated Statements of Income)

"Loss on retirement of non-current assets", which was included in "Others" of "Non-operating expenses" for the previous consolidated fiscal year, is separately presented starting from the current consolidated fiscal year since it became more material in terms of amount.

As a result, ¥3,121 million, which was presented in "Others" of "Non-operating expenses" in the consolidated statement of income for the previous consolidated fiscal year, is reclassified as ¥602 million of "Loss on retirement of non-current assets" and ¥2,519 million of "Others."

(Consolidated Statements of Cash Flows)

"Payments for purchases of investment securities", which was included in "Others" of "Cash flows from investing activities" for the previous consolidated fiscal year, is separately presented starting from the current consolidated fiscal year since it became more material in terms of amount.

As a result, ¥(760) million of "Others", which was presented in "Cash flows from investing activities" in the consolidated statements of cash flows for the previous consolidated fiscal year, is reclassified as ¥(16) million of "Payments for purchases of investment securities" and ¥(743) million of "Others."

(Additional information)

(Share-based compensation system for Directors and Vice Presidents)

SHI has introduced a share-based compensation system (hereinafter "this system") for Directors (excluding outside directors) and Vice Presidents (hereinafter collectively "Directors, etc.") The purpose of this system is to raise awareness about the improvement of medium-to-long-term performance and the contribution to increasing the corporate value, by clarifying the interrelation between the compensations of Directors, etc. and the value of SHI's shares, and encouraging Directors, etc., to share the benefits and risks of share price fluctuations with the shareholders.

1. Overview of transactions

In this system, a trust that SHI establishes by contributing funding (hereinafter "this trust") acquires SHI's common shares (hereinafter "SHI shares"), and SHI shares in a number equivalent to points granted to Directors, etc., are issued to the Directors, etc., through this trust. The time when SHI shares are issued to any Director, Vice President, etc., is when the Director retires in principle.

2. SHI's own shares remaining in the trust

SHI shares remaining in the trust are recorded as treasury shares in Net Assets section on the balance sheets according to the book value in the trust (excluding the amount of ancillary expenses). The book value and the number of such treasury shares are ¥200 million, and 67,500 shares, respectively, at the end of the consolidated fiscal years ended December 31, 2022 and 2023.

(Consolidated Balance Sheets)

***1** Of notes and accounts receivable - trade, and contract assets, the respective amounts of notes and accounts receivable and contract assets generated from contracts with customers are stated in "3. (1) Balances, etc., of contract assets and contract liabilities" under "(Revenue Recognition)" in (1) "Notes to the Consolidated Financial Statements" under "1 [Consolidated Financial Statements]" of "V. [Financial Section]."

*2 Collateralized assets and secured obligations

The assets offered as collateral are presented below.

Millions of yen

	December 31, 2022	December 31, 2023
Buildings and structures	¥741	¥797
Investment securities	—	5
Total	¥741	¥802

Secured obligations are presented below.

Millions of yen

	December 31, 2022	December 31, 2023
Current portion of long-term loans payable	¥ 59	¥ 66
Long-term loans payable	238	198
Total	¥297	¥264

*3 Notes maturing on the closing date of the consolidated fiscal year

For the accounting of notes maturing on the closing date of the consolidated fiscal year, SHI clears them on the respective due dates..
The closing date of the current consolidated fiscal year was a non-working day of financial institutions. Therefore, the following notes mature at the end of the period are included in the balance as of the closing date of the current consolidated fiscal year.

Millions of yen

	December 31, 2022	December 31, 2023
Notes receivable	¥484	¥ 770
Notes payable	¥653	¥1,229

*4 Presentation of inventories and provision for loss on construction contracts

Inventories and the provision for loss on construction contracts relating to construction contracts that are highly likely to incur losses have been presented separately and have not been offset. The amount of the provision for loss on construction contracts that relate to inventories resulting from construction contracts which are likely to generate losses is presented below.

Millions of yen

	December 31, 2022	December 31, 2023
Provision for loss on construction contracts related to inventories	¥370	¥199

*5 Revaluation of land

Land for business use is revalued pursuant to the Act on Revaluation of Land (Act No. 34 of March 31, 1998) and the Act for Partial Amendment of the Act on Revaluation of Land (Act No. 19 of March 31, 2001).
For revaluation difference, the amount corresponding to the tax on such revaluation difference has been recognized as "Deferred tax liabilities for land revaluation" under the Act for Partial Amendment of the Act on Revaluation of Land (Act No. 24 of March 31, 1999), and the amount from which deferred tax liabilities for land revaluation are deducted has been recognized as "Revaluation reserve for land" in net assets.

• Method of revaluation
While revaluation has been done by making reasonable adjustments to the value of the property tax prescribed in Article 2, item (iii) of the Order for Enforcement of the Act of on Revaluation of Land (Cabinet Order No. 119 of March 31, 1998), revaluation has at times been done based on, among other relevant factors, the appraised values by real estate appraisers as prescribed in item (v) of the said Article.

• Date of revaluation
March 31, 2002

Millions of yen

	December 31, 2022	December 31, 2023
Difference between the fair value of revalued land at the end of the year and the book value after revaluation	¥(17,110)	¥(17,366)

*6 Securities of non-consolidated subsidiaries and affiliated companies are as follows

Millions of yen

	December 31, 2022	December 31, 2023
Investment securities (equity)	¥4,171	¥4,150
Investments in capital	803	815

For presentation purposes, investments in capital have been included in "Others" of "Investments and other assets."

7 Loan commitment line agreements

SHI has loan commitment line agreements with 14 banks to finance operating funds efficiently.
The balances of undrawn loan commitment lines under those agreements are presented below.

Millions of yen

	December 31, 2022	December 31, 2023
Total loan commitment lines	¥90,000	¥90,000
Balance of drawn loan commitment lines	—	—
Undrawn loan commitment lines	¥90,000	¥90,000

8 Contingent liabilities

(1) Guaranteed liabilities

The Company guarantees loans and other liabilities of companies other than the consolidated companies from banks and financial institutions as shown below.

Millions of yen

	December 31, 2022
Sumitomo Mitsui Finance and Leasing Company, Ltd. (Purchase guarantee, etc. in connection with the lease agreement)	¥6,109
Mizuho Leasing Company, Limited (Purchase guarantee, etc. in connection with the lease agreement)	927
Diamond Construction Equipment Corp. (Purchase guarantee, etc. in connection with the lease agreement)	584
BOT Lease Co., Ltd. (Purchase guarantee, etc. in connection with the lease agreement)	287
Itochu TC Construction Machinery Co., Ltd. (Purchase guarantee, etc. in connection with the lease agreement)	54
Other 9 transactions (Purchase guarantee, etc. in connection with the lease agreement)	143
Total	¥8,103

	December 31, 2023
Sumitomo Mitsui Finance and Leasing Company, Ltd. (Purchase guarantee, etc. in connection with the lease agreement)	¥3,598
Diamond Construction Equipment Corp. (Purchase guarantee, etc. in connection with the lease agreement)	592
NTT TC Leasing Co., Ltd. (Purchase guarantee, etc. in connection with the lease agreement)	465
Mizuho Leasing Company, Limited (Purchase guarantee, etc. in connection with the lease agreement)	368
BOT Lease Co., Ltd. (Purchase guarantee, etc. in connection with the lease agreement)	126
Other 9 transactions (Purchase guarantee, etc. in connection with the lease agreement)	170
Total	¥5,320

The amounts for the previous consolidated fiscal year include foreign currency-denominated liabilities of CNY249 million (¥4,735 million) and TWD3 million (¥11 million), and the amounts for the current consolidated fiscal year include foreign currency-denominated liabilities of CNY48 million (¥962 million).

(2) Repurchase obligation following the securitization of notes receivable

Millions of yen

December 31, 2022	December 31, 2023
¥2,144	¥3,178

(Consolidated Statements of Income)

*1 Revenue generated from contracts with customers

For net sales, revenue generated from contracts with customers and other revenues are not stated separately. The amount of revenue generated from contracts with customers is stated in "1 Information on the breakdown of revenues generated from contracts with customers" under "(Revenue Recognition)" in (1) "Notes to the Consolidated Financial Statements."

*2 Loss on valuation of inventories

The ending inventory is the amount after write-down of the book value due to the decline in profitability, and the following loss on valuation of inventories is included in cost of sales.

Millions of yen

	For the year ended December 31, 2022	For the year ended December 31, 2023
	¥3,177	¥2,986

*3 Provision for loss on construction contracts included in the cost of sales

Millions of yen

	For the year ended December 31, 2022	For the year ended December 31, 2023
	¥2,351	¥2,196

*4 R&D expenses included in general and administrative expenses and production cost for the period

Millions of yen

	For the year ended December 31, 2022	For the year ended December 31, 2023
	¥17,431	¥24,800

*5 Major items of selling, general and administrative expenses

Millions of yen

	For the year ended December 31, 2022	For the year ended December 31, 2023
Salaries and allowances	¥50,802	¥62,519
Provision for bonuses	2,997	3,505
R&D expenses	17,381	24,660
Retirement benefit expenses	682	3,249
Provision of allowance for doubtful accounts and bad debts expenses	3,045	3,450

*6 Gain on amortization of past service cost

This is a gain on amortization of past service cost that accrued due to revision of our retirement benefit plan.

*7 Impairment loss

For the year ended December 31, 2022

The Company recognized impairment losses in relation to the following groups of assets.

