

HD HYUNDAI CO., LTD. AND SUBSIDIARIES

Consolidated Financial Statements

December 31, 2023 and 2022

(With Independent Auditors' Report Thereon)

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Independent Auditors' Report

Based on a report originally issued in Korean

To the Shareholders and Board of Directors of

HD HYUNDAI CO., LTD.

Opinion

We have audited the consolidated financial statements of HD HYUNDAI CO., LTD. and its subsidiaries ("the Group"), which comprise the consolidated statements of financial position as of December 31, 2023 and 2022, the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and notes, comprising of 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 2022, and its consolidated financial performance and its consolidated cash flows for the years 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 for Consolidation Purposes ("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 unmodified opinion on the effectiveness of the Group's internal control over financial reporting*.

Basis for Opinion

We conducted our audits 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 matters that, in our professional judgment, were 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.

As described in *Note 4(12)* to the consolidated financial statements, the Group reviews the impairment indicator for the cash-generating unit (CGU) at the end of each reporting period and performs impairment test by estimating the recoverable amount of CGU if impairment indicators exists. However, for CGU that include goodwill, impairment test is performed on an annual basis by estimating recoverable amount irrespective of whether there is any indication of impairment. An impairment loss is recognized for a CGU if the carrying amount of the CGU exceeds its recoverable amount.



For the CGU other than goodwill, the Group also reviews at the end of each reporting period whether there is any indication that an impairment loss recognised in prior periods may no longer exist or may have decreased, and if so, the Group performs impairment test by estimating the recoverable amount of the CGU. If the recoverable amount of the CGU exceeds the carrying amount of the CGU, the carrying amount is increased to the extent that the carrying amount that would have been determined had no impairment loss been recognised for the CGU in prior years, and it is treated as reversals of impairment loss.

Assessment of impairment in the CGU including goodwill – HD Hyundai Oilbank Co, Ltd., HD Hyundai Infracore Co. Ltd., HHI China Investment Co., Ltd., HD Hyundai Construction Equipment India Private Ltd.

As described in *Notes 17 and 19 to the consolidated financial statements*, as of December 31, 2023, the carrying amount of property, plant and equipment amounted to ₩25,052,476 million and goodwill amounted to ₩1,603,178 million and they are 40% of total assets. In addition, estimation of the recoverable amount requires the management's estimate and judgment including future cash flows and discount rate, and there is considerable uncertainty in the estimation and judgement. Therefore, we identified the assessment of impairment on CGU including goodwill (HD Hyundai Oilbank Co, Ltd., HD Hyundai Infracore Co. Ltd., HHI China Investment Co., Ltd., HD Hyundai Construction Equipment India Private Ltd.) as a key audit matter, by considering quantitative factors and possibility.

Assessment of impairment in the CGU – Segment of shipbuilding and offshore

As described in *Note 37 to the consolidated financial statements*, the carrying amount of assets in segment of shipbuilding and offshore as of December 31, 2023 is ₩42,693,714 million and amounts for 63% of total assets. The carrying amount of the segment exceeds its market capitalization. In addition, estimation of the recoverable amount requires the management's estimate and judgment including future cash flows and discount rate, and there is considerable uncertainty in the estimation and judgement. Therefore, we identified the assessment of impairment in the CGU of segment of shipbuilding and offshore as a key audit matter.

Assessment of impairment in the CGU – HD Hyundai Electric Co., Ltd.

As described in *Notes 17 and 19 to the consolidated financial statements*, due to the downturn of the business environment, the Group recognized impairment loss of ₩137,200 billion and ₩83,700 million in 2018 and 2019. As market prospects and performance of transformers and rotating machines are expected to recover in the current period, and the market capitalization of this segment significantly exceeds the carrying amount, the Group identified the indication of the reversals of impairment loss. Estimation of the recoverable amount requires the management's estimate and judgment including future cash flows and discount rate, and there is considerable uncertainty in the estimation and judgement. Therefore, we identified the assessment of impairment in CGU of HD Hyundai electric Co. Ltd. as a key audit matter.

The primary procedures we performed to address this key audit matter included the followings:

- Testing the effectiveness of the design, implementation and operation of the management review controls over the Group's impairment assessment process.
- Assessing the qualification and independence of the external valuation specialist engaged by the Group for the impairment assessment.
- Engaging our valuation specialists to assist us in evaluating the key assumptions used in impairment assessment including the discount rate, valuation methodology and others.
- Comparing the financial data used for impairment assessment to mid- to long-term business plans approved by the management.
- Comparing the future cash flows forecasts prepared in prior year with the current year's performance to assess the Group's ability to accurately forecast.
- Evaluating the reliability of key assumptions used to estimate net fair value and the accuracy of calculations.



Other Matter

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 Yong-Jae Cha.

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 HYUNDAI CO., LTD. AND SUBSIDIARIES
Consolidated Statements of Financial Position
As of December 31, 2023 and 2022

(In thousands of won)

	Note	2023	2022
Assets			
Cash and cash equivalents	5,6,8,43,44,45 ₩	4,400,502,623	3,994,767,866
Short-term financial assets	5,7,8,44,45	1,836,337,720	1,560,185,929
Trade and other receivables	9,10,21,44,45,48	6,089,449,758	5,923,430,205
Contract assets	9,35,44,45	7,423,295,856	6,647,001,194
Inventories	5,11,21,37	9,416,327,539	9,470,742,395
Derivative assets	28,44,45	217,386,128	287,909,655
Firm commitment assets	28	286,127,701	344,839,505
Current tax assets		55,294,912	57,206,856
Other current assets	12	2,355,588,910	1,841,774,389
Assets held for sale	49	2,799,373	2,951,651
Total current assets		32,083,110,520	30,130,809,645
Investments in associates and joint	13,14,48	508,518,037	463,638,152
Long-term financial assets	5,7,8,44,45	373,046,274	342,069,016
Long-term trade and other receivables	9,10,21,44,45,48	628,505,767	674,420,255
Long-term Contract assets	9,35,44,45	202,618	-
Investment property	16,37	285,943,800	293,260,165
Property, plant and equipment	17,21,37	25,052,476,031	24,219,899,472
Right-of-use assets	18,37	1,478,800,185	1,671,464,172
Intangible assets	19,37	4,274,584,441	4,374,207,422
Derivative assets	28,44,45	253,605,574	392,249,892
Firm commitment assets	28	178,402,603	292,751,459
Deferred tax assets	41	2,141,285,069	1,916,335,155
Other non-current assets	12,26	724,339,969	799,756,271
Total non-current assets		35,899,710,368	35,440,051,431
Total assets	₩	67,982,820,888	65,570,861,076

See accompanying notes to the consolidated financial statements.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Consolidated Statements of Financial Position, Continued

As of December 31, 2023 and 2022

(In thousands of won)

	Note	2023	2022
Liabilities			
Short-term financial liabilities	5,21,22,25,28,44,45 ₩	6,171,988,125	6,608,404,027
Current lease liabilities	18,44,45	328,954,227	339,063,132
Trade and other payables	23,44,45,48	8,325,568,752	7,864,549,381
Contract liability	35	12,031,175,457	8,211,692,735
Derivative liabilities	28,44,45	493,137,406	600,485,236
Firm commitment liabilities	28	78,350,473	92,548,274
Income tax payable		184,445,768	589,204,970
Current provisions	20,27	874,805,681	1,919,949,568
Other current liabilities	24	43,737,230	48,696,442
Total current liabilities		<u>28,532,163,119</u>	<u>26,274,593,765</u>
Long-term financial liabilities	5,21,22,25,28,44,45	12,161,145,623	11,445,027,947
Non-current lease liabilities	18,44,45	1,278,041,147	1,468,691,336
Long-term trade and other payables	23,44,45,48	896,325,985	799,552,855
Non-current contract liabilities	35	120,124,367	108,862,394
Liabilities for defined benefit plans	26	88,179,130	72,241,392
Non-current provisions	27	259,376,738	499,406,326
Derivative liabilities	28,44,45	186,032,734	296,707,242
Firm commitment liabilities	28	239,249,829	324,974,480
Deferred tax liabilities	41	987,362,958	1,014,449,040
Other non-current liabilities	24	2,982,158	2,690,260
Total non-current liabilities		<u>16,218,820,669</u>	<u>16,032,603,272</u>
Total liabilities		<u>44,750,983,788</u>	<u>42,307,197,037</u>
Equity			
Common stock	29	81,433,085	81,433,085
Capital surplus	29	5,252,248,660	5,253,322,452
Capital adjustments	31	(854,121,132)	(900,279,730)
Accumulated other comprehensive income	32	408,797,867	396,071,752
Retained earnings	33	2,439,211,859	2,654,698,596
Equity attributable to owners of the Company		<u>7,327,570,339</u>	<u>7,485,246,155</u>
Non-controlling interests	1,30	<u>15,904,266,761</u>	<u>15,778,417,884</u>
Total equity		<u>23,231,837,100</u>	<u>23,263,664,039</u>
Total liabilities and equity	₩	<u>67,982,820,888</u>	<u>65,570,861,076</u>

See accompanying notes to the consolidated financial statements.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Consolidated Statements of Comprehensive Income
For the years ended December 31, 2023 and 2022

<i>(In thousands of won, except per share information)</i>	Note	2023	2022
Revenue	13,14,28,35,48	₩ 61,331,302,785	60,849,668,073
Cost of sales	38,48	56,366,042,540	54,883,097,648
Gross profit		<u>4,965,260,245</u>	<u>5,966,570,425</u>
Selling, general and administrative expenses	36,38,44,48	2,933,696,658	2,579,562,161
Operating profit	5,37	<u>2,031,563,587</u>	<u>3,387,008,264</u>
Finance income	28,39,44	2,461,748,400	3,805,881,226
Finance costs	28,39,44	4,081,266,825	5,113,661,948
Other non-operating income	40,44	1,084,811,226	3,007,172,313
Other non-operating expenses	40,44	542,770,416	2,126,621,381
Share of profit of equity accounted investees	13,14	4,162,016	(63,373,971)
Profit before income taxes		<u>958,247,988</u>	<u>2,896,404,503</u>
Income tax expense	41	172,415,782	661,449,490
Profit for the year		<u>785,832,206</u>	<u>2,234,955,013</u>
Other comprehensive income (loss)	26,28,32,44		
Items that are or may be reclassified subsequently to profit or loss:			
Gain (loss) on valuation of cash flow hedges		(33,699,445)	56,417,194
Exchange differences on translating foreign operations		24,575,520	(18,937,435)
Change in equity of equity method Investments		974,257	6,551,233
		<u>(8,149,668)</u>	<u>44,030,992</u>
Items that will not be reclassified to profit or loss:			
Gain (loss) on valuation financial instruments at FVOCI		18,021,819	(42,546,837)
Actuarial gains and losses		(243,769,792)	82,433,909
Gain on revaluation of property, plant and equipment		13,838,685	13,827,773
Changes in retained earnings of equity method investments		(250,931)	10,000,014
		<u>(212,160,219)</u>	<u>63,714,859</u>
Other comprehensive income for the year, net of income tax		<u>(220,309,887)</u>	<u>107,745,851</u>
Total comprehensive income for the year		<u>₩ 565,522,319</u>	<u>2,342,700,864</u>

See accompanying notes to the consolidated financial statements.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Consolidated Statements of Comprehensive Income, Continued
For the years ended December 31, 2023 and 2022

<i>(In thousands of won, except per share information)</i>	Note	2023	2022
Profit attributable to:			
Owners of the Company	₩	264,480,508	1,408,623,310
Non-controlling interests		521,351,698	826,331,703
		<u>785,832,206</u>	<u>2,234,955,013</u>
Total comprehensive income attributable to:			
Owners of the Company		185,846,522	1,466,056,788
Non-controlling interests		379,675,797	876,644,076
		<u>565,522,319</u>	<u>2,342,700,864</u>
Earnings per share	42		
Basic earnings per share (in won)	₩	<u>3,743</u>	<u>19,933</u>

See accompanying notes to the consolidated financial statements.

