

**HD KOREA SHIPBUILDING & OFFSHORE
ENGINEERING CO., LTD. AND ITS SUBSIDIARIES**

Consolidated Financial Statements

December 31, 2023

(With Independent Auditor's Report Thereon)

Contents

	Page
Independent Auditor's Report	1
Consolidated Statements of Financial Position	6
Consolidated Statements of Comprehensive Income (Loss)	8
Consolidated Statements of Changes in Equity	9
Consolidated Statements of Cash Flows	10
Notes to the Consolidated Financial Statements	11
Independent Auditors' Report on Internal Control over Financial Reporting	134
Reports on the operations of Internal Control over Financial Reporting	136

Independent Auditors' Report

Based on a report originally issued in Korean

To the Board of Directors and Stockholders of
HD Korea Shipbuilding & Offshore Engineering Co., Ltd.

Opinion

We have audited the consolidated financial statements of HD Korea Shipbuilding & Offshore Engineering Co., Ltd. and its subsidiaries (the "Group"), which comprise the consolidated statements of financial position as of December 31, 2023, the consolidated statements of comprehensive income (loss), changes in equity and cash flows for the year then ended, and notes, comprising material accounting policy information 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 of December 31, 2023, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Korean International Financial Reporting Standards ("K-IFRS").

We also have audited, in accordance with Korean Standards on Auditing ("KSAs"), the Group's Internal Control over Financial Reporting ("ICFR") as of December 31, 2023 based on the criteria established in Conceptual Framework for Designing and Operating Internal Control over Financial Reporting issued by the Operating Committee of Internal Control over Financial Reporting in the Republic of Korea, and our report dated March 18, 2024 expressed an unqualified opinion on the effectiveness of the Group's internal control over financial reporting.

Basis for Opinion

We conducted our audit in accordance with Korean Standards on Auditing (KSAs). Our responsibilities under those standards are further described in the *Auditors' 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 Republic of Korea, 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 that matter that, in our professional judgment, was of most significance in our audit of the consolidated financial statements as of and for the year ended December 31, 2023. 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.

(1) Overview

An overview of key audit matters described in this audit report is as follows:

As described in Note 4 to the consolidated financial statements, the Group produces the customized goods on orders from the customers and recognizes revenue over time by the input method when having the following characteristics.

- (i) The Group's performance creates or enhances an asset that the customer controls as the asset is created or enhanced; or
- (ii) The Group's performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

The percentage-of-completion is calculated based on the ratio of contract costs incurred to date for work performed to estimated total contract costs except contract costs that do not reflect the progress of completion. The contract assets are presented for all contracts in which contract costs incurred to date plus recognized profits (less recognized losses) exceeded progress billings. The contract liabilities are presented for all contracts in which progress billings exceed contract costs incurred to date plus recognized profits (less recognized losses).

(2) Uncertainty of estimated total contract costs

As described in Note 34 to the consolidated financial statements, estimated total contract costs are calculated based on estimated costs of materials, labor costs and construction period, and uncertainty risk related to exchange rate fluctuation, changes of steel prices and changes in production hours exists. Accordingly, considering the impacts on profit or loss for the year ended December 31, 2023 and future periods, we identified uncertainty of estimated total contract costs as a significant risk.

We performed the following audit procedures regarding the impact of uncertainty of estimated total contract costs on the consolidated financial statements as of and for the year ended December 31, 2023:

- Testing certain internal controls over the Group's determination of revenue recognition accounting policies
- Testing certain internal controls over the Group's determination of the estimated total contract costs
- Obtaining the contract and verifying the appropriateness of the accounting policy applying revenue recognition based on input method
- Inquiries and analytical procedures on changes in major items of total contract costs in each reporting period
- Retrospective review of projects with significant changes in estimated total contract costs
- Identify the cause of difference for projects with significant changes in estimated total contract costs and if necessary, inspecting relevant documents
- Comparing estimated total contract costs among similar vessels
- Obtaining and inspecting the data of estimated total contract costs managed by production department for major projects
- Comparing details in purchase order issued by purchasing department by projects with estimated total material costs
- Assessment on whether estimated total contract costs were approved by proper authorized person
- Inquiries and analytical review procedures on the causes of increase or decrease in percentage-of-completion by each reporting period
- For selected major projects, comparing the progress of construction with the percentage-of-completion
- Inquiries on progress and significant changes in major projects
- Validation of progress rates and revenue recalculations by hull
- Visits of ship construction sites

(3) Assessment of the percentage-of-completion

As described in the Note 34 to the consolidated financial statements, the Group should include only contract costs incurred to date for work performed to estimated total contract costs in case the percentage-of-completion is calculated based on estimated total contract costs. There is a risk that the factors of change in contract costs incurred to date include construction inefficiency costs. Therefore, we identified assessment of the percentage-of-completion as a significant risk, considering the impact of uncertainty on earnings volatility.

We performed the following audit procedures with respect to the estimated total contract costs and accumulated costs which have effect on calculating the construction percentage-of-completion as of December 31, 2023:

- Inquiries and analytical review procedures on items of the contract costs incurred to date in each reporting period

- Inspecting the documents on existence of material costs incurred and appropriateness of aggregation of material cost by each project for selected samples
- Inspecting the documents on existence of labor costs and expenses incurred and appropriateness of aggregation of labor cost and expenses by each project for selected samples
- Involving our IT specialists to assist us in assessing the appropriateness of aggregation and allocation of overhead costs by each project
- Involving our IT specialists to assist us in testing risk scenarios including verification on whether the costs are allocated appropriately to each project

(4) Accounting for the variations in contract work

As described in Note 34 to the consolidated financial statements, although contract revenue is measured as the initial amount agreed in the contract, it is possible to be increased by claims and incentive payments, and decreased by penalties due to delay of construction completion by reason attributable to the Group. Variations in contract work, such as specification or design change by clients, have been occurring frequently in the shipbuilding sector due to characteristics of the industry, and they cause a possibility of variations in contract revenue. Accordingly, we identified the accounting for the variations in contract work as a significant risk.

We performed the following audit procedures with respect to the accounting for the variations in contract work as of and for the year ended December 31, 2023:

- Testing certain internal controls over changes in terms of contracts
- Inquiries and analytical review procedures on projects in which significant changes in contract revenue were made
- Inspecting the documents (change order document, etc.) to confirm the appropriateness of the changes in construction contract amounts
- Inspecting the documents regarding completion of construction (Delivery protocol, etc.) for completion work to assess existence of contract revenue
- Comparing the contractual delivery date with expected delivery date as of December 31, 2023
- Assessing the appropriateness of liquidated damages and the estimated amount of compensation

(5) Assessment of recoverability of contract assets

As described in Note 34 to the consolidated financial statements, Heavy-Tail payment plan is a major collection terms of the Group. Since Heavy-Tail payment plan is able to result in significant losses if contract is cancelled, we identified the collectability of contract assets as a significant risk.

We performed the following audit procedures with respect to the assessment of collectability of contract assets as of and for the year ended December 31, 2023:

- Testing certain internal controls over identification and assessment of impairment indicators on contract assets
- For contracts with significant increases in contract assets, inquiries and inspection of documents on payment terms, liquidated damages, delivery time, and other obligations of contracts
- Inspection of the terms of the contracts for ongoing construction to assess the appropriateness of the Group's payment conditions
- Assessing management's estimate basis for the collectability of contract assets
- For selected major customers, obtaining external confirmation letters

Other Matters

The consolidated financial statements of the Group for the year ended December 31, 2022 were audited by another auditor who expressed an unmodified opinion on those statements on March 20, 2023.

The procedures and practices utilized in the Republic of Korea to audit such consolidated financial statements may differ from those generally accepted and applied in other countries.



Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with K-IFRS, 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 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.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditors' 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 auditors' 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 KSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with KSAs, 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.
- Evaluate the appropriateness of accounting policies used in the preparation of the consolidated financial statements 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 auditors' 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 auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- 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 those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

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

From the matters communicated with those charged with governance, 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 auditors' 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.

The engagement partner on the audit resulting in this independent auditors' report is Jeon Won-Pyo.

KPMG Samjong Accounting Corp.

Seoul, Korea
March 18, 2024

This report is effective as of March 18, 2024, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statements and notes thereto. Accordingly, the readers of the audit report should understand that the above audit report has not been updated to reflect the impact of such subsequent events or circumstances, if any.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Consolidated Statements of Financial Position
For the years ended December 31, 2023 and 2022

(In thousands of won)

	<u>Note</u>	<u>2023</u>	<u>2022</u>
Assets			
Cash and cash equivalents	6,43,44	₩ 3,018,390,965	2,697,222,866
Short-term financial assets	7,43,44	1,595,618,678	1,304,041,471
Trade and other receivables	9,34,43,44,47	1,460,128,954	1,026,706,269
Contract assets	9,34,43,44	7,156,818,352	6,435,957,217
Inventories	10,21	2,005,664,722	2,203,316,626
Current derivative assets	28,43,44	143,267,305	169,837,009
Current firm commitment assets	28	286,127,701	344,839,505
Current tax assets		22,350,221	12,589,479
Other current assets	11	2,046,760,373	1,581,403,775
Total current assets		<u>17,735,127,271</u>	<u>15,775,914,217</u>
Investments in associates and joint ventures	12,13,47	308,959,157	269,723,774
Long-term financial assets	7,8,15,43,44	232,714,302	201,294,940
Long-term trade and other receivables	9,34,43,44,47	252,258,032	250,490,030
Investment property	16,35	218,330,341	222,373,885
Property, plant and equipment	17,21,35	10,503,503,219	10,143,112,509
Right-of-use assets	18,35	100,432,715	108,493,822
Intangible assets	19,35	190,793,079	163,697,162
Non-current derivative assets	28,43,44	250,805,046	388,939,410
Non-current firm commitment assets	28	178,402,603	292,751,459
Deferred tax assets	40	1,724,765,730	1,501,088,653
Other non-current assets	11,26	546,476,689	565,596,439
Total non-current assets		<u>14,507,440,913</u>	<u>14,107,562,083</u>
Total assets		₩ <u>32,242,568,184</u>	<u>29,883,476,300</u>

See accompanying notes to the consolidated financial statements.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Consolidated Statements of Financial Position
For the years ended December 31, 2023 and 2022

(In thousands of won)

	Note	2023	2022
Liabilities			
Short-term financial liabilities	21,22,25,43,44	₩ 2,220,090,996	2,700,995,392
Current lease liabilities	18,25,43,44	31,249,553	31,923,620
Trade and other payables	23,43,44,47	3,203,614,517	2,912,783,204
Contract liabilities	34	11,074,793,385	7,438,536,841
Advances received		28,310,544	28,578,990
Current derivative liabilities	28,43,44	460,861,895	549,973,127
Current firm commitment liabilities	28	78,350,473	92,548,274
Current tax payables		777,728	6,071,609
Short-term provisions	27	399,721,727	1,271,544,113
Other current liabilities	24	96,687	527,353
Total current liabilities		17,497,867,505	15,033,482,523
Long-term financial liabilities	21,22,25,28,43,44	1,698,182,746	1,438,739,131
Non-current lease liabilities	18,25,43,44	66,972,171	72,101,057
Long-term trade and other payables	23,43,44,47	25,747,456	9,225,658
Long-term contract liabilities	34	21,179,181	21,806,394
Liabilities for defined benefit plans	26	55,801,682	52,628,117
Long-term provisions	27	84,658,166	321,790,598
Non-current derivative liabilities	28,43,44	181,327,743	295,327,032
Non-current firm commitment liabilities	28	239,249,830	324,974,480
Deferred tax liabilities	40	1,478,772	1,271,500
Total non-current liabilities		2,374,597,747	2,537,863,967
Total liabilities		19,872,465,252	17,571,346,490
Equity			
Common stock	29	353,865,580	353,865,580
Capital surplus	29	2,459,694,580	2,467,505,934
Capital adjustments	30	(8,609,897,214)	(8,703,261,531)
Accumulated other comprehensive income	17,28,31	1,325,567,794	1,296,442,443
Retained earnings	32	14,374,459,760	14,300,366,736
Equity attributable to owners of the Group	1,33	9,903,690,500	9,714,919,162
Non-controlling interests		2,466,412,432	2,597,210,648
Total equity		12,370,102,932	12,312,129,810
Total liabilities and equity		₩ 32,242,568,184	29,883,476,300

See accompanying notes to the consolidated financial statements.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Consolidated Statements of Comprehensive Income (Loss)
For the years ended December 31, 2023 and 2022

(In thousands of won except earnings (loss) per share)

	Note	2023	2022
Sales	28,34,35,47	₩ 21,296,205,574	₩ 17,302,020,185
Cost of sales	10,28,37,47	20,248,178,434	16,935,580,632
Gross profit		1,048,027,140	366,439,553
Selling general and administrative expenses	19,36,37,43	765,766,421	722,000,146
Operating profit (loss)	35	282,260,719	(355,560,593)
Finance income	28,38,43	1,228,756,177	2,166,858,716
Finance costs	28,38,43	2,094,933,829	2,838,396,135
Other non-operating income	28,33,39,43	918,721,117	1,365,441,508
Other non-operating expenses	17,19,28,33,39,43	342,928,841	767,948,164
Share of income (loss) of associates and joint venture	12,13	78,973	(1,490,584)
Loss before income taxes		(8,045,684)	(431,095,252)
Income tax (benefit)	40	(152,975,968)	(135,918,156)
Profit (Loss) for the year	35	144,930,284	(295,177,096)
Other comprehensive income	17,26,28,31,43		
Items that may be subsequently reclassified to profit or loss:			
Loss on valuation of cash flow hedges		(9,397,532)	(430,967)
Exchange differences on translation of foreign operations		(1,647,073)	309,323
Changes in equity of equity method investments		817,822	5,413,959
Total items that may be subsequently reclassified to profit or loss		(10,226,783)	5,292,315
Items that will not be subsequently reclassified to profit or loss:			
Gain (loss) on valuation of financial assets measured at FVOCI		16,443,275	(35,247,611)
Actuarial gains and losses		(169,411,894)	59,557,136
Gain on revaluation of property, plant and equipment		7,447,995	5,306,906
Changes in retained earnings of equity method investments		(250,932)	56,190
Total items that will not be subsequently reclassified to profit or loss		(145,771,556)	29,672,621
Other comprehensive income (loss) for the year, net of tax		(155,998,339)	34,964,936
Total comprehensive loss for the year		₩ (11,068,055)	₩ (260,212,160)
Profit(Loss) attributable to:			
Owners of the Parent Company		₩ 221,711,002	₩ (216,949,612)
Non-controlling interests		(76,780,718)	(78,227,484)
		144,930,284	(295,177,096)
Total comprehensive loss attributable to:			
Owners of the Parent Company		103,218,375	(202,696,442)
Non-controlling interests		(114,286,430)	(57,515,718)
		₩ (11,068,055)	₩ (260,212,160)
Profit (Loss) per share attributable to owners for the Parent Company			
Basic Earnings (loss) per share (in won)	41	₩ 3,135	₩ (3,068)

See accompanying notes to the consolidated financial statements.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Consolidated Statements of Changes in Equity
For the years ended December 31, 2023 and 2022

(In thousands of won)

	Common stock	Capital surplus	Capital adjustments	Accumulated other comprehensive income	Retained earnings	Non-controlling interests	Total equity
Balance at January 1, 2022	₩ 353,865,580	2,400,507,228	(8,697,362,643)	1,332,378,580	14,467,170,337	2,557,196,222	12,413,755,304
Total comprehensive income (loss) for the period:							
Loss for the year	-	-	-	-	(216,949,612)	(78,227,484)	(295,177,096)
Changes in fair value of financial assets measured at FVOCI	-	-	-	(35,771,142)	-	523,531	(35,247,611)
Effective portion of changes in fair value of cash flow hedges	-	-	-	(455,276)	-	24,309	(430,967)
Exchange differences on translating foreign operations	-	-	-	(3,635,689)	-	3,945,012	309,323
Land revaluation surplus	-	-	-	4,787,213	-	519,693	5,306,906
Changes in equity of equity method investments	-	-	-	5,431,231	-	(17,272)	5,413,959
Actuarial gains and losses	-	-	-	-	43,840,643	15,716,493	59,557,136
Changes in retained earnings of equity method investments	-	-	-	-	56,190	-	56,190
Transactions with owners of the Group, recognized directly in equity:							
Dividends of subsidiaries	-	-	-	-	-	(2,825,146)	(2,825,146)
Equity transaction within the Group	-	66,998,706	(5,898,888)	-	(43,296)	100,355,290	161,411,812
Reclassification of accumulated other comprehensive income	-	-	-	(6,292,474)	6,292,474	-	-
Balance at December 31, 2022	₩ 353,865,580	2,467,505,934	(8,703,261,531)	1,296,442,443	14,300,366,736	2,597,210,648	12,312,129,810
Balance at January 1, 2023	₩ 353,865,580	2,467,505,934	(8,703,261,531)	1,296,442,443	14,300,366,736	2,597,210,648	12,312,129,810
Total comprehensive income (loss) for the period:							
Profit for the year	-	-	-	-	221,711,002	(76,780,718)	144,930,284
Changes in fair value of financial assets measured at FVOCI	-	-	-	16,757,124	-	(313,849)	16,443,275
Effective portion of changes in fair value of cash flow hedges	-	-	-	(7,164,940)	-	(2,232,592)	(9,397,532)
Exchange differences on translating foreign operations	-	-	-	(2,030,655)	-	383,582	(1,647,073)
Land revaluation surplus	-	-	-	3,551,465	-	3,896,530	7,447,995
Changes in equity of equity method investments	-	-	-	827,071	-	(9,249)	817,822
Actuarial gains and losses	-	-	-	-	(130,181,760)	(39,230,134)	(169,411,894)
Changes in retained earnings of equity method investments	-	-	-	-	(250,932)	-	(250,932)
Transactions with owners of the Group, recognized directly in equity:							
Dividends of subsidiaries	-	-	-	-	-	(3,120,000)	(3,120,000)
Equity transaction within the Group	-	(7,811,354)	93,364,317	-	-	(13,391,786)	72,161,177
Reclassification of accumulated other comprehensive income	-	-	-	17,185,286	(17,185,286)	-	-
Balance at December 31, 2023	₩ 353,865,580	2,459,694,580	(8,609,897,214)	1,325,567,794	14,374,459,760	2,466,412,432	12,370,102,932

See accompanying notes to the consolidated financial statements.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Consolidated Statements of Cash Flows
For the years ended December 31, 2023 and 2022

<i>(In thousands of won)</i>	Note	2023	2022
Cash flows from operating activities	42		
Profit (Loss) for the year	₩	144,930,284	₩ (295,177,096)
Adjustments		1,943,850,140	773,405,948
Cash generated from operations		2,088,780,424	478,228,852
Interest received		188,429,376	124,436,788
Interest paid		(177,558,172)	(128,201,638)
Dividends received		6,958,287	6,449,395
Income taxes (paid)		(25,018,990)	(18,667,630)
Net cash provided by operating activities		2,081,590,925	462,245,767
Cash flows from investing activities			
Net decrease (increase) in short-term financial assets		(291,661,339)	(651,602,633)
Decrease in other receivables		8,005,636	9,225
Decrease in investments in associates and joint ventures		-	31,528,667
Decrease in long-term financial assets		9,090,234	1,009,706
Decrease in long-term other receivables		3,619,006	4,949,647
Proceeds from disposal of property, plant and equipment		23,661,829	23,631,045
Proceeds from disposal of intangible assets		-	1,850,000
Proceeds from sale of non-current assets held for sale		-	18,470,560
Government grants received		2,785,096	734,780
Decrease in other non-current assets		-	2,385,480
Changes in scope of consolidation (acquisition of control)		818,673	-
Increase in other receivables		(7,570,232)	-
Increase in investments in associates and joint ventures		(88,163,929)	(23,949,000)
Increase in long-term financial assets		(21,636,426)	(19,422,650)
Increase in long-term other receivables		(23,789,717)	(11,499,010)
Acquisition of property, plant and equipment		(821,953,097)	(666,891,005)
Acquisition of intangible assets		(60,086,662)	(40,508,614)
Increase in other non-current assets		(8,627)	(9,825,000)
Changes in scope of consolidation (loss of control)		-	(341,855)
Net cash used in investing activities		(1,266,889,555)	(1,339,470,657)
Cash flows from financing activities			
Increase in short-term financial liabilities		2,200,828,991	2,146,486,555
Increase in long-term financial liabilities		1,622,610,000	643,948,328
Stock issue cost		(120,000)	-
Increase in non-controlling interests		-	181,326,791
Repayment of short-term financial liabilities		(3,757,090,133)	(3,901,565,317)
Repayment of long-term financial liabilities		(83,881,200)	(24,020,709)
Repayment of lease liabilities		(33,010,085)	(20,620,884)
Repayment of convertible preferred stock		(409,683,299)	-
Dividends on non-controlling interests		(3,120,000)	(2,825,146)
Decrease in non-controlling interests		(21,743,051)	-
Net cash used in financing activities		(485,208,777)	(977,270,382)
Effects of exchange rate changes on cash and cash equivalents		(8,324,494)	(15,749,960)
Net increase (decrease) in cash and cash equivalents		321,168,099	(1,870,245,232)
Cash and cash equivalents at January 1		2,697,222,866	4,567,468,098
Cash and cash equivalents at December 31	₩	3,018,390,965	₩ 2,697,222,866

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

1. Reporting Entity

(1) Description of the Parent company

HD Korea Shipbuilding & Offshore Engineering Co., Ltd. (Formerly Korea Shipbuilding & Offshore Engineering Co., Ltd.) (the “Controlling Company”) was incorporated in 1973, under the Commercial Code of the Republic of Korea. In August 1999, the Controlling Company was listed on the Korea Exchange. As a holding company under Article 8 of the Monopoly Regulation and Fair Trade Act, the controlling Company is engaged in the investment, R&D, and other projects. The Controlling Company’s head office is located in Seongnam-si. As of December 31, 2023, the Group’s major stockholders consist of HD Hyundai Co., Ltd. (35.05%) and National Pension Fund (5.98%).

(2) Consolidated subsidiaries

Subsidiaries as of December 31, 2023 and 2022 are summarized as follows:

Company (*7)	Main business	Location	Fiscal year end	Ownership (%)	
				2023	2022
HD Hyundai Heavy Industries Co., Ltd.	Shipbuilding	Korea	December	78.02	78.02
Hyundai Samho Heavy Industries Co., Ltd.	Shipbuilding	Korea	December	96.58	80.54
Hyundai Mipo Dockyard Co., Ltd. (*1)	Shipbuilding	Korea	December	42.40	42.40
HD Hyundai E&T Co., Ltd. (*2)	Other engineering services	Korea	December	100.00	100.00
HD Ulsan Hyundai Football Club Co.,Ltd..	Football club	Korea	December	100.00	100.00
	Maintenance services of business				
HD Hyundai Heavy Industries Mos Co., Ltd. (*2,6)	facilities	Korea	December	100.00	100.00
HD Hyundai Energy Solutions Co., Ltd.	Solar photovoltaic and renewable energy	Korea	December	53.57	53.57
	Manufacture of internal combustion				
HD Hyundai Engine Company Ltd. (*2,3)	engine	Korea	December	100.00	100.00
Seamarq service Co., Ltd. (*5)	Hotel management services	Korea	December	100.00	-
Hyundai Vietnam Shipbuilding Co., Ltd. (*2)	Shipbuilding	Vietnam	December	65.00	65.00
Hyundai Transformers And Engineering India Private Limited (*4)	Sale and manufacture of transformers	India	March	-	100.00
Hyundai Heavy Industries Miraflores Power Plant Inc.	Manufacturing	Panama	December	100.00	100.00
HHI Mauritius Limited	Manufacturing	Mauritius	December	100.00	100.00
Hyundai Arabia Company L.L.C	Industrial plant construction	Saudi Arabia	December	100.00	100.00
Hyundai Samho Heavy Industries Panama, Inc.	Civil engineering	Panama	December	100.00	100.00
Hyundai Energy Solutions America, Inc. (*2)	Sale of solar photovoltaic module	USA	December	100.00	100.00
Hyundai Heavy Industries Technology Center India Private Limited	Research and development	India	March	100.00	100.00
Pontos Investment LLC	Investing	USA	December	100.00	100.00
HD Hyundai Europe Research and Development Center GmbH (*5)	Research and development industry	Germany	December	100.00	-
Hyundai Heavy Industries Argentina S.R.L (*2,5)	Construction	Argentina	December	99.98	-

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

1. Reporting Entity, Continued

(2) Consolidated subsidiaries, continued

- (*1) Although the ownership interest in Hyundai Mipo Dockyard Co., Ltd. was less than a majority, the remaining shareholders were widely dispersed into small shareholders, and in the past general meetings of shareholder, the majority of voting rights in the decision-making process were judged to be in control, considering the circumstances in which the controlling company's share alone was able to exercise the majority of voting rights in the decision-making process.
- (*2) The percentage of ownership includes indirect ownership.
- (*3) The Group sold its stake to HD Hyundai Heavy Industries Co., Ltd., for the year ended December 31, 2022 (See Note 33).
- (*4) Hyundai Transformers And Engineering India Private Limited closed liquidation procedures for the year ended December 31, 2023.
- (*5) It was newly established and acquired for the year ended December 31, 2023.
- (*6) The controlling Company transferred its shares to HD Hyundai Heavy Industries Co., Ltd. For the year ended December 31, 2023 (See Note 33).
- (*7) A number of affiliates were renamed in March 2023.

Former company name	New company name
Korea Shipbuilding & Offshore Engineering Co., Ltd.	HD Korea Shipbuilding & Offshore Engineering Co., Ltd.
Hyundai Heavy Industries Co., Ltd.	HD Hyundai Heavy Industries Co., Ltd.
Hyundai Construction Equipment Co., Ltd.	HD Hyundai Construction Equipment Co., Ltd.
Hyundai Energy Solutions Co., Ltd.	HD Hyundai Energy Solutions Co., Ltd.
Hyundai Doosan Infracore Co., Ltd.	HD Hyundai Infracore Co., Ltd.
Hyundai Electric & Energy Systems Co., Ltd.	HD Hyundai Electric & Energy Systems Co., Ltd.
Hyundai E&T Co., Ltd.	HD Hyundai E&T Co., Ltd.
Hyundai Engine Company Ltd.	HD Hyundai Engine Company Ltd.
Hyundai Cosmo Petrochemical Co., Ltd.	HD Hyundai Cosmo Petrochemical Co., Ltd.
Hyundai Oilbank Co., Ltd.	HD Hyundai Oilbank Co., Ltd.
Hyundai and Shell Base Oil Co., Ltd.	HD Hyundai and Shell Base Oil Co., Ltd.
Hyundai Chemical Co., Ltd.	HD Hyundai Chemical Co., Ltd.
Hyundai Future Partners Co., Ltd.	HD Hyundai Future Partners Co., Ltd.
Hyundai OCI Co., Ltd.	HD Hyundai OCI Co., Ltd.
Hyundai Heavy Industries Mos Co., Ltd.	HD Heavy Industries Mos Co., Ltd.
Hyundai Global Service Co., Ltd.	HD Hyundai Global Service Co., Ltd.
Ulsan Hyundai Football Club Co., Ltd.	HD Ulsan Hyundai Football Club Co., Ltd.
Hyundai Logistics & Solutions Co., Ltd.	HD Hyundai Logistics & Solutions Co., Ltd.
Hyundai Genuine Co., Ltd.	HD Hyundai Xite Solution Co., Ltd.
Hyundai Robotics Co., Ltd.	HD Hyundai Robotics Co., Ltd.
Hyundai E&F Co., Ltd.	HD Hyundai E&F Co., Ltd.
Hyundai Global Service Tech Co., Ltd.	HD Hyundai Global Service Tech Co., Ltd.
Hyundai Energy Solutions America, Inc.	HD Hyundai Energy Solutions America, Inc.
Hyundai Heavy Industries Technology Center India Private Limited	HD Hyundai Technology Center India Private Limited

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

1. Reporting Entity, Continued

(3) Changes in scope of consolidation

- ① The subsidiaries newly included in the consolidated financial statements for the year ended December 31, 2023 are as follows:

The subsidiaries	Reasons
Seamarq Service Co., Ltd. HD Hyundai Europe Research and Development Center GmbH Hyundai Heavy Industries Argentina S.R.L	New establishment New acquisition

- ② The current status of subsidiaries excluded from the preparation of consolidated financial statements for the year ended December 31, 2023 is as follows:

The subsidiaries	Reasons
Hyundai Transformers And Engineering India Private Limited. Ltd.	Liquidation

(4) Condensed financial information of consolidated subsidiaries.