Purpose of use	Category	Location	Amount (Millions of yen)
Others	Goodwill Other intangible assets	Netherlands, etc.	¥10,203 7,541
Others	Goodwill, etc.	Germany	2,974
Business assets	Machinery, equipment, etc.	Yokosuka City, Kanagawa, etc.	308
Idle assets	Buildings and others	Yokosuka City, Kanagawa	120
Business assets	Machinery, equipment, etc.	Nishi Tokyo City, Tokyo, etc.	36

The Company recognized an impairment loss on goodwill for SHI FW Energie B.V., which is SHI's consolidated subsidiary. Due to the acceleration of the global movement toward decarbonization, the market for solid-fired boilers which represent its core business has significantly shrunk. As a result, it became difficult for SHI FW Energie B.V. to achieve an expected excess earning capacity.
Also, the Company recognized an impairment loss on goodwill for Leifield Metal Spinning GmbH because it became difficult for Leifield Metal Spinning GmbH to achieve an expected excess earning capacity at the time of acquisition.
For other tangible and intangible assets, the Company recognized impairment losses because it was not possible to recover the relevant investments due to decreased profitability.
The Company determined recognition of impairment losses basically by each business unit and recognition of impairment of idle assets and the like not expected to be used in the future by individual property.
Recoverable amounts were calculated based on the underlying net selling value or value in use. Net selling value was calculated based on the amount of disposal values less costs of disposal. Those assets that were not expected to be used in the future and difficult to sell off were determined to have no selling value. Furthermore, although value in use was calculated by discounting future cash flows at the weighted average cost of capital (13.3% - 17.2%), the value in use of some assets was zero since the estimated future cash flows were negative.

For the year ended December 31, 2023

The Company recognized impairment losses in relation to the following groups of assets.

Purpose of use	Category	Location	Amount (Millions of yen)
Core system	Other intangible assets, etc.	Obu City, Aichi, etc.	¥11,455
Business assets	Buildings and structures, etc.	China	6,932
Business assets	Machinery, equipment, etc.	Yokosuka City, Kanagawa, etc.	552
Others	Goodwill, etc.	United States	191
Business assets	Machinery, equipment, etc.	Yokosuka City, Kanagawa	91
Business assets	Other property, plant and equipment, etc.	Nishi Tokyo City, Tokyo, etc.	17

Due to a change in the development plan, the Company recognized impairment loss for other intangible assets as future cost reduction is no longer be expected after reviewing the feasibility of the assets.
For other tangible and intangible assets, the Company recognized impairment losses because it was not possible to recover the relevant investments due to decreased profitability.
The Company determined recognition of impairment losses basically by each business unit and recognition of impairment of idle assets and the like not expected to be used in the future by individual property.
Recoverable amounts were calculated based on the underlying net selling value or value in use. Net selling value was calculated based on the amount of disposal values less costs of disposal. Those assets that were not expected to be used in the future and difficult to sell off were determined to have no selling value.
Furthermore, the value in use of some assets was zero since the estimated future cash flows were negative.

*8 Loss on valuation of investment securities

For Highview Enterprises Limited's shares SHI holds, SHI recognized loss on valuation since the real value significantly fell from the acquisition cost.

(Consolidated Statements of Comprehensive Income)

*1 Reclassification adjustment and tax effect relating to other comprehensive income

Millions of yen

	For the year ended December 31, 2022	For the year ended December 31, 2023
Valuation difference on available-for-sale securities		
Amount accrued during the year	¥ (41)	¥ 3,249
Reclassification adjustment	—	(113)
Before tax effect adjustment	(41)	3,137
Tax effect	40	(949)
Valuation difference on available-for-sale securities	(1)	2,187
Deferred gains or losses on hedges		
Amount accrued during the year	2,344	728
Reclassification adjustment	(1,357)	(1,111)
Before tax effect adjustment	987	(383)
Tax effect	(371)	179
Deferred gains or losses on hedges	616	(204)
Foreign currency translation adjustments		
Amount accrued during the year	27,453	22,157
Reclassification adjustment	18	—
Foreign currency translation adjustments	27,471	22,157
Remeasurements of defined benefit plans		
Amount accrued during the year	6,847	11,283
Reclassification adjustment	(4,901)	(1,322)
Before tax effect adjustment	1,946	9,961
Tax effect	(1,250)	(2,929)
Remeasurements of defined benefit plans	697	7,031
Share of other comprehensive income of entities accounted for using equity method		
Amount accrued during the year	45	14
Reclassification adjustment	7	7
Share of other comprehensive income of entities accounted for using equity method	52	21
Total other comprehensive income	¥28,835	¥31,192

(Consolidated Statements of Changes in Equity)

For the year ended December 31, 2022

1 Type and total number of issued shares and treasury shares

Thousand shares

	Number of shares at the beginning of the year	Increase during the year	Decrease during the year	Number of shares at the end of the year
Issued shares				
Common share	122,905	—	—	122,905
Total	122,905	—	—	122,905
Treasury shares				
Common share	405	72	68	410
Total	405	72	68	410

Notes: 1 The number of treasury shares at the end of the current consolidated fiscal year includes 68 thousand SHI shares that a trust account concerning board benefit trust established for a share-based compensation system for Directors, etc., owns.
2 The increase of 72 thousand shares in the number of common shares, which are treasury shares, consists of 5 thousand shares due to requests for the repurchase of shares less than one unit, and an increase of 68 thousand shares due to the board benefit trust.
3 he decrease of 68 thousand shares in the number of common shares, which are treasury shares, consists of a decrease of 0 shares due to the sale of shares less than one unit, and a decrease of 68 thousand shares due to the board benefit trust.

2 Dividends

(1) Cash dividends paid

(Resolution)	Type of share	Total amount of dividends (Millions of yen)	Amount of dividend per share (Yen)	Record date	Effective date
June 29, 2022 Annual General Meeting of Shareholders	Common share	¥ 9,800	¥80	March 31, 2022	June 30, 2022
November 11, 2022 Meeting of the Board of Directors	Common share	5,515	45	September 30, 2022	December 2, 2022
Total		¥15,315	¥—		

Note: The total amount of dividends resolved at the Meeting of the Board of Directors held on November 11, 2022 includes a dividend of ¥3 million for the trust account concerning the board benefit trust established for a share-based compensation system for Directors, etc.

(2) Dividends recorded during the current consolidated fiscal year but effective in the next consolidated fiscal year

(Resolution)	Type of share	Source for payment of dividends	Total amount of dividends (Millions of yen)	Amount of dividend per share (Yen)	Record date	Effective date
March 30, 2023 Annual General Meeting of Shareholders	Common share	Retained earnings	¥5,515	¥45	December 31, 2022	March 31, 2023

Note: The total amount of dividends resolved at the Annual General Meeting of Shareholders held on March 30, 2023 includes a dividend of ¥3 million for the trust account concerning the board benefit trust established for a share-based compensation system for Directors, etc.

For the year ended December 31, 2023

1 Type and total number of issued shares and treasury shares

Thousand shares

	Number of shares at the beginning of the year	Increase during the year	Decrease during the year	Number of shares at the end of the year
Issued shares				
Common share	122,905	—	—	122,905
Total	122,905	—	—	122,905
Treasury shares				
Common share	410	9	0	418
Total	410	9	0	418

Notes: 1 The number of treasury shares at the end of the current consolidated fiscal year includes 68 thousand SHI shares that a trust account concerning board benefit trust established for a share-based compensation system for Directors, etc., owns.
2 The increase in common share of treasury shares by 9 thousand shares was due to requests for the repurchase of shares less than one unit.
3 The decrease in common share of treasury shares by less than 1 thousand shares was due to the sale of shares less than one unit.

2 Dividends

(1) Cash dividends paid

(Resolution)	Type of share	Total amount of dividends (Millions of yen)	Amount of dividend per share (Yen)	Record date	Effective date
March 30, 2023 Annual General Meeting of Shareholders	Common share	¥ 5,515	¥45	December 31, 2022	March 31, 2023
August 7, 2023 Meeting of the Board of Directors	Common share	7,353	60	June 30, 2023	September 1, 2023
Total		¥12,869	¥—		

Notes: 1 The total amount of dividends resolved at the Annual General Meeting of Shareholders held on March 30, 2023 includes a dividend of ¥3 million for the trust account concerning the board benefit trust established for a share-based compensation system for Directors, etc.

2 The total amount of dividends resolved at the Meeting of the Board of Directors held on August 7, 2023 includes a dividend of ¥4 million for the trust account concerning the board benefit trust established for a share-based compensation system for Directors, etc.

(2) Dividends recorded during the current consolidated fiscal year but effective in the next consolidated fiscal year

(Resolution)	Type of share	Source for payment of dividends	Total amount of dividends (Millions of yen)	Amount of dividend per share (Yen)	Record date	Effective date
March 28, 2024 Annual General Meeting of Shareholders	Common share	Retained earnings	¥7,353	¥60	December 31, 2023	March 29, 2024

Note: The total amount of dividends resolved at the Annual General Meeting of Shareholders held on March 28, 2024 includes a dividend of ¥4 million for the trust account concerning the board benefit trust established for a share-based compensation system for Directors, etc.

(Consolidated Statements of Cash Flows)

*1 Reconciliations between the cash and cash equivalents and cash and deposits presented in the consolidated balance sheets

Millions of yen

	December 31, 2022	December 31, 2023
Cash and deposits	¥97,476	¥104,458
Time deposits with term of over 3 months to maturity	(3,749)	(4,223)
Cash and cash equivalents	¥93,727	¥100,235

(Lease Transactions)

As lessee

Operating lease transactions

Lease payments for non-cancelable operating lease transactions

Millions of yen

	December 31, 2022	December 31, 2023
Within 1 year	¥1,504	¥1,139
Over 1 year	1,420	1,367
Total	¥2,924	¥2,506

(Financial Instruments)

1 Financial instruments

(1) Policy to cope with financial instruments

As a general machinery manufacturer, the Company manufactures, sells, and distributes various machines and systems including gear reducers and transmissions, as well as finances necessary for operating and equipment funds through bank loans and issue of corporate bonds. Temporary surplus funds are limited to investment in highly stable and short-term financial assets. Derivatives are used to hedge the risks described below and the Company has a policy to refrain from entering into any speculative transactions.