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Balance on January 1, 2022
Total comprehensive income (loss) for
the year

See accompanying notes to the consolidated financial statements.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Consolidated Statements of Changes in Equity, Continued
For the years ended December 31, 2023 and 2022

	Attributable to owners of the Company						
	Common stock	Capital surplus	Capital adjustments	Accumulated other comprehensive income	Retained earnings	Non-controlling interests	Total equity
₩							
Balance on January 1, 2023							
Total comprehensive income (loss) for the year	81,433,085	5,253,322,452	(900,279,730)	396,071,752	2,654,698,596	15,778,417,884	23,263,664,039
Profit for the year	-	-	-	-	264,480,508	521,351,698	785,832,206
Gain (loss) on valuation of financial instruments at FVOCI	-	-	-	7,005,506	-	11,016,313	18,021,819
Effective portion of changes in fair value of cash flow hedges	-	-	-	(14,637,880)	-	(19,061,565)	(33,699,445)
Exchange differences on translating foreign operations	-	-	-	8,779,516	-	15,796,004	24,575,520
Revaluation of property, plant, equipment	-	-	-	6,509,622	(353,717)	7,682,780	13,838,685
Change in equity of equity method investments	-	-	-	478,161	-	496,096	974,257
Actuarial gains	-	-	-	-	(86,327,166)	(157,442,626)	(243,769,792)
Change in retained earnings of equity method investments	-	-	-	-	(88,028)	(162,903)	(250,931)
Transactions with owners of the Company, recognized directly in equity							
Dividends	-	-	-	-	(388,676,365)	(299,370,437)	(688,046,802)
Revaluation surplus reclassification	-	-	-	(2,332,540)	2,332,540	-	-
Reclassification of gain/loss on valuation of financial instruments at FVOCI	-	-	-	6,923,730	(6,923,730)	-	-
Repayment of hybrid bonds by subsidiaries	-	-	-	-	-	(15,275,000)	(15,275,000)
Exercise of preemptive right of subsidiaries	-	-	-	-	-	11,092,727	11,092,727
Capital transactions in the Group	-	(1,088,085)	46,250,781	-	69,221	45,986,399	91,218,316
Others	-	14,293	(92,183)	-	-	3,739,391	3,661,501
₩	81,433,085	5,252,248,660	(854,121,132)	408,797,867	2,439,211,859	15,904,266,761	23,231,837,100
Balance on December 31, 2023							

See accompanying notes to the consolidated financial statements.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES

Consolidated Statements of Cash Flows

For the years ended December 31, 2023 and 2022

(In thousands of won)

	Note	2023	2022
Cash flows from operating activities			
Profit for the year	₩	785,832,206	2,234,955,013
Adjustments		4,486,812,645	849,435,747
Cash generated from operations	43	5,272,644,851	3,084,390,760
Interest received		279,620,233	196,932,814
Interest paid		(901,202,814)	(663,091,287)
Dividends received		12,475,516	12,393,994
Income taxes paid		(728,666,783)	(496,848,111)
Net cash provided by operating activities		3,934,871,003	2,133,778,170
Cash flows from investing activities			
Proceeds from sale of short-term financial assets		(281,659,892)	591,528,639
Proceeds from collection of short-term other receivables		11,727,455	5,767,901
Proceeds from sale of long-term financial assets		10,614,904	2,610,587
Proceeds from collection of long-term other receivables		50,853,521	89,471,217
Decrease of derivative liabilities		-	1,424,181
Proceeds from sale of investments in associates and joint ventures		-	36,637,170
Proceeds from sale of property, plant and equipment		40,767,261	36,187,149
Proceeds from sale of investment property		624,762	109,608
Proceeds from sale of intangible assets		3,513,874	5,623,270
Receipt of government subsidies		3,479,514	2,491,242
Proceeds from collection of other non-current assets		17,458,119	17,252,763
Proceeds from sale of assets held for sale		143,203	16,635,030
Changes in scope of consolidation (loss of control)		(36,561)	(1,215,018)
Acquisition of short-term other receivables		(10,156,516)	(5,418,024)
Acquisition of long-term financial assets		(27,596,392)	(21,224,658)
Acquisition of long-term other receivables		(72,818,991)	(61,290,287)
Increase of derivative liabilities		(44,838,317)	(1,021,065)
Acquisition of investments in associates and joint ventures		(90,778,379)	(142,435,657)
Acquisition of property, plant and equipment		(2,093,828,683)	(1,965,906,295)
Acquisition of investment property		(6,279,837)	(2,658,464)
Acquisition of intangible assets		(134,420,703)	(100,859,309)
Acquisition of other non-current assets		(34,735)	(9,825,000)
Changes in scope of consolidation (acquisition of control)		818,673	2,741,522,191
Net cash provided by (used in) investing activities		(2,622,447,720)	1,235,407,171
Cash flows from financing activities			
Proceeds from short-term financial liabilities		18,186,694,399	19,919,881,975
Proceeds from long-term financial liabilities		5,618,615,586	3,765,928,356
Capital contribution from non-controlling interests		3,696,009	181,326,791
Repayment of short-term financial liabilities		(22,762,338,739)	(24,411,680,905)
Dividends paid		(388,644,147)	(325,050,453)
Payment of lease liabilities		(305,148,627)	(283,239,106)
Payment of convertible preferred stock		(409,683,299)	-
Repayment of long-term financial liabilities		(525,886,787)	(124,864,089)
Dividends and distribution to non-controlling interests		(323,120,413)	(259,700,175)
Net cash used in financing activities	₩	(905,816,018)	(1,537,397,606)

See accompanying notes to the consolidated financial statements.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Consolidated Statements of Cash Flows, Continued
For the years ended December 31, 2023 and 2022

(In thousands of won)

	Note	2023	2022
Effects of movement in exchange rates on cash and cash equivalents			
	₩	(872,508)	25,915,920
Net increase in cash and cash equivalents		405,734,757	1,857,703,655
Cash and cash equivalents on January 1		3,994,767,866	2,137,064,211
Cash and cash equivalents on December 31	₩	4,400,502,623	3,994,767,866

See accompanying notes to the consolidated financial statements.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements, Continued

For the years ended December 31, 2023 and 2022

1. Reporting Entity

(1) Description of the Parent company

HD Hyundai Co., Ltd. (the "Parent Company") was incorporated on April 1, 2017 through a split-off from HD Korea Shipbuilding & Offshore Engineering Co., Ltd. and is engaged in investing business and others. The head office of the Company is located in Seongnam-si, Gyeonggi-do, Republic of Korea.

As of December 31, 2023, the Parent Company's major shareholders consist of Mong-Joon Chung (26.60%), National Pension Service Investment Management (8.91%), Ki-Sun Chung (5.26%), etc.

(2) Consolidated subsidiaries

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

Company	Main business	Location	Fiscal year end	Ownership (%)	
				2023	2022
HD Korea Shipbuilding & Offshore Engineering Co., Ltd.(*2,5)	Non-Financial Holding Company	Korea	December	35.05	35.05
HD Hyundai Heavy Industries Co., Ltd.(*1,5)	Shipbuilding Industry	Korea	December	78.02	78.02
Hyundai Samho Heavy Industries Co., Ltd.(*1)	Shipbuilding Industry	Korea	December	96.58	80.54
Hyundai Mipo Dockyard Co., Ltd.(*1,2)	Shipbuilding Industry	Korea	December	42.40	42.40
HD Hyundai Engineering & Technology(*1,5)	Other Engineering Services	Korea	December	100.00	100.00
Ulsan HD Football Club Co., Ltd.(*1,6)	Professional Football Team Management Business	Korea	December	100.00	100.00
HD Hyundai Heavy Industries Mos Co.,Ltd.(*1,5)	Facilities Management Services	Korea	December	100.00	100.00
HD Hyundai Energy Solutions Co., Ltd.(*1,5)	Renewable Energy Related Businesses such as Solar Energy	Korea	December	53.57	53.57
HD Hyundai Engine Company Ltd.(*1,5)	Internal Combustion Engine Manufacturing	Korea	December	100.00	100.00
Hyundai Vietnam Shipbuilding Co., Ltd.(*1,5)	Shipbuilding Industry	Vietnam	December	65.00	65.00
Hyundai Transformers And Engineering India- Private Limited(*1,4)	Manufacture and sale of transformers	India	March	-	100.00
Hyundai Heavy Industries Miraflores Power Plant Inc(*1)	Other manufacturing industries	Panama	December	100.00	100.00
HHI Mauritius Limited(*1)	Other manufacturing industries	Mauritius	December	100.00	100.00
Hyundai Arabia Company L.L.C(*1)	Industrial plant construction	Saudi Arabia	December	100.00	100.00
Hyundai Samho Heavy Industries Panama, Inc.(*1)	Construction - Industrial Facility Construction	Panama	December	100.00	100.00
HD Hyundai Energy Solutions America Inc.(*1,5)	Solar Module Sales	USA	December	100.00	100.00
HD Hyundai Technology Center India Private Limited(*1,6)	Research and Development	India	March	100.00	100.00
Pontos Investment LLC(*1)	Investment	USA	December	100.00	100.00
Hyundai Heavy Industries Argentina S.R.L(*1,3)	Construction	Argentina	December	99.98	-
Seamarq Service Co., Ltd. (*1,3)	Managing hotel outsourced operations	Korea	December	100.00	-
HD Hyundai Europe Research and Development Center GmbH(*1,3)	Research and development	Germany	December	100.00	-
HD Hyundai Oilbank Co., Ltd.(*5)	Manufacturing of petroleum products	Korea	December	73.85	73.85

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

1. Reporting Entity, Continued

(2) Consolidated subsidiaries, Continued

Company	Main business	Location	Fiscal year end	Ownership (%)	
				2023	2022
HD Hyundai and Shell Base Oil Co., Ltd.(*1,5)	Manufacturing and sale of base oil	Korea	December	60.00	60.00
HD Hyundai Chemical Co., Ltd.(*1,5)	Crude oil refining business	Korea	December	60.00	60.00
Hyundai Oilbank (Shanghai) Co., Ltd.(*1)	Trading in petrochemical products	China	December	100.00	100.00
HD Hyundai Oil Singapore Pte. Ltd.(*1,5)	Trading in crude oil and petrochemical products, chartering	Singapore	December	100.00	100.00
MS Dandy Ltd.(*1)	Ship rental service	Marshall Islands	December	100.00	100.00
Grande Ltd.(*1)	Ship rental service	Marshall island	December	100.00	100.00
HD Hyundai OCI Co., Ltd. (*1,5)	Other based chemicals manufacture business	Korea	December	51.00	51.00
HD Hyundai E&F Co., Ltd. (*1,5)	Energy Business	Korea	December	100.00	100.00
HD Hyundai Marine Solution Co., Ltd.(*6)	Engineering service	Korea	December	62.00	62.00
HD Hyundai Marine Solution Tech Co., Ltd.(*1,6)	Engineering service	Korea	December	100.00	100.00
HD Hyundai Marine Solution Europe B.V.(*1,6)	Engine warranty repairs	Netherlands	December	100.00	100.00
HD Hyundai Global Service Americas Co., Ltd.(*1,5)	Engine warranty repairs	USA	December	100.00	100.00
HD Hyundai Marine Solution Singapore Pte Ltd(*1,6)	Engine warranty repairs	Singapore	December	100.00	100.00
Hyundai Global Service Colombia S.A.S.(*1,4)	Other Engineering services	Colombia	December	-	100.00
Hyundai Global Service Middle East FZE(*1)	Engineering service	UAE	December	100.00	100.00
HD Hyundai Electric Co., Ltd. (*2,6)	Manufacture and sale of electronic and electric products	Korea	December	37.22	37.22
HD Hyundai Plaspo Co., Ltd. (*1,5)	Manufacture of electric motors, generators, and transformers.	Korea	December	61.84	61.84
Yeocheon Energy INC.(*1)	Electric power generation, solar power generation business	Korea	December	100.00	100.00
HD Hyundai Electric Hungary Kft.(*1,5)	Research and development of technology	Hungary	December	100.00	100.00
HD Hyundai Electric Switzerland Ltd.(*1,5)	Research and development of technology	Switzerland	December	100.00	100.00
Hdene Power Solution India Private Ltd.(*1,4)	Electric construction and power equipment manufacturing	India	March	-	100.00
HD Hyundai Electric China Co., Ltd.(*1,6)	Manufacture and sale of voltage switchboard	China	December	100.00	100.00
HD Hyundai Electric Shanghai Ltd.(*1,6)	Research and development of technology	China	December	100.00	100.00
HD Hyundai Power Transformers USA Inc.(*1,5)	Manufacture and sale of electronic and electric products	USA	December	100.00	100.00
HD Hyundai Electric America Corporation(*1,5)	Sale of transformers	USA	December	100.00	100.00
HD Hyundai Electric Arabia L.L.C(*1,5)	Customer support services	Saudi Arabia	December	100.00	100.00
HD Hyundai XiteSolution Co., Ltd.(*6)	Manufacture of machinery equipment for construction and mining	Korea	December	80.22	100.00