- ① Condensed financial information of significant consolidated subsidiaries as of and for the year ended December 31, 2023 is summarized as follows:

(In millions of won)

Company	Assets	Liabilities	Equity	Sales	Profit	Total comprehensive income (loss)
HD Hyundai Heavy Industries Co., Ltd.	₩ 17,124,174	11,915,188	5,208,986	11,957,983	21,329	(83,445)
Hyundai Samho Heavy Industries Co., Ltd.	7,457,336	5,625,561	1,831,775	5,958,697	211,165	176,016
Hyundai Mipo Dockyard Co., Ltd.	4,932,725	2,978,465	1,954,260	4,001,292	(145,185)	(166,885)
HD Hyundai Energy Solutions Co., Ltd.	499,159	129,192	369,967	522,030	(7,954)	(8,388)
Hyundai Vietnam Shipbuilding Co., Ltd.	668,413	568,206	100,207	717,208	8,859	10,318

- ② Condensed financial information of significant consolidated subsidiaries as of and for the year ended December 31, 2022 is summarized as follows:

(In millions of won)

Company	Assets	Liabilities	Equity	Sales	Profit	Total comprehensive income (loss)
Hyundai Heavy Industries Co., Ltd.	₩ 16,283,095	10,992,977	5,290,118	9,065,348	(350,076)	(304,015)
Hyundai Samho Heavy Industries Co., Ltd.	5,588,328	3,927,364	1,660,964	4,646,421	2,892	(2,309)
Hyundai Mipo Dockyard Co., Ltd.	4,780,699	2,659,554	2,121,145	3,695,798	(41,531)	(35,051)
Hyundai Energy Solutions Co., Ltd.	654,806	269,731	385,075	1,022,975	64,391	64,964
Hyundai Vietnam Shipbuilding Co., Ltd.	574,659	484,769	89,890	702,773	1,810	7,680

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

1. Reporting Entity, Continued

(5) Non-controlling interests

The information about non-controlling interests of significant consolidated subsidiaries as of and for the years ended December 31, 2023 and 2022 is summarized as follows:

(In millions of won)

	HD Hyundai Heavy Industries Co., Ltd.		Hyundai Mipo Dockyard Co., Ltd. (*)	
	2023	2022	2023	2022
Ownership of non-controlling interests	21.98%	21.98%	57.60%	57.60%
Net assets	₩ 5,208,986	5,290,118	₩ 1,954,260	2,121,145
Book value of non-controlling interests	1,178,006	1,205,226	1,125,654	1,221,780
Net income	21,329	(350,076)	(145,185)	(41,531)
The profit attributable to non-controlling interests	4,688	(72,870)	(83,627)	(23,895)
Cash flows from operating activities	180,633	65,689	(493,496)	155,349
Cash flows from investing activities	(499,009)	(523,978)	(73,095)	(4,997)
Cash flows from financing activities	502,796	(941,812)	408,385	(91,202)
Effects of changes in foreign exchange rates on cash and cash equivalents	(7,475)	(13,775)	(106)	-
Net increase (decrease) in cash and cash equivalents	176,945	(1,413,876)	(158,312)	59,150
Dividends paid to non-controlling interests	-	-	-	-

(*) Ownership of non-controlling interests considering the treasury stocks of Hyundai Mipo Dockyard Co., Ltd. is 57.54% as of December 31, 2023 and 2022, respectively.

2. Basis of Preparation

The consolidated financial statements of HD Korea Shipbuilding & Offshore Engineering Co., Ltd. and its subsidiaries (the "Group") have been prepared in accordance with Korean International Financial Reporting Standards ("K-IFRS"), as prescribed in the Act on External Audits of Stock Companies in the Republic of Korea.

The consolidated financial statements were authorized for issue by the Board of Directors on February 6, 2024 and submitted for approval to the shareholders' meeting to be held on March 29, 2024.

(1) Basis of measurement

The consolidated financial statements have been prepared on a historical cost basis, except for the following material items in the consolidated statements of financial position:

- Derivative financial instruments measured at fair value;
- Financial assets measured at fair value through profit or loss ("FVTPL");
- Financial assets measured at fair value through other comprehensive income ("FVOCI");
- Land measured at fair value
- Liabilities for defined benefit plans recognized at the net of the total present value of defined benefit obligations less the fair value of plan assets

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

2. Basis of Preparation, Continued

(2) Functional and presentation currency

These consolidated financial statements are presented in Korean won, which is the Group's functional currency and the currency of the primary economic environment in which the Group operates.

(3) Use of estimates and judgments

The preparation of the consolidated financial statements in conformity with K-IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumption are reviewed on an ongoing basis and are consistent with the Group's risk management and climate-related commitments where appropriate. Revisions to estimates are recognised prospectively.

(i) Judgments

Information about critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in the consolidated financial statements is included in the following notes:

- Note 1 – Scope of Consolidation: Whether the Group has de facto control over an investee;
- Note 12 – Investments in Associates: Whether the Group has significant influence over an associate
- Notes 13,14 – Classification of joint ventures
- Note 16 – Classification of investment property
- Note 18 – Lease term: whether the Group is reasonably certain to exercise extension options
- Note 34 – Revenue

The financial impact of the armed conflict in Ukraine, started in February 2022, and subsequent international sanctions against Russia cannot be estimated reasonably.

(ii) Uncertainties of assumptions and estimation

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year are included in the following notes:

- Note 5 – Measurement of account receivable and contract asset's expected credit loss
- Notes 11, 17, 19 – Impairment test: key assumptions underlying recoverable amounts, including the recoverability of property, plant and equipment and intangible assets;
- Note 26 – Measurement of defined benefit obligations: key actual assumptions;
- Notes 27, 45, 46 – Recognition and measurement of provisions and contingencies: key assumptions about the likelihood and magnitude of an outflow of resources;
- Note 34 – Revenue recognition in proportion to stage of completion, the estimates of total contract costs; and
- Note 40 – Measurement of deferred tax

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

2. Basis of Preparation, Continued

(3) Use of estimates and judgments, continued

(iii) Measurement of fair value

A number of the Group's accounting policies and disclosures require the measurement of fair value, for both financial and non-financial assets and liabilities. The Group has an established control framework with respect to the measurement of fair values. This includes a valuation team that has overall responsibility for overseeing all significant fair value measurements, including Level 3 fair values, and reports directly to the CFO.

The valuation team regularly reviews significant unobservable inputs and valuation adjustments. If third party information, such as broker quotes or pricing services, is used to measure fair values, then the valuation team assesses the evidence obtained from the third parties to support the conclusion that such valuations meet the requirements of K-IFRS, including the level in the fair value hierarchy in which such valuations should be classified.

Significant valuation issues are reported to the Group's Audit Committee.

When measuring the fair value of an asset or a liability, the Group uses observable market data as far as possible. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as explained note 44.

If the inputs used to measure the fair value of an asset or a liability might be categorized in different levels of the fair value hierarchy, then the fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement. The Group recognizes transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

Further information about the assumptions made in measuring fair values is included in the following notes:

- Note 15 – Financial assets measured at fair value;
- Note 16 – Investment property;
- Note 17 – Property, plant, and equipment; and
- Note 44 – Financial instruments.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

3. Changes In Accounting Policies

The Group has applied the following standards and interpretations for the first time for their annual reporting period commencing January 1, 2023. The Group has not early adopted any standard, interpretation or amendment that has been issued but is not yet effective.

(1) Deferred tax related to assets and liabilities arising from a single transaction

The Group has adopted Deferred Tax related to Assets and Liabilities arising from a Single Transaction amendments (K-IFRS No.1012 'income tax') from 1 January 2023. The amendments narrow the scope of the initial recognition exemption to exclude transactions that give rise to equal and offsetting temporary differences (e.g. leases and decommissioning liabilities). For leases and decommissioning liabilities, an entity is required to recognise the associated deferred tax assets and liabilities from the beginning of the earliest comparative period presented, with any cumulative effect recognised as an adjustment to retained earnings or other components of equity at that date. For all other transactions, an entity applies the amendments to transactions that occur on or after the beginning of the earliest period presented.

Following the amendments, the Group has recognised a separate deferred tax asset in relation to its lease liabilities and a deferred tax liability in relation to its right-of-use assets. However, there was no impact on the statement of financial position because the balances qualify for offset under paragraph 74 of K-IFRS No. 1012 'income tax'. There was also no impact on the opening retained earnings as at 1 January 2022 as a result of the change.

(2) Global minimum top-up tax

The Group has adopted International Tax Reform – Pillar Two Model Rules amendments (K-IFRS No.1012 'income tax') from 1 January 2023. The amendments provide a temporary mandatory exception from deferred tax accounting for the top-up tax, which is effective immediately, and require new disclosures about the Pillar Two exposure.

The global minimum top-up tax is a system where a multinational group's constituent companies with sales revenue exceeding €750 million in at least 2 of the previous 4 fiscal years have an effective tax rate lower than 15%. In such cases, the excess amount is paid to the tax authorities of the country where the controlling company, meeting specific conditions, is located.

South Korea enacted tax laws related to the global minimum top-up tax in 2023, which must be applied starting from the year commencing after January 1, 2024. Based on the financial statements as of December 31, 2023, it is anticipated that there will be no companies subject to the global minimum top-up tax as per the transition period exemption under Article 80 of the International Tax Adjustment Law. Since South Korea's tax laws related to the global minimum top-up tax will be enforced from January 1, 2024, there are no corporate tax effects for the current year.

The controlling Company applies the temporary/mandatory deferral of deferred tax accounting treatment for Pillar Two taxes. When Pillar Two taxes are incurred, they are recognized as current year taxes.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

3. Changes In Accounting Policies, Continued

(3) Material accounting policy information

The Group also adopted Disclosure of Accounting Policies (Amendments to K-IFRS No. 1001 'Presentation of Financial Statements') from 1 January 2023. Although the amendments did not result in any changes to the accounting policies themselves, they impacted the accounting policy information disclosed in the financial statements.

The amendments require the disclosure of 'material', rather than 'significant', accounting policies. The amendments also provide guidance on the application of materiality to disclosure of accounting policies, assisting entities to provide useful, entity-specific accounting policy information that users need to understand other information in the financial statements.

Management reviewed the accounting policies and made updates to the information disclosed in Note 4 Material accounting policies (2022: Significant accounting policies) in certain instances in line with the amendments.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

4. Material Accounting Policies

The Material accounting policies applied by the Group in the preparation of its consolidated financial statements are included below. The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements except for the changes in accounting policies as explained in Note 3.

(1) Operating segments

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Group's other components. All operating segment operating results are reviewed regularly by the Group's chief operating decision maker (CODM) to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available. As discussed in Note 35 the Group has five reportable segments which are the Group's strategic business units. The strategic business units offer different products and services and are managed separately because they require different technology and marketing strategies.

Segment results that are reported to the CEO include items directly attributable to a segment as well as those that can be allocated on a reasonable basis.

(2) Basis of consolidation

1) Non-controlling interests

Non-controlling interests are measured at their proportionate share of the acquiree's identifiable net assets on the acquisition date.

2) Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealized income and expenses arising from intra-group transactions, are eliminated. Unrealized gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Group'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.

3) Acquisitions from entities under common control

The assets and liabilities acquired under business combinations under common control are recognized at the carrying amounts recognized previously in the consolidated financial statements of the ultimate parent. The difference between consideration transferred and carrying amounts of net assets acquired is recognized as part of capital surplus.

(3) Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits with maturities of three months or less from the acquisition date that are subject to an insignificant risk of changes in their fair value and are used by the Group in the management of its short-term commitments.

(4) Inventories

The cost of inventories is based on the moving-average method with the exception of cost of materials-in-transit, which is determined on the specific identification method. Cost of inventories includes expenditures incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition.

4. Material Accounting Policies, Continued

(5) Non-derivative financial assets

1) Recognition and initial measurement

Trade receivables and debt securities issued are initially recognized when they are originated. All other financial assets and financial liabilities are initially recognized when the Group becomes a party to the contractual provisions of the instrument.

2) Classification and subsequent measurement

(i) Financial assets – Business model assessment

The Group makes an assessment of the objective of the business model in which a financial asset is held at portfolio level because this best reflects the way the business is managed and information is provided to management. The information considered includes:

- The stated policies and objectives for the portfolio and the operation of those policies in practice. These include whether management's strategy focuses on earning contractual interest income, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of any related liabilities or expected cash outflows or realizing cash flows through the sale of the assets;
- How the performance of the portfolio is evaluated and reported to the Group's management;
- The risks that affect the performance of business model (and the financial assets held within that business model) and how those risks are managed;
- How managers of the business are compensated – e.g. whether compensation is based on the fair value of the assets managed or the contractual cash flows collected; and
- The frequency, volume and timing of sales of financial assets in prior periods, the reasons for such sales and expectations about future sales activity.

Transfers of financial assets to third parties in transactions that do not qualify for derecognition are not considered sales for this purpose, consistent with the Group's continuing recognition of the assets.

Financial assets that are held for trading or are managed and whose performance is evaluated on a fair value are measured at FVTPL.

(ii) Financial assets – Assessment whether contractual cash flows are solely payments of principal and interest

In assessing whether the contractual cash flows are solely payments of principal and interest, the Group considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition.

In making this assessment, the Group considers:

- Contingent events that would change the amount or timing of cash flow;
- Terms that may adjust the contractual coupon rate, including variable-rate features;
- Prepayment and extension features; and
- Terms that limit the Group's claim to cash flows from specified assets

3) Derecognition

The Group derecognizes a financial asset when the contractual rights to the cash flow from financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

4. Material Accounting Policies, Continued

(5) Non-derivative financial assets, Continued

4) Offsetting

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Group currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realize the asset and settle the liability simultaneously.

(6) Derivative financial instruments

Derivatives are initially recognized at fair value. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are accounted for as described below.

1) Hedge accounting

The Group holds forward exchange contracts, interest rate swaps, product forward and other derivative contracts to manage interest rate risk, foreign exchange risk and oil price risk. The Group designated derivatives as hedging instruments to hedge the risk of changes in the fair value of assets, liabilities or firm commitments (a fair value hedge) and foreign currency risk of highly probable forecasted transactions or firm commitments (a cash flow hedge).

On initial designation of the hedge, the Group formally documents the relationship between the hedging instrument(s) and hedged item(s), including the risk management objectives and strategy in undertaking the hedge transaction, together with the methods that will be used to assess the effectiveness of the hedging relationship.

(i) Fair value hedge

Changes in the fair value of a derivative hedging instrument designated as a fair value hedge are recognized in profit or loss. The gain or loss from remeasuring the hedging instrument at fair value for a derivative hedging instrument and the gain or loss on the hedged item attributable to the hedged risk are recognized in profit or loss in the same line item of the consolidated statement of comprehensive income.

The Group discontinues fair value hedge accounting if the hedging instrument expires or is sold, terminated or exercised, or if the hedge no longer meets the criteria for hedge accounting. Any adjustment arising from gain or loss on the hedged item attributable to the hedged risk is amortized to profit or loss from the date the hedge accounting is discontinued.

(ii) Cash flow hedge

When a derivative is designated to hedge the variability in cash flows attributable to a particular risk associated with a recognized asset or liability or a highly probable forecasted transaction that could affect profit or loss, the effective portion of changes in the fair value of the derivative is recognized in other comprehensive income, net of tax, and presented in the hedging reserve in equity. Any ineffective portion of changes in the fair value of the derivative is recognized immediately in profit or loss.

4. Material Accounting Policies, Continued

(6) Derivative financial instruments, Continued

2) Embedded derivative

If an embedded derivative is not closely related to the economic characteristics and risks of the host contract and a separate instrument with the same terms would meet the definition of a derivative, the embedded derivative is accounted for separately from the host contract as long as the combined financial instrument is not measured at fair value through profit or loss. Changes in the fair value of the separated embedded derivative are recognized in profit or loss. If the hedge no longer meets the criteria for hedge accounting or the hedging instrument is sold, expire, is terminated or is exercised, then hedge accounting is discontinued prospectively. For all other hedged forecast transactions, the amount accumulated in the hedging reserve and the cost of hedging reserve is reclassified to profit or loss in the same period or periods during which the hedged expected future cash flows affect profit or loss.

If the hedged future cash flows no longer expected to occur, then the amounts that have been accumulated in the hedging reserve and the cost of hedging reserve are immediately reclassified to profit or loss.

3) Other derivative financial instruments

Changes in the fair value of other derivative financial instrument not designated as a hedging instrument are recognized immediately in profit or loss.

(7) Impairment of financial assets

1) Financial instruments and contract assets

The Group recognized loss allowances for expected credit losses ("ECL") on;

- Financial assets measured at amortized cost;
- Contract assets defined in K-IFRS No.1115; and
- Debt investments measured at FVOCI

The Group measures loss allowances at an amount equal to lifetime ECLs, except for the following, which are measured at 12-month ECLs;

- Debt securities that are determined to have low credit risk at the reporting date; and
- Other debt securities and bank balances for which credit risk (i.e. the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition

Loss allowances for trade receivables and contract assets are always measured at an amount equal to lifetime ECLs.

The Group considers a financial asset to be in default when:

- the borrower is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realizing security (if an is held); or
- past due of the financial asset is significantly increased

4. Material Accounting Policies, Continued

(7) Impairment of financial assets, Continued

2) Credit-impaired financial assets

At each reporting date, the Group assesses whether financial assets carried at amortized cost and debt securities at FVOCI are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable data:

- Significant financial difficulty of the borrower or issuer;
- A breach of contract such as a default or being past due;
- The restructuring of a loan or advance by the Group on terms that the Group would not consider otherwise;
- It is probable that the borrower will enter bankruptcy or other financial reorganization; or
- The disappearance of an active market for a security because of financial difficulties.

3) Presentation of allowance for ECL in the statement of financial position

Loss allowances for financial assets measured at amortized cost are deducted from the gross carrying amount of the assets. For debt securities at FVOCI, the loss allowance is charged to profit or loss and is recognized in OCI. In view of the importance of impairment losses related to trade receivables and other receivables, including contract assets, they are presented in 'selling and administrative expenses' or 'other non-operating expenses'. In view of the importance of other financial assets, impairment losses are not presented separately in the consolidated statement of comprehensive income (loss) but are presented in 'finance costs'.

4) Write-off

The gross carrying amount of a financial asset is written off when the Group has no reasonable expectation of recovering a financial asset in its entirety or a portion thereof. The Group expects no significant recovery from the amount written off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

4. Material Accounting Policies, Continued

(8) Property, plant and equipment

Subsequent to initial recognition, an item of property, plant and equipment excluding land is carried at its cost less any accumulated depreciation and any accumulated impairment losses. Subsequent to initial recognition land that fair value can be measured reliably is carried at its fair value at the date of revaluation less any accumulated impairment losses. Revaluations are made with sufficient regularity to ensure that the carrying amount does not differ materially from that which would be determined using fair value at the end of the reporting period.

Property, plant and equipment, except for land, are depreciated on a straight-line basis over estimated useful lives that appropriately reflect the pattern in which the asset's future economic benefits are expected to be consumed. A component that is significant compared to the total cost of property, plant and equipment is depreciated over its separate useful life.

The useful lives of property, plant and equipment are as follows:

	Useful lives (years)
Buildings	25~50
Structures	20~45
Heavy machinery	8~19
Machinery	5~45
Ships	15,25
Vehicles	5~14
Tools, furniture and fixtures	3~20
Other property, plant and equipment	10

(9) Intangible assets

Intangible assets are measured initially at cost and, subsequently, are carried at cost less accumulated amortization and accumulated impairment losses.

Amortization of intangible assets except for goodwill is calculated on a straight-line basis over the estimated useful lives of intangible assets from the date that they are available for use. The residual value of intangible assets is zero. However, as there are no foreseeable limits to the periods over which club memberships are expected to be available for use, this intangible asset is determined as having indefinite useful lives and not amortized.

	Useful lives (years)
Capitalized development costs	5
Industrial property right	4~10
Other intangible assets	3~50
Membership, trademark right, goodwill	Indefinite

(10) Government grants

Government grants whose primary condition is that the Group purchase, construct or otherwise acquire long-term assets are deferred and recognized as deduction to depreciation expense over the useful life of the asset.

Government grants which are intended to compensate the Group for expenses incurred are recognized as other income (government grants) in profit or loss over the periods in which the Group recognizes the related costs as expenses.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

4. Material Accounting Policies, Continued

(11) Investment property

Investment property is initially measured at its cost. Transaction costs are included in the initial measurement. Subsequently, investment property is carried at depreciated cost less any accumulated impairment losses.

The useful lives of property investment are as follows:

	<u>Useful lives (years)</u>
Buildings	25~50

(12) Lease

1) As a lessee

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognizes lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

(i) Right-of-use assets

The Group recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets.

(ii) Lease liabilities

At the commencement date of the lease, the Group recognizes lease liabilities measured at the present value of lease payments to be made over the lease term.

Variable lease payments that do not depend on an index or a rate are recognized as expenses (unless they are incurred to produce inventories) in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

(iii) Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of machinery and equipment (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered to be low value. Lease payments on short-term leases and leases of low-value assets are recognized as expense on a straight-line basis over the lease term.

4. Material Accounting Policies, Continued

(12) Lease, Continued

2) As a lessor

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. Rental income arising is accounted for on a straight-line basis over the lease terms and is included in revenue in the consolidated statement of comprehensive income (loss) due to its operating nature. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized over the lease term on the same basis as rental income. Contingent rents are recognized as revenue in the period in which they are earned.

(13) Contract assets and contract liabilities

If the Group performs the transfer of goods or services to the customer before the customer pays the consideration or before the due date, the Group presents the contract as a contract asset, except as a receivable. Contract assets are rights to receive consideration for goods or services transferred by the Group to the customer.

If the customer pays before the Group transfers goods or services to the customer, or the Group has an unconditional right to receive consideration (i.e. the receivable), the Group presents the contract as a contract liability either when it is paid or when it is due to be paid (early both). A contract liability is the Group's obligation to transfer goods or services to the customer in accordance with the consideration received from the customer or the amount of consideration to which the Group has the right to receive the payment. The Group offsets the contract assets and contract liabilities arising from one contract and presents them in the consolidated statement of financial position on a net basis.

On the other hand, expected losses in contracts (i.e. onerous contracts) that exceed the economic benefits expected to be received by the contract are recognized as (liquidity) provisions.

(14) Borrowing costs

The Group capitalizes borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. In addition, since the contract for the construction of a ship under construction does not meet the definition of a qualifying asset, finance costs are treated as finance expenses. In addition, there are no capitalized borrowing costs that have been capitalized for the years ended December 31, 2023 and 2022.

4. Material Accounting Policies, Continued

(15) Non-derivative financial liabilities

The Group classifies non-derivative financial liabilities into financial liabilities at fair value through profit or loss or other financial liabilities in accordance with the substance of the contractual arrangement and the definitions of financial liabilities. The Group recognizes financial liabilities in the consolidated statement of financial position when the Group becomes a party to the contractual provisions of the financial liability.

(16) Employee benefits

1) Retirement benefits: defined benefit plans

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method.

2) Termination benefits

If the Group makes an explicit commitment, without the practicable possibility of withdrawal, to dismiss an employee before the normal retirement date, or if the Group offers an employee a termination benefit for honorable retirement and the employee voluntarily accepts the offer, the termination benefit is payable in the current term, being recognized as profit or loss. When the voluntary retirement is offered to employees, the termination benefits are measured and recognized in profit or loss based on the number of employees expected to accept the offer. If termination benefits are due 12 months after the reporting period, they are discounted to their present value.

(17) Provisions

1) Provision for construction warranty

The Group generally provides a warranty within the contract on rectification of defects after the contract's completion and accrues the rectification expense on defects based on actual claims history as provision for construction warranty.

2) Provision for product warranty

The Group generally provides a warranty relating to product defects for a specified period of time after sales and accrues estimated costs as provision for product warranty, which may occur due to product liability suits.

3) Provision for construction losses

A provision for onerous contracts is measured at the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract, if unavoidable costs arising from the contractual obligations exceed the benefits expected to arise from the contract. Before a provision is established, the Group recognizes any impairment loss on the assets associated with that contract.

4) Other provision

In accordance with the Group's published environmental policy and applicable legal requirements, a provision for site restoration is recognized.

A provision is used only for expenditures for which the provision was originally recognized.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

4. Material Accounting Policies, Continued

(18) Emissions rights

The Group accounts for greenhouse gases emission right and the relevant liability as below pursuant to the Act on Allocation and *Trading of Greenhouse Gas Emission*.

1) Greenhouse Gases Emission Right

Greenhouse Gases Emission Right consists of emission allowances which are allocated from the government free of charge or purchased from the market. The cost includes any directly attributable costs incurred during the normal course of business.

Emission rights held for the purpose of performing the obligation are classified as an intangible asset and are initially measured at cost and after initial recognition, are carried at cost less accumulated impairment losses. Emission rights held for short-swing profits are classified as current asset and are measured at fair value with any changes in fair value recognized through profit or loss in the respective reporting period.

The Group derecognizes an emission right asset when the emission allowance is unusable, disposed or submitted to government in which the future economic benefits are no longer expected to be probable.

2) Emission liability

Emission liability is a present obligation of submitting emission rights to the government with regard to emission of greenhouse gas. Emission liability is recognized when there is a high possibility of outflows of resources in performing the obligation and the costs required to perform the obligation are reliably estimable. Emission liability is an amount of estimated obligations for emission rights to be submitted to the government for the performing period. The emission liability is measured based on the expected quantity of emission for the performing period in excess of emission allowance in possession and the unit price for such emission rights in the market at of the end of the reporting period.

(19) Foreign currency

1) Foreign currency transactions

Foreign currency differences arising on retranslation are recognized in profit or loss, except for differences arising on the retranslation of available-for-sale equity instruments, a financial liability designated as a hedge of the net investment in a foreign operation, or qualifying cash flow hedges, which are recognized in other comprehensive income. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

2) Foreign operations

The assets and liabilities of foreign operations, whose functional currency is not the currency of a hyperinflationary economy, are translated to the presentation currency using the exchange rates at the reporting date. The income and expenses of foreign operations are translated to the functional currency using the exchange rates at the dates of the transaction. Foreign currency differences are recognized in other comprehensive income.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

4. Material Accounting Policies, Continued

(20) Revenue from contracts with customers

Under K-IFRS No. 1115, revenue is measured on the basis of the consideration promised in the contract with the customer. The Group recognized revenue when a customer controls the goods or services. Control is transferred at a point in time or over time and it requires judgment.

- Determination of the transaction price

The Group considers if significant financial benefits are provided to the customer or the Group in relation to the prepayment received from the customer and reflects the effect of the time value of money to the transaction price. As a practical expedient, the Group does need to adjust the promised amount of consideration for the effects of a significant financing component if the entity expects, at contract inception, that the period between when the Group transfers a promised good or service to a customer and when the customer pays for that good or service will be one year or less.

- Identification of performance obligations

The Group shall assess the goods or services promised in a contract with a customer and shall identify as a performance obligation each promise to transfer a good or service that is distinct to the customer. If a partial change in an order is not distinguished by the context of the contract, the performance obligation is not separated.

1) Nature of goods or services and timing of performance obligations

The Group has the shipbuilding segment, which builds merchant ships and special vessels, the offshore, industrial plant and engineering segment that manufactures and installs offshore oil and gas fields, the engine segment that produces ships' engines and power generation facilities, and the green energy segment, which manufactures, sells and installs renewable energy-related products such as solar power modules.

The shipbuilding segment builds and sells ships from the owner of the order and takes at least one year from the date of the contract to the completion of the construction. Due to the nature of the order industry being customized according to the terms presented to the customer, the Group itself has no alternative use, and if the contract is terminated for the customer or other party reasons, it can claim the cost and expected profit it has already entered into and may claim a shortfall after reselling the asset in accordance with the contractual process. Consequently, if the assets that are created by the Group are not for alternative use by the Group itself and the Group has an enforceable right to payment for performance completed to date, the Group recognizes revenue over time in accordance with K-IFRS No. 1115.

If the performance obligation is satisfied over time, the timing of the performance depends on how the Group measures its performance when control of the goods or services is transferred to the customer. If the performance is not measured rationally, the performance is measured within the scope of the incurred cost.