(2) Details of financial instruments and their risks

Notes and accounts receivable — trade are exposed to customers' credit risks. Although foreign currency-denominated trade accounts receivable generated from the global expansion of business operations are exposed to foreign exchange fluctuation risks, the Company hedges the net positions of foreign currency-denominated trade accounts receivable and trade accounts payable by utilizing forward exchange contracts to maintain those positions in a certain range of percentages. Reports on hedge ratios and unhedged positions are submitted to the Board of Directors in a timely manner.

Investment securities consist of shares in the companies with which the Company has a business relationship and which are exposed to market price fluctuation risks.

Most notes and accounts payable — trade are due within one year. Some of them, which relate to imports of raw materials and are denominated in foreign currencies, are exposed to foreign exchange fluctuation risks and are hedged by utilizing forward exchange contracts.

Loans and bonds are principally intended to finance operating funds and equipment funds necessary for business transactions. For some of the long-term loans payable, the Company utilizes derivative transactions (interest rate swap transactions) as hedge instruments for each individual contract. As interest swap transactions satisfy the requirements for simplified accounting treatment, assessment of the effectiveness is not carried out. Foreign currency-denominated loans are exposed to foreign exchange fluctuation risks.

Derivative transactions consist of forward exchange contracts designed for hedge transactions in preparation for foreign exchange fluctuation risks for foreign currency-denominated trade accounts receivable and payable, and interest rate swap transactions designed to hedge fluctuation risks involving interests payable on loans and foreign exchanges. For details of hedge accounting instruments and hedged transactions, hedge policy, and methods of assessment of their effectiveness, please refer to "Method of significant hedge accounting" in "Accounting policies" above.

(3) Risk management structure for financial instruments

(i) Management of credit risk (risk from the default, etc. of counterparties)

For domestic transactions and export transactions in excess of certain levels, the Company endeavors to mitigate its concerns about the recoverability of trade accounts receivable, for example, by conducting credit examinations prior to accepting orders. In addition, each business division manages the due dates and balances of trade accounts receivable for each counterparty in accordance with the credit management regulations, thereby trying to identify concerns about recoverability as early as practicable.

In using derivative transactions, the Company enters into transactions only with highly rated financial institutions to mitigate counterparty risks.

The Company maintains term deposits only with highly rated financial institutions with which the Company has loan transactions to mitigate repayment risks. Therefore, the Company is subject only to an insignificant level of credit risks.

(ii) Management of market risk (risk from the fluctuation of foreign currency exchange rates, interest rates or other factors)

SHI hedges the net positions of foreign currency-denominated trade accounts receivable and payable in accordance with the Market Risk Management Policy which stipulates, among others, hedge ratios and unhedged volumes of foreign exchange transactions, and submits a report on how those positions are hedged to the Board of Directors on a monthly basis. Major consolidated subsidiaries with foreign currency-denominated trade accounts receivable and payable also manage their foreign exchange fluctuation risks through currency hedging in accordance with the exchange hedging policy which stipulates, among others, hedge ratios or unhedged volumes of foreign exchange transactions.

Moreover, SHI monitors interest expenses on loans and submits a report to the Board of Directors in a timely manner. The Company utilizes interest rate swap transactions to control interest expense fluctuation risks.

For investment securities, the Company monitors fair values and financial conditions of issuers in a timely manner. The Company also reviews its holdings position considering its relationships with business partners.

SHI and its major consolidated subsidiaries have a policy to utilize derivative transactions for the sole purpose of hedging the foreign exchange and interest fluctuation risks mentioned above and reconciles balances with each counterparty on a monthly basis.

(iii) Management of liquidity risk for financing (risk of becoming unable to pay debts when they become due and payable)

The Company has introduced the cash management systems for major consolidated subsidiaries, under which SHI centrally manages the Company's funds. The Company prepares and updates financing plans on a timely basis based on reports from the business divisions and major affiliated companies and manages the liquidity risk.

2 Fair values for financial instruments

The carrying amounts and fair values of financial instruments on the consolidated balance sheets and their difference are presented below.

For the year ended December 31, 2022

Millions of yen

	Carrying amount	Fair value	Difference
(1) Investment securities	¥10,226	¥10,226	¥ —
Total	¥10,226	¥10,226	¥ —
(1) Bonds payable	¥50,000	¥49,933	¥ (67)
(2) Long-term loans payable	49,323	49,458	135
Total	¥99,323	¥99,391	¥ 68
Derivative transactions (*3)	¥ 1,407	¥ 1,565	¥158

(*1) Cash is omitted from the above table. Likewise, deposits, notes and accounts receivable — trade, notes and accounts payable — trade, short-term loans payable and commercial papers are omitted since their carrying amounts approximate their respective fair values because of their short-term nature.
(*2) Shares that do not have a market price are not included in "(1) Investment securities." The carrying amounts of those financial instruments on the consolidated balance sheets are presented below.
(*3) Receivables and payables generated from derivative transactions are presented on a net basis, and net payables are presented in brackets.

Millions of yen

Category	December 31, 2022
Shares of subsidiaries and associates	¥4,171
Unlisted shares	2,326
Equity securities	5

These financial instruments are not included in "(1) Investment securities" because they had no active market price and it was not practicable to identify their fair values.

For the year ended December 31, 2023

Millions of yen

	Carrying amount	Fair value	Difference
(1) Investment securities	¥13,271	¥13,271	¥ —
Total	¥13,271	¥13,271	¥ —
(1) Bonds payable	¥50,000	¥50,062	¥ 62
(2) Long-term loans payable	48,972	49,260	288
Total	¥98,972	¥99,322	¥350
Derivative transactions (*3)	¥ (462)	¥ (428)	¥ 34

(*1) Cash is omitted from the above table. Likewise, deposits, notes and accounts receivable — trade, notes and accounts payable — trade, and short-term loans payable are omitted since their carrying amounts approximate their respective fair values because of their short-term nature.
(*2) Shares that do not have a market price are not included in "(1) Investment securities." The carrying amounts of those financial instruments on the consolidated balance sheets are presented below.
(*3) Receivables and payables generated from derivative transactions are presented on a net basis, and net payables are presented in brackets.

Millions of yen

Category	December 31, 2023
Shares of subsidiaries and associates	¥4,150
Unlisted shares	2,428
Equity securities	5

Note 1: Amounts of financial assets expected to be redeemed after the end of the year

For the year ended December 31, 2022

Millions of yen

	Within 1 year	Over 1 year but within 5 years	Over 5 years
Cash and deposits	¥ 97,476	¥ —	¥ —
Notes and accounts receivable — trade	234,480	7,247	140
Total	¥331,957	¥7,247	¥140

For the year ended December 31, 2023

Millions of yen

	Within 1 year	Over 1 year but within 5 years	Over 5 years
Cash and deposits	¥104,458	¥ —	¥ —
Notes and accounts receivable — trade	239,590	10,403	235
Total	¥334,048	¥10,403	¥235

Note 2: Amounts of bonds payable and long-term loans payable to be repaid after the end of the year

For the year ended December 31, 2022

Millions of yen

	Within 1 year	Over 1 year but within 2 years	Over 2 years but within 3 years	Over 3 years but within 4 years	Over 4 years but within 5 years	Over 5 years
Bonds payable	¥10,000	¥10,000	¥20,000	¥ —	¥ —	¥10,000
Long-term loans payable	16,985	9,400	3,053	5,561	14,323	¥ —
Total	¥26,985	¥19,400	¥23,053	¥5,561	¥14,323	¥10,000

For the year ended December 31, 2023

Millions of yen

	Within 1 year	Over 1 year but within 2 years	Over 2 years but within 3 years	Over 3 years but within 4 years	Over 4 years but within 5 years	Over 5 years
Bonds payable	¥10,000	¥20,000	¥ —	¥ —	¥10,000	¥10,000
Long-term loans payable	9,741	3,332	5,832	14,526	15,536	5
Total	¥19,741	¥23,332	¥5,832	¥14,526	¥25,536	¥10,005

3 The breakdown, etc. of financial instruments according to their levels

The fair values of financial instruments are categorized into the following three levels according to the observability and materiality of inputs associated with the calculation of fair values.

Level 1 fair value: A fair value calculated from, out of observable inputs to a market value measurement, the quoted prices of assets or liabilities subject to the calculation of fair values that are formed in an active market

Level 2 fair value: A fair value calculated by using, out of observable inputs to the fair value measurement, inputs to a fair value measurement that are other than the inputs for level 1

Level 3 fair value: A fair value calculated by using unobservable inputs to a fair value measurement

When a number of inputs that have a material impact on a fair value measurement are used for the measurement, the relevant fair value is categorized into, among the levels into which those inputs are individually categorized, the lowest level in terms of priority for the fair value measurement.