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

1. Reporting Entity, Continued

(2) Consolidated subsidiaries, Continued

Company	Main business	Location	Fiscal year end	Ownership (%)	
				2023	2022
HD Hyundai Changzhou Hydraulic Machinery Co., Ltd.(*1,6)	Production and sale of hydraulic cylinder	China	December	100.00	100.00
ECUBE Solution Co., Ltd.(*1)	Manufacture and sale of Engine after treatment device	Korea	December	60.00	60.00
HD Hyundai Construction Equipment Co., Ltd.(*1,2,5)	Manufacture and sale of machinery equipment for construction	Korea	December	33.12	33.12
HHI China Investment Co., Ltd.(*1)	Holding company	China	December	100.00	100.00
Hyundai Financial Leasing Co., Ltd.(*1)	Financing business	China	December	88.02	88.02
Hyundai (Jiangsu) Construction Machinery Co., Ltd.(*1)	Manufacture and sale of machinery equipment for construction	China	December	60.00	60.00
HD Hyundai Construction Equipment North Americas, Inc.(*1,6)	Sale of machinery equipment for construction	USA	December	100.00	100.00
HD Hyundai Construction Equipment Europe N.V.(*1,5)	Sale of machinery equipment for construction	Belgium	December	100.00	100.00
HD Hyundai Construction Equipment India Private Ltd.(*1,5)	Manufacture and sale of machinery equipment for construction	India	March	100.00	100.00
PT. Hyundai Construction Equipment Asia(*1)	Sale of machinery equipment for construction	Indonesia	December	69.96	69.44
PT HD Hyundai Construction Machinery Indonesia(*1,3,5)	Sale of machinery equipment for construction	Indonesia	December	100.00	-
HD Hyundai Construction Equipment Brazil - Manufacturing and Trading of Construction Equipment S.A(*1,5)	Manufacture, trade and repair of heavy equipment	Brazil	December	100.00	100.00
HD Hyundai Infracore Co., Ltd.(*1,2,6)	Manufacture of machinery equipment	Korea	December	32.98	33.29
HD Hyundai Infracore China Co., Ltd.(*1,5)	Sale and manufacturing of machinery equipment	China	December	100.00	100.00
HD Hyundai Infracore Hunan Corp.(*1,5)	Sale of machinery equipment	China	December	100.00	100.00
HD Hyundai Infracore Beijing Corp.(*1,5)	Sale of machinery equipment	China	December	100.00	100.00
HD Hyundai Infracore (Shandong) Co., Ltd.(*1,5)	Sale of machinery equipment	China	December	100.00	100.00
HD Hyundai Infracore China Investment Co., Ltd.(*1,5)	Holding company	China	December	100.00	100.00
HD Hyundai Infracore (Beijing) Financial Leasing Corp.(*1,6)	Financing business	China	December	100.00	100.00
HD Hyundai Infracore North America LLC.(*1,5)	Manufacture and sale of machinery equipment for construction	USA	December	100.00	100.00
HD Hyundai Infracore Chile S.A.(*1,5))	Sale of machinery equipment	Chile	December	100.00	100.00
HD Hyundai Infracore South America(*1,6)	Sale of machinery equipment	Brazil	December	99.99	99.99
HD Hyundai Infracore Norway AS.(*1,5)	Manufacture and sale of machinery equipment for construction	Norway	December	100.00	100.00
Doosan Infracore Construction Equipment India Private Ltd.(*1)	Sale of machinery equipment	India	March	100.00	100.00
HD Hyundai Infracore Europe s.r.o.(*1,5)	Sale of machinery equipment	Czech	December	100.00	100.00
Clue Insight Inc.(*1)	Software development and sales	USA	December	72.21	72.21
HD Hyundai Infracore Deutschland GmbH(*1,5)	Sale of machinery equipment	Germany	December	100.00	100.00
HD Hyundai Infracore Engine (Tianjin) Co., Ltd.(*1, 6)	Production and sale of engines, etc	China	December	100.00	100.00
PT Hyundai Infracore Asia(*1,3)	Sale of machinery equipment	Indonesia	December	100.00	-

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

1. Reporting Entity, Continued

(2) Consolidated subsidiaries, Continued

Company	Main business	Location	Fiscal year end	Ownership (%)	
				2023	2022
HD Hyundai Robotics Co., Ltd.(*5)	Manufacturing of industrial robots	Korea	December	90.00	90.00
HD Hyundai LNS Co., Ltd.(*1,5)	Other engineering services	Korea	December	100.00	100.00
Hyundai Robotics Investment (Shanghai) Co., Ltd.(*1)	Robot sales and after-sales service	China	December	100.00	100.00
Hyundai Robotics (Jiangsu) Co., Ltd(*1)	Wholesale of other industrial machinery and equipment	China	December	100.00	100.00
Hyundai Robotics Europe GmbH(*1)	Wholesale of other industrial machinery and equipment	Germany	December	100.00	100.00
Hyundai Robotics USA Inc.(*1)	Wholesale of other industrial machinery and equipment	USA	December	100.00	100.00
HD Hyundai Future Partners Co., Ltd.(*5)	Management consulting business	Korea	December	100.00	100.00
AMC Bio Co., Ltd.(*1)	Research and development business of drug	Korea	December	100.00	100.00
Medi Plus Solution Co., Ltd(*1)	Healthcare solution development and service	Korea	December	76.76	76.76
Avikus Co., Ltd.	Development and sale of software for maritime autonomous surface ships	Korea	December	100.00	100.00

(*1) Percentage of ownership including indirect ownership.

(*2) Although the ownership percentage is less than 50%, the Group has determined that its ownership percentage (including proxy voting) is sufficient to exercise a majority of voting rights in the decision-making process, based on a comprehensive consideration of the shareholders' meetings and the composition of the shareholders.

(*3) Newly established and newly acquired during the year were included as subsidiaries.

(*4) Excluded from subsidiaries due to liquidation during the year.

(*5) The company's name was changed during the year due to a change in the name of its corporate group.

(*6) The following subsidiaries changed their names during the year.

Old Name	New Name
HD Hyundai Heavy Industries Technology Center India Private Limited	HD Hyundai Technology Center India Private Limited
Ulsan Hyundai Football Club Co., Ltd.	Ulsan HD Football Club Co., Ltd.
Hyundai Electric & Energy Systems Co., Ltd.	HD Hyundai Electric Co., Ltd.
Hyundai Genuine Co., Ltd	HD Hyundai XiteSolution Co., Ltd.
Changzhou Hyundai Hydraulic Machinery Co., Ltd.	HD Hyundai Changzhou Hydraulic Machinery Co., Ltd.
Hyundai Doosan Infracore Co., Ltd.	HD Hyundai Infracore Co., Ltd.
Hyundai Construction Equipment Americas Inc.	HD Hyundai Construction Equipment North Americas, Inc.
Hyundai Global Service Co., Ltd.	HD Hyundai Marine Solution Co., Ltd.
Hyundai Global Technology Service Co., Ltd.	HD Hyundai Marine Solution Tech Co., Ltd.
Hyundai Global Service Europe B.V.	HD Hyundai Marine Solution Europe B.V.
Hyundai Global Service Singapore Pte. Ltd.	HD Hyundai Marine Solution Singapore Pte Ltd
Hyundai Electric China Co. Ltd.	HD Hyundai Electric China Co. Ltd.
Hyundai Electric Shanghai Ltd.	HD Hyundai Electric Shanghai Ltd.
Doosan (China) Financial Leasing Corp.	HD Hyundai Infracore (Beijing) Financial Leasing Corp.
Doosan Infracore South America Industria E Comercio De Maquinas De Construção LTDA	HD Hyundai Infracore South America
Tianjin Hyundai Doosan Engine Co.,Ltd.	HD Hyundai Infracore Engine (Tianjin) Co., Ltd.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

1. Reporting Entity, Continued

(3) Changes in scope of consolidation

(i) Subsidiaries newly subject to consolidation for the year ended December 31, 2023 are as follows:

Company	Reason
Seamarq Service Co., Ltd.	Establishment
HD Hyundai Europe Research and Development Center GmbH	Establishment
PT. HD Hyundai Construction Machinery Indonesia	Establishment
PT Hyundai Infracore Asia	Establishment
Hyundai Heavy Industries Argentina S.R.L	New Acquisition

(ii) Subsidiaries excluded from consolidation for the year ended December 31, 2023 are as follows:

Company	Reason
Hyundai Transformers and Engineering India- Private Limited	Liquidation
Hyundai Global Service Colombia S.A.S	Liquidation
Hdene Power Solution India Private Ltd.	Liquidation

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

1. Reporting Entity, Continued

(4) Condensed financial information of consolidated subsidiaries

Condensed financial information of significant consolidated subsidiaries as of and for the years ended December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

Company	2023					
	Assets	Liabilities	Equity	Revenue	Profit (loss)	Total comprehensive income (loss)
HD Korea Shipbuilding & Offshore Engineering Co., Ltd.	₩ 11,774,250	244,652	11,529,598	269,908	301,457	292,013
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)
HD Hyundai Vietnam Shipbuilding Co., Ltd.	668,413	568,205	100,208	717,208	8,859	10,318
HD Hyundai Oilbank Co., Ltd.	14,133,029	9,132,795	5,000,234	26,172,012	246,329	221,825
HD Hyundai and Shell Base Oil Co., Ltd.	454,651	118,512	336,139	1,311,689	109,442	109,334
HD Hyundai Chemical Co., Ltd.	6,120,377	4,218,272	1,902,105	5,770,045	(156,191)	(160,913)
HD Hyundai Oil Singapore Pte. Ltd.	1,194,479	1,116,182	78,297	5,104,053	58,318	60,408
HD Hyundai OCI Co., Ltd.	352,838	53,032	299,806	336,420	62,079	61,279
HD Hyundai Marine Solution Co., Ltd.	586,881	332,925	253,956	1,145,160	143,474	141,130
HD Hyundai Electric Co., Ltd.	2,459,476	1,443,723	1,015,753	2,293,237	257,484	239,611
HD Hyundai Power Transformers USA Inc.	346,898	198,185	148,713	285,857	37,729	39,176
HD Hyundai Electric America Corporation	561,468	546,624	14,844	633,592	6,835	6,890
HD Hyundai XiteSolution Co., Ltd.	1,953,590	854,333	1,099,257	1,012,648	73,863	70,185
HD Hyundai Construction Equipment Co., Ltd.	2,343,773	965,716	1,378,057	2,574,571	108,876	99,497
HHI China Investment Co., Ltd.	299,742	20,333	279,409	82,182	411	(523)
Hyundai Financial Leasing Co., Ltd.	278,120	16,432	261,688	35,339	1,796	771
Hyundai (Jiangsu) Construction Machinery Co., Ltd.	205,690	77,374	128,316	188,508	(30,231)	(30,270)
HD Hyundai Construction Equipment Europe N.V.	292,407	185,489	106,918	473,360	5,276	10,698
HD Hyundai Construction Equipment North Americas, Inc.	406,697	285,742	120,955	982,157	25,154	26,493
HD Hyundai Construction Equipment Brazil - Manufacturing and Trading of Construction Equipment S.A	254,277	141,554	112,723	198,525	13,728	22,846
HD Hyundai Infracore Co., Ltd.	3,855,346	2,103,551	1,751,795	4,241,475	458,768	435,224
HD Hyundai Infracore China Co., Ltd.	831,336	352,301	479,035	426,498	(64,366)	(56,669)
HD Hyundai Infracore (Beijing) Financial Leasing Corp.	340,715	85,304	255,411	44,566	19,386	18,247
HD Hyundai Infracore North America LLC.	417,359	333,488	83,871	676,338	7,342	8,566
HD Hyundai Infracore Europe s.r.o.	390,828	353,043	37,785	797,115	6,102	7,817
HD Hyundai Robotics Co., Ltd.	388,555	106,798	281,757	171,393	(10,246)	(11,748)

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

1. Reporting Entity, Continued

(4) Condensed financial information of consolidated subsidiaries, Continued

(In millions of won)