As the shipbuilding segment provides design, raw material purchase, production, and commissioning, it is difficult to obtain information for applying calculation method without incurring excessive cost due to the wide variety of shipbuilding processes. Therefore, the Group determines the timing of satisfaction of performance obligations when the timing of costs incurred because input methods, that recognize revenue on the basis of the Group's inputs to the satisfaction of a performance obligation relative to the total expected inputs to the satisfaction of that performance obligation, can faithfully depict the Group's performance.

4. Material Accounting Policies, Continued

(20) Revenue from contracts with customers, continued

1) Nature of goods or services and timing of performance obligations, continued

The offshore, industrial plant and engineering segment is similar to the shipbuilding segment, but the facility specifications required are complicated and extensive depending on the installation area and the production conditions of crude oil or gas, so the construction and construction period are long and the construction amount is very large. Because of the nature of the customized order industry under the conditions presented to the customer, the Group itself has no alternative use, and if it terminates the contract for reasons of the customer or other party, it can claim the costs and expected profits it has already entered into for the completion of the contract, and recognizes revenue over time in accordance with K-IFRS No. 1115.

If the performance obligation is satisfied over time, the timing of the performance depends on how the Group measures its performance when control of the goods or services is transferred to the customer. If the performance is not measured rationally, the performance is measured within the scope of the incurred cost. The offshore, industrial plant and engineering segment is a contract that provides design and raw materials purchase, production, and commissioning, and since the construction process is very diverse, it is difficult to obtain information to apply the calculation method without incurring excessive cost. Therefore, the timing of the cost injection is determined as the timing of implementation, as the input method can faithfully represent the performance of the Group.

The engine segment supplies the ship's propulsion/generation engines as its main products. For a typical contract, an entity recognizes revenue as it is satisfied at a point in time that is not a performance obligation satisfied over time.

The timing of satisfaction of performance obligations is when the assets held by the Group are transferred to and controlled by the customer, and the Group determines the point in time by indicators of the transfer of control, that include right to payment, legal title, physical possession, transfer of the significant risks and rewards, and the customer's acceptance of an asset. Generally, exports are transferred under the conditions like CIF, FOB and domestic sales are determined to satisfy performance obligations when the Group transfers physical possession of the asset to the customer.

The green energy segment manufactures and sells products such as solar modules, inverters, and ESS related to renewable energy. The type of sales in the sector is largely classified as a standard product supply agreement consisting of a single performance obligation and a composite component order contract that includes a number of distinct performance obligations that provide various products and services within a single contract.

Because of the nature of the contract being customized according to the terms presented to the customer, the Group recognizes revenue over time in accordance with K-IFRS No.1115 for contracts that state that there is no alternative use in the Group itself and that termination of the contract for the reason of the customer or another party can claim the cost and expected profit that has already been entered for the completion of the contract.

For a typical sales contract, revenue is recognized as a performance obligation satisfied at a point in time that is not a performance obligation satisfied over time, and for a contract that satisfies the performance obligation over time, the timing of the performance is determined in accordance with the method of measuring progress that indicates the performance of the segment when control of the goods or services is transferred to the customer. If the performance is not measured rationally, the performance is measured within the scope of the incurred cost.

4. Material Accounting Policies, Continued

(20) Revenue from contracts with customers, continued

1) Nature of goods or services and timing of performance obligations, continued

The timing of performance obligation fulfillment is when the assets held by the sector are transferred to the customer and are controlled by the customer, and the timing of performance obligation is determined by indicators of the transfer of control of the right to payment, ownership, physical possession, transfer of significant risks and rewards. In general, we believe that exports have met performance obligations at a time when they are physically transferred to the customer, primarily on terms such as CIF, FOB and DDP.

Orders contracts are contracts that provide the delivery, installation, and commissioning of components, and the process is so diverse that it is difficult to obtain information to apply the calculation method without incurring excessive cost. Therefore, the timing of the cost injection is determined as the timing of implementation, as the input method can faithfully represent the performance of the Group.

2) Significant payment terms

The shipbuilding segment is collected by shipbuilding stage, and the collection time for general merchant ships is divided into contracts, Steel cutting, Keel Laying, Launching, Delivery, and in particular, the Heavy Tail method, which collects most of the contract price at the time of delivery of ships.

Special vessels will be charged up to 6 months for planned funds up to 180 days from the date of claim under the Rules for Start-up and Intermediate payments on the defense industry.

The offshore, industrial plant and engineering segment is charged according to the progress of the construction, including the advance payment, the achievement amount of Milestone, and the performance deposit, and the engine segment is collected separately by the advance payment, middle and balance according to the collection conditions stipulated in the contract.

The green energy segment typically receives payments within 60 to 180 days of the billing date for supply of standard goods, and in the case of installation contracts, the amount is collected according to progress, and in the case of multi-component order contracts, the amount is usually divided into advance payment, middle payment, and balance.

Depending on the terms of payment, a difference between when the Group receives the consideration for the goods or services from the customer and when it expects to transfer the promised goods or services to the customer may result in a significant financing component that adjusts the promised consideration to reflect the effect of the time value of money.

4. Material Accounting Policies, Continued

(20) Revenue from contracts with customers, continued

3) Nature and duration of warranty

The shipbuilding segment typically provides a warranty of 12 months or 24 months depending on type of ship. The offshore, industrial plant and engineering segment provides a separate warranty period based on the nature of each object and the terms of the contract. The engine segment typically provides a warranty period of 24 months after delivery or 12 months after delivery, and the green energy sector provides a warranty of about 12 years after delivery. This is similar to the normal warranty period of the peer group. Usually, the term of warranty granted over a period of time will be transferred to a paid-in AS. The warranty provided is intended to provide assurance that the product complies with the agreed-upon specifications and is not subject to a separate performance obligation.

4) Transaction price calculation method, estimation of variable cost, input variables, information

Although there is no need to estimate the stand-alone selling price for the distribution of the transaction price because there is a single performance obligation for the supply of standard goods in the shipbuilding, offshore, industrial plant and engineering segment and green energy segment, but in the engine machinery segment, separate services such as installation and supervision exist within the contract. And, in the case of contracts for multi-component contracts in the green energy segment, each includes a number of such performance obligation to supply of services within one contract.

If the transaction price is allocated on a stand-alone selling price basis and the stand-alone selling price does not exist in the market, the expected cost of satisfying the performance obligation is predicted and the total contract amount is allocated to the performance obligation separately separated by the expected cost-benefit calculation approach, which adds an appropriate profit to the transaction price.

The consideration receivable from customers may be variable by change order due to design changes and additional work caused by requests from owners of the shipbuilding and the offshore, industrial plant and engineering segment, and delayed compensation due to delay in delivery and fail to achieve specifications. In the case of change order, variable consideration is included in the transaction price only to the extent it is highly probable that a significant revenue reversal will not occur. In the case of delayed compensation, the Group recognizes revenue by deducting the estimated amount incurred by the contract terms from the contract price.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

4. Material Accounting Policies, Continued

(21) Finance income and finance costs

The Group's finance income and finance costs are as follows;

- interest income
- interest expense;
- dividend income;
- the net gain or loss on the disposal of investments in debt securities measured at FVOCI;
- the net gain or loss on financial assets at FVTPL;
- the foreign currency gain or loss on financial assets and financial liabilities;
- impairment loss (and reversals) on investments in debt securities carried at amortized cost or FVOCI; and
- re-measurement gains on the fair value of existing interests in the acquiree in a business combination;
- fair value loss on contingent consideration classified as a financial liability;
- hedge ineffectiveness recognized in profit or loss
- the reclassified net profit or loss previously recognized in other comprehensive income in the cash flow hedge accounting for borrowing liabilities (See Note 28).

Interest income or expense is recognized using the effective interest method. Dividend income is recognized in profit or loss on the date on which the Group's right to receive payment is established.

(22) Corporate income taxes

The controlling Company applies the consolidated tax filing method, treating the controlling Company, its 90% or more domestically controlled subsidiary (hereinafter referred to as the "consolidated subsidiary"), as a consolidated tax group unit for calculating a single tax base and tax amount. The Group assess the realization potential of temporary differences, considering the future taxable income of individual companies and the consolidated group separately. Changes in deferred tax assets (liabilities) are recognized as income tax expense (income), excluding amounts related to items directly debited or credited to equity accounts.

(23) Discontinued operations

A discontinued operation is a component of the Group's business, the operations and cash flows of which can be clearly distinguished from the rest of the Group and which:

- represents a separate major line of business or geographical area of operations;
- is part of a single co-ordinated plan to dispose of a separate major line of business or geographic area of operations;
- or
- is a subsidiary acquired exclusively with a view to resale

When an operation is classified as a discontinued operation, the comparative separate statement of profit or loss and OCI is re-presented as if the operation had been discontinued from the start of the comparative period.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

4. Material Accounting Policies, Continued

(24) New standards and interpretations not yet adopted

The following new standards, interpretations and amendments to existing standards have been published and are not mandatory for the Group for annual periods beginning on January 1, 2023, and the Group has not early adopted them.

- 1) K-IFRS No.1001 'Presentation of Financial Statements' – Classification of Liabilities as Current or Non-Current and Non-current Liabilities with Covenants
The amendments, as issued in 2020 and 2022, aim to clarify the requirements on determining whether a liability is current or non-current, and require new disclosures for non-current liabilities that are subject to future covenants. The amendments apply for annual reporting periods beginning on or after 1 January 2024. The Group is in the process of evaluating the potential impact of the amendment.
- 2) K-IFRS No.1007 'Cash Flows' and K-IFRS No.1107 'Financial Instruments: Disclosures' – Supplier Finance Arrangements
The amendments introduce new disclosures relating to supplier finance arrangements that assist users of the financial statements to assess the effects of these arrangements on an entity's liabilities and cash flows and on an entity's exposure to liquidity risk. The Group has entered into supplier financing arrangements. It is currently in the process of evaluating the impact of the amendments for disclosure in the footnotes. The amendments apply for annual periods beginning on or after 1 January 2024.
- 3) The following new and amended accounting standards are not expected to have a significant impact on the Group's consolidated financial statements.
 - Lease Liability in a Sale and Leaseback (K-IFRS No. 1116 'Lease')
 - Disclosure of virtual assets (K-IFRS No. 1001 'Presentation of Financial Statements')

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

5. Risk Management

The Group has exposure to the following risks from its use of financial instruments:

- Credit risk
- Liquidity risk
- Market risk

This note presents information about the Group's exposure to each of the above risks, the Group's risk management objectives, policies and processes for measuring and managing risk, and the Group's management of capital. Further quantitative disclosures are included throughout these separate financial statements.

(1) Financial risk management

1) Risk management framework

The Board of Directors has overall responsibility for the establishment and oversight of the Group's risk management framework.

The Group's risk management policies are established to identify and analyze the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

The Group Audit Committee oversees how management monitors compliance with the Group's risk management policies and procedures, and reviews the adequacy of the risk management framework in relation to the risks faced by the Group. The Group Audit Committee is assisted in its oversight role by Internal Audit. Internal Audit undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the Audit Committee.

2) Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables from customers and investment securities.

(i) Trade and other receivables and contract assets

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer. Most of the Group's customers are located in Korea, so the risk of bankruptcy in the country where the customer is located does not significantly affect credit risk.

The Group establishes credit limits for each customer and each new customer is analyzed quantitatively and qualitatively before determining whether to utilize third party guarantees, insurance or factoring as appropriate.

The Group evaluates the impairment loss separately for receivables with significant receivable size and credit-impaired credit, taking into account the insurance purchase and creditworthiness.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

5. Risk Management, Continued

(1) Financial risk management, continued

(2) Credit risk, Continued

(ii) Investments

The Group limits its exposure to credit risk by investing only in liquid securities and only with counterparties that have high credit ratings. Management actively monitors credit ratings and given that the Group only has invested in securities with high credit ratings, does not expect a significant risk that any counterparty fails to meet its obligations.

(iii) Guarantees

The Group provides financial guarantees to subsidiaries, associates and third parties if necessary.

3) Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The Group has historically been able to satisfy its cash requirements from cash flow from operations and debt and equity financing. To the extent that the Group does not generate sufficient cash flow from operations to meet its capital requirements, the Group may rely on other financing activities, such as external long-term borrowings and offerings of debt securities, equity-linked and other debt securities.

4) Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices will affect the Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return.

The Group buys and sells derivatives, and also incurs financial liabilities, in order to manage market risks. All such transactions are carried out within the guidelines set by the Group until the spin-off date. Generally the Group seeks to apply hedge accounting in order to manage volatility in profit or loss.

(i) Currency risk

The Group is exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than the functional currency of the Group, Korean won (KRW). The currencies in which these transactions primarily are denominated are USD, EUR, CNY, JPY and others.

The Group hedges trade receivables and trade payables denominated in a foreign currency in respect of forecasted sales and purchases. The Group uses forward exchange contracts to hedge its currency risk, most with a maturity of less than two years from the reporting date. When necessary, forward exchange contracts are rolled over at maturity. Trade receivables denominated in a foreign currency have been hedged using forward contracts that mature on the same dates that the receivables are due for collection. In respect of other monetary assets and liabilities denominated in foreign currencies, the Group ensures that its net exposure is kept to an acceptable level by buying or selling foreign currencies at spot rates when necessary to address short-term imbalances.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

5. Risk Management, Continued

(1) Financial risk management, continued

(2) Credit risk, Continued

4) Market risk, Continued

(ii) Interest rate risk

The Group hedges interest rate risk using interest rate swap for variable interest borrowings. As a result, the risk that changes in the value of variable interest-bearing bonds and loans will affect the Group's profit or loss is avoided.

(iii) Other market price risk

The Group is exposed to the price risk arising from available-for-sale equity securities.

The effect of 1% changes in price of marketable available-for-sale securities on the total comprehensive income for the years ended December 31, 2023 and 2022 are ₩969 million and ₩966 million.

(1) Capital management

The management's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Group monitors the liability to equity ratio and net borrowing to equity ratio, which the Group defines as total liabilities divided by total equity and net borrowing divided by total equity.

The Group's liability to-equity ratio and net borrowing to equity ratio as of December 31, 2023 and 2022 are as follows:

<i>(In millions of won, except ratio)</i>		2023	2022
Total liabilities	₩	19,872,465	17,571,346
Total equity		12,370,103	12,312,130
Cash and deposits(*1)		4,614,300	3,820,379
Borrowings(*2)		3,915,734	4,137,941
Liability to-equity ratio		160.65%	142.72%
Net borrowing to equity ratio(*3)		(*4)	2.58%

(*1) Cash and deposits consist of cash, cash equivalents, short-term and long-term financial instruments.

(*2) Discount on debentures is deducted from the face value of debentures.

(*3) Net borrowing to equity ratio is calculated by dividing net of borrowings by total equity.

(*4) Net borrowing to equity ratio has not been calculated because it is a negative ratio.

The interest coverage ratio and basis of calculation for the years periods ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
1. Operating profit (loss)	₩	282,261	(355,561)
2. Interest expense		193,879	165,846
3. Interest coverage ratio (1÷2)		1.46	(*)

(*) The interest coverage ratio has not been calculated because it is a negative ratio.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

6. Cash and Cash Equivalents

Cash and cash equivalents as of December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
Cash	₩	99	2,853
Demand deposits		46,064	64,540
Others (MMDA, and others)		2,972,228	2,629,830
	₩	<u>3,018,391</u>	<u>2,697,223</u>

7. Short-term and Long-term Financial Assets

Short-term and long-term financial assets as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won)	2023		2022	
	Current	Non-current	Current	Non-current
Financial instruments	₩ 1,595,619	290	1,122,751	405
Financial assets measured at FVTPL	-	19,704	181,290	18,463
Financial assets measured at FVOCI	-	212,720	-	182,427
	₩ 1,595,619	232,714	1,304,041	201,295

8. Restricted Deposits and Others

Deposits and others which are restricted in use as of December 31, 2023 and 2022 are summarized as follows:

<i>(In millions of won)</i>		2023	2022	Restrictions
Cash and cash equivalent	₩	-	150	Others
Short-term financial assets		-	1,252	Pledging and others
Other Receivables		-	4,100	Collateral deposit
Long-term financial assets		48	48	Guarantee deposits for checking accounts
	₩	<u>48</u>	<u>5,550</u>	

The Group has deposited ₩181,002 million in financial institutions for the purpose of providing financial support to the Group's partners and Implementation of government project as of December 31, 2023.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

9. Trade and Other Receivables and Contract Assets

(1) Trade and other receivables as of December 31, 2023 and 2022 are summarized as follows:

<i>(In millions of won)</i>	2023		2022	
	Current	Non-current	Current	Non-current
Trade receivables:				
Trade receivables	₩ 1,920,128	338,414	1,549,800	395,597
Allowance for doubtful accounts	(870,967)	(138,770)	(877,499)	(177,726)
	<u>1,049,161</u>	<u>199,644</u>	<u>672,301</u>	<u>217,871</u>
Other receivables:				
Other accounts receivable	545,848	1,439	498,699	2,878
Allowance for doubtful accounts	(183,805)	-	(181,866)	(1)
Accrued income	37,545	-	23,795	-
Allowance for doubtful accounts	(1,346)	-	(1,573)	-
Loans	8,127	5,432	10,479	2,772
Allowance for doubtful accounts	-	(787)	-	(787)
Guarantee deposits	4,599	46,530	4,871	27,757
	<u>410,968</u>	<u>52,614</u>	<u>354,405</u>	<u>32,619</u>
₩	<u>1,460,129</u>	<u>252,258</u>	<u>1,026,706</u>	<u>250,490</u>

(2) Contract assets as of December 31, 2023 and 2022 are summarized as follows:

<i>(In millions of won)</i>	2023	2022
Contract assets	₩ 7,165,162	6,444,373
Allowance for doubtful accounts	(8,344)	(8,416)
₩	<u>7,156,818</u>	<u>6,435,957</u>

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

10. Inventories

Inventories as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

	2023			2022		
	Acquisition cost	Provision for inventory valuation	Carrying amount	Acquisition cost	Provision for inventory valuation	Carrying amount
Merchandise	₩ 33	-	33	73	-	73
Finished goods	163,856	(28,023)	135,833	208,960	(8,143)	200,817
Work-in-progress	536,521	(17,448)	519,073	468,358	(13,372)	454,986
Raw materials	909,596	(2,971)	906,625	1,000,186	(7,874)	992,312
Supplies	19,301	-	19,301	16,292	-	16,292
Materials-in-transit	424,800	-	424,800	538,837	-	538,837
	₩ 2,054,107	(48,442)	2,005,665	2,232,706	(29,389)	2,203,317

Losses on valuation of inventory amounting to ₩ 19,035 million was added to the cost of sales for the year ended December 31, 2023 and reversal of loss on valuation of inventory amounting to ₩ 6,123 million was deducted from the cost of sales for the year ended December 31, 2022.

11. Other Assets

Other assets as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

	2023		2022	
	Current	Non-current	Current	Non-current
Advanced payments	₩ 1,599,420	-	1,185,942	-
Accumulated impairment loss	(986)	-	-	-
Prepaid expenses	455,611	4,816	402,694	1,474
Accumulated impairment loss(*1)	(7,285)	-	(48,063)	-
Others(*2)	-	241,296	229,814	219,681
Accumulated impairment loss	-	(63,307)	(188,983)	(63,307)
Net defined benefit assets(*3)	-	363,672	-	407,748
	₩ 2,046,760	546,477	1,581,404	565,596

(*1) Prior to recognition of the provision for the onerous contract, the impairment loss on the related asset was recognized.

(*2) The under-construction vessel acquired due to contract cancellation was sold during the current period upon completion of the contract.

(*3) As of December 31, 2023, plan assets in excess of the present value of defined benefit obligations was recorded as other non-current assets (See Note 26).

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

12. Investments in Associates

(1) Investments in associates as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

Associates	Location	Fiscal year end	Business	2023		2022	
				Ownership (%)	Carrying amount	Ownership (%)	Carrying amount
New Korea Country Club	Korea	December	Country club	29.00	₩ 29,258	29.00	28,273
Hyundai Green Industries Co., W.L.L.	Kuwait	December	Education	49.00	-	49.00	-
KC LNG Tech Co., Ltd.(*1)	Korea	December	Other engineering service	16.60	-	16.60	-
Zvezda-Hyundai LLC	Russia	December	Shipbuilding	49.00	1,384	49.00	1,676
International Maritime Industries Company(*2)	Saudi Arabia	December	Shipbuilding	20.00	53,730	20.00	73,203
Elcogen Group PLC(*1)	United Kingdom	December	Manufacture of cell, stack, stack module	17.36	62,967	-	-
Hyundai Financial Leasing Co., Ltd.	China	December	Financial and operating leases	41.26	116,445	41.26	116,822
			Sale and manufacture of machinery equipment for				
Hyundai Hymys Co., Ltd.	Korea	December	shipbuilding	25.00	39,766	25.00	39,477
					₩ 303,550		259,451

(*1) Although the controlling company owns less than 20% of the equity interests, the controlling company has determined that it has significant influence because the rest of shareholders are minority and widely spread, as result the controlling company has been able to participate in the board of directors.

(*2) For the year ended December 31, 2023, the Group have acquired additional shares of International Maritime Industries Company.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

12. Investments in Associates, Continued

(2) Condensed financial information of associates as of and for the years ended December 31, 2023 and 2022 is summarized as follows:

(In millions of won)

Associates	2023										
	Condensed financial information of associates										Dividends received from investments in associates
	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Equity	Sales	Operating profit (loss)	Profit (loss)	Other comprehensive income (loss)	Total comprehensive income (loss)	
New Korea Country Club	₩ 32,452	18,958	1,838	5,359	44,213	18,383	3,740	3,936	-	3,936	145
Hyundai Green Industries Co., W.L.L.	-	-	-	-	-	-	-	-	-	-	-
KC LNG Tech Co., Ltd.	2,666	6,313	12,893	376	(4,290)	2,062	(2,171)	(85)	-	(85)	-
Zvezda-Hyundai LLC	3,436	1,963	565	1	4,833	1,165	277	161	(758)	(597)	-
International Maritime Industries Company	356,506	997,389	159,634	993,296	200,965	91,338	(255,423)	(240,411)	8,032	(232,379)	-
Ecogen Group PLC	71,822	26,978	13,572	18,435	66,793	1,174	(3,474)	(3,522)	(530)	(4,052)	-
Hyundai Financial Leasing Co., Ltd.	236,059	42,061	6,765	9,667	261,688	35,339	3,728	1,796	(836)	960	773
Hyundai Hymys Co., Ltd.(*)	46,026	205,346	34,901	39,870	176,601	189,188	14,493	9,883	(1,004)	8,879	-
	<u>₩ 748,967</u>	<u>1,299,008</u>	<u>230,168</u>	<u>1,067,004</u>	<u>750,803</u>	<u>338,649</u>	<u>(238,830)</u>	<u>(228,242)</u>	<u>4,904</u>	<u>(223,338)</u>	<u>918</u>

(*) It is financial information based on the consolidated financial statements of associate as of December 31, 2023.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

12. Investments in Associates, Continued

(2) Condensed financial information of associates as of and for the years ended December 31, 2023 and 2022 is summarized as follows, continued:

(In millions of won)

Associates	2022										
	Condensed financial information of associates										Dividends received from investments in associates
	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Equity	Sales	Operating profit (loss)	Profit (loss)	Other comprehensive income (loss)	Total comprehensive income (loss)	
New Korea Country Club	₩ 29,947	18,586	2,166	5,550	40,817	18,015	4,143	3,844	-	3,844	145
Taebaek Wind Power Co., Ltd.(*1)	4,598	23,380	386	2,667	24,925	5,445	992	1,304	-	1,304	1,155
Taebaek Guinemi Wind Power Co., Ltd.(*1)	5,075	38,012	894	27,140	15,053	4,892	2,367	1,624	-	1,624	-
Pyeongchang Wind Power Co., Ltd.(*1)	13,197	57,097	5,848	39,761	24,685	10,702	5,126	3,441	-	3,441	92
Changjuk Wind Power Co., Ltd.(*1)	6,201	21,475	470	1,388	25,818	6,756	3,220	3,241	-	3,241	1,935
Hyundai Green Industries Co., W.L.L.	-	-	-	-	-	-	-	-	-	-	-
KC LNG Tech Co., Ltd.	2,951	7,108	13,916	347	(4,204)	4,231	(3,275)	(8,699)	-	(8,699)	-
Zvezda-Hyundai LLC	3,555	2,275	399	1	5,430	3,262	556	491	(945)	(454)	-
International Maritime Industries Company	668,194	727,450	140,177	953,724	301,743	98,064	(180,600)	(169,297)	36,188	(133,109)	-
Hyundai Financial Leasing Co., Ltd.	359,387	83,323	142,489	37,618	262,603	52,670	12,722	9,545	(7,241)	2,304	-
Hyundai Hymys Co., Ltd.(*2)	29,390	203,439	32,810	33,344	166,675	144,745	3,637	3,374	269	3,643	-
	₩ 1,122,495	1,182,145	339,555	1,101,540	863,545	348,782	(151,112)	(151,132)	28,271	(122,861)	3,327

(*1) It is financial information based on associates as of the date of sales.

(*2) It is financial information based on the consolidated financial statements of associate as of December 31, 2022.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

12. Investments in Associates, Continued

(3) Changes in equity-method accounted investees for the years ended December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

Associates	2023					
	Beginning balance	Acquisitions (disposals)	Share of profit (loss) of equity accounted investees	Changes in equity of equity accounted investees	Dividends received	Ending balance
New Korea Country Club	₩ 28,273	-	1,130	-	(145)	29,258
Hyundai Green Industries Co., W.L.L.	-	-	-	-	-	-
KC LNG Tech Co., Ltd. (*)	-	-	-	-	-	-
Zvezda-Hyundai LLC	1,676	-	79	(371)	-	1,384
International Maritime Industries Company	73,203	24,099	(45,178)	1,606	-	53,730
Elcogen Group PLC	-	64,065	(611)	(487)	-	62,967
Hyundai Financial Leasing Co., Ltd.	116,822	-	741	(345)	(773)	116,445
Hyundai Hymys Co., Ltd.	39,477	-	527	(238)	-	39,766
	₩ 259,451	88,164	(43,312)	165	(918)	303,550

(*) Due to accumulated deficits, the book value became zero ("0"), and the application of the equity method was suspended, the amount of change in equity that was not recognized due to the suspension of the application of the equity method is ₩712 million.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

12. Investments in Associates, Continued

(3) Changes in equity-method accounted investees for the years ended December 31, 2023 and 2022 are summarized as follows:

(In millions of won)		2022					
		Beginning balance	Acquisitions (disposals)	Share of profit (loss) of equity accounted investees	Changes in equity of equity accounted investees	Dividends received	Ending balance
Associates							
New Korea Country Club	₩	27,312	-	1,106	-	(145)	28,273
Taebaek Wind Power Co., Ltd.(*1)		9,186	(8,506)	475	-	(1,155)	-
Taebaek Guinemi Wind Power Co., Ltd.(*1)		5,036	(5,645)	609	-	-	-
Pyeongchang Wind Power Co., Ltd.(*1)		4,978	(5,678)	792	-	(92)	-
Changjuk Wind Power Co., Ltd.(*1)		11,830	(11,275)	1,380	-	(1,935)	-
Hyundai Green Industries Co., W.L.L.		-	-	-	-	-	-
KC LNG Tech Co., Ltd.(*2)		746	-	(746)	-	-	-
Zvezda-Hyundai LLC		177	2,707	(745)	(463)	-	1,676
International Maritime Industries Company		55,989	43,249	(33,288)	7,253	-	73,203
Hyundai Financial Leasing Co., Ltd.		115,871	-	3,938	(2,987)	-	116,822
Hyundai Hyms Co., Ltd.		40,818	-	(1,418)	77	-	39,477
Hyundai Heavy Industries Power Systems Co., Ltd.(*3)		36,579	(36,579)	-	-	-	-
	₩	308,522	(21,727)	(27,897)	3,880	(3,327)	259,451

(*1) All of the holdings were sold for the year ended December 31, 2022.

(*2) Due to accumulated deficits, the book value became zero ("0"), and the application of the equity method was suspended, the amount of change in equity that was not recognized due to the suspension of the application of the equity method is ₩698 million.

(*3) It was reclassified as a long-term financial asset as its holdings were changed to non-voting convertible stocks during the previous period (See Note 45).