(1) Financial instruments whose fair values are stated on the consolidated balance sheets

December 31, 2022

Millions of yen

Category	Fair value			
	Level 1	Level 2	Level 3	Total
Investment securities				
Available-for-sale securities				
Shares	¥10,226	¥ —	¥—	¥10,226
Derivative transactions				
Foreign currency-related transactions	—	2,738	—	2,738
Total	¥10,226	¥2,738	¥—	¥12,964
Derivative transactions				
Foreign currency-related transactions	—	1,331	—	1,331
Total	¥ —	¥1,331	¥—	¥ 1,331

December 31, 2023

Millions of yen

Category	Fair value			
	Level 1	Level 2	Level 3	Total
Investment securities				
Available-for-sale securities				
Shares	¥13,271	¥ —	¥—	¥13,271
Derivative transactions				
Foreign currency-related transactions	—	1,155	—	1,155
Total	¥13,271	¥1,155	¥—	¥14,426
Derivative transactions				
Foreign currency-related transactions	—	1,617	—	1,617
Total	¥ —	¥1,617	¥—	¥ 1,617

(2) Financial instruments other than those whose fair values are stated on the consolidated balance sheets

December 31, 2022

Millions of yen

Category	Fair value			
	Level 1	Level 2	Level 3	Total
Derivative transactions				
Foreign currency-related transactions	¥—	¥ 218	¥—	¥ 218
Total	¥—	¥ 218	¥—	¥ 218
Bonds payable	¥—	¥49,933	¥—	¥49,933
Long-term loans payable	—	49,458	—	49,458
Derivative transactions				
Foreign currency-related transactions	—	60	—	60
Total	¥—	¥99,451	¥—	¥99,451

December 31, 2023

Millions of yen

Category	Fair value			
	Level 1	Level 2	Level 3	Total
Derivative transactions				
Foreign currency-related transactions	¥—	¥ 113	¥—	¥ 113
Total	¥—	¥ 113	¥—	¥ 113
Bonds payable	¥—	¥50,062	¥—	¥50,062
Long-term loans payable	—	49,260	—	49,260
Derivative transactions				
Foreign currency-related transactions	—	78	—	78
Total	¥—	¥99,400	¥—	¥99,400

Note: Explanation of valuation techniques used for the calculation of fair values and inputs

Investment securities

The valuation of listed shares is based on their quoted prices. Since listed shares are actively traded in the market, their fair values are categorized as level 1 fair values.

Bonds payable

The fair value of a bond payable issued by SHI is calculated with the present discounted value method based on the total amount of the principal and interest and an interest rate that reflects the duration of the bond to maturity and credit risk, which is categorized as a level 2 fair value.

Long-term loans payable

The fair value of a long-term loan payable is calculated with the present discounted value method based on the total amount of the principal and interest and an interest rate that reflects the duration of the loan to maturity and credit risk, which is categorized as a level 2 fair value.

Derivative transactions

The fair values of interest rate swap and forward exchange contract are calculated using observable inputs such as interest rate and exchange rate, and classified as level-2 fair value.

(Securities)

1 Available-for-sale securities

December 31, 2022

Millions of yen

Category	Carrying amount	Acquisition cost	Difference
Securities for which the carrying amount on the consolidated balance sheets is in excess of the acquisition cost			
Shares	¥10,124	¥3,612	¥6,511
Securities for which the carrying amount on the consolidated balance sheets is not in excess of the acquisition cost			
Shares	102	127	(24)
Total	¥10,226	¥3,739	¥6,487

Note: Unlisted shares, etc. (amount recorded in the consolidated balance sheets: ¥2,332 million) are shares, etc., with no active market price, and therefore are not included in "Available-for-sale securities" of the above table.

December 31, 2023

Millions of yen

Category	Carrying amount	Acquisition cost	Difference
Securities for which the carrying amount on the consolidated balance sheets is in excess of the acquisition cost			
Shares	¥13,191	¥3,522	¥9,669
Securities for which the carrying amount on the consolidated balance sheets is not in excess of the acquisition cost			
Shares	80	127	(47)
Total	¥13,271	¥3,649	¥9,622

Note: Unlisted shares, etc. (amount recorded in the consolidated balance sheets: ¥2,433 million) are shares, etc., with no active market price, and therefore are not included in "Available-for-sale securities" of the above table.

2 Available-for-sale securities sold during the year

For the year ended December 31, 2022

Millions of yen

Type	Amount sold	Total amount of selling profits	Total amount of selling losses
Shares	¥71	¥68	¥1

For the year ended December 31, 2023

Millions of yen

Type	Amount sold	Total amount of selling profits	Total amount of selling losses
Shares	¥189	¥76	¥—

3 Recognition of impairment loss on securities

For the year ended December 31, 2022

Available-for-sale securities are immaterial in the recognized amount of impairment loss, and therefore are omitted from the statements. For shares of subsidiaries and associates, impairment loss of ¥5,172 million is recognized.

For the year ended December 31, 2023

No disclosure is made as further descriptions are immaterial in terms of amount.

Impairment loss on available-for-sale securities is recognized when there is a significant decline in the fair value. Investment securities for which the fair value as of the end of the fiscal year has fallen to below 50% of the acquisition costs are deemed to have no recovery potential and to be impaired in their entirety. Investment securities for which the fair value has fallen to between 30% and 50% of the acquisition costs are deemed to be partially impaired by an amount that takes into consideration the likelihood of recovery and other factors.

(Derivative Transactions)

1 Derivative transactions to which hedge accounting is not applied

Foreign currency-related transactions

December 31, 2022

Millions of yen

Category	Type	Contract amount	Over 1 year	Fair value	Valuation gains (losses)
Off-market transactions	Forward exchange contracts				
	Selling				
	USD	¥34,627	¥ 912	¥1,627	¥1,627
	EUR	18,961	—	331	331
	CNY	4,517	—	139	139
	MXN	770	—	1	1
	GBP	331	—	0	0
	Buying				
	USD	8,816	2,730	275	275
	EUR	4,715	1,095	17	17
	CNY	857	762	(46)	(46)
	JPY	249	—	(1)	(1)
	CLP	80	—	2	2
	Total	¥73,921	¥5,499	¥2,344	¥2,344

December 31, 2023

Millions of yen

Category	Type	Contract amount	Over 1 year	Fair value	Valuation gains (losses)
Off-market transactions	Forward exchange contracts				
	Selling				
	USD	¥43,009	¥ —	¥786	¥786
	EUR	15,670	—	(35)	(35)
	CNY	3,453	—	23	23
	MXN	2,340	—	(26)	(26)
	GBP	2,152	—	(48)	(48)
	Buying				
	USD	6,229	370	81	81
	EUR	2,598	496	67	67
	MXN	1,237	—	(5)	(5)
	CNY	579	53	15	15
	JPY	77	—	(1)	(1)
	CLP	43	—	0	0
	THB	28	—	0	0
	Total	¥77,414	¥919	¥858	¥858

2 Derivative transactions to which hedge accounting is applied

(1) Foreign currency-related transactions

December 31, 2022

Millions of yen

Method of hedge accounting	Type	Major hedged item	Contract amount	Over 1 year	Fair value
Basic accounting method	Forward exchange contracts				
	Selling				
	USD	Accounts receivable — trade and contract assets	¥26,339	¥11,620	¥(1,143)
	EUR		3,971	14	143
	TWD		3,100	2,732	41
	GBP		320	—	(3)
	CNY		150	—	4
	Buying				
	CHF	Accounts payable — trade	457	—	6
	USD		252	—	15
	EUR		25	—	(0)
Allocation of forward exchange contracts	Forward exchange contracts				
	Selling				
	EUR	Accounts receivable — trade	433	169	(50)
	USD		251	—	(7)
	THB		2	—	(0)
	Buying				
	JPY	Accounts payable — trade	3,497	—	209
	EUR		66	—	6
	Total		¥38,864	¥14,536	¥ (780)

December 31, 2023

Millions of yen

Method of hedge accounting	Type	Major hedged item	Contract amount	Over 1 year	Fair value
Basic accounting method	Forward exchange contracts				
	Selling				
	USD	Accounts receivable — trade and contract assets	¥18,823	¥8,574	¥(1,159)
	EUR		2,118	102	(11)
	TWD		2,732	—	(153)
	GBP		398	—	(12)
	CNY		132	—	(2)
	Buying				
	TWD	Accounts payable — trade	1,005	—	17
	USD		131	24	(1)
Allocation of forward exchange contracts	Forward exchange contracts				
	Selling				
	USD	Accounts receivable — trade	607	33	(53)
	EUR		195	113	(25)
	Buying				
	JPY	Accounts payable — trade	2,942	—	113
	Total		¥29,084	¥8,845	¥(1,286)

(2) Interest-related transactions

December 31, 2022
Not applicable

December 31, 2023
Not applicable

(Retirement Benefits)

1 Overview of the retirement benefit plans adopted

SHI and its major domestic consolidated subsidiaries have adopted a combination of the lump-sum retirement allowance plan and the defined contribution pension plan, while certain overseas consolidated subsidiaries have defined benefit-type plans.
A retirement benefit trust has been created for SHI's lump-sum retirement allowance plan.
Some consolidated subsidiaries with lump-sum retirement allowance plans calculate net defined benefit liability and retirement benefit costs based on the simplified method.

2 Defined benefit plans (excluding plans to which the simplified method is applied)

(1) Movements in retirement benefit obligations

Millions of yen

	For the year ended December 31, 2022	For the year ended December 31, 2023
Balance at the beginning of the year	¥95,360	¥84,424
Service cost	3,019	3,417
Interest cost	1,125	2,076
Actuarial loss (gain)	(15,278)	2,606
Benefit paid	(5,832)	(6,075)
Past service cost	(202)	(1,254)
Increase due to change from the simplified method to the principle method	169	214
Others	6,063	2,977
Balance at the end of the year	¥84,424	¥88,385

(2) Movements in plan assets

Millions of yen

	For the year ended December 31, 2022	For the year ended December 31, 2023
Balance at the beginning of the year	¥62,042	¥60,264
Expected return on plan assets	2,761	2,423
Actuarial loss (gain)	(8,205)	12,901
Contributions paid by the employer	632	823
Benefit paid	(1,943)	(4,039)
Others	4,976	2,333
Balance at the end of the year	¥60,264	¥74,705

(3) Reconciliations from retirement benefit obligations and plan assets to net defined benefit liability (asset)

Millions of yen

	December 31, 2022	December 31, 2023
Funded retirement benefit obligations	¥ 60,794	¥ 62,291
Plan assets	(60,264)	(74,705)
	530	(12,414)
Unfunded retirement benefit obligations	23,630	26,094
Total net defined benefit liability	24,160	13,680
Defined benefit asset	(8,515)	(15,773)
Defined benefit liability	32,676	29,453
Total net defined benefit liability	¥ 24,160	¥ 13,680

(4) Retirement benefit expenses

Millions of yen

	For the year ended December 31, 2022	For the year ended December 31, 2023
Service cost	¥ 3,019	¥ 3,417
Interest cost	1,125	2,076
Expected return on plan assets	(2,761)	(2,423)
Net actuarial loss amortization	(4,889)	(9)
Past service costs amortization	(12)	(1,313)
Increase due to transition from the simplified method to the principle method	57	125
Total retirement benefit expenses	¥(3,461)	¥ 1,872

(5) Remeasurements of defined benefit plans

The items recognized in remeasurements of defined benefit plans (before tax effect) are as follows.