(In millions of won)	2022						
Company	Assets	Liabilities	Equity	Revenue	Profit (loss)	Total comprehensive income (loss)	
Korea Shipbuilding & Offshore Engineering Co., Ltd.(*)	₩ 11,430,170	305,681	11,124,489	154,487	333,656	301,169	
Hyundai Heavy Industries Co., Ltd.(*)	16,283,095	10,992,977	5,290,118	7,803,987	(191,917)	(177,587)	
Hyundai Samho Heavy Industries Co., Ltd.(*)	5,589,596	3,927,364	1,662,232	4,051,503	85,790	75,242	
Hyundai Mipo Dockyard Co., Ltd.(*)	4,780,699	2,659,554	2,121,145	3,138,442	(627)	1,874	
Hyundai Energy Solutions Co., Ltd.(*)	654,806	269,731	385,075	911,727	60,136	60,797	
Hyundai Vietnam Shipbuilding Co., Ltd.(*)	574,659	484,769	89,890	615,430	(3,901)	626	
Hyundai Oilbank Co., Ltd.	13,973,057	8,619,115	5,353,942	32,599,794	1,137,803	1,164,897	
Hyundai and Shell Base Oil Co., Ltd.	471,959	165,154	306,805	1,266,833	81,935	82,015	
Hyundai Chemical Co., Ltd.	6,268,594	4,205,577	2,063,017	8,111,204	201,971	203,875	
Hyundai Oil Singapore Pte. Ltd.	1,204,150	1,091,227	112,923	6,233,604	65,271	65,271	
Hyundai OCI Co., Ltd.	336,230	75,703	260,527	384,694	70,572	71,195	
Hyundai Global Service	483,500	281,220	202,280	1,080,845	113,600	115,046	
Hyundai Electric & Energy Systems Co., Ltd.	2,048,149	1,254,011	794,138	1,829,775	136,271	147,380	
Hyundai Power Transformers USA Inc.	292,983	182,878	110,105	242,304	38,737	42,093	
Hyundai Electric America Corporation	300,348	292,394	7,954	351,087	2,825	3,107	
Hyundai Genuine Co., Ltd	1,871,665	1,043,769	827,896	700,442	(7,260)	(1,869)	
Hyundai Construction Equipment Co., Ltd.	2,418,818	1,108,403	1,310,415	2,571,209	107,160	125,413	
HHI China Investment Co., Ltd.	353,393	73,463	279,930	33,705	1,631	(9,544)	
Hyundai Financial Leasing Co., Ltd.	442,710	180,107	262,603	52,670	9,545	13,812	
Hyundai (Jiangsu) Construction Machinery Co., Ltd.	307,946	175,073	132,873	379,242	(44,590)	(43,635)	
Hyundai Construction Equipment Europe N.V.	236,476	140,256	96,220	449,780	9,607	13,812	
Hyundai Construction Equipment Americas., Inc.	332,999	238,537	94,462	659,103	36,237	49,805	
Hyundai Construction Equipment Brazil - Manufacturing and Trading of Construction Equipment	259,591	177,560	82,031	287,213	7,614	15,687	
Hyundai Doosan Infracore Co., Ltd.	3,731,594	2,378,226	1,353,368	4,204,908	207,607	260,519	
Doosan Infracore China Co., Ltd.	1,288,688	545,049	743,639	975,660	25,481	5,020	
Doosan (China) Financial Leasing Corp.	618,213	381,049	237,164	60,386	18,914	10,788	
Doosan Infracore North America LLC.	317,230	241,925	75,305	512,977	13,161	16,937	
Doosan Infracore Europe s.r.o.	342,610	312,642	29,968	794,850	7,308	7,420	
Hyundai Robotics Co., Ltd.	415,708	122,038	293,670	178,315	10,904	13,000	

(*) Financial information after acquisition of control in February 2022.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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 December 31, 2023 and 2022 are summarized as follows:

(In millions of won)

	HD Korea Shipbuilding & Offshore Engineering Co., Ltd. and subsidiaries (*1,4)		HD Hyundai Oilbank Co., Ltd. and subsidiaries (*2)		HD Hyundai XiteSolution Co., Ltd. and subsidiaries (*5)		HD Hyundai Electric Co., Ltd. and subsidiaries (*3)	
	2023	2022	2023	2022	2023	2022	2023	2022
Ownership for non-controlling interests	64.87%	64.87%	26.15%	26.15%	-	-	62.63%	62.63%
Net assets	₩ 12,370,103	12,312,130	6,439,966	6,926,823	4,138,391	3,624,232	1,057,030	831,169
Book value of non-controlling interests	9,447,938	9,495,808	2,900,783	3,058,758	2,767,075	2,595,462	712,225	571,702
Net income (loss)	144,930	2,678	155,619	1,632,702	364,384	271,369	259,456	162,018
The profit (loss) attributable to non-controlling interests	27,332	(53,960)	61,141	550,651	216,315	190,256	161,596	99,805
Cash flows from operating activities	2,081,591	462,246	1,157,665	1,622,690	825,489	235,738	(22,439)	(124,138)
Cash flows from investing activities	(1,266,890)	(1,339,471)	(807,344)	(1,135,895)	(217,301)	(207,366)	(93,296)	(57,613)
Cash flows from financing activities	(485,209)	(977,270)	(216,030)	(679,032)	(612,687)	(467,116)	118,221	(1,941)
Net increase (decrease) of cash and cash equivalents	329,492	(1,854,495)	134,291	(192,237)	(4,499)	(438,744)	2,486	(183,692)
Dividends paid to non-controlling interests	3,120	2,825	198,113	160,495	52,526	15,039	11,288	-

(*1) Financial information after acquisition of HD Korea Shipbuilding & Offshore Engineering Co., Ltd. as a subsidiary for the year ended December 31, 2022.

(*2) Non-controlling interest in HD Hyundai Oilbank Co., Ltd. includes hybrid bonds amounted to ₩428,924 million issued by HD Hyundai Oilbank Co., Ltd. as of December 31, 2023 and 2022.

(*3) Ownership for non-controlling interest adjusted for treasury stock of HD Hyundai Electric Co., Ltd., are 62.72% as of December 31, 2023 and 2022.

(*4) Ownership for non-controlling interest adjusted for treasury stock of HD Korea Shipbuilding & Offshore Engineering Co., Ltd. are 64.92% as of December 31, 2023 and 2022.

(*5) During the year ended December 31, 2023, some of the convertible bonds of HD Hyundai XiteSolution Co., Ltd. were exercised by exercising the conversion right, but the Group determined that it did not have an unconditional right to avoid the delivery of cash or other financial assets for the new shares that were granted the right to purchase, and therefore the redemption amount was recorded as a liability rather than a non-controlling interest.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

2. Basis of Preparation

The Company 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");
- Contingent consideration payable for business combination measured at fair value;
- Land measured at fair value; and
- 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

(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

K-IFRS requires the use of estimates and assumptions in the preparation of financial statements that affect the application of accounting policies and the reported amounts of assets, liabilities, revenues and expenses at the date of the financial statements and the disclosure of contingent assets and liabilities during the reporting period based on management's best judgment, including climate-related risks and opportunities. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

The potential financial impact of the ongoing armed conflict in Ukraine and international sanctions against Russia on the Group cannot be reasonably estimated at this time.

(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 13 – Investments in Associates: Whether the Group has significant influence over an associate
- Note 14,15 – Classification of joint ventures
- Note 16 – Classification of investment property
- Note 18 – Lease term: whether the Group is reasonably certain to exercise extension options

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

2. Basis of Preparation, Continued

(3) Use of estimates and judgments, Continued

(ii) Assumptions and estimation uncertainties

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:

- Notes 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, 46 – Recognition and measurement of provisions and contingencies: key assumptions about the likelihood and magnitude of an outflow of resources;
- Note 34 – Acquisition of subsidiary: measurement of fair value;
- Note 35 – Revenue recognition in proportion to stage of completion, the estimates of total contract costs;
- Note 41 – Measurement of deferred tax; and
- Note 45 – Measurement of account receivable and contract asset's expected credit loss: key assumptions about weighted average loss rate

(iii) Measurement of fair value

A number of the Group's accounting policies and disclosures require the measurement of fair values, 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 market observable 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 follows:

- Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: Inputs other than quoted prices included in 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).

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 17 – Property, plant, and equipment;
- Note 34 – Acquisition and disposal of Subsidiary and Business; and
- Note 44 – Financial instruments

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

3. Changes in Accounting Policies

Effective January 1, 2023, the Group first applied deferred income taxes on assets and liabilities arising from a single transaction (*K-IFRS No. 1012, 'Income Taxes'*), the global minimum tax (*K-IFRS No. 1012, 'Income Taxes'*) and significant accounting policy information (*K-IFRS No. 1001, 'Financial Statement Presentation'*). The other standards, which are effective on or after January 1, 2023, do not have a material impact on the Group's consolidated financial statements.

- Deferred tax on assets and liabilities arising from a single transaction

Effective January 1, 2023, the Group adopted the amendments to deferred taxes on assets and liabilities arising from a single transaction (*K-IFRS No. 1012, 'Income Taxes'*), which excludes transactions that give rise to additive and deductible temporary differences of equal amounts at the transaction date (e.g., leases, post-treatment and restoration provisions) from the exception to initial recognition of deferred taxes. The Group recognized deferred tax assets and liabilities for all deductible temporary differences and creditable temporary differences related to leases and provisions for post-treatment and restoration already existing at the beginning of the earliest comparative period, with the cumulative effect of initial application recognized as an adjustment to retained earnings or other components of equity on that date. We applied this amendment to all other transactions occurring at or after the beginning of the earliest comparative period presented.

As a result of this amendment, the Group has recognized a deferred tax asset related to lease liabilities and a deferred tax liability related to right-of-use assets, respectively. However, there is no impact on the Group's consolidated statement of financial position and no impact on the opening retained earnings balance at January 1, 2022, as the Group meets the conditions for offsetting deferred tax assets and liabilities in paragraph 74 of *K-IFRS No. 1012, 'Income Taxes'*.

- Global minimum tax

On May 23, 2023, the Group adopted the International Tax Reform-Pillar 2 Model Rule (*K-IFRS No. 1012, 'Income Taxes'*), which contains mandatory provisions that provide a temporary exemption from deferred tax accounting for the Global Minimum Tax and requires additional disclosures about an entity's exposure to the Pillar 2 tax.

The global minimum tax is a system whereby a member of a multinational group with consolidated financial statement revenues of €750 million or more in two or more of the group's four immediately preceding calendar years (subsidiaries included in the consolidated financial statements) pays an amount equal to the effective tax rate of 15% to the tax authorities of the country in which the controlled entity is located if it meets certain requirements.

Korea enacted the Global Minimum Tax Act in 2023, which is applicable to fiscal years beginning on or after January 1, 2024. The Group's consolidated financial statements for the fiscal years ended December 31, 2021 and 2022, respectively, include Hungary, the United Arab Emirates, and the Marshall Islands, where the statutory tax rate is less than 15%.

However, based on the financial statements for 2023, we have conducted a transitional exemption test under Article 80 of the National Tax Adjustment Act and expect that the United Arab Emirates, where our subsidiary Hyundai Global Service Middle East FZE is located, will be subject to the global minimum tax.

However, since the tax law related to the global minimum tax in Korea is effective from January 1, 2024, there is no income tax effect in the current period. The Group has applied the provision for temporary and mandatory exemption from deferred tax accounting for the effect of the Pillar 2 tax and recognizes the Pillar 2 tax in current income tax when it arises.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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3. Changes in Accounting Policies, Continued

- Material accounting policy information

Effective on January 1, 2023, the Group adopted the amendments to the accounting policy disclosures (*K-IFRS No. 1001 'Presentation of Financial Statements'*), which do not change the accounting policies per se, but affect the accounting policy information disclosed in these consolidated financial statements.

The amendments require the disclosure of 'material' accounting policies, rather than 'significant' accounting policies, and provide guidance on the application of materiality to the disclosure of accounting policies to ensure that the disclosures provide entity-specific accounting policy information that users of the financial statements need to understand.

The Group's management has reviewed its accounting policies and has updated the material accounting policy information disclosed in *Note 4* (2022: Significant Accounting Policies) in accordance with these amendments.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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 and the Group has consistently applied the accounting policies to all periods presented in these consolidated financial statements, except changes in accounting policies described in *Note 3*.