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

12. Investments in Associates, Continued

- (4) Reconciliation from net assets of the associates to the carrying amount of investments in associates in The Group's consolidated financial statements as of December 31, 2023 and 2022 is summarized as follows:

(In millions of won)

Associates	2023						
	Ending net assets	Percentage of the Group's ownership (%)	Net value	Corporate adjustments (i.e.: goodwill, etc.)	Elimination of intra-company transactions and unrealized profits and losses	Others	Ending carrying amount
New Korea Country Club	₩ 44,213	29.00	₩ 12,822	16,436	-	-	29,258
Hyundai Green Industries Co., W.L.L.	-	49.00	-	-	-	-	-
KC LNG Tech Co., Ltd.	(4,290)	16.60	(712)	-	-	712	-
Zvezda-Hyundai LLC	4,833	49.00	2,369	-	(985)	-	1,384
International Maritime Industries Company	200,965	20.00	40,192	13,538	-	-	53,730
Elcogen Group PLC	66,793	17.36	11,597	51,370	-	-	62,967
Hyundai Financial Leasing Co., Ltd.	261,688	41.26	107,977	8,468	-	-	116,445
Hyundai Hyms Co., Ltd(*)	176,601	25.00	44,150	-	-	(4,384)	39,766
	₩ <u>750,803</u>		₩ <u>218,395</u>	<u>89,812</u>	<u>(985)</u>	<u>(3,672)</u>	<u>303,550</u>

(*) Hyundai Hyms Co., Ltd. issued cumulative preferred shares classified as equity and, accordingly the shareholding of the Group have been calculated after accounting for the dividends received on the cumulative preferred shares.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

12. Investments in Associates, Continued

- (4) Reconciliation from net assets of the associates to the carrying amount of investments in associates in The Group's consolidated financial statements as of December 31, 2023 and 2022 is summarized as follows, continued:

(In millions of won)

Associates	2022						
	Ending net assets	Percentage of the Group's ownership (%)	Net value	Corporate adjustments (i.e.: goodwill, etc.)	Elimination of intra-company transactions and unrealized profits and losses	Others	Ending carrying amount
New Korea Country Club	₩ 40,817	29.00	₩ 11,837	16,436	-	-	28,273
Taebaek Wind Power Co., Ltd. (*1)	24,925	-	-	-	-	-	-
Taebaek Guinemi Wind Power Co., Ltd. (*1)	15,053	-	-	-	-	-	-
Pyeongchang Wind Power Co., Ltd. (*1)	24,685	-	-	-	-	-	-
Changjuk Wind Power Co., Ltd. (*1)	25,818	-	-	-	-	-	-
Hyundai Green Industries Co., W.L.L.	-	49.00	-	-	-	-	-
KC LNG Tech Co., Ltd.	(4,204)	16.60	(698)	-	-	698	-
Zvezda-Hyundai LLC	5,430	49.00	2,661	-	(985)	-	1,676
International Maritime Industries Company	301,743	20.00	60,348	12,855	-	-	73,203
Hyundai Financial Leasing Co., Ltd.	262,603	41.26	108,354	8,468	-	-	116,822
Hyundai Hymys Co., Ltd (*2)	166,675	25.00	41,669	-	-	(2,192)	39,477
	₩ 863,545		₩ 224,171	37,759	(985)	(1,494)	259,451

(*1) All of the holdings were sold for the year ended December 31, 2022, and it is the net asset value of the associates as of the date of sale.

(*2) Hyundai Hymys Co., Ltd. issued cumulative preferred shares classified as equity, and accordingly, the shareholding of the Group has been calculated after accounting for the dividends received on the cumulative preferred shares.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

13. Investments in a Joint Ventures

(1) Investments in a joint venture as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

Company	Location	Fiscal year	Main business	2023		2022	
				Ownership (%)	Carrying amount	Ownership (%)	Carrying amount
Saudi Engines Manufacturing Company(*)	Saudi Arabia	December	Manufacture of marine engines	30.00	₩ 5,409	30.00	₩ 10,273

(*) According to the shareholders' agreement, critical financial and operating decisions must be agreed to by ownership parties. For this reason, the entity is classified as joint venture.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

13. Investments in Joint Ventures, Continued

(2) Condensed financial information of a joint venture as of and for the years ended December 31, 2023 and 2022 is summarized as follows:

(i) Summary of financial information

(In millions of won)

Joint venture	2023										
	Condensed financial information of joint ventures										Dividends received from investments in joint ventures
	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Equity	Sales	Operating loss	Loss for the period	Other comprehensive income	Total comprehensive loss	
Saudi Engines Manufacturing Company	₩ 21,344	12,828	15,855	286	18,031	-	(17,719)	(16,994)	781	(16,213)	-

(ii) Additional financial information

(In millions of won)

(In millions of won)	2023						
	Cash and cash equivalents	Current financial liabilities	Non-current financial liabilities	Depreciation	Interest income	Interest expense	Income tax expense
Joint venture							
Saudi Engines Manufacturing Company	₩ 14,837	485	38	1,052	824	51	47

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

13. Investments in Joint Ventures, Continued

(2) Condensed financial information of a joint venture as of and for the years ended December 31, 2023 and 2022 is summarized as follows, continued:

(i) Summary of financial information

(In millions of won)

(In millions of won)		2022										Dividends received from investments in joint ventures
		Condensed financial information of joint ventures										
Joint venture		Current assets	Non-current assets	Current liabilities	Non-current liabilities	Equity	Sales	Operating loss	Loss for the period	Other comprehensive income	Total comprehensive loss	
Saudi Engines Manufacturing Company	₩	35,776	3,828	4,871	488	34,245	-	(13,638)	(13,792)	3,359	(10,433)	-

(ii) Additional financial information

(In millions of won)

	2022							Income tax expense
	Cash and cash equivalents	Current financial liabilities	Non-current financial liabilities	Depreciation	Interest income	Interest expense		
Saudi Engines Manufacturing Company ₩	31,083	663	410	623	36	97		94

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

13. Investments in a Joint Ventures, Continued

- (3) Changes in an equity-method accounted joint venture as of and for the years ended December 31, 2023 and 2022 is summarized as follows:

(In millions of won)

Joint venture	2023				
	Beginning balance	Acquisitions	Share of loss of equity accounted investees	Changes in equity of equity accounted investees	Ending balance
Saudi Engines Manufacturing Company	₩ 10,273	-	(5,098)	234	5,409

(In millions of won)

Joint venture	2022				
	Beginning balance	Acquisitions	Share of loss of equity accounted investees	Changes in equity of equity accounted investees	Ending balance
Saudi Engines Manufacturing Company	₩ 13,450	-	(4,184)	1,007	10,273

- (4) Reconciliation from net assets of the joint ventures to the carrying amount of investments in joint ventures in the Group's consolidated financial statements as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

Joint venture	2023			
	Ending net assets	Ownership (%)	Net value	Ending carrying amount
Saudi Engines Manufacturing Company	₩ 18,031	30.00	5,409	5,409

(In millions of won)

Joint venture	2022			
	Ending net assets	Ownership (%)	Net value	Ending carrying amount
Saudi Engines Manufacturing Company	₩ 34,245	30.00	10,273	10,273

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

14. Joint Operation

The joint operation as of December 31, 2023 and 2022 is summarized as follows:

Joint operation	Main Office	Main business	Ownership (%)	
			2023	2022
FDH JV(*1)	Kuwait	Chemical plant	33.33	33.33
FDH JV(*2)	Kuwait	Chemical plant	20.00	20.00

(*1) The Group holds a significant joint operation 'FDH JV' as of December 31, 2023 and 2022. FDH JV is a joint operation that the main purpose of an arrangement is a construction of Clean Fuels Project MAB2 EPC PKG ordered by Kuwait National Petroleum Company. The Group recognizes assets and liabilities relating to its interest in the joint operation as well as revenues and expenses relating to its interest in the joint operation.

(*2) The Group holds a significant joint operation 'FDH JV' as of December 31, 2023 and 2022. FDH JV is a joint operation that the main purpose of an arrangement is a construction of Al Zour Refinery Project Package 2 & 3 EPC PKG ordered by Kuwait Integrated Petroleum Industries Company. The Group recognizes assets and liabilities relating to its interest in the joint operation as well as revenues and expenses relating to its interest in the joint operation.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

15. Financial assets measured at fair value

(1) Financial assets measured at FVOCI as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won, except percentage of ownership)

Company	2023			2022		
	Ownership (%)	Acquisition cost	Carrying amount	Ownership (%)	Acquisition cost	Carrying amount
Listed equity securities:						
HMM Co.,Ltd	0.71	₩ 314,455	95,502	1.00	₩ 314,455	95,356
KCC Corporation	0.06	1,071	1,167	0.06	1,071	1,045
KCC Glass Corporation	0.03	201	197	0.03	201	177
		<u>315,727</u>	<u>96,866</u>		<u>315,727</u>	<u>96,578</u>
Unlisted equity securities(*1):						
Hyundai Heavy Industries Power Systems Co.,Ltd(*2)	20.00	5,857	30,592	20.00	5,857	20,726
Bexco Co.,Ltd.(*2)	7.96	9,460	4,773	7.96	9,460	6,365
Hyundai M Partners Co., Ltd.(*3)	9.93	13,145	19,704	9.93	13,145	18,323
OSX Construção Naval S.A.	0.20	57,498	-	0.20	57,498	-
SK Hynix America Inc.(*4)	-	-	-	1.33	34,526	-
Other	-	63,545	60,785	-	43,877	40,435
		<u>149,505</u>	<u>115,854</u>		<u>164,363</u>	<u>85,849</u>
		<u>₩ 465,232</u>	<u>212,720</u>		<u>₩ 480,090</u>	<u>182,427</u>

(*1) Unless otherwise noted, the carrying amounts of unlisted equity securities were recorded at their acquisition cost since their fair values cannot be reliably estimated.

(*2) The fair value of Bexco Co.,Ltd and Hyundai Heavy Industries Power Systems Co.,Ltd were calculated by using the free cash flow to equity method and comparison method of similar listed companies.

(*3) The fair value of Hyundai M Partners Co., Ltd. was calculated by using the net asset value method.

(*4) For the year ended December 31, 2023, the Group sold entire share of SK Hynix America Inc.

Changes in the end of the current year compare to the prior year are attributable to acquisitions, disposals and fair value adjustments.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

15. Financial assets measured at fair value, Continued

(2) Financial assets measured at FVTPL as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won, except percentage of ownership)

Company	2023			2022		
	Ownership (%)	Acquisition cost	Carrying amount	Ownership (%)	Acquisition cost	Carrying amount
Debt investments(*1):						
KC Coexistence PEF(*2)	16.67	₩ 7,000	6,436	16.67	₩ 7,000	7,101
Beneficiary certificate and others	-	2,264	2,191	-	2,671	2,304
Construction Guarantee Cooperative (investment) and others	-	7,500	11,077	-	6,483	9,058
Specified Money Trust (MMT)(*3)	-	-	-	-	185,669	181,290
		₩ 16,764	19,704		₩ 201,823	199,753

(*1) If the fair value cannot be reliably measured due to the insufficient basic data or lack of objectivity, the fair value is evaluated at acquisition cost.

(*2) The company calculated the fair value of KC Coexistence PEF shares using the net assets value model.

(*3) For the year ended December 31, 2023, the Group sold entire share of Specified Money Trust (MMT).

Changes in the end of the current year compare to the prior year are attributable to acquisitions, disposals and fair value adjustments.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

16. Investment Property

- (1) Changes in investment properties for the years ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>	2023			2022		
	Land	Buildings	Total	Land	Buildings	Total
Beginning balance	₩ 63,077	159,297	222,374	63,083	168,415	231,498
Reclassification	-	961	961	(6)	(4,121)	(4,127)
Depreciation	-	(5,005)	(5,005)	-	(4,997)	(4,997)
Ending balance	₩ 63,077	155,253	218,330	63,077	159,297	222,374

- (2) Investment Properties as of December 31, 2023 and 2022 are summarized as follows:

<i>(In millions of won)</i>	2023			2022		
	Land	Buildings	Total	Land	Buildings	Total
Acquisition cost	₩ 63,077	225,119	288,196	63,077	224,574	287,651
Accumulated depreciation	-	(69,866)	(69,866)	-	(65,277)	(65,277)
Ending balance	₩ 63,077	155,253	218,330	63,077	159,297	222,374

- (3) Revenue and expense from investment property for the years ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>	2023	2022
Rental income	₩ 10,116	10,011
Operating and maintenance expense arising from investment property that generated rental income	4,973	5,158

- (4) Fair values from investment property as of December 31, 2023 and 2022 is as follows:

<i>(In millions of won)</i>	2023	2022
Land	₩ 90,435	94,700
Buildings	239,105	263,991
	₩ 329,540	358,691

The fair value of investment property was determined by external, independent appraiser, having appropriate recognized professional qualifications and experience in relation to the assessment of real estate in the Republic of Korea as of January 1, 2010 when the KIFRS was adopted. The valuation is achieved by using comparison methods to obtain the economic value based on marketability of the property. The Group calculated fair value considering the standard market price after transition date in order to estimate the fair value of investment property as of December 31, 2023.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

17. Property, Plant and Equipment

(1) Changes in property, plant and equipment for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

		2023					
					Machinery and equipment	Construction in-progress	
		Land	Buildings	Structures		Others	Total
Beginning balance	₩	5,032,116	1,829,636	1,436,354	893,962	364,846	10,143,113
Acquisitions		148	15,975	8,789	266,619	340,207	829,238
Reclassification		1,156	80,806	66,020	55,592	(258,644)	(12,387)
Disposals		(2,054)	(1,315)	(1,498)	(2,913)	(8,027)	(17,415)
Depreciation		-	(68,849)	(58,411)	(168,950)	-	(418,559)
Impairment losses		-	(1,183)	(1,314)	(20,743)	-	(24,380)
Effect of changes in exchange rates		-	844	1,525	1,117	104	3,893
Ending balance	₩	<u>5,031,366</u>	<u>1,855,914</u>	<u>1,451,465</u>	<u>1,024,684</u>	<u>438,486</u>	<u>10,503,503</u>

(In millions of won)

		2022					
					Machinery and equipment(*)	Construction in-progress	
		Land	Buildings	Structures		Others	Total
Beginning balance	₩	5,042,990	1,865,406	1,430,338	818,739	190,342	9,872,012
Acquisitions		-	6,179	9,050	148,776	358,259	676,621
Reclassification		6	25,122	51,308	82,206	(185,399)	(3,906)
Disposals		(10,880)	(2,047)	(611)	(6,822)	-	(23,005)
Depreciation		-	(66,546)	(56,273)	(149,052)	-	(382,945)
Impairment losses		-	(1,566)	(2,933)	(734)	-	(7,884)
Effect of changes in exchange rates		-	3,088	5,475	849	1,644	12,222
Effects of changes in scope of consolidation		-	-	-	-	-	(2)
Ending balance	₩	<u>5,032,116</u>	<u>1,829,636</u>	<u>1,436,354</u>	<u>893,962</u>	<u>364,846</u>	<u>10,143,113</u>

(*) Sale and lease transactions were repaid in 2022.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

17. Property, Plant and Equipment, Continued

(2) Property, plant and equipment as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

(In millions of won)		2023						
					Machinery and equipment	Construction in-progress	Others	Total
	Land	Buildings	Structures					
Acquisition cost	₩	5,031,366	3,318,107	2,734,374	4,665,981	438,486	2,770,192	18,958,506
Government grants		-	(2,748)	(94)	(885)	-	(795)	(4,522)
Accumulated depreciation		-	(1,355,018)	(1,141,968)	(3,514,455)	-	(1,987,660)	(7,999,101)
Accumulated impairment		-	(104,427)	(140,847)	(125,957)	-	(80,149)	(451,380)
Ending balance	₩	5,031,366	1,855,914	1,451,465	1,024,684	438,486	701,588	10,503,503

(In millions of won)

(In millions of won)		2022						
					Machinery and equipment	Construction in-progress	Others	Total
	Land	Buildings	Structures					
Acquisition cost	₩	5,032,116	3,221,169	2,661,067	4,407,332	364,846	2,593,387	18,279,917
Government grants		-	(1,854)	(96)	(686)	-	(322)	(2,958)
Accumulated depreciation		-	(1,286,434)	(1,085,076)	(3,406,139)	-	(1,922,900)	(7,700,549)
Accumulated impairment		-	(103,245)	(139,541)	(106,545)	-	(83,966)	(433,297)
Ending balance	₩	5,032,116	1,829,636	1,436,354	893,962	364,846	586,199	10,143,113

(3) Impairment losses

The Group assessed cash generating units (“CGUs”) for impairment where indications of impairment existed, as a result impairment loss was recognized in the amount of ₩5,887 million (₩5,386 million in 2022) for property, plant and equipment for the period ended December 31, 2023. The estimated recoverable amount based on the impairment assessments is the greater of its value in use and its fair value less costs to sell. The value in use is estimated by applying a pre-tax discount rate that reflect current market assessments of the time value of money and the risks specific to the asset or CGU for which estimated future cash flows have not been adjusted, to the estimated future cash flows expected to be generated by the asset or CGU. The fair value less costs is the expected negotiated sales amount or appraised value. Appraised value corresponds to fair value, which is evaluated based on valuation methods, such as “publicly assessed land price”, “sales comparison approach”, and others.

Additionally, the Group recognized an impairment loss of ₩18,493 million for Property, plant and equipment without plans for use for the year ended December 31, 2023 and assessed impairment related to damage caused by typhoons and others, as a result impairment loss of ₩2,498 million was recognized for property, plant and equipment for the year ended December 31, 2022.

The Group tests for impairment on CGU annually. The Group, in principle, defines the business unit as CGU, and determines whether it is impaired by evaluating the value in use of the independent CGU. The recoverable amount of each business unit is reasonably estimated by the Group and is derived through DCF (Discounted Cash Flow) using estimated cash flow before tax based on the five-year business approved by management.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

17. Property, Plant and Equipment, Continued

(3) Impairment losses, Continued

At the end of the current period, the recoverable amount was determined using the value in use of the CGU, which exceeds its carrying amount. Estimated cash flows have been updated to reflect increased demand for goods and services since the end of the prior period, and discount rate and permanent growth rate were calculated by taking into account the market environment, and applying the average value of the long-term observation period.

<i>(In percentage)</i>	<u>Discount rate</u>	<u>Permanent growth rate</u>
Inputs variables	7.86~11.42	0.00~1.00

(4) Construction-in-progress is related to the construction of Ihwa Industrial Park and others as of December 31, 2023.

(5) Land revaluation

The Group applied revaluation model on land and revalued land by using the value which independent and expertise appraisal institution appraised as of December 31, 2020. The appraisal institution valued land price based on the publicly assessed land price with adjustments and reviewed reasonableness of revaluation amount by comparing appraisal results with the estimated price based on recent market transactions among the independent third parties.

Book values of land assessed by revaluation model and cost model as of December 31, 2023 are as follows:

<i>(In millions of won)</i>		<u>2023</u>	
		<u>Revaluation model</u>	<u>Cost model</u>
Land	₩	5,031,366	3,021,373

The measured fair value of land is classified into level 3 fair value based on the input variables used in the valuation techniques. The valuation method and input variables which are used for measuring fair value of land are as follows:

<u>Valuation method</u>	<u>Significant but unobservable input variables</u>	<u>Correlation between the main unobservable variable and fair value</u>
Publicly assessed land price	Time adjustment (Rate of changes in land value)	If rate of changes in land value increases (decreases), then fair value increases (decreases).
	Regional contribution	If regional contribution increases (decreases), then fair value increases (decreases).
	Individual contribution	If the adjusted value of terms of residential lot and others increases (decreases), then fair value increases (decreases).
	Other contributions	If the adjusted value of the level of land value and others increases (decreases), then fair value increases (decreases).

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

17. Property, Plant and Equipment, Continued

(6) Temporarily unused assets

As of December 31, 2023, the carrying amount of the assets not in use is ₩310 million (₩107,103 million in 2022).

18. Right-of-use assets and lease liabilities

(1) Changes in right-of-use assets for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

		2023				
		Land	Buildings	Structures	Others	Total
Beginning balance	₩	38,294	55,829	2,515	11,856	108,494
Acquisitions		9,336	14,096	-	3,652	27,084
Termination		(13)	(278)	-	(6)	(297)
Transfers		496	(781)	1	1,089	805
Depreciation		(12,798)	(18,590)	(194)	(4,170)	(35,752)
Effect of changes in exchange rates		98	1	-	-	99
Ending balance	₩	<u>35,413</u>	<u>50,277</u>	<u>2,322</u>	<u>12,421</u>	<u>100,433</u>

(In millions of won)

		2022				
		Land	Buildings	Structures	Others	Total
Beginning balance	₩	31,378	8,402	2,692	9,242	51,714
Acquisitions		15,629	59,139	-	4,996	79,764
Termination		(6)	(1,434)	-	(79)	(1,519)
Transfers		785	390	17	235	1,427
Depreciation		(9,863)	(10,664)	(194)	(2,538)	(23,259)
Effect of changes in exchange rates		371	(4)	-	-	367
Ending balance	₩	<u>38,294</u>	<u>55,829</u>	<u>2,515</u>	<u>11,856</u>	<u>108,494</u>

(2) Right-of-use assets as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

		2023				
		Land	Buildings	Structures	Others	Total
Acquisition cost	₩	50,846	71,686	2,752	19,454	144,738
Accumulated depreciation		(15,433)	(21,409)	(430)	(7,033)	(44,305)
Ending balance	₩	<u>35,413</u>	<u>50,277</u>	<u>2,322</u>	<u>12,421</u>	<u>100,433</u>

(In millions of won)

		2022				
		Land	Buildings	Structures	Others	Total
Acquisition cost	₩	48,749	63,103	2,751	15,820	130,423
Accumulated depreciation		(10,455)	(7,274)	(236)	(3,964)	(21,929)
Ending balance	₩	<u>38,294</u>	<u>55,829</u>	<u>2,515</u>	<u>11,856</u>	<u>108,494</u>

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

18. Right-of-use assets and lease liabilities, Continued

(3) Lease liabilities

Lease liabilities as of December 31, 2023 and 2022 are summarized as follows:

<i>(In millions of won)</i>		2023	2022
Current lease liabilities	₩	31,250	31,924
Non-current lease liabilities		66,972	72,101
	₩	<u>98,222</u>	<u>104,025</u>

The details of the timing of the cash outflow of lease liabilities as of December 31, 2023 are summarized as follows:

<i>(In millions of won)</i>		Contractual cash flow	Within 1 years	1~3 years	More than 3 years
Lease liabilities	₩	112,191	31,771	44,915	35,505

(4) Profit (loss) and cash outflow from lease

Profit (loss) in lease for the years ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
Depreciation on right-of-use assets:	₩	35,752	23,259
Interest expenses on lease liabilities		3,573	1,309
Short-term lease payments(*)		51,255	30,666
Payment for leases of low-value assets(*)		1,728	1,284

(*) The amounts are included in cost of sales and selling, general and administrative expenses.

For the years ended December 31, 2023 and 2022, the total cash outflows related to leases are ₩89,566 million and ₩53,880 million, respectively.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

19. Intangible Assets

- (1) Goodwill as of December 31, 2023 and 2022 are as follows:

(In millions of won)

		2023	2022
Hyundai Samho Heavy Industry Co., Ltd.	₩	13,141	13,141

- (2) Changes in intangible assets for years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

		2023		
		Goodwill	Development costs	Other intangible assets
				Total
Beginning balance	₩	13,141	73,788	76,768
Acquisitions		-	58,615	3,055
Transfers		-	118	1,648
Government grants received		-	(806)	-
Amortization		-	(10,885)	(1,743)
Impairment loss(*)		-	(22,923)	-
Effect of changes in exchange rates		-	-	17
Ending balance	₩	<u>13,141</u>	<u>97,907</u>	<u>79,745</u>
				<u>190,793</u>

(*) For the year ended December 31, 2023, an impairment loss was recognized for the development costs associated with computer system development.

(In millions of won)

		2022		
		Goodwill	Development costs	Other intangible assets
				Total
Beginning balance	₩	13,141	43,859	76,536
Acquisitions		-	39,211	3,710
Transfers		-	(531)	-
Government grants received		-	-	(2,174)
Amortization		-	(8,708)	(1,267)
Impairment loss(*)		-	(43)	-
Effect of changes in exchange rates		-	-	(37)
Ending balance	₩	<u>13,141</u>	<u>73,788</u>	<u>76,768</u>
				<u>163,697</u>

(*) For the year ended December 31, 2022, The impairment loss was recognized for the development cost of HD Hyundai Heavy Industries Co., Ltd.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

19. Intangible Assets, Continued

(3) Intangible assets as of December 31, 2023 and 2022 are as follows:

(In millions of won)

		2023		
		Goodwill	Development costs	Other intangible assets
				Total
Acquisition cost	₩	13,141	177,239	95,148
Accumulated amortization		-	(52,733)	(13,635)
Accumulated impairment		-	(24,331)	(1,768)
Government grants		-	(2,268)	-
Ending balance	₩	<u>13,141</u>	<u>97,907</u>	<u>79,745</u>

(In millions of won)

		2022		
		Goodwill	Development costs	Other intangible assets
				Total
Acquisition cost	₩	13,141	123,072	90,426
Accumulated amortization		-	(41,660)	(11,890)
Accumulated impairment		-	(5,977)	(1,768)
Government grants		-	(1,647)	-
Ending balance	₩	<u>13,141</u>	<u>73,788</u>	<u>76,768</u>

The carrying amount of intangible assets with indefinite useful lives is ₩57,758 million and ₩58,688 million as of December 31, 2023 and 2022, respectively.

(4) Details of research and development costs, ordinary development costs and development cost amortization included in intangible asset for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

		2023	2022
Research and development costs	Selling, general and administrative expenses	₩ 12,617	9,115
	Government grants	(1,206)	(767)
		<u>₩ 11,411</u>	<u>8,348</u>
Ordinary development costs	Selling, general and administrative expenses	87,564	73,536
	Government grants	(972)	(39)
		<u>₩ 86,592</u>	<u>73,497</u>
Development cost amortization	Manufacturing costs	10,578	8,701
	Selling, general and administrative expenses	493	193
	Government grants	(186)	(186)
		<u>₩ 10,885</u>	<u>8,708</u>

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

20. Emissions rights

- (1) The estimated quantities of emission rights allocated free of charge for each performing period during the third planning period (from 2021 to 2025) as of December 31, 2023 are as follows:

<i>(In ton)</i>	2021	2022	2023	2024	2025	Total
Allocated emission right free of charge	933,899	953,099	941,377	933,157	933,157	4,694,689

- (2) The contents of emission permits and their carrying amount for the years ended December 31, 2023 and 2022, are as follows.

(In ton, In millions of won)

	2023									
	2021		2022		2023		2024		2025	
	Quantity	Book value	Quantity	Book value	Quantity	Book value	Quantity	Book value	Quantity	Book value
Beginning balance and free allocation	1,190,153	-	1,105,232	-	1,027,918	-	933,157	-	933,157	-
Purchase (disposal)	(69,547)	-	(30,080)	-	-	-	-	-	-	-
Governmental proposition	(968,473)	-	(988,611)	-	-	-	-	-	-	-
Borrowing (carry forward)	(152,133)	-	(86,541)	-	-	-	-	-	-	-
Reclassification	-	-	-	-	-	-	-	-	-	-
Ending balance	-	-	-	-	1,027,918	-	933,157	-	933,157	-

(In ton, In millions of won)

	2022									
	2021		2022		2023		2024		2025	
	Quantity	Book value	Quantity	Book value	Quantity	Book value	Quantity	Book value	Quantity	Book value
Beginning balance and free allocation	1,190,153	-	1,105,232	-	941,377	-	933,157	-	933,157	-
Purchase (disposal)	(69,547)	-	-	-	-	-	-	-	-	-
Governmental proposition	(968,473)	-	-	-	-	-	-	-	-	-
Borrowing (carry forward)	(152,133)	-	-	-	-	-	-	-	-	-
Reclassification	-	-	-	-	-	-	-	-	-	-
Ending balance	-	-	1,105,232	-	941,377	-	933,157	-	933,157	-

- (3) As of December 31, 2023, there are no emission rights provided as collateral.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

20. Emissions rights, Continued

- (4) The estimated quantity of greenhouse gas emission for the performing period is 1,110,953 ton.
- (5) The changes in emission liabilities for the years ended December 31, 2023 and 2022 are as follows.