Millions of yen

	For the year ended December 31, 2022	For the year ended December 31, 2023
Past service costs	¥ 190	¥ (59)
Actuarial gains and losses	2,184	10,286
Others	(428)	(266)
Total	¥1,946	¥ 9,961

(6) Accumulated remeasurements of defined benefit plans

The items recognized in accumulated remeasurements of defined benefit plans (before tax effect) are as follows.

Millions of yen

	December 31, 2022	December 31, 2023
Past service costs that are yet to be recognized	¥ 249	¥ 185
Actuarial gains and losses that are yet to be recognized	8,259	18,284
Total	¥8,508	¥18,469

(7) Plan assets

(i) Major components of plan assets

Percentages by major category to total plan assets are as follows.

%

	December 31, 2022	December 31, 2023
Shares	77	79
Cash and deposits	3	3
Others	20	18
Total	100	100

Note: Total plan assets include the retirement benefit trust created for SHI's lump-sum retirement allowance plan. The retirement benefit trust has been included as a percentage to total plan assets, which was 47% (¥28,539 million) at the end of the previous consolidated fiscal year and is 48% (¥35,601 million) at the end of the current consolidated fiscal year.

(ii) Method of setting a long-term expected rate of return on plan assets
In order to determine a long-term expected rate of return on plan assets, the present and predicted allocation of plan assets and the present and expected long-term rate of return on various assets constituting plan assets are considered.

(8) Basis of actuarial assumptions

Basis for major actuarial assumptions

%

	For the year ended December 31, 2022	For the year ended December 31, 2023
Discount rate	0.5 to 5.1	0.0 to 7.0
Long-term expected rate of return on plan assets	0.0 to 8.0	0.0 to 8.0

3 Defined benefit plans to which the simplified method is applied

(1) Movements in net defined benefit liability

Millions of yen

	For the year ended December 31, 2022	For the year ended December 31, 2023
Balance at the beginning of the year	¥4,758	¥3,678
Decrease due to change from the simplified method to the principle method	(123)	(89)
Retirement benefit expenses	(660)	1,123
Benefit paid	(254)	(297)
Contributions paid by the employer	(43)	(57)
Balance at the end of the year	¥3,678	¥4,359

(2) Reconciliations from retirement benefit obligations and plan assets to net defined benefit liability

Millions of yen

	December 31, 2022	December 31, 2023
Funded retirement benefit obligations	¥ 948	¥ 925
Plan assets	(957)	(949)
	(9)	(24)
Unfunded retirement benefit obligations	3,687	4,383
Total net defined benefit liability	¥3,678	¥4,359
Defined benefit asset	¥ (9)	¥ (24)
Defined benefit liability	3,687	4,383
Total net defined benefit liability	¥3,678	¥4,359

(3) Retirement benefit expenses

Retirement benefit expenses calculated using the simplified method: ¥(660) million for the previous consolidated fiscal year and ¥1,123 million for the current consolidated fiscal year.

4 Defined contribution plans

The amounts required to be contributed to the defined contribution plans of the Company are ¥725 million for the previous consolidated fiscal year and ¥982 million for the current consolidated fiscal year.

(Tax Effect Accounting)

1 Major components of deferred tax assets and deferred tax liabilities

Millions of yen

	December 31, 2022	December 31, 2023
Deferred tax assets		
Allowance for bonuses	¥ 1,776	¥ 1,720
Amount exceeding the limit on deductible allowance for doubtful accounts	1,058	2,381
Provision for construction warranties	2,862	3,200
Defined benefit liability	10,751	8,424
Unrealized profit on inventories	2,248	3,386
Loss on valuation of investment securities	2,564	2,525
Excess of depreciation	1,606	3,783
Tax loss carryforward	10,713	12,959
Loss on valuation of inventories	3,731	3,711
Impairment loss	3,931	8,921
Provision for loss on construction contracts	349	88
Others	10,332	11,135
Subtotal	51,921	62,229
Valuation allowance for tax loss carryforward (Note 2)	(8,571)	(11,301)
Valuation allowance for deductible temporary differences	(8,945)	(12,714)
Subtotal of valuation allowance (Note 1)	(17,516)	(24,015)
Total	34,405	38,214
Deferred tax liabilities		
Unrealized gains on full fair value valuation of consolidated subsidiaries	(3,277)	(3,302)
Extra depreciation in overseas subsidiaries	(3,448)	(3,956)
Retained earnings of overseas subsidiaries	(6,862)	(6,986)
Intangible assets identified by business combinations	(3,821)	(3,948)
Valuation difference on available-for-sale securities	(1,717)	(2,666)
Others	(3,087)	(3,861)
Total	(22,211)	(24,719)
Net deferred tax assets	¥ 12,194	¥ 13,496

Notes: 1 The change in the valuation allowance is mainly due to an increase in the valuation allowance related to tax loss carryforward at consolidated subsidiaries.
2 Tax loss carryforward and its deferred tax assets by expiration period.

December 31, 2022

Millions of yen

	Within 1 year	Over 1 year but within 2 years	Over 2 years but within 3 years	Over 3 years but within 4 years	Over 4 years but within 5 years	Over 5 years	Total
Tax loss carryforward (a)	¥ 143	¥ 62	¥ 95	¥ 42	¥15	¥10,355	¥10,713
Valuation allowance	(129)	(47)	(75)	(28)	(6)	(8,285)	(8,571)
Deferred tax assets	¥ 14	¥ 15	¥ 20	¥ 14	¥ 9	¥ 2,069	(b) ¥ 2,142

(a) Tax loss carryforward shown in the above table is after multiplication by the statutory tax rate.
(b) The Company recognized deferred tax assets of ¥2,142 million in relation to tax loss carryforward of ¥10,713million (amount multiplied by the statutory tax rate). These deferred tax assets were recognized mainly for tax loss carryforward at SHI's consolidated subsidiaries. The tax loss carryforward which resulted in the recognition of such deferred tax assets was generated from previously recognized loss before income taxes; however, no valuation allowance was recognized for the portions that were determined to be recoverable based on expected future taxable income and other factors.

December 31, 2023

Millions of yen

	Within 1 year	Over 1 year but within 2 years	Over 2 years but within 3 years	Over 3 years but within 4 years	Over 4 years but within 5 years	Over 5 years	Total
Tax loss carryforward (a)	¥ 78	¥134	¥115	¥ 730	¥ 506	¥ 11,395	¥ 12,959
Valuation allowance	(53)	(97)	(65)	(505)	(355)	(10,226)	(11,301)
Deferred tax assets	¥ 25	¥ 36	¥ 50	¥ 226	¥ 151	¥ 1,170	(b) ¥ 1,657

(a) Tax loss carryforward shown in the above table is after multiplication by the statutory tax rate.
(b) The Company recognized deferred tax assets of ¥1,657 million in relation to tax loss carryforward of ¥12,959million (amount multiplied by the statutory tax rate). These deferred tax assets were recognized mainly for tax loss carryforward at SHI's consolidated subsidiaries. The tax loss carryforward which resulted in the recognition of such deferred tax assets was generated from previously recognized loss before income taxes; however, no valuation allowance was recognized for the portions that were determined to be recoverable based on expected future taxable income and other factors.

2 SHI and its consolidated domestic companies are subject to corporate, inhabitants' and enterprise taxes, which constitute, in the aggregate, a statutory tax rate in Japan of approximately 30.6% for the years ended March 31, 2021 and 2022, respectively. Major items causing the differences between the statutory effective tax rate and the effective income tax rate after application of tax effect accounting are as follows.

%

	December 31, 2022	December 31, 2023
Statutory effective tax rates	30.6	30.6
(adjustments)		
Items not deductible permanently, such as entertainment expenses	2.1	1.0
Inhabitant tax on a per capita basis	1.1	0.5
Items not taxable permanently, such as dividend income	(3.1)	(1.0)
Increase (decrease) in valuation allowance	28.5	12.9
Tax credit	(10.1)	(5.4)
Share of profit of entities accounted for using equity method	0.2	0.3
Retained earnings of overseas subsidiaries	2.5	0.3
Tax rate differences of overseas subsidiaries	(6.0)	(6.0)
Amortization of goodwill	4.3	1.0
Impairment loss on goodwill	19.8	—
Others	4.7	2.1
Effective income tax rates after application of tax effect accounting	74.5	36.4

3 Accounting of corporate tax and local corporate tax, and accounting of effects of these taxes

SHI and some of its consolidated subsidiaries in Japan apply the group tax sharing system. In connection with this, for the accounting and disclosure of corporate tax, local corporate tax and tax effect accounting application, we apply the Practical Issues Task Force (PITF) No. 42 "Practical Solution on the Accounting and Disclosure Under the Group Tax Sharing System" (August 12, 2021).