Effective on January 1, 2023, the Group has adopted the amendments to accounting policy disclosures (*K-IFRS No. 1001, 'Presentation of Financial Statements'*), which requires disclosure of 'material' accounting policies rather than 'significant' accounting policies. These amendments do not result in a change in accounting policies, but do affect the accounting policy information disclosed.

(1) Operating segments

▮ 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 37* the Group has six 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) Business combinations

A business combination is accounted for by applying the acquisition method, unless it is a combination involving entities or business under common control.

2) Non-controlling interests

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

3) 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.

4) 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 share premium.

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4. Material Accounting Policies, Continued

(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 unit cost of inventories is determined by the moving average method and includes purchase price, conversion costs and other costs necessary to prepare inventories for use. However, unsold goods are valued at cost using the individual method.

The carrying amount of inventories is recognized as cost of sales in the period in which revenue from the sale of inventories is recognized.

(5) Non-derivative financial assets

1) Recognition and first 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.

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Notes to the Consolidated Financial Statements, Continued
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4. Material Accounting Policies, Continued

(5) Non-derivative financial assets, Continued

2) Classification and subsequent measurement, Continued

(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) 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.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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4. Material Accounting Policies, Continued

(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.

A. 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

Cash flow hedge accounting is discontinued when the Group no longer designates a hedging relationship, or when the hedging instrument is extinguished, sold, liquidated, exercised, or otherwise no longer meets the criteria for qualifying as a cash flow hedge. Upon discontinuance of cash flow hedge accounting, cumulative gains and losses on derivatives recognized in equity are recognized in profit or loss over the reporting period in which the forecasted transaction occurs.

B. 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.

C. 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.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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4. Material Accounting Policies, Continued

(7) Impairment of financial assets

(i) 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

(ii) 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.

(iii) 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.

(iv) 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 HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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4. Material Accounting Policies, Continued

(8) Property, plant and equipment

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.

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

	Useful lives (years)
Buildings	20~60
Structures	9~50
Heavy machinery	8~19
Tools, furniture and fixtures	3~20
Machinery	2~45
Ships	15,25
Vehicles	5~14
Other property, plant and equipment	3~13

(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	4~7
Distribution networks	20
Customer relationships	8~34
Brands, Membership, Goodwill	Indefinite
Know-how	16
Technology	5~11
Order backlog	10
Other intangible assets	3~50

(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 HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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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:

	Useful lives (years)
Buildings	25~50
Structures	20, indefinite

(12) Impairment of non-financial assets

The carrying amounts of the Group's non-financial assets, other than assets arising from contract assets recognized from revenue from customers, employee benefits, inventories, deferred tax assets and non-current assets held for sale, are reviewed at the end of the reporting period to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Goodwill and intangible assets that have indefinite useful lives or that are not yet available for use, irrespective of whether there is any indication of impairment, are tested for impairment annually by comparing their recoverable amount to their carrying amount.

For impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets ("CGUs"). The recoverable amount of an asset or CGU 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.

An impairment loss is recognized in profit or loss if the carrying amount of an asset or a CGU exceeds its recoverable amount.

Goodwill acquired in a business combination is allocated to each CGU that is expected to benefit from the synergies arising from the goodwill acquired. Any impairment identified at the CGU level will first reduce the carrying value of goodwill and then be used to reduce the carrying amount of the other assets in the CGU on a pro rata basis. Except for impairment losses in respect of goodwill which are never reversed, an impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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4. Material Accounting Policies, Continued

(13) Lease

(i) As a lessee

At commencement or on modification of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease component on the basis of its relative stand-alone prices. However, for the leases of property the Group has elected not to separate non-lease components and account for the lease and non-lease components as a single lease component.

The Group determines its incremental borrowing rate by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease and type of the asset leased.

- Short-term leases and lease of low-value assets

The Group has elected not to recognize right-of-use assets and lease liabilities for lease of low-value assets and short-term leases, including buildings and fixtures. The Group recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

(ii) As a lessor

When the Group acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease.

To classify each lease, the Group makes an overall assessment of whether the lease transfers substantially all of the risks and rewards incidental to ownership of the underlying asset. As part of this assessment, the Group considers certain indicators such as whether the lease is for the major part of the economic life of the asset.

The Group recognizes lease payments received under operating leases as income on a straight-line basis over the lease term as part of 'other revenue' and 'sales'.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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4. Material Accounting Policies, Continued

(14) Contract assets and contract liabilities

Contract assets are the sum of unsolicited amount from the ongoing construction work to be received from the client and are calculated by subtracting the proceeds from the recognized amount and the recognized loss from the sum of profits recognized in accrued costs. Accrued costs include fixed and variable indirect costs allocated on the basis of normal operating costs, which are directly related to a specific contract and common costs that can be attributed to overall contract activities.

The total amount of contract assets in which the sum of the accrued costs and the recognized profits exceeds the proceeds is indicated as contract assets in the statement of financial position. If the proceeds of the claim exceed the sum of the accrued costs and the recognized profit, the total contract liabilities are presented as contract liabilities in the statement of financial position.

Under the contract categorized as a loss contract, which refers to a contract where the unavoidable costs for fulfilling contractual obligations exceed the expected economic benefits to be received from the contract, the anticipated losses are recognized as provisions for (liquidity) contingencies.

(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

The defined benefit obligation is calculated annually by an independent actuary using the projected unit credit method.

(17) Provisions

- (i) 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.
- (ii) 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.
- (iii) 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.
- (iv) Other provision
In accordance with the Group's published environmental policy and applicable legal requirements, a provision for site restoration is recognized.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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4. Material Accounting Policies, Continued

(18) Convertible bonds

If the number of shares to be issued upon conversion is fixed during the subsequent period in accordance with the contract terms, the conversion feature is reclassified as equity.

(19) 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* which became effective in 2015.

(i) 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.

(ii) 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 the end of the reporting period.

(20) Foreign currency

(i) 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.

(ii) 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.

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Notes to the Consolidated Financial Statements, Continued
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4. Material Accounting Policies, Continued

(21) Equity capital

-Hybrid bonds

The Group classifies capital securities as financial liabilities or equity instruments in accordance with the substance of the contractual terms of capital securities. Hybrid bonds that have an unconditional right to avoid delivering cash or financial assets to pay a contractual obligation are classified as equity instrument and are presented in equity.

(22) Revenue from contracts with customers

(i) Characteristics of goods or services and timing of performance obligations

The Group is engaged in an oil refining segment that conducts business related to crude oil refining, an electric and electronic segment that manufactures and sells transformers, high-voltage circuit breakers, switchboards, rotating machines, power electronic control systems, and wind power generators, a construction equipment segment that manufactures and sells electronics, construction machinery and industrial transportation machinery, and a robot segment that manufactures and sells industrial and LCD robots.

1) In the oil refinery sector, oil products made by refining crude oil such as gasoline and diesel are used as main products and supplied to customers. Revenue is recognized in the case of a general contract because it does not correspond to the performance obligation to be fulfilled over a period of time. The time when performance obligations are fulfilled is the time when assets held by the relevant sector are transferred to the customer and controlled by the customer. We are determining when to fulfill our performance obligations. In general, export is mainly carried out under conditions such as CIF and FOB, and in case of domestic sales, it is judged that the performance obligation is fulfilled at the time when it is physically transferred to the customer.

2) The shipbuilding and offshore sector 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 sector 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 sector are not for alternative use by the sector itself and the sector has an enforceable right to payment for performance completed to date, the sector 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 sector 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.

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4. Material Accounting Policies, Continued

(22) Revenue from contracts with customers, Continued

(i) Characteristics 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 and 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.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

4. Material Accounting Policies, Continued

(22) Revenue from contracts with customers, Continued

(i) Characteristics of goods or services and timing of performance obligations, Continued

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.

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.

3) The electric and electronic sector manufactures and supplies various electric and electronic devices and energy solutions for all phases of the power supply process, ranging from power generation→transmission→distribution→consumption. The types of revenue in the segment are three: standard product supply agreement, multiple-element arrangement and Turn-key contract.

While standard product supply agreement consists of one performance obligation, multiple-element arrangement and Turn-key contracts are one contract but contain multiple distinctive obligations.

As the electric and electronic sector manufactures and supplies various electric devices and energy solutions for all phases of the power supply process, for a general contract, revenue is recognized as a performance obligation is satisfied at a point in time.

The timing of satisfaction of performance obligations is when the goods are delivered to customers and the customers obtain control of the goods. The determination of the timing when the control is transferred to customer, is based on the entity's right to payment, the legal title, the physical possession, the significant risks and rewards of ownership, and the acceptance by the customer. Generally, the performance obligation is satisfied when the terms of trade such as CIF, FOB and DDP are met for transfer of the legal title in exports sales and when the product is delivered physically to customers in domestic sales respectively.

The contract to manufacture a highly customized product for a particular customer is supposed 'not to create an alternative use to the electric and electronic sector'. If the contract describes the electric and electronic sector would be compensated for an amount of recovery of the costs incurred plus a reasonable profit margin when terminated by the customer or another party, revenue from those contracts is recognized over time and is otherwise recognized at a point in time.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

4. Material Accounting Policies, Continued

(22) Revenue from contracts with customers, Continued

(i) Characteristics of goods or services and timing of performance obligations, Continued

If the performance obligation is satisfied over time, the timing of the performance obligation depends on how the electric and electronic sector measures its progress to indicate 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 electric and electronic sector provides design, raw material purchase, production, and trial run, it is difficult to obtain information for applying calculation method without incurring excessive cost due to the wide variety of drying processes. Therefore, it is decided that the timing of the cost injection should be satisfied because the input method that recognizes revenue based on the electric and electronic sector's inputs compared to the total inputs expected to satisfy the performance obligation can faithfully represent the electric and electronic sector's performance.

4) The construction equipment sector produces and supplies construction equipment and industrial vehicles such as excavators, wheel loaders, backhoe loaders, skid steer loaders, and forklifts. Revenue is recognized in the case of a general contract because it does not correspond to the performance obligation to be fulfilled over a period of time.

When the performance obligation is fulfilled, the assets held by the relevant sector are transferred to the customer and controlled by the customer. In the case of domestic sales, sales are recognized at the time of delivery of goods and at the time of shipment for export.

Usually, the customer pays the price at the time of delivery of the goods, and there may be a difference between some delivery time and the time of payment, but in general, the difference is not long, and the relevant sector holds the right to claim by completing the obligation at the time of delivery. In some cases, there is a reservation provision for transfer of ownership in the contract, but this is a case where the customer has not paid the sales price at the product delivery point, so it does not affect the determination of transfer of control because it is a safeguard against default.

Export contract terms are usually FOB terms, and customers pay the full amount at the time of shipment. Differences may occur between the time of shipment and the time of payment, but generally the difference is not long, and the sector retains the claim for payment by completing the obligation at the time of shipment, and ownership and control of the asset is transferred to the customer.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

4. Material Accounting Policies, Continued

(22) Revenue from contracts with customers, Continued

(i) Characteristics of goods or services and timing of performance obligations, Continued

5) The ship service sector is engaged in selling of components and providing technical services for ships, providing fuel oil for ships, plant business and eco-friendly ship remodeling and others. When the control of goods or service is transferred to a customer, the ship service sector recognizes revenue in an amount that reflects the expected amount of having the right to receive the goods or services.

The eco-friendly ship remodeling business of the ship service sector provides services for manufacturing, installation, and commissioning of eco-friendly facility equipment according to the customer's ship conditions at the request of the customer. Generally, the contract period is 1 year and due to the nature of the order-made production 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. Consequently, 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 obligation depends on how the Group measures its progress to indicate 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 eco-friendly ship remodeling business provides design, equipment purchase, installation, and commissioning, it is difficult to obtain information for applying calculation method without incurring excessive cost due to the wide variety of drying processes. Therefore, it is decided that the timing of the cost injection should be satisfied because the input method that recognizes revenue based on the Group's inputs compared to the total inputs expected to satisfy the performance obligation can faithfully represent the Group's performance.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

4. Material Accounting Policies, Continued

(22) Revenue from contracts with customers, Continued

(ii) Significant payment conditions

1) In the refining sector, the payment conditions for revenue recognized at the time of delivery differ depending on the content of the contract with the customer, and there is almost no significant change consideration.

2) 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.

3) In the case of a standard product supply contract, the electric and electronics sector generally receives payment within 90 to 180 days from the billing date. In the case of the complex element order contract and the turn-key order contract, it is generally received in the form of advance payment, intermediate payment, and balance.