<i>(In millions of won)</i>		2023	2022
Beginning balance	₩	455	512
Increase		420	455
Decrease		(277)	(371)
Utilization		(178)	(141)
Ending balance	₩	420	455

21. Pledged Assets

- (1) Assets pledged as collateral for the Group's borrowings as of December 31, 2023 are summarized as follows:

Pledged assets	Carrying amount	Collateralized amount	Type of borrowings	Borrowings amount	Lender
Machinery and equipment	48,329	57,723	Facility financing	41,333	Korea Development bank and others

- (2) The Group receives payment guarantees from financial institutions for advances from customers on ships as of December 31, 2023. Regarding these guarantees, the Group provides its ships under construction and materials for shipbuilding as collateral (See Note 45).
- (3) The Group has pledged stand-by letter of credit issued by Hana Bank as collateral to Atlantic Specialty Insurance Company (See Note 45).
- (4) Other receivables (₩4,100 million) equivalent to 10% of the outstanding balance of the acquisition fund of employee stock provided as collateral to Korea Securities Finance Co., Ltd. as of December 31, 2022 were recovered as of December 31, 2023 (See Note 45).
- (5) The Group provides ships under construction, raw materials for construction and export receivables as collateral in connection with VND2,600,000 million borrowing arrangements (See Note 45).
- (6) On May 4, 2023, the Group redeemed blank private equity bonds of ₩25,000 million. Subsequently, the lien on the construction proceeds account and reserve account was released, and the transferred collateral for payment claims related to the construction of Taean Thermal Power Units 5-8, using low-grade coal, was returned (See Note 45).

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

22. Short-term and Long-term Financial Liabilities

Short-term and long-term financial liabilities as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won)		2023		2022	
		Current	Non-current	Current	Non-current
Borrowings	₩	1,464,516	985,700	1,958,789	399,188
Debentures		755,575	709,943	481,963	1,037,758
Convertible preference shares		-	-	260,243	-
Financial liabilities measured at FVTPL		-	2,540	-	1,793
	₩	2,220,091	1,698,183	2,700,995	1,438,739

23. Trade and Other Payables

Trade and other payables as of December 31, 2023 and 2022 are summarized as follows:

		2023		2022	
		Current	Non-current	Current	Non-current
(In millions of won)					
Trade payables	₩	1,915,052	-	1,609,851	-
Other accounts payable(*)		423,272	93	533,279	-
Accrued expense		865,288	4,464	769,653	-
Deposits received		3	21,190	-	9,226
	₩	3,203,615	25,747	2,912,783	9,226

(*) The controlling Company granted 1,260,558 shares of common stocks to convertible preferred stock of Hyundai Samho Heavy Industries Co., Ltd. to the financial investors who have the right to purchase the stock of Hyundai Samho Heavy Industries Co., Ltd. for the year ended December 31, 2018. The controlling Company recognizes the scheduled amount of repayment at the time of exercise of purchase request as liabilities based on the assumption that there is no unconditional right to avoid payment of financial assets such as cash and cash equivalents as of December 31, 2022 and paid back in full for the year ended December 31, 2023 (See Note 45).

24. Other Liabilities

Other liabilities as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won)		2023	2022
		Current	Current
Unearned revenues	₩	32	475
Others		65	52
	₩	97	527

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

25. Borrowings and Debentures

(1) Short-term borrowings as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

Type of borrowing	Lender	Annual interest rate (%)		2023	2022
General loan	The Korea Development Bank and others	5.13~5.40	₩	300,000	180,000
General loan in foreign currency	VCB and others	3.70~5.00		177,983	121,268
Usance L/C	KEB Hana Bank and others	3.58~6.38		318,188	282,078
Production finance	Korea Exim bank	5.10~5.42		130,000	-
Import Loan	-	-		-	1,395
Commercial paper	-	-		-	50,000
				926,171	634,742
Current portion of long-term borrowings				538,345	1,324,047
			₩	<u>1,464,516</u>	<u>1,958,789</u>

(2) Long-term borrowings as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

Type of borrowing	Lender	Annual interest rate (%)		2023	2022
General loan	The Korea Development Bank and others	2.43~5.68	₩	1,050,000	976,000
General loan in foreign currency	ICBC and others	7.15~7.53		322,350	542,051
Business loans(*1)	Korea Energy Agency	0.75~3.75		10,362	10,184
Facility financing(*2)	The Korea Development Bank and others	2.25~6.31		41,333	45,000
Production finance	The Korea Development Bank	5.16~5.18		100,000	-
Commercial paper	Korea Investment & Securities Co., Ltd., and others	-		-	150,000
				1,524,045	1,723,235
Current portion of long-term borrowings				(538,345)	(1,324,047)
Non-current portion of long-term borrowings			₩	<u>985,700</u>	<u>399,188</u>

(*1) During 2013, the consortium that included the Group decided to withdraw from its oil development business in the 4 mining areas in Yemen. The amount borrowed from Korea Energy Agency was classified as liquidity according to the original repayment plan, but maturities of business loans from Korea Energy Agency are not readily determinable since the decision on the redemptions of these business loans are still being deliberated by the supervisory institution (See Note 45).

(*2) The Group has provided machinery and equipment as collateral in relation to facility financing (See Note 21).

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

25. Borrowings and Debentures, Continued

(3) Debentures as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

Description	Maturity	Annual interest rate (%)	2023	2022
Guaranteed bond	2027-03-28	3.18~6.57	644,700	633,650
Non-Guaranteed bond	2026-04-27	2.50~5.38	822,000	862,000
Secured bond	-	-	-	25,000
			1,466,700	1,520,650
Discount on debentures			(1,182)	(929)
Current portion of debentures			(755,880)	(482,250)
Discount on current portion of debentures			305	287
			<u>₩ 709,943</u>	<u>1,037,758</u>

(4) Convertible preference shares

Convertible preference shares as of December 31, 2023 and 2022 are summarized as follows:

Description	Issue date	Annual interest rate (%)	2023	2022
Convertible preference shares(*)	2017-07-27	2.00	₩ -	260,243

(*) It has been repaid in full for year ended December 31, 2023

(5) Aggregate repayment schedules of the Group's borrowings and debentures as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

Periods	2023		
	Borrowings	Debentures	Total
1 year or less	₩ 1,464,516	755,880	2,220,396
1~5 years	985,700	710,820	1,696,520
	<u>₩ 2,450,216</u>	<u>1,466,700</u>	<u>3,916,916</u>

(In millions of won)

Periods	2022			
	Borrowings	Debentures	Convertible preference shares	Total
1 year or less	₩ 1,958,789	482,250	260,243	2,701,282
1~5 years	389,004	1,038,400	-	1,427,404
More than 5 years	10,184	-	-	10,184
	<u>₩ 2,357,977</u>	<u>1,520,650</u>	<u>260,243</u>	<u>4,138,870</u>

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

25. Borrowings and Debentures, Continued

(6) Changes in liabilities arising from financing activities for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

		2023				
		Borrowings	Debentures	Convertible preference shares	Lease liabilities	Total
Beginning balance		₩ 2,357,977	1,519,721	260,243	104,025	4,241,966
Cash flows from Borrowings		3,397,439	426,000	-	-	3,823,439
financing activities(*1)	Repayments	(3,304,966)	(491,000)	(409,683)	(33,010)	(4,238,659)
	Effects of changes in foreign exchange rates	(234)	11,050	-	96	10,912
	Amortization of bond discounts	-	(253)	-	-	(253)
Non-cash flows	Others	-	-	-	30,684	30,684
Cash flows from operating activities(*2)		-	-	-	(3,573)	(3,573)
Loss on redemption of convertible preferred stock		-	-	149,440	-	149,440
Ending balance		₩ 2,450,216	1,465,518	-	98,222	4,013,956

(*1) In addition to the above financial activity cash flow, there is a cash flow (-) of ₩45,005 million due to the exercise of the parent's right to purchase common shares (1,260,558 shares) allocated to the financial investor of Hyundai Samho Heavy Industries Co., Ltd., a subsidiary.

(*2) Interest expense part of lease payments for the year ended December 31, 2023 is classified as cash flows from operating activities.

(In millions of won)

		2022				
		Borrowings	Debentures	Convertible preference shares	Lease liabilities	Total
Beginning balance		₩ 3,458,799	1,493,296	260,243	48,003	5,260,341
Cash flows from financing activities	Borrowings	2,240,518	549,916	-	-	2,790,434
	Repayments	(3,369,616)	(555,970)	-	(20,621)	(3,946,207)
	Effects of changes in foreign exchange rates	40,390	31,060	-	(242)	71,208
Non-cash flows	Amortization of bond discounts	-	1,419	-	-	1,419
	Others	(12,114)	-	-	78,194	66,080
Cash flows from operating activities(*)		-	-	-	(1,309)	(1,309)
Ending balance		₩ 2,357,977	1,519,721	260,243	104,025	4,241,966

(*) Interest expense part of lease payments for the year ended December 31, 2022 is classified as cash flows from operating activities.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

26. Employee Benefits

(1) Recognized liabilities for defined benefit obligations as of December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
Present value of defined benefit obligations	₩	1,512,840	1,233,692
Fair value of plan assets(*)		1,457,039	1,181,064
Recognition of liabilities of defined benefit plans	₩	55,801	52,628

(*) Plan assets exceed the present value of defined benefit obligations in the amount of ₩363,672 million and ₩407,749 million as of December 31, 2023 and 2022, respectively. Such amounts were recognized as defined benefit assets (in other non-current assets). The fair value of the plan assets added to the surplus is ₩1,802,711 million and ₩1,588,813 million.

(2) Plan assets as of December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
Retirement pension(*)	₩	1,819,852	1,587,796
Transfer to National Pension Fund		859	1,017
	₩	1,820,711	1,588,813

(*) As of December 31, 2023, retirement pension is fully invested in principal and interest guaranteed and bond mixed fund products.

(3) Expenses recognized in profit or loss for the years ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
Current service costs	₩	128,489	122,561
Past service costs		4,306	(6,173)
Interest cost		61,096	37,059
Interest income		(83,432)	(40,372)
Expense for defined contribution plans		2,809	1,278
	₩	113,268	114,353

The Group introduced a voluntary retirement during the years ended December 31, 2023 and 2022 and recorded additional retirement benefits cost of ₩1,783 million and ₩5,434 million, respectively.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

26. Employee Benefits, Continued

(4) Changes in defined benefit obligations for years ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
Beginning balance	₩	1,233,692	1,326,318
Current service costs		128,489	122,561
Past service costs		4,306	(6,173)
Interest cost		61,096	37,059
Benefits paid		(159,880)	(166,802)
Transfers from related parties		17,751	14,541
Effect of changes in exchange rates and others		53	216
Actuarial losses (gains) in other comprehensive income:			
Demographic assumptions		1	6,169
Financial assumptions		129,040	(184,375)
Experience adjustments		98,292	84,178
Ending balance	₩	<u>1,512,840</u>	<u>1,233,692</u>

(5) Changes in the plan assets for the years ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
Beginning balance	₩	1,588,813	1,321,817
Benefits paid		(107,773)	(132,852)
Contributions to plan assets		252,776	374,121
Interest income		83,432	40,372
Actuarial gains (losses) in other comprehensive income		3,463	(14,645)
Ending balance	₩	<u>1,820,711</u>	<u>1,588,813</u>

The Group reviews the level of the fund every year and takes the policy to preserve fund in the event of a loss to the fund. As of December 31, 2023, the estimated fund payment for the next year amounted to ₩ 138,661 million.

(6) Expected payment date of the defined benefit obligations as of December 31, 2023 is as follows:

<i>(In millions of won)</i>		Within 1 year	1 ~ 5 years	5 ~ 10 years	More than 10 years	Total
Expected payment	₩	54,400	499,115	712,907	3,838,422	5,104,844

(7) Principal actuarial assumptions as of December 31, 2023 and 2022 are as follows:

<i>(In percentage)</i>	2023	2022
Discount rate	4.02 ~ 4.68	5.27 ~ 5.35
Future salary growth	3.00 ~ 4.85	3.00 ~ 3.82
Future mortality (Males, at age 45)	0.18	0.07

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

26. Employee Benefits, Continued

(8) Weighted average durations of defined benefit obligations as of December 31, 2023 and 2022 are as follows:

<i>(In years)</i>	2023	2022
Weighted average durations	9.82	9.88

(9) Reasonably possible changes as of December 31, 2023 and 2022 to each relevant actuarial assumption would have affected the defined benefit obligation by the amounts shown below.

<i>(In millions of won)</i>	2023		2022	
	Increase	Decrease	Increase	Decrease
Discount rate (1% movement)	₩ (122,087)	141,194	(96,244)	111,282
Future salary growth (1% movement)	128,508	(113,703)	99,364	(87,979)

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

27. Provisions

(1) Changes in provisions for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

		2023					
		Provision for construction losses	Provision for carbon emission	Provision for construction warranty	Provision for product warranty	Other Provision (*2)	Total
Beginning balance	₩	335,374	455	471,322	73,270	712,914	1,593,335
Increase		61,827	420	78,862	61,227	17,590	219,926
Decrease		(252,936)	(277)	(256,672)	(4,196)	(2,489)	(516,570)
Offset		-	(178)	(105,795)	(27,163)	(720,112)	(853,248)
Other (*1)		40,778	-	-	-	-	40,778
Effect of changes in exchange rates		(4)	-	105	4	54	159
Ending balance	₩	185,039	420	187,822	103,142	7,957	484,380

(*1) For the year ended December 31, 2023, this is effect of changes in impairment losses previously recognized for assets related to onerous contracts.

(*2) Amount recognized as a provision for regular wage lawsuit and others (See Note 46).

(In millions of won)

		2022					
		Provision for construction losses	Provision for carbon emission	Provision for construction warranty	Provision for product warranty	Other Provision (*2)	Total
Beginning balance	₩	784,376	512	512,270	81,823	690,524	2,069,505
Increase		166,083	455	69,776	35,754	22,869	294,937
Decrease		(695,688)	(371)	(36,927)	(21,765)	-	(754,751)
Offset		-	(141)	(74,292)	(22,556)	(720)	(97,709)
Other (*1)		80,000	-	-	-	-	80,000
Effect of changes in exchange rates		603	-	495	14	241	1,353
Ending balance	₩	335,374	455	471,322	73,270	712,914	1,593,335

(*1) For the year ended December 31, 2022, this is effect of changes in impairment losses previously recognized for assets related to onerous contracts.

(*2) Other provisions are recognized for the lawsuit and construction obligation. Regular wage lawsuit was newly recognized amount ₩710,111 million by estimation amount the Group have to pay to employees as of December 31, 2022 according to the judgment of the Supreme Court (See Note 46).

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

27. Provisions, Continued

(2) Changes in provisions for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

(In millions of won)

	2023					
	Provision for construction losses	Provision for carbon emission	Provision for construction warranty	Provision for product warranty	Other Provision	Total
Current portion	₩ 185,039	420	138,124	70,580	5,559	399,722
Non-current portion	-	-	49,698	32,562	2,398	84,658
Ending balance	₩ 185,039	420	187,822	103,142	7,957	484,380

(In millions of won)

(In millions of won)

	2022					
	Provision for construction losses	Provision for carbon emission	Provision for construction warranty	Provision for product warranty	Other Provision	Total
Current portion	₩ 335,374	455	179,190	46,414	710,111	1,271,544
Non-current portion	-	-	292,132	26,856	2,803	321,791
Ending balance	₩ 335,374	455	471,322	73,270	712,914	1,593,335

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

28. Derivative Financial Instruments

The Group has entered into derivative instrument contracts with various banks, including Hana Bank and others to hedge the risk related to changes in foreign exchange rates, interest rate risk and others. Derivatives are measured at fair value by using the forward exchange rate presented by contract counterparty and others.

(1) The description of derivative instrument and hedge accounting is as follows:

Hedge accounting	Type	Description
Fair value hedge	Foreign currency forward	Hedges the risk of changes in foreign currency exchange rate for firm commitments.
Cash flow hedge	Foreign currency forward	Hedges the variability in cash flows attributable to foreign currency exposure in respect of forecasted sales and purchases
	Foreign currency swap	Hedges cash flow risk on interest rate fluctuation and changes in exchange rates of foreign currency liabilities

(2) Terms of derivative contracts as of December 31, 2023 are as follows:

(In millions of won and in thousands of foreign currency)

Description	Type	Currency		Contract amount	Weighted average exchange rate (In won)	Average maturities	Number of contracts
		Sell	Buy				
Fair value hedge	Foreign currency forward	USD	KRW ₩	21,095,881	1,243.40	2025-05-20	7,377
	Foreign currency forward	USD	GBP	20,600	1.24	2025-11-14	2
Cash flow hedge	Foreign currency swap	KRW	USD	896,123	1,194.83	2025-07-11	7
For trading	Call option for convertible share(*)	KRW	KRW	36,000	-	-	1

(*) The Group granted investor the right to purchase non-voting convertible shares of Hyundai Heavy Industries Power systems Co., Ltd. held by the Group (See Note 45).

※ Terms of settlement: Netting the settlement or collecting total

※ The contract amount is denominated in the selling currency.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

28. Derivative Financial Instruments, Continued

(3) Book value related to derivatives as of December 31, 2023 is as follows:

(In millions of won)

		Derivatives				Financial liabilities measured at FVTPL				Firm commitment			
		Assets		Liabilities		Assets		Liabilities		Assets		Liabilities	
Description	Type	Current	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current	Non-current
Fair value	Foreign currency												
hedge	forward	₩ 87,939	239,855	460,128	181,328	-	-	-	-	286,128	178,403	78,350	239,250
	Foreign currency												
	forward	-	747	-	-	-	-	-	-	-	-	-	-
Cash flow	Foreign currency												
hedge	swap	55,328	10,203	734	-	-	-	-	-	-	-	-	-
	Call option for												
For trading	convertible share	-	-	-	-	-	-	-	2,540	-	-	-	-
		₩ 143,267	250,805	460,862	181,328	-	-	-	2,540	286,128	178,403	78,350	239,250

(4) Gains and losses on valuation and transaction of derivatives for the year ended December 31, 2023 are as follows:

(In millions of won)

Description	Type	Sales	Cost of sales	Finance income	Finance costs	Other non-operating income	Other non-operating expenses	Other comprehensive income (loss)
Fair value								
hedge	Foreign currency forward	₩ (784,721)	-	243,695	1,040,545	869,888	200,111	-
Cash flow	Foreign currency forward	-	(67)	-	-	-	-	1,382
hedge	Foreign currency swap	-	-	22,993	3,618	-	-	(13,969)
	Foreign currency forward	-	-	904	2,746	-	-	-
	Call option for							
For trading	convertible share	-	-	-	747	-	-	-
		₩ (784,721)	(67)	267,592	1,047,656	869,888	200,111	(12,587)

For the year ended December 31, 2023, the Group recognized a loss of ₩9,397 million in other comprehensive income (loss), net of a deferred tax adjustment of ₩3,190 million, on the valuation loss of ₩12,587 million on derivatives designated as cash flow hedges. This is comprised of ₩7,165 million attributable to equity holders of the controlling company.

The maximum expected period of exposure to cash flow risk, where the cash flow hedge accounting is applied, is approximately 39 months.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

29. Capital and Capital Surplus

(1) Common stock

The controlling company's common stock as of December 31, 2023 and 2022 are as follows:

<i>(In shares)</i>	2023	2022
Authorized shares	160,000,000	160,000,000
Issued shares	70,773,116	70,773,116
Par value (in won)	5,000	5,000

(2) Capital surplus

Capital surplus is comprised of paid-in capital in excess of par value, capital surplus related to acquisition or disposal of interests in subsidiaries and investments in associates, and other capital surplus of controlling company. Other capital surplus of the controlling company is derived from various sources including gains arising from previous business combination, gains on disposal of treasury stocks, and others. Capital surplus is only available for the reduction of accumulated deficit or transfer to capital stock.

Capital surplus as of December 31, 2023 and 2022 is summarized as follows:

<i>(In millions of won)</i>	2023	2022
Paid-in-capital in excess of par value	₩ 1,794,083	1,794,083
Gains on disposal of treasury stocks	442,353	442,353
Gains on merger	21,830	21,830
Other capital surplus	201,429	209,240
	<u>₩ 2,459,695</u>	<u>2,467,506</u>

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

30. Capital Adjustments

(1) Capital adjustments as of December 31, 2023 and 2022 are summarized as follows:

<i>(In millions of won)</i>		2023	2022
Treasury sharess	₩	(10,532)	(10,532)
Capital adjustment of equity method securities		(2,333)	(2,333)
Loss on capital reduction		(7,036,683)	(7,036,683)
Other capital adjustments		(1,560,349)	(1,653,714)
	₩	<u>(8,609,897)</u>	<u>(8,703,262)</u>

(2) Treasury stocks as of December 31, 2023 and 2022 are as follow:

<i>(In millions of won, except share data)</i>		2023	2022
Number of shares (in shares)		58,486	58,486
Carrying amount	₩	10,532	10,532
Fair value		7,071	4,135

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

31. Accumulated Other Comprehensive Income (loss)

(1) Accumulated other comprehensive income (loss) as of December 31, 2023 and 2022 is summarized as follows:

<i>(In millions of won)</i>		2023	2022
Net change in fair value of financial assets measured at FVOCI	₩	(159,541)	(196,035)
Effective portion of changes in fair value of cash flow hedges		(2,884)	4,281
Exchange differences on translating foreign operations		48,464	50,494
Changes in equity of equity method investments		16,944	16,117
Revaluation of property, plant and equipment		1,422,585	1,421,585
	₩	<u>1,325,568</u>	<u>1,296,442</u>

(2) Other comprehensive income (loss) for the years ended December 31, 2023 and 2022 are as follows:

		2023			2022		
		Other comprehensive Income (loss)	Owners of the controlling company	Non- controlling interests			
Net change in fair value of financial assets measured at FVOCI	₩	16,443	16,757	(314)	(35,247)	(35,771)	524
Effective portion of changes in fair value of cash flow hedges		(9,398)	(7,165)	(2,233)	(431)	(455)	24
Exchange differences on translating foreign operations		(1,646)	(2,030)	384	309	(3,636)	3,945
Changes in equity of equity method investments		818	827	(9)	5,414	5,431	(17)
Retained earnings of equity method investments		(251)	(251)	-	56	56	-
Actuarial gains and losses		(169,412)	(130,182)	(39,230)	59,557	43,841	15,716
Revaluation of property, plant and equipment		7,448	3,551	3,897	5,307	4,787	520
	₩	<u>(155,998)</u>	<u>(118,493)</u>	<u>(37,505)</u>	<u>34,965</u>	<u>14,253</u>	<u>20,712</u>

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

32. Retained Earnings

(1) Retained earnings as of December 31, 2023 and 2022 are summarized as follows:

<i>(In millions of won)</i>	2023	2022
Legal reserves(*1,2)	₩ 2,020,414	2,020,414
Voluntary reserves	14,712,751	14,332,197
Unappropriated retained earnings	<u>(2,358,705)</u>	<u>(2,052,244)</u>
	₩ 14,374,460	14,300,367

(*1) The Korean Commercial Code requires the Group to appropriate as a legal reserve an amount equal to at least 10% of annual cash dividends for each accounting period until the reserve equals 50% of capital. This reserve is not available for the payment of cash dividends but may be transferred to capital stock or used to offset accumulated deficit, if any, through a resolution of shareholders.

(*2) Only available for the reduction of accumulated deficit or transfer to capital stock in accordance with related laws.

(2) Dividends

There is no dividend that the controlling company decided to pay out through a resolution of the stockholders' general meeting for the years ended December 31, 2023 and 2022.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

33. Acquisitions of Subsidiary and Non-controlling Interests

- (1) There was no business combination transaction for the years ended December 31, 2023 and 2022.
(2) Business combination transaction for the years ended December 31, 2023 and 2022 are as follows:

(i) Increase of ownership

(In millions of won)

Subsidiary	2023				
	Ownership before transaction (%)	Ownership after transaction (%)	Changes in equity	Decrease in non-controlling interests	Increase in controlling interest
Hyundai Samho Heavy Industries Co., Ltd.	80.54	96.58	Equity transaction within the Group and others ₩	(14,466)	14,466
Hyundai Heavy Industries Argentina S.R.L	95.00	99.98	Equity transaction within the Group and others	(30)	30

There was no case in which the ownership interest increased without loss of control for the year ended December 31, 2022.

(ii) Decrease of ownership

(In millions of won)

Subsidiary	2023				
	Ownership before transaction (%)	Ownership after transaction (%)	Changes in equity	Decrease in non-controlling interests	Increase in controlling interest
HD Heavy Industries Mos Co., Ltd.(*)	100.00	78.02	Equity transaction within the Group and others ₩	(67)	67

(*) Changes due to the transfer of the stake in HD Heavy Industries Mos Co., Ltd. a subsidiary, to HD Hyundai Heavy Industries Co., Ltd., a subsidiary of the Group for year ended December 31, 2023

(In millions of won)

Subsidiary	2022				
	Ownership before transaction (%)	Ownership after transaction (%)	Changes in equity	Decrease in non-controlling interests	Increase in controlling interest
Hyundai Engine Company Ltd(*)	100.00	79.72	Equity transaction within the Group ₩	5,774	(5,899)
HD Hyundai Heavy industries Co., Ltd.	79.72	78.02	Sales of stakes	94,581	66,955

(*) Changes due to the transfer of the stake in Hyundai Engine Co., Ltd., a subsidiary, to HD Hyundai Heavy Industries Co., Ltd., a subsidiary of the Group for year ended December 31, 2022

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

33. Acquisitions of Subsidiary and Non-controlling Interests, Continued

- (3) Gains (losses) on disposal upon loss of control of subsidiaries for the years ended December 31, 2023 and 2022 are as follow:

<i>(In millions of won)</i>		2023		
Subsidiary that have lost control		Hyundai Transformers And Engineering India Private Limited		
Loss on disposal upon loss of control(*)	₩	-		
<i>(In millions of won)</i>		2022		
Subsidiary that have lost control		Komas Corporation	Hyundai West Africa Limited	Hyundai Heavy Industries Free Zone Enterprise
Loss on disposal upon loss of control(*)	₩	(25)	(18)	(387)

- (*) Gain or loss on disposal upon loss of control is presented in other non-operating income or expenses, which include exchange differences on translating foreign operations and others through reclassification adjustment and gain (loss) on measurement of remaining investments at fair value upon disposal.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

34. Revenue

(1) Changes in outstanding contracts for the year ended December 31, 2023 are as follows:

(In millions of won)		Offshore, Industrial Plant and Engineering			Total
		Shipbuilding		Other	
Beginning balance	₩	50,671,348	1,672,831	3,886,460	56,230,639
Increase during the period(*1)		27,412,852	1,606,604	3,375,887	32,395,343
Revenue recognized(*2)		(17,694,375)	(1,268,297)	(2,382,024)	(21,344,696)
Ending balance(*3)	₩	60,389,825	2,011,138	4,880,323	67,281,286

(*1) The increase includes the impact from changes in the contract amount and exchange rate.

(*2) The share of profit (loss) of equity accounted investees in associates and joint ventures is not included.

(*3) The balance of contract related to joint operation (FDH JV) is not included.

As of December 31, 2023, the Group provides certain amounts to financial institutions as guarantee deposits or letters of guarantee from various financial institutions to the customers in connection with construction contracts.

As of December 31, 2023, the periods when the ending balance is expected to be recognized as revenue are as follows:

(In millions of won)		2024	2025	After 2026	Total
Expected amounts	₩	22,319,756	21,626,749	23,334,781	67,281,286

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

34. Revenue, Continued

(2) Accumulated revenue and cost of construction and others related to construction-in-progress as of December 31, 2023 are as follows:

(In millions of won)

		Accumulated revenue of construction	Accumulated cost of construction	Accumulated profit (loss) of construction	Billed receivables on construction contracts (*1)	Unbilled receivables on construction contracts (*1)	Contract liabilities	Provision for construction losses
Shipbuilding	₩	15,506,093	14,776,978	729,115	378,087	6,563,177	10,094,502	179,705
Offshore, Industrial Plant and Engineering(*2)		5,332,439	5,434,048	(101,609)	129,709	592,647	165,324	4,262
Others		1,821	1,522	299	319	20	1	-
	₩	<u>20,840,353</u>	<u>20,212,548</u>	<u>627,805</u>	<u>508,115</u>	<u>7,155,844</u>	<u>10,259,827</u>	<u>183,967</u>

(*1) As of December 31, 2023, allowance for receivables on construction contracts and contract assets amounted to ₩31 million and ₩8,344 million, respectively. The receivables on construction contracts is the amount deducted from the allowance for bad debts.