(Asset Retirement Obligations)

No further disclosure is made as those obligations are immaterial in terms of amount.

(Revenue Recognition)

1 Information on the breakdown of revenues generated from contracts with customers

The sales of the Company consist of revenues mainly generated from contracts with customers, and the sales of the Company's reporting segments are broken down by region as follows.

For the year ended December 31, 2022

Millions of yen

	Reporting Segments					Others (Note 1)	Total
	Mechatronics	Industrial Machinery	Logistics & Construction	Energy & Lifelines	Total		
North America	¥ 43,260	¥ 25,486	¥116,418	¥ 10,430	¥195,594	¥ —	¥195,594
Europe	43,504	40,010	15,709	19,291	118,515	—	118,515
Asia (excluding China)	17,912	32,226	34,318	19,810	104,266	—	104,266
China	17,745	53,399	13,602	1,121	85,867	20	85,887
Others	13,584	5,683	14,293	16,800	50,360	—	50,360
Overseas	136,006	156,803	194,341	67,452	554,602	20	554,622
Japan	45,425	68,122	105,974	75,881	295,402	4,069	299,471
Sales to external customers (Note 2)	¥181,431	¥224,926	¥300,315	¥143,332	¥850,004	¥4,089	¥854,093

Notes: 1 "Others" is a business segment which is not included in the reporting segments, and contains the real estate business, software-related business and other businesses.
2 "Sales to external customers" include revenues generated from contracts with customers and revenues generated from other sources. Such revenues from other sources include those related to leases and those from real estate business, which have no material impact in terms of the amounts.

For the year ended December 31, 2023

Millions of yen

	Reporting Segments					Others (Note 1)	Total
	Mechatronics	Industrial Machinery	Logistics & Construction	Energy & Lifelines	Total		
North America	¥ 44,246	¥ 27,870	¥151,871	¥ 15,894	¥ 239,881	¥ —	¥ 239,881
Europe	52,095	43,748	26,205	35,859	157,907	—	157,907
Asia (excluding China)	21,273	43,680	36,127	19,723	120,803	—	120,803
China	15,771	62,324	6,381	1,765	86,242	19	86,260
Others	18,396	6,536	18,701	8,477	52,110	—	52,110
Overseas	151,781	184,159	239,285	81,718	656,943	19	656,962
Japan	68,263	95,671	154,137	100,437	418,509	6,063	424,571
Sales to external customers (Note 2)	¥220,044	¥279,830	¥393,422	¥182,155	¥1,075,452	¥6,081	¥1,081,533

Notes: 1 "Others" is a business segment which is not included in the reporting segments, and contains the real estate business, software-related business and other businesses.
2 "Sales to external customers" include revenues generated from contracts with customers and revenues generated from other sources. Such revenues from other sources include those related to leases and those from real estate business, which have no material impact in terms of the amounts.

2 Information as a basis for understanding revenues

With respect to contracts with customers, revenue is recognized when control over the promised goods or service is transferred to the customer and in the amount of consideration to which the Company expects to be entitled in exchange for the goods or service.
Revenue is recognized within a range within which an economic benefit is likely to flow into the Company and the amount of the revenue is reliably measurable, and is measured with reference to the fair value of the received or receivable consideration in light of the terms of payment under the relevant contract. No material financial element is involved in the transaction price.
In the recognition of revenue, a performance obligation associated with the Company's sale of finished goods, construction contract, or provision of a service is identified in light of the contract with the customer concerned, and the relevant revenue is normally recognized at the applicable point of time below when the performance obligation is determined to be satisfied.
For details on the types of finished goods and services in each reporting segment, refer to "(Segment Information, etc.)."

(1) Revenue from the sale of finished goods

Revenue from the sale of finished goods mainly includes revenue from the sale of gear reducers and transmissions, plastics machinery and hydraulic excavators and is recognized at the time of delivery because the relevant performance obligation is determined to be satisfied as the customer assumes control over the relevant finished goods at that time. For finished goods which the Company assumes no obligation to install, in cases where the period from the shipment of such finished goods to the time when control over those finished goods is transferred to the customer is an ordinary period of time, the revenue is recognized at the time of shipment.

(2) Revenue from construction contracts and the provision of services

Revenue from construction contracts mainly includes revenue from the production/construction of ships, material handling machinery and energy plant systems and is recognized over a period of time as the relevant performance obligation is being satisfied, and the progress of satisfaction of the performance obligation to provide the customer with the subject matter of production/construction is estimated. The cost-to-cost method is mainly used for estimation of construction progress. In the application of the cost-to-cost method, the percentage of costs incurred for construction work to estimated total construction costs is used to determine the progress toward the completion of construction. For a construction contract with a very short work period, the revenue is recognized when the relevant performance obligation is satisfied in full.

3 Information for understanding the amounts of revenue in the current consolidated fiscal year and subsequent fiscal years

For the year ended December 31, 2022

(1) Balances, etc. of contract assets and contract liabilities

The balances of notes and accounts receivable generated from contracts with customers, contract assets and contract liabilities are as follows.

Millions of yen

	For the year ended December 31, 2022	
	Balance at the beginning of the period	Balance at the end of the period
Notes and accounts receivable generated from contracts with customers		
Notes receivable	¥ 21,563	¥ 22,966
Accounts receivable	212,028	218,901
Total	¥233,591	¥241,867
Contract assets	61,179	58,414
Contract liabilities	55,952	60,473

In relation to the balance of contract liabilities at the beginning of the previous consolidated fiscal year, the amount of revenue recognized during the same fiscal year is ¥ 39,784 million.
The revenue recognized during the previous consolidated fiscal year on the basis of performance obligations satisfied (or partially satisfied) during previous periods is not material.
Contract assets are for the consideration of works that have been completed as of the end of the previous consolidated fiscal year but which has not been billed. Contract assets are to be reclassified as accounts receivable when the right to receive relevant payments becomes unconditional.
Contract liabilities mainly consist of advances received from customers.

(2) Transaction price allocated to remaining performance obligations
The total amount of transaction prices allocated to performance obligations remaining as of the end of the previous consolidated fiscal year is ¥ 138,797 million. The transaction price allocated to such performance obligations is mainly attributable to the business of individually ordered items and in relation to transactions under those construction contracts under which approximately 90% of the performance obligations are to be satisfied within three years and approximately 10% are to be satisfied over periods longer than three years.

For the year ended December 31, 2023

(1) Balances, etc. of contract assets and contract liabilities
The balances of notes and accounts receivable generated from contracts with customers, contract assets and contract liabilities are as follows.

Millions of yen

	For the year ended December 31, 2023	
	Balance at the beginning of the period	Balance at the end of the period
Notes and accounts receivable generated from contracts with customers		
Notes receivable	¥ 22,966	¥ 21,588
Accounts receivable	218,901	228,641
Total	¥241,867	¥250,229
Contract assets	58,414	39,632
Contract liabilities	60,473	48,029

In relation to the balance of contract liabilities at the beginning of the current consolidated fiscal year, the amount of revenue recognized during the same fiscal year is ¥ 44,038 million.
The revenue recognized during the current consolidated fiscal year on the basis of performance obligations satisfied (or partially satisfied) during previous periods is not material.
Contract assets are for the consideration of works that have been completed as of the end of the current consolidated fiscal year but which has not been billed. Contract assets are to be reclassified as accounts receivable when the right to receive relevant payments becomes unconditional.
Contract liabilities mainly consist of advances received from customers.

(2) Transaction price allocated to remaining performance obligations
The total amount of transaction prices allocated to performance obligations remaining as of the end of the current consolidated fiscal year is ¥ 129,312 million. The transaction price allocated to such performance obligations is mainly attributable to the business of individually ordered items and in relation to transactions under those construction contracts under which approximately 90% of the performance obligations are to be satisfied within three years and approximately 10% are to be satisfied over periods longer than three years.

(Segment Information, etc.)

[Segment Information]

1 Summary of reporting segments

(1) Method for determining reporting segments

The reporting segments of the Company are based on the business units for which financial information is separately available and periodically reviewed by the Board of Directors to determine the allocation of management resources and assess their operating performance.

(2) Type of finished goods and services belonging to each reporting segment

The Company formulates comprehensive domestic and global strategies for its products and services handled by the head office and each consolidated subsidiary, and operates business activities. Therefore, it consists of segments by products and services of the head office and the consolidated subsidiaries, and has four reporting segments: "Mechatronics", "Industrial Machinery", "Logistics & Construction" and "Energy & Lifeline."

Business	Main finished goods
Mechatronics	Power transmissions, control equipment, inverters, laser processing systems, precision positioning equipment, control components
Industrial Machinery	Plastics machinery, film forming machines, cryogenic equipment, precision forgings, semiconductor production equipment, Ion accelerators, medical machines and equipment, forging press machines, machine tools, air-conditioning equipment, defense equipment
Logistics & Construction	Hydraulic excavators, mobile cranes, road machinery, material handling systems, logistics systems, automated parking systems
Energy & Lifeline	Private power generation facilities, boilers, air pollution control equipment, water and sewage treatment systems, turbines, pumps, pressure vessels, mixing vessels, food processing machinery, ships

2 Method of calculating net sales, profits or losses, assets and other items of each reporting segment

The method of accounting treatment of the business segments reported is almost identical to the descriptions in "Basis for preparation."

Internal sales and transfers among the segments are based on market prices in effect.