There is no significant financial factor in the case of a standard product supply contract, and in the case of a multi-element order contract and a turn-key order contract, the Group receives the payment of goods or services from the customer in accordance with the payment terms and the promise to the customer. There may be a significant financial component that adjusts the promised price to reflect the effect of the time value of money as differences occur between the time when you expect to transfer goods or services. However, if the expected period between the time when the Group transfers the goods or services promised to the customer and the time when the customer pays for it at the time of commencement of the contract, it reflects the effect of significant financial factors. Therefore, we apply a practical convenience method that does not adjust the promised price.

4) The construction equipment sector generally receives a price at the time of supply of goods. In the case of domestic sales contracts, there are provisions for the payment of the down payment in the contract, but in practice, it rarely occurs. In addition, there are terms of payment in installments in the domestic sales contract, but this is a transaction in which the buyer receives the loan from the financial institution, pays the purchase price, and repays the loan to the financial institution in installments in the future. This is not the case when selling products. Therefore, there is no significant difference between when the goods are transferred and when they are paid.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

4. Material Accounting Policies, Continued

(22) Revenue from contracts with customers, Continued

(ii) Significant payment conditions, Continued

5) The ship service sector is charged according to the collection conditions specified in the contract or when goods are delivered and services are provided. Also, free AS business charges and collects monthly billed amount. The eco-friendly ship remodeling business is charged according to the progress of the construction, including the advance payment, the achievement amount of Milestone, and the performance deposit.

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.

(iii) Nature and duration of guarantee

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 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.

Although the period varies depending on the product and contract, in general, the electrical and electronics sector is 24 to 60 months after product delivery, the construction equipment sector is 12 to 24 months or 1,000 to 3,000 hours after product delivery, and the ship service sector is 6 to 12 or 12 to 36 months after product delivery. This is similar to the normal warranty period of the same company. These guarantees are converted to paid AS after the specified warranty period. The warranty provided is intended to provide confidence that the product conforms to the agreed specifications and does not constitute a separate performance obligation.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

4. Material Accounting Policies, Continued

(22) Revenue from contracts with customers, Continued

(iv) 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. In addition, 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.

In the case of contracts for supplying standard products in the electrical and electronics sector, and contracts in the refinery and construction equipment sector, there is no need to allocate the transaction price, but it is not necessary to allocate contracts for the order of complex elements and turn-key contracts in the robot and electrical and electronics sectors. In the case, the transaction price is allocated to each of these performance obligations because it includes a number of distinct performance obligations that supply various products and services within a single contract.

The electrical and electronics sector and ship service sector apply the adjusted market assessment approach which allocates the transaction price based on the estimated stand-alone selling price. If the stand-alone selling price is not directly observable, transaction price is determined by the expected cost-plus-a-margin approach by forecasting expected cost of satisfying a performance obligation and then adding an appropriate margin. Only if the above-mentioned two approaches are not available, the residual approach, by estimating the total transaction price less the sum of the observable stand-alone prices of other goods or services.

In the case of the electrical and electronics sector and ship service sector, due to design changes and additional work occurring due to reasons attributable to the sector or the request of the client, delayed compensation due to delay in delivery and failure to meet conditions, sales discount and sales incentives to encourage sales, etc. Due to this, the price to receive from the customer may change. In the case of sales discounts and sales incentives, the price of the change is included in the transaction price only up to a very high probability of not reversing the significant portion of the accumulated revenues already recognized, and in the case of delayed compensation, the expected price incurred by the terms of the contract is recognized by deducting from.

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4. Material Accounting Policies, Continued

(23) Finance income and finance costs

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

- interest income, 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
- hedge ineffectiveness recognized in profit or loss

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.

(24) Corporate income taxes

The global minimum tax payable under the Pillar 2 legislation is an income tax for purposes of *K-IFRS No. 1012, 'Income Taxes'*. The Group has applied the temporary relief from the obligation to account for deferred taxes resulting from the impact of the minimum tax and has recognized the tax in current income taxes as incurred.

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(25) New standards and interpretations not yet adopted

A number of new standards are effective for annual periods beginning after January 1, 2023, and earlier application is permitted; however, the Group has not early adopted the new or amended standards in preparing these consolidated financial statements.

- (i) K-IFRS No. 1001 '*Presentation of Financial Statements - Current and Noncurrent Classification of Liabilities and Borrowing Arrangements for Noncurrent Liabilities*'

This amendment, issued in 2020 and 2022, clarifies the requirements for the liquidity classification of liabilities and requires the disclosure of information about noncurrent liabilities that have future borrowing commitments that must be honored. The amendments are effective for annual periods beginning on or after January 1, 2024. The Group has secured bank borrowings and convertible bonds with certain borrowing covenants (see Notes 21, 25 and 46). These liabilities are classified as non-current on December 31, 2023, but could be required to be repaid prior to the contractual maturity date if the Group breaches the related borrowing covenants in the future. The Group is in the process of assessing the potential impact of this amendment.

- (ii) K-IFRS No. 1007 '*Statement of Cash Flows*' and K-IFRS No. 1107 '*Financial Instruments: Disclosures - Supplier Financing Arrangements*'

The amendments require note disclosures about supplier finance arrangements to enable financial statement users to understand the impact of supplier finance arrangements on an entity's liabilities and the extent to which the entity is exposed to cash flow and liquidity risk. The Group enters into supplier finance arrangements and is in the process of assessing the impact of the amendments on its note disclosures about arrangements. The amendments are effective for annual periods beginning on or after January 1, 2024.

The following new and amended standards are not expected to have a material impact on the Group.

- Lease liabilities arising from post-sale lease transactions (K-IFRS No. 1116 '*Leases*')
- Lack of exchangeability (K-IFRS No. 1021, '*Effects of Changes in Foreign Exchange Rates*')

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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5. Risk Management

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

- Credit risk;
- Liquidity risk; and
- Market risk

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

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 accounts for expected credit losses and their changes at the end of each reporting period in order to reflect changes in the credit risk since initial recognition of the financial asset in accordance with the expected credit loss model in relation to the impairment of the financial asset.

(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.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

5. Risk Management, Continued

(1) Financial risk management, Continued

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. 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, 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.

(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.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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5. Risk Management, Continued

(2) 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 equity ratio)</i>		2023	2022
Total liabilities	₩	44,750,984	42,307,197
Total equity		23,231,837	23,263,664
Cash and deposits(*1)		6,230,200	5,347,819
Borrowings(*2)		18,126,188	17,982,985
Liability to equity ratio		192.63%	181.86%
Net borrowing to equity ratio(*3)		51.21%	54.31%

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

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

(*3) Net borrowing represents borrowings net of cash and deposits.

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

<i>(In millions of won, except ratio)</i>		2023	2022
1. Operating profit	₩	2,031,564	3,387,008
2. Interest expenses		911,711	640,541
3. Interest coverage ratio(1 ÷ 2)		2.23	5.29

6. Cash And Cash Equivalents

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

<i>(In millions of won)</i>		2023	2022
Cash on hand	₩	1,771	6,236
Current accounts		271,051	159,791
Other cash and cash equivalents		4,127,681	3,828,741
	₩	<u>4,400,503</u>	<u>3,994,768</u>

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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 assets measured at amortised cost	₩	1,828,058	2,122	1,358,514	9,868
Financial assets measured at FVTPL		8,280	97,230	201,672	90,511
Financial assets measured at FVOCI		-	273,694	-	241,690
	₩	<u>1,836,338</u>	<u>373,046</u>	<u>1,560,186</u>	<u>342,069</u>

8. Restricted Financial Instruments

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

(In millions of won)

Description		2023	2022	Restrictions
Cash and cash equivalents	₩	-	150	Etc
Short-term financial instruments		5,037	19,479	Pledging
Other receivables		-	4,100	Security deposit
Long-term financial instruments				Guarantee deposits for checking accounts and etc.
		1,437	3,172	
	₩	<u>6,474</u>	<u>26,901</u>	

Separately, the Group deposits ₩268,058 million in financial institutions to provide financial support to cooperative companies and to execute government-funded projects as of December 31, 2023.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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:

(In millions of won)

	2023		2022	
	Current	Non-current	Current	Non-current
Trade receivables:				
Trade receivables(*)	₩ 5,664,330	344,292	5,026,697	403,201
Allowance for doubtful accounts	(1,176,859)	(139,107)	(1,248,092)	(177,736)
	<u>4,487,471</u>	<u>205,185</u>	<u>3,778,605</u>	<u>225,465</u>
Other receivables:				
Account receivable	1,434,801	28,801	1,625,319	18,533
Allowance for doubtful accounts	(299,911)	(14,227)	(309,491)	(4,747)
Accrued income	48,169	-	34,981	-
Allowance for doubtful accounts	(1,397)	-	(1,623)	-
Loans	16,984	65,853	19,435	57,083
Allowance for doubtful accounts	(8,472)	(787)	(8,470)	(787)
Guarantee deposits	8,188	257,624	20,826	245,173
Allowance for doubtful accounts	-	(100)	-	(152)
Finance lease receivables	419,387	86,792	780,831	134,910
Allowance for doubtful accounts	(15,770)	(635)	(16,983)	(1,058)
	<u>1,601,979</u>	<u>423,321</u>	<u>2,144,825</u>	<u>448,955</u>
	<u>₩ 6,089,450</u>	<u>628,506</u>	<u>5,923,430</u>	<u>674,420</u>

(*) As of December 31, 2023, the balance of trade receivables that the Group transferred but does not past are ₩573,597 million. The Group transferred the trade receivables to ING Bank and others and accounted for derecognition as all the risks and rewards of the assets are substantially transferred.

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

(In millions of won)

	2023		2022	
	Current	Non-current	Current	Non-current
Trade receivables:				
Contract assets	₩ 7,463,664	203	6,688,598	-
Allowance for doubtful accounts	(40,368)	-	(41,597)	-
	<u>₩ 7,423,296</u>	<u>203</u>	<u>6,647,001</u>	<u>-</u>

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

10. Financial Lease

- (1) Gross investment in financial leases and their present value of minimum leases receipts as of December 31, 2023 and 2022 are summarized as follows:

<i>(In millions of won)</i>		2023	2022
Less than 1 year	₩	367,919	695,917
More than 1 year, less than 5 years		144,842	231,711
More than 5 years		14,755	22,062
Gross investments in financial leases	₩	527,516	949,690
Present value of minimum lease payment receivable		502,797	911,417

- (2) Unearned interest income of financial leases as of December 31, 2023 and 2022 as follows:

<i>(In millions of won)</i>		2023	2022
Gross investment in financial lease	₩	527,516	949,690
Net lease investment(*)		506,179	915,741
Unearned interest income	₩	21,337	33,949

(*) Present value of unguaranteed residual value ₩3,382 million and ₩4,324 million are included as of December 31, 2023 and 2022.

- (3) Interest income regarding lease receivable for the years ended December 31, 2023 and 2022 are summarized as follows:

<i>(In millions of won)</i>		2023	2022
Interest income	₩	30,198	44,727
Commission revenue		16,691	37,255
	₩	46,889	81,982

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

11. 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	₩	647,512	(38,522)	608,990	857,638	(50,780)	806,858
Finished goods		2,381,746	(94,989)	2,286,757	1,543,100	(56,087)	1,487,013
Work-in-progress		1,927,756	(71,434)	1,856,322	1,559,398	(43,809)	1,515,589
Raw materials		3,068,492	(118,524)	2,949,968	3,234,991	(168,259)	3,066,732
Materials-in-transit		1,714,291	-	1,714,291	2,594,550	-	2,594,550
	₩	<u>9,739,797</u>	<u>(323,469)</u>	<u>9,416,328</u>	<u>9,789,677</u>	<u>(318,935)</u>	<u>9,470,742</u>

Losses on valuation of inventory amounting to ₩4,534 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 ₩179,283 million was added to the cost of sales for the year ended December 31, 2022.