(*2) The accumulated revenue and cost of construction related to joint operation (FDH JV) are not included.

As of December 31, 2023, among the receivables on construction contracts, the amount of retentions in accordance with the contract terms is amounting to ₩31,599 million.

Heavy-tail payment plan is a major collection term in the Shipbuilding segment, and Offshore, Industrial Plant and Engineering segment mainly based on Progress and Milestone payment plan. Therefore, billed receivables on construction contracts and contract assets might be changed according to the progress of construction.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

34. Revenue, Continued

(3) As of December 31, 2023, information of significant construction contracts is as follows:

(In millions of won)

Name	Date of contract	Construction deadline(*1)	Stage of completion (%)	Contract assets		Trade receivables	
				Total amount	Allowance for doubtful accounts	Total amount	Allowance for doubtful accounts
CFP	2014.04.13	2018.10.18	99.43	₩ -	-	869	-
ZOR	2015.10.13	2019.07.27	96.59	2,024	-	24,043	-
FPSO Petrobras 78 Project	2021.05.08	2025.11.07	93.90	540,221	-	-	-
Shenandoah FPS Project	2021.08.05	2024.09.26	64.05	-	-	12,765	-
FPU Project	2023.07.01	2027.04.01	3.56	-	-	90,060	-
NASR 2	2014.07.08			(*2)			

(*1) For projects where the construction deadline has elapsed, some remaining work is still ongoing after the final deliverable was transferred, or a discussion with the client to extend the construction period is still under negotiation.

(*2) As there are contractual confidentiality obligations and the clients disagree with disclosing this information, the Group omitted the related disclosures after reporting it to the audit committee. As of December 31, 2023, the Group omitted the related disclosures for one contract. However, the date of contracts of NASR 2 are disclosed in securities registration statement, business report, investment prospectus, or important management matters, the Group has disclosed the related information.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

34. Revenue, Continued

(4) The effect of changes in estimated total contract costs and total contract revenue

(i) Effect of changes in total contract costs and total contract revenue

For the year ended December 31, 2023, the estimated total contract costs and total contract revenue for contracts in progress as of December 31, 2022 have changed. Effects on profit or loss for the current period and the future period, the impact on contract assets and contract liabilities are as follows:

<i>(In millions of won)</i>		Changes in total contract revenue (*1)	Changes in total estimated contract cost	Effect on profit or loss of contract			Change of contract assets	Change of contract liabilities
				Current period	Future period	Total		
Shipbuilding	₩	741,618	1,444,043	(145,115)	(557,310)	(702,425)	(41,085)	(5,054)
Offshore, Industrial Plant and Engineering(*2)		130,897	141,038	1,948	(12,089)	(10,141)	(9,382)	(1,603)
	₩	<u>872,515</u>	<u>1,585,081</u>	<u>(143,167)</u>	<u>(569,399)</u>	<u>(712,566)</u>	<u>(50,467)</u>	<u>(6,657)</u>

(*1) Changes in entire contract revenue (including foreign currency fluctuation) are reflected because it is unable to distinguish total contract revenue changed directly by changes in total contract costs.

(*2) The accumulated revenue and cost of construction related to joint operation (FDH JV) are not included.

Effects on profit or loss for the current period and future period is calculated based on the total contract cost and total contract revenue estimated on the basis of situations generated in current period, and these estimations could be changed by variation of situations in the future.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

34. Revenue, Continued

(4) The effect of changes in estimated total contract costs and total contract revenue, Continued

(ii) Sensitivity analysis of changes in estimated total contract costs

The amount of contract assets and contract liabilities affected by progress which is determined by accumulated cost incurred divided by estimated total contract cost. An estimated total contract cost is calculated based on an estimated material cost, labor cost and construction period, and has a variance risk related to exchange rate fluctuations, changes in steel prices and changes in production hours.

The Group has entered foreign currency forward contracts to hedge the risk related to exchange rate fluctuations, and hedges the risk related to changes of steel price in short period of time by entering steel purchase agreement by period. The risk and uncertainty related to production hours has been managed by department which is responsible for managing production hours. Effects on profit or loss of current period and future periods, contract assets and contract liabilities in case production hour changes 10% are as follows:

(ii) Sensitivity analysis of changes in estimated total contract costs, continued

(In millions of won)	Effect on profit or loss in current period		Effect on profit or loss in future period		Change of contract assets		Change of contract liabilities	
	10%	10%	10%	10%	10%	10%	10%	10%
	increase	decrease	increase	decrease	increase	decrease	increase	decrease
Shipbuilding	₩ (137,871)	120,691	(946,576)	963,843	(70,321)	71,821	26,927	(25,114)
Offshore, Industrial Plant and Engineering(*)	(4,484)	4,542	(18,360)	18,303	(173)	174	4,264	(4,325)
	₩ (142,355)	125,233	(964,936)	982,146	(70,494)	71,995	31,191	(29,439)

(*) The accumulated revenue and cost of construction related to joint operation (FDH JV) is not included.

(5) Source of revenue

(In millions of won)	2023	2022
Revenue from contracts with customers	₩ 22,129,416	18,085,469
Share of profit (loss) of equity accounted investees	(48,489)	(30,591)
Hedging gains and losses	(784,721)	(752,858)
	₩ 21,296,206	17,302,020

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

34. Revenue, Continued

(6) Disaggregation of revenue

Disaggregation of revenue from contracts with customers for the years ended December 31, 2023 and 2022, is as follows:

<i>(In millions of won)</i>		2023	2022
Major products/service lines:			
Shipbuilding	₩	18,337,245	15,228,735
Offshore, Industrial Plant and Engineering		1,330,286	893,462
Engine & Machinery		1,713,154	817,427
Others		748,731	1,145,845
	₩	<u>22,129,416</u>	<u>18,085,469</u>
Primary geographical markets:			
Korea	₩	6,893,676	4,708,082
North America		521,068	158,940
Asia		5,818,800	4,995,279
Europe		8,507,860	7,054,430
Others		388,012	1,168,738
	₩	<u>22,129,416</u>	<u>18,085,469</u>
Duration of contract:			
Short-term contract	₩	1,295,882	1,716,440
Long-term contract		20,833,534	16,369,029
	₩	<u>22,129,416</u>	<u>18,085,469</u>
Timing of revenue recognition:			
Goods and services transferred at a point in time	₩	2,336,739	2,060,909
Goods and services transferred over time		19,792,677	16,024,560
	₩	<u>22,129,416</u>	<u>18,085,469</u>

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

34. Revenue, Continued

(7) Contract balance

The following table provides information about receivables, contract assets and contract liabilities from contracts with customers as of December 31, 2023 and 2022.

<i>(In millions of won)</i>	2023		2022	
	Current	Non-current	Current	Non-current
Receivables	₩ 1,920,128	338,414	1,549,801	395,597
Allowance for doubtful accounts	(870,967)	(138,770)	(877,499)	(177,726)
	<u>₩ 1,049,161</u>	<u>199,644</u>	<u>672,302</u>	<u>217,871</u>
Contract assets	₩ 7,165,162	-	6,444,373	-
Allowance for doubtful accounts	(8,344)	-	(8,146)	-
	<u>₩ 7,156,818</u>	<u>-</u>	<u>6,435,957</u>	<u>-</u>
Contract liabilities(*)	11,074,793	21,179	7,438,537	21,806

(*) The amount of ₩4,141,365 million included in contract liabilities recognized as of December 31, 2022, has been recognized as revenue for the year ended December 31, 2023.

(8) Cost to fulfill a contract recognized as an asset

The Group pays commission fees in relation to the contract, in accordance with K-IFRS No.1115, which is the incremental costs of obtaining a contract are those costs that the Group incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained. Commission fees that are expected to be recovered from the customers are recognized as costs to fulfill contract assets and amortized to reflect the progress of the construction.

<i>(In millions of won)</i>	2023	2022
Beginning balance	₩ 258,978	122,224
Increase	161,776	186,046
Depreciation(*)	(150,615)	(120,253)
Reversals (Impairment)	41,749	70,961
Ending balance	<u>₩ 311,888</u>	<u>258,978</u>

(*) It is amortized in the same way that the controls over involved goods or services are transferred to the customer.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

35. Operating Segments

The Group has five reportable segments, as described below, which are its strategic business units. The policies of reportable segments are the same as those applied by the Group in its consolidated financial statements as of and for the year ended December 31, 2022.

- (i) Shipbuilding: Manufacturing and sale of VLCCs, containerships, P/C ships, LNG carriers, warships and others.
- (ii) Offshore, Industrial Plant and Engineering: Manufacturing and installation of offshore facilities, floating units, co-generating power plants, and processing equipment
- (iii) Engine and Machinery: Manufacturing and sale of engines for ships, diesel power plants, industrial and marine pumps and hydraulic machinery
- (iv) Green Energy: Services related to solar power systems and new and renewable energy systems
- (v) Others: Football club, and others

The financial performance of each reportable segments for the years ended December 31, 2023 and 2022 is as follows:

(1) Profit (loss) of each segment

(In millions of won)

		2023				
		Sales	Inter-segment sales	Operating profit (loss)	Profit (loss) for the period	Depreciation and amortization (*)
Shipbuilding	₩	18,700,059	(1,005,684)	302,232	232,342	306,964
Offshore and Industrial Plant Engineering		1,269,740	(1,443)	(37,455)	(23,801)	23,237
Engine and Machinery		2,739,542	(1,098,636)	286,310	248,860	66,657
Green Energy		556,089	(9,967)	11,240	(7,524)	13,952
Others		552,698	(406,192)	(230,142)	(62,111)	64,250
Consolidation adjustments		(2,521,922)	2,521,922	(49,924)	(242,836)	(3,116)
	₩	<u>21,296,206</u>	<u>-</u>	<u>282,261</u>	<u>144,930</u>	<u>471,944</u>

(*) Depreciation on the right-of-use assets for the year ended December 31, 2023 is included.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

35. Operating Segments, Continued

(1) Profit (loss) of each segment, Continued

(In millions of won)

		2022				
		Sales	Inter-segment sales	Operating profit (loss)	Profit (loss) for the period	Depreciation and amortization (*)
Shipbuilding	₩	15,473,615	(912,329)	(160,405)	(55,354)	273,730
Offshore and Industrial Plant Engineering		930,213	(39,739)	(184,514)	(197,293)	22,909
Engine and Machinery		1,741,067	(1,006,566)	171,197	151,355	63,557
Green Energy		1,085,967	(101,148)	98,103	66,126	10,512
Others		424,195	(293,255)	(204,499)	94,540	53,230
Consolidation adjustments		(2,353,037)	2,353,037	(75,443)	(354,551)	(2,762)
	₩	<u>17,302,020</u>	<u>-</u>	<u>(355,561)</u>	<u>(295,177)</u>	<u>421,176</u>

(*) Depreciation on the right-of-use assets for the year ended December 31, 2022 is included.

Consolidation adjustments are made by eliminating inter-segment transactions, unrealized profits and losses and profit (loss) of equity accounted investees in associates and joint ventures.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

35. Operating Segments, Continued

(2) Assets and liabilities of each segment

(In millions of won)

		2023		2022	
		Total assets	Total liabilities	Total assets	Total liabilities
Shipbuilding	₩	19,589,854	15,532,462	16,507,103	12,669,114
Offshore and Industrial Plant					
Engineering		638,752	890,440	1,080,101	1,479,409
Engine and Machinery		2,164,932	1,863,824	1,525,198	1,345,163
Green Energy		530,001	156,872	725,818	338,053
Others		19,770,174	3,355,526	19,712,963	3,191,277
Consolidation adjustments		(10,451,145)	(1,926,659)	(9,667,707)	(1,451,670)
	₩	<u>32,242,568</u>	<u>19,872,465</u>	<u>29,883,476</u>	<u>17,571,346</u>

Consolidation adjustments are made by eliminating inter-segment transactions, unrealized profits and losses and profit (loss) of equity accounted investees in associates and joint ventures.

(3) Non-current assets by subsidiary location

(In millions of won)

		2023	2022
Korea	₩	10,820,055	10,470,325
North America		105	10
Asia		231,812	229,061
Europe-others		194	-
Consolidation adjustments(*1)		(39,107)	(61,719)
Total(*2)	₩	<u>11,013,059</u>	<u>10,637,677</u>

(*1) Consolidation adjustments are made by eliminating inter-segment transactions and unrealized profits and losses.

(*2) It represents the sum of investment property, property, plant and equipment, intangible assets, and right-of-use assets.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

36. Selling, General and Administrative Expenses

Selling, general and administrative expenses for the years ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>	2023	2022
Salaries	₩ 196,863	186,116
Bonus	41,341	44,395
Post-employment benefit costs	19,236	18,477
Employee welfare	75,832	55,722
Depreciation	28,137	27,463
Depreciation on right-of-use assets	14,924	11,485
Bad debt expenses (reversal of bad debt expenses)	(30,966)	(67,311)
Ordinary development costs	86,592	73,497
Advertising	11,949	8,890
Printing	1,175	1,117
Power cost	2,254	1,864
Warranty expenses (reversal of warranty expenses)	(50,067)	2,838
Insurance	3,704	3,725
Supplies	1,339	1,319
Consumable expenses	2,848	1,611
Water, light and heating expenses	1,239	966
Repairs	2,573	3,802
Travel	10,538	6,688
Research	11,411	8,348
Training	3,612	3,767
Service contract expenses	79,644	62,826
Transportation	21,818	62,965
Ceremonial expenses	936	1,702
Rent	4,329	3,618
Data processing	18,755	16,135
Entertainment	2,730	2,314
Taxes and dues	7,252	6,708
Service charges	180,001	155,078
Automobile maintenance	4,534	4,759
Sales commissions	897	1,872
Others	10,336	9,244
	₩ <u>765,766</u>	<u>722,000</u>

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

37. Nature of Expenses

The classification of expenses by nature for the years ended December 31, 2023 and 2022 is as follows:

<i>(In millions of won)</i>		2023	2022
Changes in inventories	₩	198,879	(648,019)
Purchase of inventories		12,159,293	11,128,062
Depreciation		423,564	387,942
Depreciation on right-of-use assets		35,752	23,259
Amortization		12,628	9,975
Labor costs		2,095,471	1,796,809
Other expenses		6,088,358	4,959,553
Total(*)	₩	21,013,945	17,657,581

(*) Total expenses consist of cost of sales and selling, general and administrative expenses.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

38. Finance Income and Finance Costs

Finance income and finance costs for the years ended June 30, 2023 and 2022 are as follows:

<i>(In millions of won)</i>	2023	2022
Finance income:		
Interest income	₩ 201,958	134,083
Gain on valuation of financial instruments measured at FVTPL	16	5,398
Gain on disposal of financial instruments measured at FVTPL	2,393	9,810
Dividend income	6,040	3,122
Gain on foreign currency translations	31,710	96,413
Gain on foreign currency transactions	719,563	1,225,012
Gain on valuation of derivatives	136,916	588,396
Gain on derivatives transactions	129,772	104,625
Others	388	-
	₩ 1,228,756	2,166,859
Finance costs:		
Interest expense	₩ 193,879	165,846
Loss on valuation of financial instruments measured at FVTPL	1,446	4,386
Loss on disposal of financial instruments measured at FVTPL	4,140	42,593
Loss on foreign currency translations	164,973	438,266
Loss on foreign currency transactions	536,892	712,219
Loss on valuation of derivatives	481,666	797,215
Loss on derivatives transactions	562,497	677,871
Others	149,441	-
	₩ 2,094,934	2,838,396

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

39. Other Non-operating Income and Other Non-operating Expenses

Other non-operating income and other non-operating expenses for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

	2023	2022
Other non-operating income:		
Gain on disposal of property, plant and equipment	₩ 9,963	13,100
Gain on disposal of non-current assets held for sale	-	4,303
Disposal of investments in associates and joint ventures	-	3,038
Gain on valuation of firm commitments	869,888	1,272,555
Reversal of other allowance for doubtful accounts	1,024	3,216
Others	37,846	69,230
	₩ 918,721	1,365,442
Other non-operating expenses:		
Service charges	₩ 8,328	11,941
Loss on disposal of property, plant and equipment	4,917	11,028
Loss on disposal of intangible assets	-	324
Loss on disposal of right-of-use assets	117	80
Loss on disposal of loss on non-current assets held for sale	-	70
Loss on disposal of investments in associates	-	7,223
Impairment loss on property, plant and equipment	24,380	7,884
Impairment loss on intangible assets	22,923	43
Impairment loss on other current assets	-	23,518
Loss on valuation of firm commitments	200,111	599,945
Other bad debt expenses	2,092	612
Donation	17,105	9,737
Others	62,956	95,543
	₩ 342,929	767,948

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

40. Income Tax Expense (Benefit)

(1) Components of income tax expense (benefit) for the years ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>	2023	2022
Current tax expense	₩ 8,275	21,068
Adjustment for prior periods	880	(3,217)
Origination and reversal of temporary differences	(223,432)	(128,629)
Income tax recognized in other comprehensive income (loss)	62,233	(25,538)
Others	(932)	398
Income tax expense (benefit)	₩ <u>(152,976)</u>	<u>(135,918)</u>

(2) Income taxes recognized directly other than profit or loss for the years ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>	2023	2022
Changes in fair value of financial assets measured at FVOCI	₩ (3,037)	9,636
Effective portion of changes in fair value of cash flow hedges	3,190	179
Actuarial gains and losses	54,458	(19,875)
Revaluation of property, plant and equipment	7,456	5,369
Others	166	(20,847)
Total income tax expense (benefit)	₩ <u>62,233</u>	<u>(25,538)</u>

Income taxes related to changes in fair value of financial assets measured at FVOCI, effective portion of changes in fair value of cash flow hedges, actuarial gains and losses, revaluation of property, plant and equipment and others are recognized in other comprehensive income (loss).

(3) Reconciliation of the effective tax rates for the years ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>	2023	2022
Loss before income tax	₩ (8,046)	(431,095)
Income tax using each component's statutory tax rate	58,913	(33,107)
Adjustment for:		
-Change in tax rates	27,464	40,280
-Tax effect of non-deductible expenses	3,227	10,297
-Tax effect of tax-exempt income	(20,163)	461
-Tax incentives	(4,574)	(7,489)
- Change in unrecognized temporary difference	3,926	(53,777)
- Current adjustments for prior periods	437	(2,211)
- Impairment (reversal)	(243,778)	(73,843)
-Others	21,572	(16,529)
Income tax expense (benefit)	₩ <u>(152,976)</u>	<u>(135,918)</u>
Effective tax rate	(*)	(*)

(*) As loss before income tax or income tax benefit is occurred, the Group did not calculate the effective tax rate.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

40. Income Tax Expense (Benefit), Continued

- (4) Deferred tax assets and deferred tax effects by origination and reversal of temporary differences for the years ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
Deferred assets at the end of the year	₩	1,723,287	1,499,817
Deferred assets at the beginning of the year		1,499,817	1,370,864
Others		38	324
Deferred tax effects by origination and reversal of temporary differences	₩	<u>(223,432)</u>	<u>(128,629)</u>

- (5) As of December 31, 2023, the tax effects of temporary difference were calculated using the enacted statutory tax rate for the fiscal period when the temporary differences are expected to be reversed
- (6) Deferred tax assets and liabilities are offset and presented in the separate statements of financial position, only if there are a legally enforceable right to offset the related current tax liabilities and assets, and they relate to income taxes levied by the same tax authority and they intend to settle current tax liabilities and assets on a net basis.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

40. Income Tax Expense (Benefit), Continued

(7) Changes in deferred tax assets (liabilities) for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

	2023		
	Beginning balance	Change	Ending balance
Investments in subsidiaries and associates	₩ (28,343)	2,337	(26,006)
Financial assets measured at fair value	127,481	(8,744)	118,737
Trade and other receivables	334,016	(12,974)	321,042
Asset revaluation	(265,186)	2,110	(263,076)
Property, plant and equipment	34,778	4,030	38,808
Derivatives	(6,641)	16,128	9,487
Accrued expenses	34,512	4,005	38,517
Provisions	210,885	(120,382)	90,503
Others	(76,948)	(202,616)	(279,564)
	364,554	(316,106)	48,448
Tax loss carryforward	1,094,997	536,044	1,631,041
Carryforward tax credit	40,266	3,532	43,798
₩	<u>1,499,817</u>	<u>223,470</u>	<u>1,723,287</u>

(In millions of won)

	2022		
	Beginning balance	Change	Ending balance
Investments in subsidiaries and associates	₩ (40,776)	12,433	(28,343)
Financial assets measured at fair value	118,121	9,360	127,481
Trade and other receivables	375,212	(41,196)	334,016
Asset revaluation	(271,580)	6,394	(265,186)
Property, plant and equipment	31,210	3,568	34,778
Derivatives	21,769	(28,410)	(6,641)
Accrued expenses	31,397	3,115	34,512
Provisions	353,100	(142,215)	210,885
Others	(27,928)	(49,020)	(76,948)
	590,525	(225,971)	364,554
Tax loss carryforward	743,558	351,439	1,094,997
Carryforward tax credit	36,781	3,485	40,266
₩	<u>1,370,864</u>	<u>128,953</u>	<u>1,499,817</u>

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

40. Income Tax Expense (Benefit), Continued

- (8) The details of temporary differences not recognized as deferred tax assets (liabilities) as of December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022	Reason
Investments in subsidiaries and associates(*)	₩	779,044	342,990	Remote to be reversed
Goodwill		(13,141)	(13,141)	Asset with indefinite useful lives
Impairment losses on property, plant, and equipment, etc		31,857	33,863	Remote to be utilized
	₩	<u>797,760</u>	<u>363,712</u>	

(*) The tax rate was applied when recognizing deferred tax assets (liabilities).

- (9) The details of deferred tax assets (liabilities) for unrecognized accumulated deficits and temporary differences to be deducted as of December 31, 2023 and 2022 are as follows.

<i>(In millions of won)</i>		2023	2022	Reason
Unused deficit	₩	66,629	1,095,227	Remote to be utilized
Temporary differences to be deducted		19,498	8,579	Remote to be utilized

- (10) Expiration schedule of unused deficit as of December 31, 2023 and 2022 is as follows

<i>(In millions of won)</i>		2023	2022
2028	₩	66,629	750,743
2029		-	344,484
	₩	<u>66,629</u>	<u>1,095,227</u>

- (11) The classification of deferred tax assets (liabilities) between current and non-current as of December 31, 2023 is as follows.

<i>(In millions of won)</i>		2023	2022
Deferred tax assets (liabilities) payment due in 12 months	₩	179,807	201,380
Deferred tax assets (liabilities) payment due after 12 months		1,543,480	1,298,437
	₩	<u>1,723,287</u>	<u>1,499,817</u>

- (12) The controlling Company believes that there is a likelihood of realization for deferred tax assets related to deficit carried forward, which exceed the expected average income after the next accounting year, excluding deferred tax assets associated with deficit carried forward not recognized due to remote realization. Due to amendments in tax laws, Hyundai Samho Co., Ltd. has been included as a consolidated subsidiary for tax consolidation purposes, as the conditions for being a consolidated tax-paying entity now require ownership of 90% or more. Considering the high possibility of future taxable income that can absorb the unused tax losses, the controlling company recognized deferred tax assets related to unused tax losses within that scope.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

41. Earnings (loss) per Share

(1) Basic earnings per share for the years ended December 31, 2023 and 2022 are as follows:

<i>(In thousands of won, In thousands of shares)</i>		2023	2022
Profit (loss) attributable to owners of the Company	₩	221,711,002	(216,949,612)
Weighted average number of ordinary shares outstanding(*)		70,715	70,715
Earnings (loss) per share <i>(in won)</i>	₩	3,135	(3,068)

(*) Weighted-average number of ordinary shares for years ended December 31, 2023 and 2022 are as follows:

<i>(In shares)</i>		2023	
	Number of shares outstanding	Weighted average (In days)	Weighted average number of shares outstanding
Beginning balance	70,714,630	365/365	70,714,630
Weighted average number of ordinary shares outstanding	70,714,630		70,714,630

<i>(In shares)</i>		2022	
	Number of shares outstanding	Weighted average (In days)	Weighted average number of shares outstanding
Beginning balance	70,714,630	365/365	70,714,630
Weighted average number of ordinary shares outstanding	70,714,630		70,714,630

(2) Since there are no potentially dilutive common shares for years ended December 31, 2023 and 2022, diluted earnings per share have not been calculated.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

42. Cash Generated from Operations

(1) Cash generated from operations for the years ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
Profit (Loss) for the year	₩	144,930	(295,177)
Adjustments for:		1,943,850	773,406
Retirement benefits		110,459	113,075
Depreciation		423,564	387,942
Depreciation on right-of-use assets		35,752	23,259
Amortization		12,628	9,975
Bad debt expenses (Reversal of bad debt expenses)		(30,966)	(67,311)
Finance income		(378,129)	(829,266)
Finance costs		992,798	1,410,590
Other non-operating income		(882,618)	(1,302,969)
Other non-operating expenses		255,059	651,033
Share of profit of equity accounted investees (sales)		48,489	30,591
Share of profit of equity accounted investees		(79)	1,491
Income tax expense (benefit)		(152,976)	(135,918)
Trade receivables		(369,274)	30,208
Other receivables		(41,730)	(93,626)
Contract assets		(788,596)	(1,091,191)
Inventories		198,973	(644,726)
Derivative assets		(395,699)	(383,200)
Firm commitments		742,915	853,124
Other current assets		(429,747)	(506,133)
Long-term trade receivables		(3,616)	8,322
Other non-current assets		(22,184)	(150,000)
Trade payables		332,461	(430,081)
Other payables		76,110	31,197
Advances received		(274)	93
Contract liabilities		3,608,479	3,770,591
Other current liabilities		(711)	39,890
Long-term other payables		17,025	2,433
Retirement benefits paid		(159,880)	(164,196)
Succession of retirement benefits		17,751	14,541
Plan assets		(145,003)	(241,269)
Provisions		(1,127,131)	(563,170)
Other non-current liabilities		-	(1,893)

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

42. Cash Generated from Operations, Continued

- (2) Significant transactions that do not involve cash inflows and outflows for the years ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>	2023	2022
Change in advances received related to the non-current assets held for sale	₩ -	1,528
Reclassification of construction-in-progress	258,644	185,399
Increase and decrease in accounts payable about acquisition amount of property, plant and equipment	7,285	19,177
Reclassification to current portion of debentures and borrowings	1,292,035	1,825,070
Net changes of financial assets measured at FVOCI	16,443	(35,248)
Increase in right-of-use assets and lease liabilities	27,084	77,557
Substitution of other capital adjustments and accounts payable	139,757	-
Reclassification of deposit to investments in associates and joint ventures	-	19,300
Replace investments in associates with FVOCI	-	31,888

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

43. Categories of Financial Instruments and Income and Costs by Categories

(1) Categories of financial instruments as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

		2023					
		Fair value – hedging instruments	Financial instruments measured at FVTPL	Financial instruments measured at FVOCI	Financial instruments measured at amortized cost	Total	Fair values
Financial assets							
measured at fair value:							
Financial instruments measured at FVTPL(*1)	₩	-	19,704	-	-	19,704	19,704
Equity investments measured at FVOCI(*2)		-	-	212,720	-	212,720	212,720
Derivative assets		394,072	-	-	-	394,072	394,072
Financial assets not measured at fair value:							
Cash and cash equivalents		-	-	-	3,018,391	3,018,391	-
Financial assets		-	-	-	1,595,909	1,595,909	-
Trade and other receivables		-	-	-	1,712,387	1,712,387	-
Contract assets		-	-	-	7,156,818	7,156,818	-
	₩	394,072	19,704	212,720	13,483,505	14,110,001	626,496
Financial liabilities							
measured at fair value:							
Financial liabilities measured at FVTPL	₩	-	2,540	-	-	2,540	2,540
Derivative liabilities		642,190	-	-	-	642,190	642,190
Financial liabilities not measured at fair value:							
Borrowings		-	-	-	2,450,216	2,450,216	-
Bonds		-	-	-	1,465,518	1,465,518	-
Lease liabilities		-	-	-	98,222	98,222	-
Trade and other payables		-	-	-	3,229,362	3,229,362	-
	₩	642,190	2,540	-	7,243,318	7,888,048	644,730

(*1) The amounts of financial assets that were recorded at their acquisition cost because the fair values cannot be measured reliably as of December 31 2023 are ₩2,006 million.