3 Information on the amounts of sales, profits or losses, assets and other items by reporting segment

For the year ended December 31, 2022

Millions of yen

	Reporting Segments					Others (Note 1)	Total	Adjustments (Note 2)	Carrying amount on the consolidated financial statements
	Mechatronics	Industrial Machinery	Logistics & Construction	Energy & Lifelines	Total				
Net sales									
(1) Sales to external customers	¥181,431	¥224,926	¥300,315	¥143,332	¥ 850,004	¥ 4,089	¥ 854,093	¥ —	¥ 854,093
(2) Inter-segment sales	1,567	1,161	467	685	3,879	2,460	6,339	(6,339)	—
Total	182,998	226,086	300,782	144,018	853,883	6,549	860,432	(6,339)	854,093
Segment profit or loss	9,482	21,299	13,008	(475)	43,314	1,634	44,949	(146)	44,803
Segment assets	273,507	292,736	323,316	185,451	1,075,010	67,737	1,142,747	6,123	1,148,870
Other categories									
Depreciation	9,533	6,762	9,520	3,370	29,185	450	29,634	—	29,634
Amortization of goodwill	1,745	212	—	704	2,660	—	2,660	—	2,660
Impairment loss	—	3,010	—	18,172	21,182	—	21,182	—	21,182
Investments in companies accounting for using equity method	77	—	2,642	—	2,719	—	2,719	—	2,719
Increase in tangible and intangible assets	12,691	21,169	6,136	4,442	44,438	532	44,969	—	44,969

Notes: 1 "Others" is a business segment which is not included in the reporting segments, and contains the real estate business, software-related business and other businesses.
2 Adjustments are as follows.
(1) The adjustment of segment profit or loss (a decrease of ¥146 million) is attributable to inter-segment eliminations.
(2) Adjustments of segment assets (¥6,123 million) are attributable to assets relating to the surplus investment funds (cash and deposits) and long-term investment funds (investment securities) of SHI.
3 The segment profit or loss (-) is adjusted with the operating profit in the consolidated statements of income.

For the year ended December 31, 2023

Millions of yen

	Reporting Segments					Others (Note 1)	Total	Adjustments (Note 2)	Carrying amount on the consolidated financial statements
	Mechatronics	Industrial Machinery	Logistics & Construction	Energy & Lifelines	Total				
Net sales									
(1) Sales to external customers	¥220,044	¥279,830	¥393,422	¥182,155	¥1,075,452	¥ 6,081	¥1,081,533	¥ —	¥1,081,533
(2) Inter-segment sales	2,156	1,669	435	707	4,968	3,303	8,270	(8,270)	—
Total	222,201	281,500	393,857	182,862	1,080,419	9,384	1,089,803	(8,270)	1,081,533
Segment profit	12,408	25,602	28,123	6,342	72,476	1,880	74,356	12	74,367
Segment assets	284,135	303,860	360,287	163,497	1,111,779	83,316	1,195,095	5,762	1,200,857
Other categories									
Depreciation	11,441	9,426	11,403	3,544	35,815	559	36,374	—	36,374
Amortization of goodwill	1,898	41	—	—	1,939	—	1,939	—	1,939
Impairment loss	10,993	472	6,932	648	19,045	192	19,237	—	19,237
Investments in companies accounting for using equity method	49	—	2,154	—	2,203	—	2,203	—	2,203
Increase in tangible and intangible assets	14,657	15,217	6,234	5,462	41,570	932	42,502	—	42,502

Notes: 1 "Others" is a business segment which is not included in the reporting segments, and contains the real estate business, software-related business and other businesses.
2 Adjustments are as follows.
(1) Adjustments of segment profit (¥12 million) are attributable to inter-segment eliminations.
(2) Adjustments of segment assets (¥5,762 million) are attributable to assets relating to the surplus investment funds (cash and deposits) and long-term investment funds (investment securities) of SHI.
3 The segment profit is adjusted with the operating profit in the consolidated statements of income.

[Related Information]

For the year ended December 31, 2022

1 Information by finished goods and service

No further disclosure is made because the finished goods and services categories are identical to those of the reporting segments.

2 Information by region

(1) Sales

Millions of yen

Japan	United States	China	Others	Total
¥299,471	¥174,926	¥85,887	¥293,808	¥854,093

Note: Sales are based on the locations of customers and are divided into countries or regions.

(2) Property, plant and equipment

Millions of yen

Japan	United States	Others	Total
¥224,659	¥33,627	¥61,790	¥320,077

3 Information by major customer

There is no description because the Company has no single external customer that accounts for at least 10% of the net sales in the consolidated statements of income.

For the year ended December 31, 2023

1 Information by finished goods and service

No further disclosure is made because the finished goods and services categories are identical to those of the reporting segments.

2 Information by region

(1) Sales

Millions of yen

Japan	United States	China	Others	Total
¥424,571	¥212,048	¥86,260	¥358,653	¥1,081,533

Note: Sales are based on the locations of customers and are divided into countries or regions.

(2) Property, plant and equipment

Millions of yen

Japan	United States	Others	Total
¥227,971	¥37,876	¥64,159	¥330,007

3 Information by major customer

There is no description because the Company has no single external customer that accounts for at least 10% of the net sales in the consolidated statements of income.

[Unamortized Balance of Goodwill by Reporting Segment]

For the year ended December 31, 2022

Millions of yen

	Reporting Segments					Others	Corporate/ Eliminations	Total
	Mechatronics	Industrial Machinery	Logistics & Construction	Energy & Lifelines	Total			
Balance at the end of the period	¥19,073	¥150	¥—	¥—	¥19,223	¥—	¥—	¥19,223

For the year ended December 31, 2023

Millions of yen

	Reporting Segments					Others	Corporate/ Eliminations	Total
	Mechatronics	Industrial Machinery	Logistics & Construction	Energy & Lifelines	Total			
Balance at the end of the period	¥19,312	¥—	¥—	¥—	¥19,312	¥—	¥—	¥19,312

[Information on Gain on Negative Goodwill by Reporting Segment]

Not applicable

[Information on Related Parties]

Not applicable

(Per-share Information)

Yen

	For the year ended December 31, 2022	For the year ended December 31, 2023
Net assets per share	¥4,647.20	¥5,059.88
Earnings per share	47.20	267.30

Notes: 1 There is no disclosure for diluted earnings per share information after adjustments of dilutive potential shares because there are no dilutive potential shares.
2 SHI introduces a share-based compensation system using a trust for Directors, etc. For the average number of outstanding shares for the term, which serves as the basis for calculation of earnings per share, the treasury shares deducted in the calculation include SHI shares held by this trust account (68 thousand shares for the previous consolidated fiscal year, and 68 thousand shares for the current consolidated fiscal year). In addition, to calculate the net assets per share, the treasury shares deducted from the total number of issued shares at the end of the period include SHI shares held by this trust account (68 thousand shares for the previous consolidated fiscal year, and 68 thousand shares for the current consolidated fiscal year).
3 The basis for calculation of earnings per share is presented below.

Millions of yen

	For the year ended December 31, 2022	For the year ended December 31, 2023
Profit attributable to owners of parent	¥ 5,782	¥ 32,742
Value not attributable to common shareholders	—	—
Profit attributable to common shareholders of parent	5,782	32,742
Average number of outstanding shares for the term (in thousand shares)	122,498	122,491

(Significant Subsequent Events)

(Acquisition of treasury shares)

As the Board of Directors meeting held on February 14, 2024, SHI resolved to set a limit in acquisition of treasury shares at ¥10,000 million in total acquisition amount.

(1) Reason for acquiring treasury shares

The purpose of acquiring treasury shares is to enhance the shareholder return and improve the capital efficiency based on our capital policy in the "Medium-Term Management Plan 2026."

(2) Details of matters related to acquisition

(i) Type of share to be acquired	SHI common shares
(ii) Total number of shares that can be acquired	4 million shares (upper limit) Ratio of total number of issued shares (excluding treasury shares): 3.26%
(iii) Total amount of share acquisition value	¥10,000 million (upper limit)
(iv) Acquisition period	From March 1, 2024 to October 31, 2024
(v) Acquisition method	Plan to acquisition at the Tokyo Stock Exchange

(Consolidated Supplementary Schedules)

[Bonds Schedule]

Company name	Name of issue	Issue date	Millions of yen Balance at the beginning of the current period	Millions of yen Balance at the end of the current period	Interest rate (%)	Security	Redemption date
Sumitomo Heavy Industries, Ltd.	4th unsecured bond	March 15, 2018	¥10,000	—	0.17	Unsecured	March 15, 2023
Sumitomo Heavy Industries, Ltd.	5th unsecured bond	July 24, 2019	10,000	10,000 (10,000)	0.13	Unsecured	July 24, 2024
Sumitomo Heavy Industries, Ltd.	6th unsecured bond	January 24, 2020	10,000	10,000	0.29	Unsecured	January 24, 2030
Sumitomo Heavy Industries, Ltd.	7th unsecured bond	September 23, 2020	20,000	20,000	0.17	Unsecured	September 22, 2025
Sumitomo Heavy Industries, Ltd.	8th unsecured bond	July 19, 2023	—	10,000	0.41	Unsecured	July 19, 2028
Total	—	—	¥50,000	¥ 50,000 (10,000)	—	—	—

Notes: 1 The amounts in brackets under "Balance at the end of the current period" are to be redeemed within one year.
2 Annualized amounts to be redeemed within five years after the end of the current consolidated fiscal year are as follows.