12. 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
Advance payments	₩	1,841,768	-	1,379,632	-
Allowance for doubtful accounts		(10,395)	-	(9,411)	-
Prepaid expenses		526,124	15,882	472,929	10,345
Accumulated impairment loss(*1)		(7,285)	-	(48,323)	-
Plan assets(*2)		-	499,534	-	605,134
Emission right		4	-	98	-
Right of return product		4,462	-	3,961	-
Others(*3)		28,405	272,232	261,366	247,584
Accumulated impairment loss		(27,494)	(63,308)	(218,478)	(63,307)
	₩	<u>2,355,589</u>	<u>724,340</u>	<u>1,841,774</u>	<u>799,756</u>

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

(*2) As of December 31, 2023 and 2022, plan assets of ₩499,534 million and ₩605,134 million in excess of present value of defined benefit obligation were recorded as other non-current assets (see Note 26).

(*3) For the year ended December 31, 2023, the vessels the group acquired under construction due to cancellation of a shipbuilding contracts have been sold under a sales contract, and the delivery has been completed.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

13. Investments in Associates

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

(In millions of won, except percentage of ownership)

Associates	Location	Fiscal year end	Main business	2023		2022	
				Ownership (%)	Carrying amount	Ownership (%)	Carrying amount
KORAMCO Life Infra Reit Co., Ltd.(*1,8)	Korea	May, November	Real estate investing company	9.04	₩ 41,841	9.04	₩ 42,138
KORAMCO Banpo PFV Co., Ltd.(*1,9)	Korea	December	Real estate developing company	13.50	1,422	13.50	1,992
KORAMCO Dongjak PFV Co., Ltd.(*1)	Korea	December	Real estate developing company	13.16	939	13.16	1,072
Potenit Co., Ltd.(*2)	Korea	December	Manufacturing of robot	22.86	-	18.78	-
Eugene Special Growth Opportunity Securities Investment trust No. 1	Korea	December	Other financing	28.57	58,174	28.57	30,037
STIC-Welcome Upcycling New technology investment association	Korea	December	Other financing	31.45	4,836	31.45	4,924
New Korea country club(*4)	Korea	December	Golf courses and incidental business	29.00	29,258	29.00	28,273

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

13. Investments in Associates, Continued

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

(In millions of won, except percentage of ownership)

Associates	Location	Fiscal year end	Main business	2023		2022	
				Ownership (%)	Carrying amount	Ownership (%)	Carrying amount
Hyundai Green Industries Co., W.L.L.(*4)	Kuwait	December	Education services	49.00	₩	49.00	₩
KC LNG Tech Co., Ltd.(*1,4)	Korea	December	Other engineering services	16.60	-	16.60	-
Zvezda-Hyundai LLC(*4)	Russia	December	Shipbuilding	49.00	1,384	49.00	1,676
International Maritime Industries Company(*4,7)	Saudi Arabia	December	Shipbuilding	20.00	53,730	20.00	73,203
Elcogen Group Plc(*1,6)	United Kingdom	December	Manufacture fuel cell component	17.36	62,967	-	-
Hyundai Hymys Co., Ltd.(*3,4)	Korea	December	Manufacture and sale of ship parts	25.00	39,766	25.00	39,477
Daehoji Solar Park Inc.(*1,4)	Korea	December	Solar power generation	16.67	279	35.50	224
Palantir Korea Co. Ltd.(*5,7)	Korea	December	Sale of software	34.00	2,802	25.10	703
REL Kumbhari Solar Project 4 Pvt Ltd(*6)	India	December	Solar power generation	26.00	226	-	-
				₩	297,624	₩	223,719

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

13. Investments in Associates, Continued

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

(* 1) Although ownership is less than 20%, investments are classified as associates because the Group can appoint board of directors.

(* 2) The entire carrying amount of the associate was recognized as impairment losses and no book values were stated currently.

(* 3) As of December 31, 2023, the Group provide the security of Hyundai Hymns Co., Ltd as collateral for Hercules Holding LLC, the majority shareholder of Hyundai Hymns Co., Ltd. (See Note 46).

(* 4) For the year ended December 31, 2022, it was newly incorporated due to change in scope of consolidation.

(* 5) For the year ended December 31, 2022, the Group newly established.

(* 6) For the year ended December 31, 2023, the Group newly acquired.

(* 7) For the year ended December 31, 2023, the Group has additionally acquired through a paid-in capital increase.

(* 8) For the year ended December 31, 2023, KORAMCO Energy Plus Reit Co., Ltd has changed its name to KORAMCO Life Infra Reit Co., Ltd.

(* 9) For the year ended December 31, 2023, the Group has pledged its shares (See Note 46).

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

13. Investments in Associates, Continued

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

(In millions of won)

Associates	2023						
	Current assets	Non-Current assets	Current liabilities	Non-Current liabilities	Equity	Operating income (loss)	Total comprehensive income (loss)
KORAMCO Life Infra Reit Co., Ltd	₩ 24,097	1,226,733	10,013	777,775	463,042	49,021	31,132
KORAMCO Banpo PFV Co., Ltd	133,859	-	40,626	82,700	10,533	(4,874)	(3,888)
KORAMCO Dongjak PFV Co., Ltd	28,972	-	21,837	-	7,135	(10)	(1,014)
Eugene Special Growth Opportunity Securities Investment trust No. 1	1,553	202,112	56	-	203,608	52,872	98,480
STIC-Welcome Upcycling New technology Investment association	323	15,123	69	-	15,377	(280)	(280)
New korea country club	32,452	18,958	1,838	5,359	44,213	3,740	3,936
Hyundai Green Industries Co., W.L.L.	-	-	-	-	-	-	-
KC LNG Tech Co., Ltd.	2,666	6,313	12,893	376	(4,290)	(2,171)	(85)
Zvezda-Hyundai LLC	3,436	1,963	565	1	4,833	277	161
International Maritime Industries Company	356,506	997,389	159,634	993,296	200,965	(255,423)	(240,411)
Elcogen Group Plc	71,822	26,978	13,572	18,435	66,793	(3,474)	(3,522)
Hyundai HYMS Co., Ltd. (*)	46,026	205,346	34,901	39,870	176,601	14,493	9,883
Daehoji Solar park Inc.	84	2,232	623	-	1,693	(211)	(260)
Palantir Korea Co. Ltd.	16,478	-	7,767	-	8,711	6,128	5,533
REL Kumbhari Solar Project 4 Pvt Ltd	90	2,691	72	1,848	861	75	(26)
₩	718,364	2,705,838	304,466	1,919,660	1,200,075	(139,837)	(100,361)
					489,105	5,740	(94,621)

(*) Financial information of consolidated financial statement as of and for the year ended December 31, 2023.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

13. Investments in Associates, Continued

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

(In millions of won)

Associates	2022						
	Current assets	Non-Current assets	Current liabilities	Non-Current liabilities	Equity	Revenue	Operating income (loss)
							Profit (loss)
							Other comprehensive income (loss)
							Total comprehensive income (loss)
KORAMCO Energy Plus Reit ₩	64,354	1,217,040	16,717	798,347	466,330	56,926	39,854
KORAMCO Banpo PFV Co., Ltd	105,499	-	17,343	73,400	14,756	-	(5,795)
KORAMCO Dongjak PFV Co., Ltd	27,156	-	3,084	15,922	8,150	656	115
Eugene Special Growth Opportunity Securities Investment trust No. 1	1,191	103,971	34	-	105,128	(69,453)	(69,759)
STIC-Welcome Upcycling New technology Investment association	598	15,123	64	-	15,657	1	(243)
New korea country club(*3)	29,947	18,586	2,166	5,550	40,817	18,015	4,143
Taebaek Wind Power Co., Ltd.(*1,3)	4,598	23,380	386	2,667	24,925	5,445	992
Taebaek Guinemi Wind Power Co., Ltd.(*1,3)	5,075	38,012	894	27,140	15,053	4,892	2,367
PyeongChang Wind Power Co., Ltd.(*1,3)	13,197	57,097	5,848	39,761	24,685	10,702	5,126
Changjuk Wind Power Co., Ltd.(*1,3)	6,201	21,475	470	1,388	25,818	6,756	3,220
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)
Zvezda-Hyundai LLC(*3)	3,555	2,275	399	1	5,430	3,262	556
							(8,699)
							(945)
							(454)

13. Investments in Associates, Continued

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

(In millions of won)

Associates	2022									
	Current assets	Non-Current assets	Current liabilities	Non-Current liabilities	Equity	Revenue	Operating income (loss)	Profit (loss)	Other comprehensive income (loss)	Total comprehensive income (loss)
₩ International Maritime Industries Company(*3)	668,194	727,450	140,177	953,724	301,743	98,064	(180,600)	(169,297)	36,188	(133,109)
₩ Hyundai HYMS Co., Ltd.(*2,3)	29,390	203,439	32,810	33,344	166,675	144,745	3,637	3,374	269	3,643
₩ Daehoji Solar park Inc.	444	1,679	1,475	-	648	-	(124)	(170)	-	(170)
₩ Palantir Korea Co. Ltd.	2,800	-	-	-	2,800	-	-	-	-	-
	₩ 965,150	2,436,635	235,783	1,951,591	1,214,411	284,242	(199,786)	(214,433)	35,512	(178,921)

(*1) Financial information as of the date of disposal.

(*)2) Financial information of consolidated financial statement as of and for the year ended December 31, 2022.

(*3) For the year ended December 31, 2022, it was incorporated due to change in scope of consolidation and financial information since January 1, 2022.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

13. 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	Beginning balance	Acquisition / Disposals	Equity Income (Losses) on Investments	Changes in equity of equity accounted investees	Dividends received	Ending balance
KORAMCO Life Infra Reit Co., Ltd	₩ 42,138	-	2,711	1	(3,009)	41,841
KORAMCO Banpo PFV Co., Ltd	1,992	-	(570)	-	-	1,422
KORAMCO Dongjak PFV Co., Ltd	1,072	-	(133)	-	-	939
Eugene Special Growth Opportunity Securities Investment trust No. 1	30,037	-	28,137	-	-	58,174
STIC-Welcome Upcycling New technology Investment association	4,924	-	(88)	-	-	4,836
New korea country club	28,273	-	1,130	-	(145)	29,258
Zvezda-Hyundai LLC	1,676	-	79	(371)	-	1,384
International Maritime Industries Company	73,203	24,099	(45,178)	1,606	-	53,730
Hyundai Hymys Co., Ltd.	39,477	-	527	(238)	-	39,766
Daehoji Solar park Inc.	224	-	(92)	147	-	279
Palantir Korea Co. Ltd.	703	378	1,721	-	-	2,802
REL Kumbhari Solar Project 4 Pvt Ltd	-	237	(7)	(4)	-	226
Elcogen Group Plc	-	64,065	(611)	(487)	-	62,967
	₩ 223,719	88,779	(12,374)	654	(3,154)	297,624

HYUNDAI HEAVY INDUSTRIES CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2018 and 2016

13. Investments in Associates, Continued

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

(In millions of won)

Associates	2022						
	Beginning balance	Change in scope of consolidation	Acquisition / Disposals	Equity Income (Losses) on Investments	Changes in equity of equity accounted investees	Dividends received	Ending balance
Korea Shipbuilding & Offshore Engineering Co., Ltd.	₩ 3,054,860	(2,990,655)	-	(74,485)	10,280	-	-
KORAMCO Energy Plus Reit	41,896	-	-	4,346	(136)	(3,968)	42,138
KORAMCO Banpo PFV Co., Ltd	2,772	-	-	(780)	-	-	1,992
KORAMCO Dongjak PFV Co., Ltd	1,123	-	-	(51)	-	-	1,072
KORAMCO Amsa PFV Co., Ltd.	799	-	(1,388)	589	-	-	-
Eugene Special Growth Opportunity Securities Investment trust No. 1	7,501	-	42,500	(19,928)	(2)	(34)	30,037
STIC-Welcome Upcycling New technology Investment association	-	-	5,000	(76)	-	-	4,924
New korea country club	-	27,223	-	1,195	-	(145)	28,273
Taebaek Wind Power Co., Ltd	-	9,628	(8,506)	33	-	(1,155)	-
Taebaek Guinemi Wind Power Co., Ltd.	-	5,531	(5,645)	114	-	-	-
PyeongChang Wind Power Co., Ltd	-	5,551	(5,678)	219	-	(92)	-
Changjuk Wind Power Co., Ltd	-	12,527	(11,275)	683	-	(1,935)	-
Hyundai Green Industries Co., W.L.L.	-	-	-	-	-	-	-
KC LNG Tech Co., Ltd.	-	701	-	(701)	-	-	-
Zvezda-Hyundai LLC	-	219	2,706	(809)	(440)	-	1,676
International Maritime Industries Company	-	53,345	43,249	(30,036)	6,645	-	73,203
Hyundai Hymns Co., Ltd.	-	40,479	-	(1,078)	76	-	39,477
Daehoji Solar park Inc.	-	284	-	(60)	-	-	224
Palantir Korea Co. Ltd.	-	-	703	-	-	-	703
₩	3,108,951	(2,835,167)	61,666	(120,825)	16,423	(7,329)	223,719