(*2) The amounts of financial assets that were recorded at their acquisition cost because the fair values cannot be measured reliably as of December 31, 2023 are ₩41,221 million.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

43. Categories of Financial Instruments and Income and Costs by Categories, Continued

(1) Categories of financial instruments as of December 31, 2023 and 2022 are summarized as follows, continued:

(In millions of won)

	2022					
	Fair value – hedging instruments	Financial instruments measured at FVTPL	Financial instruments measured at FVOCI	Financial instruments measured at amortized cost	Total	Fair values
Financial assets measured at fair value:						
Financial instruments measured at FVTPL(*1)	₩ -	199,753	-	-	199,753	199,753
Equity investments measured at FVOCI(*2)	-	-	182,427	-	182,427	182,427
Derivative assets	558,776	-	-	-	558,776	558,776
Financial assets not measured at fair value:						
Cash and cash equivalents	-	-	-	2,697,223	2,697,223	-
Financial assets	-	-	-	1,123,156	1,123,156	-
Trade and other receivables	-	-	-	1,277,196	1,277,196	-
Contract assets	-	-	-	6,435,957	6,435,957	-
	₩ 558,776	199,753	182,427	11,533,532	12,474,488	940,956
Financial liabilities measured at fair value:						
Financial liabilities measured at FVTPL	₩ -	1,793	-	-	1,793	1,793
Derivative liabilities	845,300	-	-	-	845,300	845,300
Financial liabilities not measured at fair value:						
Borrowings	-	-	-	2,357,977	2,357,977	-
Bonds	-	-	-	1,519,721	1,519,721	-
Lease liabilities	-	-	-	104,025	104,025	-
Trade and other payables	-	-	-	2,922,009	2,922,009	-
Convertible preference shares	-	-	-	260,243	260,243	-
	₩ 845,300	1,793	-	7,163,975	8,011,068	847,093

(*1) The amounts of financial assets that were recorded at their acquisition cost because the fair values cannot be measured reliably as of December 31 2022 are ₩998 million.

(*2) The amounts of financial assets that were recorded at their acquisition cost because the fair values cannot be measured reliably as of December 31, 2022 are ₩21,548 million.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

43. Categories of Financial Instruments and Income and Costs by Categories, Continued

(2) Financial instruments income and costs by categories for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

	2023				
	Fair value- hedging instruments	Financial instruments measured at FVTPL	Equity investments measured at FVOCI	Financial instruments measured at amortized cost	Total
Selling, general and Administrative Expenses:					
Reversal of allowance for doubtful accounts	₩ -	-	-	30,966	30,966
Finance income:					
Interest income(*)	₩ -	-	-	201,958	201,958
Gain on valuation of financial instruments measured at FVTPL	-	16	-	-	16
Gain on disposal of financial instruments measured at FVTPL	-	2,393	-	-	2,393
Dividend income	-	49	5,991	-	6,040
Gain on foreign currency translation	-	-	-	31,710	31,710
Gain on foreign currency transactions	-	-	-	719,563	719,563
Gain on valuation of derivatives	136,916	-	-	-	136,916
Gain on derivatives transactions	129,772	-	-	-	129,772
Others	-	-	-	388	388
	₩ 266,688	2,458	5,991	953,619	1,228,756
Finance costs:					
Interest expense(*)	₩ -	-	-	(193,879)	(193,879)
Loss on valuation of financial instruments measured at FVTPL	-	(1,446)	-	-	(1,446)
Loss on disposal of financial instruments measured at FVOCI	-	(4,140)	-	-	(4,140)
Loss on foreign currency translation	-	-	-	(164,973)	(164,973)
Loss on foreign currency transactions	-	-	-	(536,892)	(536,892)
Loss on valuation of derivatives	(481,666)	-	-	-	(481,666)
Loss on derivatives transactions	(562,497)	-	-	-	(562,497)
Others	-	-	-	(149,441)	(149,441)
	₩ (1,044,163)	(5,586)	-	(1,045,185)	(2,094,934)
Other non-operating income:					
Reversal of other allowance for doubtful Accounts	₩ -	-	-	1,024	1,024
Other non-operating expenses:					
Other bad debt expenses	₩ -	-	-	(2,092)	(2,092)
Other comprehensive income (loss) (net of tax):					
Changes in fair value of financial assets measured at FVOCI	₩ -	-	16,443	-	16,443
Effective portion of changes in fair value of cash flow hedges	(9,398)	-	-	-	(9,398)
	₩ (9,398)	-	16,443	-	7,045
	₩ (786,873)	(3,128)	22,434	(61,668)	(829,235)

(*) Interest expense arising from effective interest rate amortization and significant financial factors of contract liabilities are included.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

43. Categories of Financial Instruments and Income and Costs by Categories, Continued

- (2) Financial instruments income and costs by categories for the years ended December 31, 2023 and 2022 are as follows, continued:

(In millions of won)

(In millions of won)	2022				
	Fair value- hedging instruments	Financial instruments measured at FVTPL	Equity investments measured at FVOCI	Financial instruments measured at amortized cost	Total
Selling, general and Administrative Expenses:					
Bad debt expenses	₩ -	-	-	67,311	67,311
Finance income:					
Interest income(*)	₩ -	-	-	134,083	134,083
Gain on valuation of financial instruments measured at FVTPL	-	5,398	-	-	5,398
Gain on disposal of financial instruments measured at FVTPL	-	9,810	-	-	9,810
Dividend income	-	985	2,137	-	3,122
Gain on foreign currency translation	-	-	-	96,413	96,413
Gain on foreign currency transactions	-	-	-	1,225,012	1,225,012
Gain on valuation of derivatives	588,396	-	-	-	588,396
Gain on derivatives transactions	104,625	-	-	-	104,625
	₩ 693,021	16,193	2,137	1,455,508	2,166,859
Finance costs:					
Interest expense(*)	₩ -	-	-	(165,846)	(165,846)
Loss on valuation of financial instruments measured at FVTPL	-	(4,386)	-	-	(4,386)
Loss on disposal of financial instruments measured at FVOCI	-	(42,593)	-	-	(42,593)
Loss on foreign currency translation	-	-	-	(438,266)	(438,266)
Loss on foreign currency transactions	-	-	-	(712,219)	(712,219)
Loss on valuation of derivatives	(797,215)	-	-	-	(797,215)
Loss on derivatives transactions	(677,871)	-	-	-	(677,871)
	₩ (1,475,086)	(46,979)	-	(1,316,331)	(2,838,396)
Other non-operating income:					
Reversal of other allowance for doubtful Accounts	₩ -	-	-	3,216	3,216
Other non-operating expenses:					
Other bad debt expenses	₩ -	-	-	(612)	(612)
Other comprehensive income (loss) (net of tax):					
Changes in fair value of financial assets measured at FVOCI	₩ -	-	(35,247)	-	(35,247)
Effective portion of changes in fair value of cash flow hedges	(431)	-	-	-	(431)
	₩ (431)	-	(35,247)	-	(35,678)
	₩ (782,496)	(30,786)	(33,110)	209,092	(637,300)

(*) Interest income and expense arising from effective interest rate amortization are included.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

44. Financial Instruments

(1) Credit risk

(i) Exposure to credit risk

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk as of December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
Cash and cash equivalents(*1)	₩	3,018,292	2,694,370
Fair value –hedging instruments		394,072	558,776
Financial assets measured at fair value		19,704	199,753
Amortized cost(*2)		10,465,114	8,836,309
	₩	<u>13,897,182</u>	<u>12,289,208</u>

(*1) Cash held as of December 31, 2023 and 2022 is excluded.

(*2) The carrying amounts of contract assets as of December 31, 2023 and 2022 are included.

As of December 31, 2023, there is no credit risk incurred by the Group due to payment guarantee contracts.

The maximum exposure to credit risk for loans and receivables at the reporting date by geographic region as of December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
Korea	₩	4,085,478	2,478,205
North America		16,223	26,919
Asia		2,429,048	2,560,930
Europe		3,718,955	3,319,089
Others		215,410	451,166
	₩	<u>10,465,114</u>	<u>8,836,309</u>

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

44. Financial Instruments, Continued

(1) Credit risk, Continued

(ii) Impairment loss

- ① The aging of financial assets at amortized cost (including contract asset) and the related allowance for impairment as of December 31, 2023 and 2022 are as follows:

(In millions of won)	2023		2022	
	Gross	Impairment	Gross	Impairment
Not past due	₩ 8,938,591	(191,946)	7,893,817	(225,297)
Past due up to 6 months	94,884	(8,703)	35,900	(5,871)
Past due 6~12 months	42,229	(6,710)	23,512	(8,322)
Past due 1~3 years	61,562	(59,313)	63,787	(62,414)
More than 3 years	937,782	(937,347)	946,231	(945,964)
	₩ 10,075,048	(1,204,019)	8,963,247	(1,247,868)

- ② The movement in the allowance for impairment in respect of financial assets at amortized cost (including contract asset) for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)	2023	2022
Beginning balance	₩ 1,247,868	1,319,553
Impairment loss recognized	6,913	12,034
Reversal of allowance for doubtful accounts	(37,796)	(81,949)
Write-offs	(12,966)	(1,770)
Ending balance	₩ 1,204,019	1,247,868

The allowance accounts in respect of trade and other receivables, contract assets are used to record impairment losses until the Group is satisfied that all collection measures have been exhausted. At that point, the amounts are considered irrecoverable and are written off against the financial asset directly.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

44. Financial Instruments, Continued

(2) Liquidity risk

- (i) The contractual maturities of financial liabilities, including estimated interest payments and excluding the impact of netting agreements for the years ended December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

		2023				
		Contractual cash flow	6 months or less	6~12 months	1~3 years	More than 3 years
Non-derivative financial liabilities:						
Borrowings	₩	2,590,620	804,284	760,743	1,014,221	11,372
Debentures		1,560,213	616,087	186,664	364,493	392,969
Lease liabilities		112,191	17,537	14,234	44,915	35,505
Trade and other payables		3,229,362	3,203,615	-	18,358	7,389
Derivative financial liabilities:						
Derivative contracts used for hedging		658,750	274,038	193,766	190,816	130
	₩	<u>8,151,136</u>	<u>4,915,561</u>	<u>1,155,407</u>	<u>1,632,803</u>	<u>447,365</u>

As of December 31, 2023, the Group did not include payment amounting to ₩2,540 million, which are recognized as financial liabilities measured at FVTPL due to uncertainty of estimated payment time.

- (ii) It is not expected that the cash flows included in the maturity analysis could occur significantly earlier, or at significantly different amounts.

(In millions of won)

		2022				
		Contractual cash flow	6 months or less	6~12 months	1~3 years	More than 3 years
Non-derivative financial liabilities:						
Borrowings	₩	2,421,793	1,558,950	451,859	391,750	19,234
Debentures		1,618,613	218,369	303,215	698,710	398,319
Convertible preference shares		260,243	260,243	-	-	-
Lease liabilities		115,592	16,006	16,819	40,946	41,821
Trade and other payables		2,922,009	2,912,741	42	4,280	4,946
Derivative financial liabilities:						
Derivative contracts used for hedging		874,788	324,834	234,704	313,648	1,602
	₩	<u>8,213,038</u>	<u>5,291,143</u>	<u>1,006,639</u>	<u>1,449,334</u>	<u>465,922</u>

As of December 31, 2022, the Group did not include payment amounting to ₩1,793 million, which are recognized as financial liabilities measured at FVTPL due to uncertainty of estimated payment time.

It is not expected that the cash flows included in the maturity analysis could occur significantly earlier, or at significantly different amounts.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

44. Financial Instruments, Continued

(2) Liquidity risk, Continued

(iii) The periods in which the cash flows associated with cash flow hedges are expected to occur as of December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

		2023			
		Contractual cash flow	6 months or less	6~12 months	1~3 years
Currency forward:					
Assets	₩	833	-	-	833
Liabilities		-	-	-	-
Currency swaps:					
Assets		86,448	58,668	706	27,074
Liabilities		(2,104)	(1,288)	(816)	-
	₩	<u>85,177</u>	<u>57,380</u>	<u>(110)</u>	<u>27,907</u>

(In millions of won)

		2022			
		Contractual cash flow	6 months or less	6~12 months	1~3 years
Currency forward:					
Assets	₩	21	21	-	-
Liabilities		(121)	(121)	-	-
Currency swaps:					
Assets		127,281	48,645	12,390	66,246
Liabilities		(1,090)	-	-	(1,090)
	₩	<u>126,091</u>	<u>48,545</u>	<u>12,390</u>	<u>65,156</u>

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

44. Financial Instruments, Continued

(3) Currency risk

(i) Exposure to currency risk

The Group's exposure to foreign currency risk based on notional amounts for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

		2023				
		USD	EUR	CNY	JPY	Others
Assets:						
Cash and cash equivalents	₩	883,910	1,158	276	199	29,830
Trade and other receivables		1,396,554	58,096	177	212	82,664
Contract assets		7,028,595	14,043	-	-	2,024
		<u>9,309,059</u>	<u>73,297</u>	<u>453</u>	<u>411</u>	<u>114,518</u>
						<u>9,497,738</u>
Liabilities:						
Trade and other payables		(1,279,896)	(129,337)	(775)	(3,210)	(171,398)
Borrowings and debentures		(1,205,256)	(94,394)	-	-	(9,700)
		<u>(2,485,152)</u>	<u>(223,731)</u>	<u>(775)</u>	<u>(3,210)</u>	<u>(181,098)</u>
						<u>(2,893,966)</u>
Net statement of financial position exposure		6,823,907	(150,434)	(322)	(2,799)	(66,580)
Derivative contracts		(248,864)	-	-	-	747
Net exposure	₩	<u>6,575,043</u>	<u>(150,434)</u>	<u>(322)</u>	<u>(2,799)</u>	<u>(65,833)</u>
						<u>6,355,655</u>

(In millions of won)

		2022				
		USD	EUR	CNY	JPY	Others
Assets:						
Cash and cash equivalents	₩	635,445	138	74	108	18,656
Trade and other receivables		1,257,688	63,965	230	218	135,489
Contract assets		6,285,869	13,135	-	-	77,729
		<u>8,179,002</u>	<u>77,238</u>	<u>304</u>	<u>326</u>	<u>231,874</u>
						<u>8,488,744</u>
Liabilities:						
Trade and other payables		(1,064,769)	(203,014)	(688)	(2,336)	(207,848)
Borrowings and debentures		(1,352,339)	(121,664)	-	-	(8,902)
		<u>(2,417,108)</u>	<u>(324,678)</u>	<u>(688)</u>	<u>(2,336)</u>	<u>(216,750)</u>
						<u>(2,961,560)</u>
Net statement of financial position exposure		5,761,894	(247,440)	(384)	(2,010)	15,124
Derivative contracts		(285,329)	(1,077)	-	-	(118)
Net exposure	₩	<u>5,476,565</u>	<u>(248,517)</u>	<u>(384)</u>	<u>(2,010)</u>	<u>15,006</u>
						<u>5,240,660</u>

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

44. Financial Instruments, Continued

(3) Currency risk, Continued

(i) Exposure to currency risk, Continued

Foreign currency risk is based on financial instruments presented in currencies other than the functional currency of the individual company in the Group. Derivative contracts, which contain derivative contracts to hedge the risk of exchange rate fluctuation, are the amount of exposure to currency risk before considering effectiveness of hedge.

Significant exchange rates applied for the years ended December 31, 2023 and 2022 are as follow:

(In won)		Average rate		Spot rate	
		2023	2022	2023	2022
USD	₩	1,305.41	1,291.95	1,289.40	1,267.30
EUR		1,412.36	1,357.38	1,426.59	1,351.20
CNY		184.22	191.57	180.84	181.44
JPY (100)		931.24	983.44	912.66	953.18

(ii) Sensitivity analysis

A weakening of the won, as indicated below, against the USD, EUR, CNY, JPY and other currencies as of December 31, 2023 and 2022 would have increased (decreased) profit or loss by the amounts shown below.

This analysis is based on foreign currency exchange rate variances that the Group considered to be reasonably possible at the reporting date. The analysis assumes that all other variables, in particular interest rates, remain constant.

The changes in profit or loss are as follows:

(In millions of won)		Profit or loss	
		2023	2022
USD (3 percent strengthening)	₩	197,251	164,297
EUR (3 percent strengthening)		(4,513)	(7,456)
CNY (3 percent strengthening)		(10)	(12)
JPY (3 percent strengthening)		(84)	(60)
Others (3 percent strengthening)		(1,975)	450

A strengthening of the won against the above currencies as of December 31, 2023 and 2022 would have had the equal but opposite effect on the above currencies to the amounts shown above assuming all other variables remain constant.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

44. Financial Instruments, Continued

(4) Interest rate risk

- (i) The interest rate profile of the Group's interest-bearing financial instruments as of December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
Fixed rate instruments:			
Financial assets	₩	3,995,773	3,438,223
Financial liabilities		(2,951,672)	(2,483,932)
	₩	<u>1,044,101</u>	<u>954,291</u>
Variable rate instruments:			
Financial assets	₩	833,841	707,395
Financial liabilities		(967,251)	(1,654,938)
	₩	<u>(133,410)</u>	<u>(947,543)</u>

- (ii) Interest rate risk arises from savings and borrowings with floating interest rates. The Group properly hedges the risk borrowings with floating interest rates through interest rate swaps. Interest rate swap contracts as of December 31, 2023 are as follows:

<i>(In thousands US dollar)</i>				
Counterparties	Amount	Interest rate		Expiration date
The Korea Development bank	450,000	Receives floating interest rate	3M Term Sofr+1.21%~2.18%	
		Pays fixed interest rate	1.47%~4.55%	2024-05-21

- (iii) Cash flow sensitivity analysis for variable rate instruments

A change of 100 basis points in interest rates as of December 31, 2023 and 2022 would have increased (decreased) equity and profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency rates, remain constant. The changes in equity and profit or loss are as follows:

<i>(In millions of won)</i>		Profit or loss	
		100 bp increase	100 bp decrease
2023:			
Variable rate instruments	₩	(1,334)	1,334
Interest rate swaps		5,802	(5,802)
Net cash flow sensitivity	₩	<u>4,468</u>	<u>(4,468)</u>
2022:			
Variable rate instruments	₩	(9,475)	9,475
Interest rate swaps		11,406	(11,406)
Net cash flow sensitivity	₩	<u>1,931</u>	<u>(1,931)</u>

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

44. Financial Instruments, Continued

(5) Fair values

Fair value hierarchy

The Group classified fair value measurements in accordance with the fair value hierarchy which reflects the significance of the inputs used in fair value measurements

The different levels have been defined as follows:

- Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: Inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The financial instruments carried at fair value, by fair value hierarchy as of December 31, 2023 and 2022 are as follows:

(In millions of won)

		<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
2023:					
Financial assets measured at FVTPL	₩	-	2,089	15,609	17,698
Financial assets measured at FVOCI		96,866	-	74,633	171,499
Derivative assets		-	394,072	-	394,072
Financial liabilities measured at FVTPL		-	-	2,540	2,540
Derivative liabilities		-	642,190	-	642,190
2022:					
Financial assets measured at FVTPL		-	183,492	15,263	198,755
Financial assets measured at FVOCI	₩	96,577	177	64,125	160,879
Derivative assets		-	558,776	-	558,776
Financial liabilities measured at FVTPL		-	-	1,793	1,793
Derivative liabilities		-	845,300	-	845,300

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

44. Financial Instruments, Continued

(5) Fair values, Continued

Fair value hierarchy, Continued

The fair value of financial instruments traded in active markets is based on quoted market prices at the end of reporting period. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. These financial instruments are included in level 1. Instruments included in level 1 are comprised primarily of listed equity investments.

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using valuation techniques. These valuation techniques maximize the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fairly value an instrument are observable, the instrument is included in level 2. If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3.

Specific valuation techniques used to value financial instruments include:

- Quoted market prices or dealer quotes for similar instruments
- The fair value of forward foreign exchange contracts is determined using forward exchange rates at the end of reporting period, with the resulting value discounted back to present value.
- Other techniques, such as a discounted cash flow analysis, are used to determine fair value for the remaining financial instruments.

Unlisted equity securities, investments in capital and other investments in entities newly established or having no comparative entity are excluded from the fair value valuation because their fair value cannot be measured reliably.

(6) Valuation techniques and input variables of Level 2 fair values

The valuation techniques and input variables used in measuring Level 2 fair values rates as of December 31, 2023 and 2022 are as follows:

(In millions of won)		2023	2022	Valuation techniques	Input variables
Financial assets measured at FVPL :					
Beneficiary certificates	₩	2,089	183,492	Market approach, Net asset value, cash flow discount model and others	CER future price, discount rate and others
Financial assets measured at FVOCI:					
Equity securities		-	177	Market approach	Market multiple and others
Derivative Assets:					
Derivatives		394,072	558,776	Cash flow discount model and others	Currency forward price, discount rate and others
Derivative liabilities:					
Derivatives		642,190	845,300	Cash flow discount model and others	Currency forward price, discount rate and others

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

44. Financial Instruments, Continued

(7) Level 3 fair values

- (i) Changes in assets and liabilities which are classified as Level 3 fair values among assets and liabilities measured at fairvalue for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

		2023			2022		
		Financial assets	Financial assets	Financial liabilities	Financial assets	Financial assets	Financial liabilities
		measured at FVTPL	measured at FVOCI	measured at FVTPL	measured at FVTPL	measured at FVOCI	measured at FVTPL
Beginning Balance	₩	15,263	64,125	1,793	14,831	40,774	5,866
Acquisitions		1,001	-	-	1	31,888	-
Disposals		-	-	-	(289)	-	-
Valuation		(655)	10,331	747	720	(8,537)	(4,073)
Reclassification		-	177	-	-	-	-
Ending Balance	₩	15,609	74,633	2,540	15,263	64,125	1,793

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

44. Financial Instruments, Continued

(7) Level 3 fair values, Continued

(ii) The valuation techniques and input of assets and liabilities classified as level 3 in the fair value hierarchy of assets and liabilities measured at fair value as of December 31, 2023 and 2022 are as follows:

2023				
	Valuation techniques	Input variables	Significant unobservable input variables	Ranges of significant unobservable input variables
Financial assets measured at FVOCI:				
Equity securities	Net assets value model	-	-	-
	Cash flow discount model,	Discount rate	Discount rate	12.40%
	Free cash flow to equity, Guideline public company method	PBR	PBR	0.39 ~ 1.45
Financial assets measured at FVTPL:				
Equity securities and others	Net assets value model	-	-	-
	Guideline public company method	PBR	PBR	51%
Financial liabilities measured at FVTPL:				
Call option for share	Binominal model	Volatility	Volatility	23.32%
2022				
	Valuation techniques	Input variables	Significant unobservable input variables	Ranges of significant unobservable input variables
Financial assets measured at FVOCI:				
Equity securities	Net assets value model	-	-	-
	Cash flow discount model,	Discount rate	Discount rate	13.09%
	Free cash flow to equity, Guideline public company method	PBR	PBR	1.1 ~ 1.40
Financial assets measured at FVTPL:				
Equity securities and others	Net assets value model	-	-	-
	Guideline public company method	PBR	PBR	52%
Financial liabilities measured at FVTPL:				
Call option for share	Binominal model	Volatility	Volatility	30.15%

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

44. Financial Instruments, Continued

(7) Level 3 fair values, Continued

(iii) Effects by changes in unobservable input variables on fair value measurement of financial assets and liabilities as of December 31, 2023 and 2022 are as follows:

(In millions of won)				2023			
				Effects of changes in fair value			
				Profit (loss) for the year		Other comprehensive	
						income (loss)	

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

44. Financial Instruments, Continued

(7) Level 3 fair values, Continued

(iii) Effects by changes in unobservable input variables on fair value measurement of financial assets and liabilities as of December 31, 2023 and 2022 are as follows, Continued:

(In millions of won)				2022		Effects of changes in fair value			
						Profit (loss) for the year		Other comprehensive income (loss)	
				Effects by changes in unobservable input variables on fair value measurement	Measuring methods of the effect of changes	Favorable changes	Unfavorable changes	Favorable changes	Unfavorable changes
Financial assets measured at FVOCI:									
Equity securities	Discount rate			Fair value decrease by discount rate increase	Measuring fair value changes by 1%P discount rate increase or decrease	₩ -	-	86	(83)
	Share price multiple			Fair value increase by share price multiple increase	Measuring fair value changes by 1P share price multiple increase or decrease	-	-	404	(404)
Financial assets measured at FVTPL:									
Investments in capital	Share price multiple			Fair value increase by share price multiple increase	Measuring fair value changes by 1P share price multiple increase or decrease	69	(69)	-	-
Financial liabilities measured at FVTPL:									
Call option for share	Underlying asset price			Fair value increase by underlying asset price increase	Measuring fair value changes by 10% underlying asset price increase or decrease	613	(516)	-	

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

44. Financial Instruments, Continued

(8) Transfers of financial assets

There is no financial assets and financial liabilities netting arrangements as of December 31, 2023 and 2022.

(9) Offsetting of financial assets and financial liabilities

(In millions of won)

(In millions of won)		2023					
		Total recognized financial assets	Total recognized financial assets that will be setoff	Net financial assets presented in the statement of financial position	Related amount: won't be setoff in the statement of financial position		Net amount
Financial instruments	Received cash security						
Financial assets:							
Trade and other receivables	₩	119	(95)	24	-	-	24
Financial liabilities:							
Financial liabilities measured at amortized cost		3,566	(95)	3,471	-	-	3,471

(In millions of won)

(In millions of won)		2022					
		Total recognized financial assets	Total recognized financial assets that will be setoff	Net financial assets presented in the statement of financial position	Related amount: won't be setoff in the statement of financial position		Net amount
Financial instruments	Received cash security						
Financial assets:							
Trade and other receivables	₩	1,273	(543)	730	-	-	730
Financial liabilities:							
Financial liabilities measured at amortized cost		3,902	(543)	3,359	-	-	3,359

The 'related amount that won't be setoff in the statement of financial position' is recognized up to the amount of 'Net financial assets presented in the consolidated statement of financial position.'

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

45. Commitments and Contingencies

- (1) As of December 31, 2023, the Group has entered into general loan agreements with Korea Development Bank and others amounting to ₩1,672,000 million, USD 292,000 thousand, VND 2,600,000 million.
- (2) As of December 31, 2023, the Group has entered into credit facilities agreements such as letters of credit with KEB Hana Bank and others for the Group's exports and imports totaling USD 2,175,486 thousand, ₩295,550 million.
- (3) As of December 31, 2023, the Group has entered into credit agreements such as secured loan of credit sales and others with Hana Bank and others amounting to ₩181,700 million, USD 5,300 thousand. Meanwhile, the Group provides letter of credit amounting to USD 2,700 thousand with KEB Hana Bank as collateral to Atlantic Specialty Insurance Company.
- (4) As of December 31, 2023, three blank notes have been provided to relevant counterparty as collaterals for the Group's borrowings.
- (5) As of December 31, 2023, in connection with the Group's contract performance guarantees, the Group has been provided with guarantees amounting to ₩3,186,537 million and USD 28,256,472 thousand by various financial institution. Among them, the Group has also been provided with payment guarantees in relation to ship advances from customers amounting to USD 25,867,816 thousand by Export-Import Bank of Korea and others. Regarding this, the Group provides as collateral its ships under construction and construction materials.
- (6) The Group entered into a consortium agreement on a natural resource development project with various organizations including Korea National Oil Corporation. During 2013, the consortium that included the Group decided to withdraw from its oil development business. As of December 31, 2023, the Group obtained borrowings for a natural resource development project from the Korea Energy Agency (See Note 25).
- (7) For the year ended December 31, 2023, the Group purchased 4,647,201 convertible preferred shares of Hyundai Samho Heavy Industries Co., Ltd. for ₩409,683 million. In addition, the right to purchase the consolidated common stock (1,260,558) allocated to the financial investor was exercised, and the difference between the financial investor's sale amount and the purchase claim amount was paid ₩45,005 million in cash.
- (8) The Group jointly provides a debt guarantee with HD Hyundai Heavy Industries Co., Ltd. for employee stock ownership acquisition loan when the capital increase was made. Meanwhile, the obligation to provide joint guarantee has been terminated from March, 2022. The Group has recovered the outstanding amount of other receivables (₩4,100 million), which corresponds to 10% of the remaining balance of the loan for the acquisition of our own shares pledged as collateral to Korea Securities Finance Corporation, as of December 31, 2023.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

45. Commitments and Contingencies, Continued

- (9) For the year ended December 31, 2018, the Group sold its stake in Hi Investment & Securities Co., Ltd. held by Hyundai Mipo Dockyard Co., Ltd., a subsidiary of the Group, to DGB Financial Holding Co., Ltd. for ₩ 472,000 million for the purpose of HD Hyundai Co., Ltd.'s compliance with the regulations governing the conduct of holding companies under the Fair Trade Act.