Millions of yen

Within 1 year	Over 1 year but within 2 years	Over 2 years but within 3 years	Over 3 years but within 4 years	Over 4 years but within 5 years
¥10,000	¥20,000	¥—	¥—	¥10,000

[Loans Schedule]

Category	Millions of yen Balance at the beginning of the period	Millions of yen Balance at the end of the period	Average interest rate (%)	Repayment date
Short-term loans payable	¥ 36,442	¥ 63,258	3.30	—
Current portion of long-term loans payable	16,985	9,741	0.64	—
Commercial papers	25,000	—	—	—
Lease obligations due within 1 year	3,071	3,148	—	—
Long-term loans payable (excluding long-term debts due within 1 year)	32,338	39,231	0.57	From March 13, 2025 to September 30, 2029
Lease obligations (excluding long-term debts due within 1 year)	7,904	5,624	—	—
Total	¥121,740	¥121,001	—	—

Notes: 1 For "Average interest rate," a weighted average interest rate on the balance of the loan at the end of the current fiscal year is presented.
2 The table below is the maturity profile of long-term loans payable and lease obligations at the end of the current consolidated fiscal year, which are due after one year

Millions of yen

Category	Over 1 year but within 2 years	Over 2 years but within 3 years	Over 3 years but within 4 years	Over 4 years but within 5 years
Long-term loans payable	¥3,332	¥5,832	¥14,526	¥15,536
Lease obligations (long-term)	2,348	1,116	659	364

3 No interest rate information is available because lease obligations are measured by including interest expenses, except for certain consolidated subsidiaries.

[Asset Retirement Obligations Schedule]

No further disclosure is made because the amount of asset retirement obligations was 1% or less of the total balance of liabilities and net assets at the beginning of the current consolidated fiscal year and at the end of the current consolidated fiscal year, respectively.

Independent auditor's report

To the Board of Directors of Sumitomo Heavy Industries, Ltd.:

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the accompanying consolidated financial statements of Sumitomo Heavy Industries, Ltd. ("the Company") and its consolidated subsidiaries (collectively referred to as "the Group"), which comprise the consolidated balance sheets as at December 31, 2023 and 2022, the consolidated statements of income and 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, 2023 and 2022, 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 judgment as to whether an impairment loss should be recognized on goodwill that arose when the Group acquired control of Lafert S.p.A.

The key audit matter	How the matter was addressed in our audit
As described in the Note on "Significant Accounting Estimates, 1. Valuation of goodwill" to the consolidated financial	The primary procedures we performed to assess whether the judgment as to whether an impairment loss should be recognized on goodwill that arose when the

statements, the Group recognized goodwill of ¥19,312 million in the consolidated balance sheets as of December 31, 2023. Included therein was goodwill of ¥11,195 million that arose when the Group acquired control of Lafert S.p.A. Goodwill is amortized using the straight-line method over a period of up to 20 years. In addition, each business unit to which asset groups that include goodwill belong is tested for impairment whenever there is an impairment indicator. The impairment test is performed by comparing the undiscounted future cash flows of each business unit with the carrying amount of asset groups including goodwill. If the recognition of an impairment loss is deemed necessary, the carrying amount is reduced to the recoverable amount, and the resulting decrease in the carrying amount is recognized as an impairment loss. During the current fiscal year, there was an indication of impairment in the asset group that included the goodwill of Lafert S.p.A. due to a deviation in the initial business plan developed when the Company acquired control of Lafert S.p.A. and its recurring operating losses after recording amortization of goodwill. Accordingly, the Group assessed whether an impairment loss should be recognized; however, it was determined that the recognition of an impairment loss was not deemed necessary as the estimated undiscounted future cash flows exceeded the carrying amount of the asset group including the goodwill. The undiscounted future cash flows used in this assessment were estimated based on the business plan of Lafert S.p.A. prepared by management taking into account the long-term sales growth rate. The sales under the business plan and the long-term sales growth rate included assumptions that involved a high degree of uncertainty, such as future trends in the industrial motor market and their prospective market shares. Therefore, management's judgment on these	Group acquired control of Lafert S.p.A. was appropriate included the following: **(1) Internal control testing** We tested the design and operating effectiveness of certain of the Group's internal controls relevant to the process of determining whether an impairment loss on goodwill should be recognized. In this assessment, we focused our testing on controls to assess the reasonableness of the business plan and the controls to reasonably estimate and approve the undiscounted future cash flows prepared based on the business plan. **(2) Assessment of the reasonableness of the estimated undiscounted future cash flows** For the business plan of Lafert S.p.A., prepared based on the long-term forecasts, which formed the basis for estimating future cash flows, we assessed the appropriateness of key assumptions and how management addressed the underlying uncertainty. In this assessment, we inquired of management and personnel responsible for the related business unit in charge of Lafert S.p.A. In addition, we: ● evaluated the accuracy of the estimates included in the business plan by analyzing the status of achievement of Lafert S.p.A.'s past business plans and the causes of any variances between the plans and actual results; ● compared the future trends in the industrial motor market with relevant market forecast data published by external research organizations; ● assessed the impact on the estimated undiscounted future cash flows when specific uncertainties were incorporated into the key assumptions. In assessing the degree of uncertainty, we inquired of personnel responsible for the related business unit regarding the basis for the sales growth rate assumption under the business plan which included their prospective market shares, and

assumptions had a significant impact on the estimated undiscounted future cash flows. We, therefore, determined that our assessment of the appropriateness of the judgment as to whether an impairment loss should be recognized on goodwill that arose when the Group acquired control of Lafert S.p.A. was one of the most significant matters in our audit of the consolidated financial statements for the current fiscal year, and accordingly, a key audit matter.	compared the past results with relevant market forecast data; and ● assessed the impact on the estimated undiscounted future cash flows by conducting a sensitivity analysis when specific uncertainties were incorporated into the forecast of the long-term sales growth rate.

Reasonableness of the estimate of total construction costs for performance obligations satisfied over a period of time	
The key audit matter	**How the matter was addressed in our audit**
As described in the Note on "Significant Accounting Estimates, 2. Estimate of total construction costs based on performance obligations to be satisfied over a period of time" to the consolidated financial statements, the Group estimates the progress towards complete satisfaction of a performance obligation and recognizes revenue over time based on such progress as performance obligations are satisfied over a period of time in each of the Industrial Machinery segment, the Logistics & Construction segment, and the Energy & Lifeline segment. The construction revenue recognized from performance obligations satisfied over a period of time for the current fiscal year totaled ¥141,642 million, representing approximately 13% of net sales in the consolidated financial statements. The progress towards complete satisfaction of a performance obligation is estimated mainly using the cost-to-cost method. In the cost-to-cost method, the percentage of costs incurred for construction work against the estimated total construction costs is used to measure the progress toward the completion of construction. Since each construction work is significantly different in nature depending on the contract,	The primary procedures we performed to assess whether the Group's estimate of total construction costs for performance obligations satisfied over a period of time was reasonable included the following: **(1) Internal control testing** We tested the design and operating effectiveness of certain of the Group's internal controls relevant to the process of preparing and revising a project budget for construction, with a particular focus on the following: ● controls to ensure the accuracy of a project budget for construction by comparing it with the specification sheet and confirming the completeness of the estimated total construction costs; and ● controls to revise the project budget for construction in a timely manner based on subsequent changes in the specification and the progress of construction work. **(2) Assessment of the reasonableness of the estimated total construction costs**

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the preparation of a project budget, which provided the basis for estimating the total construction costs, as well as any subsequent revisions thereto involved estimation uncertainty. Specifically, management's determination of the following aspects of construction had a significant effect on the estimated total construction costs:

whether all the work necessary to complete the construction contract was identified and the estimated costs were included in the project budget; and
whether subsequent developments, such as unexpected changes in the economic environment, actual costs incurred exceeding the initially estimated costs due to design or process disruptions, or penalty payments resulting from issues with product performance or delivery timing, were reflected within the project budget in a timely and appropriate manner.

We, therefore, determined that our assessment of the reasonableness of the estimate of total construction costs for performance obligations satisfied over a period of time was one of the most significant matters in our audit of the consolidated financial statements for the current fiscal year, and accordingly, a key audit matter.
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The primary procedures we performed to assess the reasonableness of the estimate of total construction cost included the following:

We compared the correlation between the construction period and the progress of satisfaction of performance obligations with the correlation of similar projects in the past, and assessed whether there were any projects with a significant deviation; and
We performed the following procedures for a selection of projects that were deemed to involve a higher degree of uncertainty in the estimated total construction costs considering the terms and conditions and the nature of each project:

assessed the accuracy of the project budget for construction by comparing the preliminary estimate of the total construction costs with the revised estimate. We also evaluated the causes of variances identified in the comparison and assessed whether the impacts caused by events which contributed to the variances were appropriately reflected in the revised project budget for construction;
traced the estimated total construction costs that were used as the basis for the estimate to the supporting cost accumulation document, and assessed whether all significant estimated costs necessary to complete the construction were included in the project budget; and
assessed the necessity of revising the project budget for construction by inquiring of personnel responsible for the construction project regarding the overview and progress of the construction, as well as comparing the planned progress toward completion described in the progress management document at the construction sites, the progress of satisfaction of performance obligations used to recognize revenue, and the actual progress observed through the inspection of the construction sites.

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Other Information

The other information comprises the information included in the Consolidated Financial Statements and Notes to the Consolidated Financial Statements, but does not include the consolidated financial statements, the financial statements, and our auditor's reports thereon. Management is responsible for the preparation and presentation of the other information. 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 reporting process for the other information.

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

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

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

We have nothing to report in this regard.

Responsibilities of Management and Corporate Auditors and the Board of Corporate Auditorsor 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, actions taken to eliminate threats or safeguards applied.

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.

Fee-related Information

Fees paid or payable to our firm and to other firms within the same network as our firm for audit and non-audit services provided to the Company and its subsidiaries for the current year are 604 million yen and 167 million yen, respectively.

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

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

Yutaka Matsuki

Designated Engagement Partner

Certified Public Accountant

Michiko Muramatsu

Designated Engagement Partner

Certified Public Accountant

Hiroshi Yabumae

Designated Engagement Partner

Certified Public Accountant

KPMG AZSA LLC

Tokyo Office, Japan

June 26, 2024

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.