In the meantime, if a seller's statement or guarantee is false or does not conform to the facts, the seller is liable for damages. If the total amount of damages incurred to the buyer exceeds 1% of the sales amount (the total amount of damages the Group is liable for cannot exceed 5% of the sales amount), the Group shall be liable for compensation for the total damages.

Meanwhile, the Group was notified of the estimated damages of ₩13,300 million by DGB Financial Holding Co., Ltd. in October 2019, and the expected damages may change during future consultations. The Group did not count the provisions because it judged that the possibility of outflow of resources from the claim was not high.

- (10) The controlling Company was spun-off to an existing entity, HD Hyundai Heavy Industries Co., Ltd. which engages in shipbuilding segment and others, and newly established entities, HD Hyundai Electric Co., Ltd., HD Hyundai Construction Equipment Co., Ltd., and HD Hyundai Co., Ltd. which engage in electro electric systems segment, construction equipment segment, and robotics/financial services segment, respectively, on April 1, 2017. The newly established entities and the existing entity from the spin-off are jointly liable for the liability of the controlling Company before the spin-off in accordance with *Article 530, paragraph 9.1 of the Commercial law*.
- (11) In April, 2019, the controlling company sold its stake in Hyundai Hymys Co., Ltd., which is a subsidiary, to Hercules Holdings for ₩97,500 million. In this regard, the buyer shall be liable for damages within 5% limit of the sales amount in the event of damages caused by violation of the seller's statement, guarantee, and other obligations. Furthermore, the shareholder agreement related to this divestiture includes the controlling Company's tag-along participation rights and Hercules Holdings' drag-along rights.
- (12) As of December 31, 2023, the Group has provided performance guarantees for construction contracts (contract amount: USD 97,688 thousand) which is being built by Hyundai Heavy Industries Power Systems Co., Ltd.
- (13) The controlling Company was split-off to an existing entity, 'HD Korea Shipbuilding & Offshore Engineering Co., Ltd.' which engages in segments such as investment and others, and newly established entity, 'HD Hyundai Heavy Industries Co., Ltd.' which engages in segments such as shipbuilding-related business, on June 1, 2019. In accordance with *Article 530, paragraph 9.1 of the Commercial law*, the controlling Company and Hyundai Heavy Industries Co., Ltd. are responsible for jointly repaying the debts of HD Hyundai Heavy Industries Co., Ltd. prior to the split-off.

In addition, the controlling Company split and merged the investment business of Hyundai Samho Heavy Industries Co., Ltd., a subsidiary, on December 1, 2018. In this regard, the controlling Company and Hyundai Samho Heavy Industries Co., Ltd. are responsible for reimbursement of debts owed by Hyundai Samho Heavy Industries Co., Ltd. prior to the merger of its divisions under the provisions of *Article 530, paragraph 9.1 of the Commercial law*.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

45. Commitments and Contingencies, Continued

- (14) In July 2021, the controlling Company sold 800,000 shares of Hyundai Heavy Industries Power systems Co., Ltd. to H Asset Management Co., Ltd. for ₩144,000 million. In this regard, the seller shall be liable for damages within 5% limit of the sales amount in the event of damage exceeding 1% of the sales amount caused by the violation of the seller's statement, guarantee, and other obligations. In addition, the shareholder's agreement includes drag-along and call options for the remaining equity securities of Hyundai Heavy Industries Power Systems Co., Ltd. (See Note 28).

	Details
Buying company	The controlling Company
Issue date	July 30, 2021
Type of shares to buy(*)	Non-voting convertible shares of Hyundai Heavy Industries Power systems Co., Ltd
Number of shares	200,000 shares
When to exercise	From the next day of the day 3 years have elapsed from the closing date of transaction
Exercise price	Adding 5% of annual compound interest based on IRR to the purchasing price from the closing date of the transaction to the payment date of the exercise of option

(*) In January 2022, ordinary shares of Hyundai Heavy Industries Power System Co., Ltd. held by the controlling Company was changed to non-voting convertible stocks. The shares can be converted into ordinary shares with voting rights before the exercise of the largest shareholder's right to sell, Hyundai Heavy Industries Power System Co., Ltd.'s approval for listing preliminary screening, and the sale of shares involving changes in management rights to third parties.

- (15) On May 4, 2023, the Group repaid private equity bonds with an unnamed transfer of ₩25,000 million, terminating the right to pledge for the construction receipt account and reserve account, and returning the transfer of the bonds for Taean Thermal Power Units 5 to 8.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

46. Litigations

(1) A claim for damages (Seoul Central District Court 2016 gahap 519022)

Date of filing	October 14, 2015
Litigant	Plaintiff: Korea Gas Corporation, Defendant: HD Hyundai Heavy Industries Co., Ltd. and 18 other companies
Litigation content	Korea Gas Corporation is demanding ₩1.66 billion from a total of 19 companies, including the controlling company, based on bid-rigging in the 1st and 2nd gas pipeline network construction projects commissioned by Korea Gas Corporation.
Litigation value	₩166,000 million
Litigation status	In progress after filing appeals on October 14, 2015. Plaintiff partially won (₩116.1 billion) the first trial on January 13, 2022
Future litigation schedule and countermeasures	Ruling of the first trial was accepted. (Plaintiff and defendant have not filed an appeal until the deadline on February 4, 2022)
The effect on the Group as a result of litigation.	The Group recognized provisions amounting to ₩10.5 billion, which is the estimated amount that the Group would have to pay if it loses the case as of December 31, 2021. The Group paid compensation amounting to ₩10.5 billion as agreed with other defendants in January, 2022. Korea Gas Corporation is currently in the process of pursuing collection procedures for the unpaid contribution from one of the defendant companies among the parties.

(2) Ordinary wage lawsuit (Busan High Court 2022 na 29)

Date of filing	December 28, 2012
Litigant	Plaintiff: Jeong and nine others, Defendant: The controlling Company and HD Hyundai Heavy Industries Co., Ltd.
Litigation content	Plaintiff filed a suit claiming that total bonuses should be included in the ordinary wage category and recalculated.
Litigation value	₩630 million
The progress of litigation	Defendant partially lost the first trial (Ulsan District Court 2012 gahap 10108) on February 12, 2015. Defendant won the second trial (Busan High Court 2015 na 1888) on January 13, 2016. Defendant lost the third trial (Supreme Court 2016 da 7975) on December 16, 2021. The case reversed and remanded (Busan High Court 2022 na 29) was received on January 3, 2022. Primary adjustments on July 20, 2022 Secondary adjustments on August 17, 2022 Third adjustments on September 21, 2022 Fourth adjustment on December 03, 2022 Compulsory adjustment decision on December 28, 2022 Compulsory adjustment is established (termination) on January 12, 2023
Future litigation schedule and countermeasures	The case was closed due to the confirmation of the compulsory mediation decision, and as of December 31, 2023, the Group is in the process of paying unpaid legal allowances.
The effect on the Group as a result of litigation.	As of December 31, 2023, the process of paying unpaid legal allowances is in progress according to the contents of the court ruling.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

46. Litigations, Continued

(3) Ordinary wage lawsuit (Busan High Court 2022 na 12)

Date of filing	December 28, 2012
Litigant	Plaintiff: Jang and four others, Defendant: Hyundai Mipo Dockyard Co., Ltd.
Litigation content	Five workers working for Hyundai Mipo Dockyard Co., Ltd. filed a lawsuit for seeking wages unpaid during recent five years (December 28, 2009~May 31, 2014) because total bonuses, summer vacation bonus, a personal pension subsidy and other wages were excluded in the ordinary wage so legal allowance, incentive, retirement pay and others which are calculated based on the ordinary wage were partially unpaid.
Litigation value	₩270 million
The progress of litigation	Plaintiff partially won the litigation on February 12, 2015 (Both sides appealed against the decision). Plaintiff lost the second trial on January 13, 2016 (Defendant won the trial). Plaintiff won the litigation on December 16, 2021 The case reversed and remanded (Busan High Court 2022 na 12) was received on January 3, 2022. Primary adjustments on July 20, 2022 Secondary adjustments on August 17, 2022 Third adjustments on September 21, 2022 Fourth adjustment on December 03, 2022 Compulsory adjustment decision on December 28, 2022 Compulsory adjustment is established(termination) on January 12, 2023
Future litigation schedule and countermeasures	The case was closed due to the confirmation of the compulsory mediation decision, and as of December 31, 2023, the Group is in the process of paying unpaid legal allowances.
The effect on the Group as a result of litigation.	As of December 31, 2023, the process of paying unpaid legal allowances is in progress according to the contents of the court ruling.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

46. Litigations, Continued

(4) Arbitration for a claim related to KOC

Date of filing	February 17, 2020
Litigant	Plaintiff: Kuwait Oil Company, Defendant: The controlling Company and HD Hyundai Heavy Industries Co., Ltd.
Litigation content	The Kuwait Oil Company (KOC) claimed compensation for a defect to the part of construction delivered by Offshore, Industrial Plant and Engineering segment.
Litigation value	USD 64 million
The progress of litigation	The KOC filed a request for arbitration with the London Court of International Arbitration (LCIA) on February 17, 2020. The KOC submitted a statement of claiming compensation for a defect to the part of construction on January 30, 2021. The Group submitted refutation document for the plaintiff's statement on May 7, 2021. The KOC submitted response and the Group submitted refutation document on June 25, 2021. Completion of 'Document Production' procedure on November 16, 2021. Witness Statement has been submitted by HHI on Mar 21, 2022 Completion for exchange of Factual Witness Evidence on May 16, 2022 The first expert statement was submitted on July 9, 2022. The second expert statement was submitted on September 30, 2022. The international arbitration hearing (1 st Round) was held on October 25, 2022. The international arbitration hearing (2 nd round) was held on January 26, 2023. Arbitration Award (HD Hyundai Heavy Industries Co., Ltd. to Pay Compensation and Related Interest to KOC) on April 27, 2023. Allocation of Arbitration Costs Decision (Final Conclusion) on June 2, 2023
Future litigation schedule and countermeasures	The arbitration has reached its final conclusion, and the Group has paid the award amount, interest, and costs as per the decision.
The effect on the Group as a result of litigation.	As a result of the arbitration award, a net income-based expense of ₩71,000 million was recognized in the consolidated financial statements for the year ended December 31, 2023.

In addition to the cases mentioned above, the Group is currently a defendant in 53 lawsuits involving claims amounting to ₩149 billion. Currently, the impact on the Group's financial statements, if any, cannot be reliably estimated.

As of June 17, 2019, a lawsuit was filed against the controlling Company and HD Hyundai Heavy Industries Co., Ltd. for invalidity of split off in relation to split off on June 1, 2019. However, a lawsuit was withdrawn and concluded as of January 26, 2023.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

47. Related Parties

- (1) Transactions between the controlling Company and its subsidiaries are eliminated in the preparation of the consolidated financial statements and the related parties as of December 31, 2023 are as follows:

	Company(*1)	Main business
Parent company	HD Hyundai Co.,Ltd.	Holding company
Associates and joint ventures(*2)	Hyundai Hyms Co., Ltd.	Sale and manufacture of machinery equipment for shipbuilding
	Hyundai Financial Leasing Co., Ltd.	Financial and operating leases
	International Maritime Industries Company	Shipbuilding
	Saudi Engines Manufacturing Company and 4 other companies	Manufacture of marine engines and others
Others (large-scale corporate conglomerates)	HD Hyundai Electric Co., Ltd.	Sale and manufacture of industrial electric equipment
	HD Hyundai Robotics Co., Ltd.	Manufacture of Industrial and LCD Robots
	HD Hyundai Construction Equipment Co., Ltd.	Sale and manufacture of machinery equipment for construction
	HD Hyundai Oilbank Co., Ltd.	Manufacturing of petroleum products
	HD Hyundai Marine Solution Co., Ltd.	Engineering services
	HD Hyundai Infracore Co., Ltd.	Sale and manufacture of machinery equipment for construction
	HD Hyundai Xite Solution Co., Ltd.	Manufacture of construction and mining machinery and equipment
	Other related parties of HD Hyundai Co., Ltd.	Other business
	Other related parties of HD Hyundai Electric Co., Ltd.	Other business
	Other related parties of HD Hyundai Construction Equipment Co., Ltd.	Other business
	Other related parties of HD Hyundai Oilbank Co., Ltd.	Other business
	Other related parties of HD Hyundai Marine Solution Co., Ltd.	Other business
	Other related parties of HD Hyundai Infracore Co., Ltd.	Other business
	Other related parties	Other business

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

47. Related Parties, Continued

- (1) Transactions between the controlling company and its subsidiaries are eliminated in the preparation of the consolidated financial statements and the related parties as of December 31, 2023 are as follows, continued:

(*1) A number of affiliates were renamed for the year ended December 31, 2023.

Former company name	New company name
Korea Shipbuilding & Offshore Engineering Co., Ltd.	HD Korea Shipbuilding & Offshore Engineering Co., Ltd.
Hyundai Heavy Industries Co., Ltd.	HD Hyundai Heavy Industries Co., Ltd.
Hyundai Construction Equipment Co., Ltd.	HD Hyundai Construction Equipment Co., Ltd.
Hyundai Energy Solutions Co., Ltd.	HD Hyundai Energy Solutions Co., Ltd.
Hyundai Doosan Infracore Co., Ltd.	HD Hyundai Infracore Co., Ltd.
Hyundai Electric & Energy Systems Co., Ltd.	HD Hyundai Electric Co., Ltd.
Hyundai E&T Co., Ltd.	HD Hyundai E&T Co., Ltd.
Hyundai Engine Company Ltd.	HD Hyundai Engine Company Ltd.
Hyundai Cosmo Petrochemical Co., Ltd.	HD Hyundai Cosmo Petrochemical Co., Ltd.
Hyundai Oilbank Co., Ltd.	HD Hyundai Oilbank Co., Ltd.
Hyundai and Shell Base Oil Co., Ltd.	HD Hyundai and Shell Base Oil Co., Ltd.
Hyundai Chemical Co., Ltd.	HD Hyundai Chemical Co., Ltd.
Hyundai Future Partners Co., Ltd.	HD Hyundai Future Partners Co., Ltd.
Hyundai OCI Co., Ltd.	HD Hyundai OCI Co., Ltd.
Hyundai Heavy Industries Mos Co., Ltd.	HD Heavy Industries Mos Co., Ltd.
Hyundai Global Service Co., Ltd.	HD Hyundai Marine Solution Co., Ltd.
Ulsan Hyundai Football Club Co., Ltd.	HD Ulsan Hyundai Football Club Co., Ltd.
Hyundai Logistics & Solutions Co., Ltd.	HD Hyundai Logistics & Solutions Co., Ltd.
Hyundai Genuine Co., Ltd.	HD Hyundai Xite Solution Co., Ltd.
Hyundai Robotics Co., Ltd	HD Hyundai Robotics Co., Ltd
Hyundai E&F Co., Ltd.	HD Hyundai E&F Co., Ltd.
Hyundai Global Service Tech Co., Ltd.	HD Hyundai Global Service Tech Co., Ltd.
Hyundai Energy Solutions America, Inc.	HD Hyundai Energy Solutions America, Inc.
Hyundai Heavy Industries Technology Center India Private Limited	HD Hyundai Technology Center India Private Limited

(*2) Associates and joint ventures include their subsidiaries.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

47. Related Parties, Continued

(2) Significant transactions for the years ended December 31, 2023 and 2022 with related parties are as follows:

(In millions of won)

	2023			
	Sales and other		Purchases and other	
	Sales(*1)	Dividends income	Purchase of raw materials	Others purchase(*2)
Parent company:				
HD Hyundai Co., Ltd.	₩ 21,883	-	4,049	33,847
Associates and joint ventures(*3):				
Hyundai Hymys Co., Ltd.	7,174	-	178,251	46
International Maritime Industries Company	15,717	-	-	-
Others	7,294	918	71	678
	30,185	918	178,322	724
Other related parties				
(large-scale corporate conglomerates):				
HD Hyundai Electric Co., Ltd.	51,608	-	193,747	6,082
HD Hyundai Robotics Co., Ltd.	2,262	-	10	1,522
HD Hyundai Construction Equipment Co., Ltd.	26,546	-	781	4,201
HD Hyundai Oilbank Co., Ltd.	26,348	-	127,008	1,677
HD Hyundai Global Service Co., Ltd.	28,290	-	48,100	64,981
HD Hyundai Xite Solution Co., Ltd.	11,058	-	1,026	6,410
HD Hyundai Infracore Co., Ltd.	10,236	-	-	-
Others	3,817	-	3,534	15,137
	160,165	-	374,206	100,010
₩	212,233	918	556,577	134,581

(*1) Including disposal of property, plant and equipment and interest income.

(*2) Including acquisitions of property, plant and equipment and payments of lease (₩15,830 million) and others.

(*3) Including associates and joint ventures' subsidiaries.

In addition to the above transactions, the controlling company participated in the paid-in capital increase of the International Maritime Industries Company and paid SAR 68,100 thousand and acquired ₩64.1 billion worth of investment shares in Elcogen Group PLC.

HD Hyundai Heavy Industries Co., Ltd. paid the full amount of unpaid allowances in advance in relation to ordinary wage lawsuits under payment procedures for the year ended December 31, 2023 and received the burden of affiliates and paid withholding tax from each affiliate. There are ₩117,358 million deposit and ₩8,445 million payment from HD Hyundai Electric Co., Ltd., ₩32,462 million deposit and ₩2,439 million payment, ₩4,768 million deposit and ₩333 million payment from HD Hyundai Robotics Co., Ltd., ₩116 million deposit and ₩22 million payment details.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

47. Related Parties, Continued

(2) Significant transactions for the years ended December 31, 2023 and 2022 with related parties are as follows, continued:

(In millions of won)

	2022			
	Sales and other		Purchases and other	
	Sales(*1)	Dividends income	Purchase of raw materials	Others purchase(*2)
Parent company:				
HD Hyundai Co.,Ltd.	₩ 9,246	-	674	6,365
Associates and joint ventures(*3):				
Hyundai Hymys Co., Ltd.	7,103	-	134,651	94
International Maritime Industries Company	13,163	-	-	-
Others(*4)	5,987	3,327	4,521	364
	26,253	3,327	139,172	458
Other related parties				
(large-scale corporate conglomerates):				
Hyundai Electric & Energy Systems Co., Ltd.	44,808	-	148,362	8,869
Hyundai Construction Equipment Co., Ltd.	27,019	-	1,029	4,473
Hyundai Oilbank Co., Ltd.	23,141	-	133,060	4,156
Hyundai Global Service Co., Ltd.	28,242	-	41,273	44,662
Hyundai Genuine Co., Ltd.	5,854	-	874	5,125
Hyundai Doosan Infracore Co., Ltd	5,771	-	-	-
Others	5,945	-	1,480	2,829
	140,780	-	326,078	70,114
₩	176,279	3,327	465,924	76,937

(*1) Including disposal of property, plant and equipment and interest income.

(*2) Including acquisitions of property, plant and equipment and payments of lease (₩ 678million) and others.

(*3) Including associates and joint ventures' subsidiaries.

(*4) Only January-February transactions are included as Hyundai Heavy Industries Power Systems Co., Ltd. is separated for the year ended December 31, 2022

In addition to the above transactions, the controlling company participated in the paid-in capital increase of the International Maritime Industries Company and paid SAR 75,000 thousand, as of December 31, 2022, the paid-in capital increase process is underway, so a total of 138,750 thousand SARs, including 63,750 thousand SARs, were recognized as deposits.

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

47. Related Parties, Continued

(3) Outstanding balances as of December 31, 2023 and 2022 with related parties are as follows:

(In millions of won)

	2023			
	Trade and other receivables		Trade and other payables	
	Trade receivable	Other receivables	Trade payables	Other Payables(*2)
Parent company:				
HD Hyundai Co., Ltd.	₩ 9,777	14,028	1,613	38,193
Associates and joint ventures(*1):				
Hyundai Hymys Co., Ltd.	610	3,677	13,551	-
International Maritime Industries Company	6,830	-	-	-
Others	1,684	1	746	-
	<u>9,124</u>	<u>3,678</u>	<u>14,297</u>	<u>-</u>
Other related parties				
(large-scale corporate conglomerates):				
HD Hyundai Electric Co., Ltd.	4,224	2,532	65,806	3,643
HD Hyundai Robotics Co., Ltd.	433	3,942	45	40
HD Hyundai Construction Equipment Co., Ltd.	2,626	1,521	759	325
HD Hyundai Oilbank Co., Ltd.	2,040	153	47,266	1,053
HD Hyundai Global Service Co., Ltd.	4,548	3,570	33,952	1,516
HD Hyundai XiteSolution Co., Ltd.	1,364	443	1,709	455
HD Hyundai Infracore Co., Ltd.	1,104	404	-	138
Others	317	925	2,080	245
	<u>16,656</u>	<u>13,490</u>	<u>151,617</u>	<u>7,415</u>
₩	<u>35,557</u>	<u>31,196</u>	<u>167,527</u>	<u>45,608</u>

(*1) Including associates and joint ventures' subsidiaries.

(*2) Including lease liabilities (₩40,815 million).

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

47. Related Parties, Continued

(3) Outstanding balances as of December 31, 2023 and 2022 with related parties are as follows, continued:

(In millions of won)

	2022			
	Trade and other receivables		Trade and other payables	
	Trade receivable	Other receivables	Trade payables	Other Payables(*2)
Parent company:				
HD Hyundai Co., Ltd.	₩ 668	11,007	11,007	45,717
Associates and joint ventures(*1):				-
Hyundai Hymys Co., Ltd.	615	5,017	5,505	-
International Maritime Industries Company	6,290	-	-	-
Others	905	43	368	-
	7,810	5,060	5,873	-
Other related parties				
(large-scale corporate conglomerates):				
Hyundai Electric & Energy Systems Co., Ltd.	6,501	2,359	26,085	327
Hyundai Construction Equipment Co., Ltd.	2,330	1,615	620	534
Hyundai Oilbank Co., Ltd.	552	256	16,770	881
Hyundai Global Service Co., Ltd.	4,511	1,817	17,684	994
Hyundai Genuine Co., Ltd.	729	380	201	402
Hyundai Doosan Infracore Co., Ltd.	613	206	-	169
Hyundai Robotics Co., Ltd.	230	4,016	325	46
Others	189	182	809	204
	15,655	10,831	62,494	3,557
₩	24,133	26,898	69,312	49,274

(*1) Including associates and joint ventures' subsidiaries.

(*2) Including lease liabilities (₩45,406 million).

HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. AND ITS SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2023 and 2022

47. Related Parties, Continued

(4) There is no guarantee that provided for related parties or provided by related parties as of December 31, 2023.

(5) Compensation for key management of the Group for the years ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
Short-term employee benefits	₩	9,815	9,482
Post-employment benefit		2,056	2,005
Other long-term benefits		379	-
	₩	<u>12,250</u>	<u>11,487</u>

The above key management consists of directors and internal auditors who have important rights and responsibilities for the planning, operation and control of the Group.

48. Subsequent Events

(1) Issuance of public bond

The controlling company issued Korean won bonds to secure operating funds, and the details of the issuance are as follows:

<i>(In millions of won)</i>	Expiration date	Interest rate	Amount
Public bond	2027-01-29	4.27%~4.60%	₩ 200,000

(2) Mergers

HD Hyundai Co., Ltd. received approval for a merger with HD Hyundai Heavy Industries MOS Co., Ltd at the board of directors meeting on October 25, 2023 (replacing the shareholder meeting according to *Article 527-3 of the Commercial Act*) with the purpose of increasing operational efficiency and enhancing business competitiveness. The merger effective date is January 1, 2024.

(3) Cancellation of sales contract

In February 2024, the construction contract for two ROPAX vessels, which the consolidated entity was planning to build, was terminated due to the shipowner's cancellation request. Discussions regarding the cancellation with the shipowner are ongoing, and the financial impact on the controlling company cannot be reasonably estimated at this time.

Independent Auditors' Report on Internal Control over Financial Reporting

Based on a report originally issued in Korean

To the Stockholders and Board of Directors of
HD Korea Shipbuilding & Offshore Engineering Co., Ltd.

Opinion on Internal Control over Financial Reporting

We have audited HD Korea Shipbuilding & Offshore Engineering Co., Ltd. And its subsidiaries (the "Group") internal control over financial reporting ("ICFR") as of December 31, 2023 based on the criteria established in the Conceptual Framework for Designing and Operating ICFR ("ICFR Design and Operation Framework") issued by the Operating Committee of Internal Control over Financial Reporting in the Republic of Korea (the "ICFR Committee").

In our opinion, the Group maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on ICFR Design and Operation Framework.

We also have audited, in accordance with Korean Standards on Auditing (KSAs), the consolidated financial statements of the Group, which comprise the consolidated statement of financial position as of December 31, 2023, the consolidated statements of loss, comprehensive loss, changes in equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information, and our report dated March 18, 2024 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

We conducted our audit in accordance with KSAs. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Internal Control over Financial Reporting section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the internal control over financial reporting in Republic of Korea, 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.

Responsibilities of Management and Those Charged with Governance for the Internal Control over Financial Reporting

The Group's management is responsible for designing, operating and maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report on the Operations of Internal Control over Financial Reporting.

Those charged with governance are responsible for overseeing the Group's internal control over financial reporting.

Auditors' Responsibilities for the Audit of the Internal Control over Financial Reporting

Our responsibility is to express an opinion on the Group's internal control over financial reporting based on our audit. We conducted our audit in accordance with KSAs. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk.



Definition and Limitations of Internal Control over Financial Reporting

A Group's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with Korean International Financial Reporting Standards ("K-IFRS"). A Group's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Group; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with K-IFRS, and that receipts and expenditures of the Group are being made only in accordance with authorizations of management and directors of the Group; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Group's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The engagement partner on the audit resulting in this independent auditors' report is on Internal control over financial reporting Jeon Won-Pyo.

KPMG Samjong Accounting Corp.

Seoul, Korea
March 18, 2024

<p>This report is effective as of March 18, 2024, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the internal control over financial reporting. Accordingly, the readers of the audit report should understand that the above audit report has not been updated to reflect the impact of such subsequent events or circumstances, if any.</p>
--

Report on the Operations of Internal Control over Financial Reporting

Based on a report originally issued in Korean

To the Stockholders and Board of Directors and Audit Committee of
HD Korea Shipbuilding & Offshore Engineering Co., Ltd.

We, as the Chief Executive Officer and the Internal Accounting Manager of HD Korea Shipbuilding & Offshore Engineering Co., Ltd. and its subsidiaries ("the Group"), assessed operating status of the Group's Internal Control over Financial Reporting ("ICFR") for the year ended December 31, 2023.

Design and operation of ICFR is the responsibility of the Group's management, including the Chief Executive Officer and the Internal Accounting Manager.

We evaluated whether the Group effectively designed and operated its ICFR to prevent and detect errors or frauds which may cause a misstatement in financial statements to ensure preparation and disclosure of reliable financial information.

We used the 'Conceptual Framework for Designing and Operating Internal Control over Financial Reporting issued by the Operating Committee of Internal Control over Financial Reporting as the criteria for design and operation of the Group's ICFR. And we conducted an evaluation of ICFR based on the 'Guideline for Evaluating and Reporting Effectiveness of Internal Control over Financial Reporting' established by the ICFR Committee.

Based on our assessment, we concluded that the Group's ICFR is designed and operated effectively as of December 31, 2023, in all material respects, in accordance with the Conceptual Framework for Designing and Operating Internal Control over Financial Reporting.

We certify that this report does not contain any untrue statement of a fact or omit to state a fact necessary to be presented herein. We also certify that this report does not contain or present any statements which might cause material misunderstandings of the readers, and we have reviewed and verified this report with sufficient care.

Lee, Tae Hong
Internal Accounting Control Officer

Chung, Ki Sun
Chief Executive Officer

February 6, 2024