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

13. 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 are summarized as follows:

(In millions of won, except percentage of ownership)

Associates	Ending net assets	Group's ownership	Group's share of net assets	2023			Ending carrying amount
				Investment difference such as goodwill	Elimination of inter-segment transactions and unrealized profits and losses	Other	
KORAMCO Life Infra Reit Co., Ltd	₩ 463,042	9.04%	41,859	-	-	-	41,859
KORAMCO Banpo PFV Co., Ltd	10,533	13.50%	1,422	-	-	-	1,422
KORAMCO Dongjak PFV Co., Ltd	7,135	13.16%	939	-	-	-	939
Eugene Special Growth Opportunity Securities Investment trust No. 1	203,608	28.57%	58,174	-	-	-	58,174
STIC-Welcome Upcycling New technology							
Investment association	15,377	31.45%	4,836	-	-	-	4,836
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.(*1)	(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 Hymys Co., Ltd.(*2,3)	176,601	25.00%	44,150	-	-	(4,384)	39,766
Daehoji Solar park Inc.	1,693	16.67%	282	-	(3)	-	279
Palantir Korea Co. Ltd.	8,711	34.00%	2,962	(160)	-	-	2,802
REL Kumbhari Solar Project 4 Pvt Ltd	861	26.00%	224	-	-	2	226
	₩ 1,200,075		221,116	81,184	(988)	(3,670)	297,642

(*1) Equity method accounting was suspended due to a cumulative deficit that resulted in a book value of zero, and the unrecognized equity in net income of the associate due to the suspension of equity method accounting amounted to ₩712 million.

(*2) Proportionate share of the parent company in net assets of the associate on a consolidated financial statement basis as of December 31, 2023.

(*3) Hyundai Hymys Co., Ltd. issued cumulative preferred shares classified as equity, and adjusted the dividend amount for the cumulative preferred shares and calculated the share of the Group.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

13. 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 are summarized as follows, Continued

(In millions of won, except percentage of ownership)

2022							
Associates	Ending net assets	Group's ownership(*1)	Group's share of net assets(*2)	Investment difference such as goodwill	Elimination of inter-segment transactions and unrealized profits and losses		Ending carrying amount
						Other	
KORAMCO Energy Plus Reit Co., Ltd	₩ 466,330	9.04%	42,138	-	-	-	42,138
KORAMCO Banpo PFV Co., Ltd	14,756	13.50%	1,992	-	-	-	1,992
KORAMCO Dongjak PFV Co., Ltd	8,150	13.16%	1,072	-	-	-	1,072
Eugene Special Growth Opportunity Securities Investment trust No. 1	105,128	28.57%	30,037	-	-	-	30,037
STIC-Welcome Upcycling New technology investment association	15,657	31.45%	4,924	-	-	-	4,924
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(*2)	5,430	49.00%	2,661	-	(985)	-	1,676
International Maritime Industries Company	301,743	20.00%	60,348	12,855	-	-	73,203
Hyundai Hymns Co., Ltd.(*3,4)	157,906	25.00%	39,477	-	-	-	39,477
Daehoji Solar park Inc.	648	35.50%	230	-	(6)	-	224
Palantir Korea Co. Ltd.	2,800	25.10%	703	-	-	-	703
₩	1,205,642		194,721	29,291	(991)	698	223,719

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
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13. 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 are summarized as follows, Continued

(*1) Net asset values of the associate as of the date of disposal, where all of the holding interest was sold for the year ended December 31, 2022.

(*2) Equity method accounting was suspended due to a cumulative deficit that resulted in a book value of zero, and the unrecognized equity in net income of the associate due to the suspension of equity method accounting amounted to ₩698 million.

(*3) Proportionate share of the parent company in net assets of the associate on a consolidated financial statement basis as of December 31, 2022.

(*4) Hyundai Hymys Co., Ltd. issued cumulative preferred shares classified as equity, and adjusted the dividend amount for the cumulative preferred shares and calculated the share of the Group.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
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14. Investments in Joint Ventures

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

(In millions of won, except percentage of ownership)

Joint ventures	Location	Fiscal year end	Business	2023		2022	
				Ownership (%)	Carrying amount	Ownership (%)	Carrying amount
Hyundai Cosmo Petrochemical Co., Ltd. Haining Hagong Hyundai Robotics. Co., Ltd. (*1)	Korea	December	Manufacturing of petrochemicals	50.00	₩ 201,636	50.00	₩ 227,570
Doosan Infracore Liaoning Machinery Sales Co., LTD. (*2)	China	December	Sale of robot and service	24.00	-	24.00	-
Mirae asset-Hyundai Heavy Industries holdings Co., Ltd Growth Opportunity Securities Investment joint No. 1 (*2,5)	China	December	Sale of Excavators	43.00	245	43.00	296
Saudi Engines Manufacturing Company (*3,4)	Korea	December	Investment of new technology business	29.85	3,605	29.85	1,781
	Saudi Arabia	December	Manufacture of ship engine	30.00	5,409	30.00	10,273
					₩ 210,895	₩	239,920

(*1) The Group signed a contract to sell a portion of our ownership stake in joint venture Haining Hagong Hyundai Robotics Co., Ltd. for the year ended December 31, 2022, and sold 6% of its 30% ownership stake (See Note 49).

(*2) The Group owns less than half of voting rights, however, the right of decision-making in certain area to be exercised jointly by the Group and a party to the joint venture is material for operating the joint venture. Accordingly, the investment has been classified into a joint venture.

(*3) The Group newly incorporated due to changes in the scope of consolidation for the year ended December 31, 2022.

(*4) Classified as a joint venture due to joint control with other investors regarding important financial and operational policies according to a shareholder agreement.

(*5) For the year ended December 31, 2023, the Group has additionally acquired through a paid-in capital increase.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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14. Investments in Joint Ventures, Continued

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

1) Summary financial information

Joint ventures ⁴	2023									
	Condensed financial information of joint ventures									
	Current assets	Non-Current assets	Current liabilities	Non-Current liabilities	Equity	Revenue	Operating loss	Loss for the year	Other comprehensive income (loss)	Total comprehensive loss
₩ Hyundai Cosmo										
Petrochemical Co., Ltd.	100,730	857,234	275,881	172,802	509,281	1,987,942	(53,356)	(51,629)	(222)	(51,852)
Doosan Infracore Liaoning Machinery Sales Co., Ltd.	2,486	17	1,944	-	559	3,674	(256)	(249)	-	(249)
Mirae asset-Hyundai Heavy Industries holdings Co., Ltd										
Growth Opportunity Securities Investment joint No. 1	9,249	3,000	172	-	12,077	-	(679)	(591)	-	(591)
Saudi Engines Manufacturing Company	21,344	12,828	15,855	286	18,031	-	(17,719)	(16,994)	781	(16,213)
₩	133,809	873,079	293,852	173,088	539,948	1,991,616	(72,010)	(69,463)	559	(68,905)

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
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14. Investments in Joint Ventures, Continued

(2) Condensed financial information of joint ventures as of December 31, 2023 and 2022 and for the years ended December 31, 2023 and 2022 are summarized as follows, Continued:

1) Summary financial information, Continued

(In millions of won)

	2022									
	Condensed financial information of joint ventures									
Joint ventures ⁴	Current assets	Non-Current assets	Current liabilities	Non-Current liabilities	Equity	Revenue	Operating loss	Loss for the year	Other comprehensive income	Total comprehensive loss
Hyundai Cosmo										
Petrochemical Co., Ltd.	₩ 155,982	837,189	213,686	218,352	561,133	2,912,532	(105,986)	(155,343)	122	(155,221)
Doosan Infracore Liaoning Machinery Sales Co., Ltd.	3,479	40	2,713	-	806	8,060	(170)	(251)	-	(251)
Mirae asset-Hyundai Heavy Industries holdings Co., Ltd										
Growth Opportunity Securities investment joint No. 1	3,139	3,000	171	-	5,968	-	(699)	(622)	-	(622)
Saudi Engines Manufacturing Company(*)	35,776	3,828	4,871	488	34,245	-	(13,638)	(13,792)	3,359	(10,433)
₩	198,376	844,057	221,441	218,840	602,152	2,920,592	(120,493)	(170,008)	3,481	(166,527)

(*) For the year ended December 31, 2022, it was incorporated due to change in scope of consolidation and financial information since January 1, 2022.

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Notes to the Consolidated Financial Statements, Continued
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14. Investments in Joint Ventures, Continued

(2) Condensed financial information of joint ventures as of December 31, 2023 and 2022 and for the years ended December 31, 2023 and 2022 are summarized as follows, Continued:

2) Additional financial information

(In millions of won)

Joint ventures	2023					
	Cash and cash equivalents	Current financial liabilities	Non-current financial liabilities	Depreciation	Interest income	Interest expenses
Hyundai Cosmo Petrochemical Co., Ltd.	₩ 5,017	46,663	163,007	168	866	11,547
Doosan Infracore Liaoning Machinery Sales Co., Ltd.	122	886	-	16	-	36
Mirae asset-Hyundai Heavy Industries holdings Co., Ltd Growth Opportunity Securities Investment joint No. 1	9,246	-	-	-	88	-
Saudi Engines Manufacturing Company	14,837	485	38	1,052	824	51
	₩ 29,222	48,034	163,045	1,236	1,778	11,634
						(15,298)
						-
						-
						47
						(15,251)

(In millions of won)

Joint ventures	2022					
	Cash and cash equivalents	Current financial liabilities	Non-current financial liabilities	Depreciation	Interest income	Interest expenses
Hyundai Cosmo Petrochemical Co., Ltd.	₩ 8,675	210,978	209,567	4	655	11,588
Doosan Infracore Liaoning Machinery Sales Co., Ltd.	138	835	-	25	-	27
Mirae asset-Hyundai Heavy Industries holdings Co., Ltd Growth Opportunity Securities Investment joint No. 1	3,118	171	-	-	77	-
Saudi Engines Manufacturing Company(*)	31,083	663	410	623	36	97
	₩ 43,014	212,647	209,977	652	768	11,712
						(45,830)
						-
						-
						94
						(45,736)

(*) For the year ended December 31, 2022, it was incorporated due to change in scope of consolidation and financial information since January 1, 2022.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
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14. Investments in Joint Ventures, Continued

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

Joint ventures	2023					
	Beginning balance	Share of profit (loss) of equity accounted investees	Acquisition	Disposal / Replacement to assets held for sale	Share of profit (loss) of equity accounted investees	Changes in equity of equity accounted investees
Hyundai Cosmo Petrochemical Co., Ltd.	₩ 227,570	(25,823)	-	-	-	(111)
Doosan Infracore Liaoning Machinery Sales Co., Ltd.	296	(51)	-	-	-	-
Mirae asset-Hyundai Heavy Industries holdings Co., Ltd Growth Opportunity Securities Investment joint No. 1	1,781	(176)	2,000	-	-	-
Saudi Engines Manufacturing Company	10,273	(5,098)	-	-	-	234
	₩ 239,920	(31,148)	2,000	-	-	123
						210,895

(In millions of won)

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

14. Investments in Joint Ventures, Continued

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

(In millions of won)

Joint ventures	Beginning balance	Change in scope of consolidation	Acquisition	Disposal / Replacement to assets held for sale	2022		Ending balance
					Share of profit (loss) of equity accounted investees	Changes in equity of equity accounted investees	
Hyundai Cosmo Petrochemical Co., Ltd.	₩ 201,392	-	70,000	-	(43,536)	(286)	227,570
AsanKakao Medical Data Co., Ltd.	3,864	-	-	(3,741)	(128)	5	-
Haining Hagong Hyundai Robotics Co., Ltd.	5,791	-	-	(3,828)	(2,146)	183	-
Doosan Infracore Liaoning Machinery Sales Co., Ltd.	394	-	-	-	(93)	(5)	296
Mirae asset-Hyundai Heavy Industries holdings Co., Ltd Growth Opportunity Securities Investment joint No. 1	1,967	-	-	-	(186)	-	1,781
Saudi Engines Manufacturing Company	-	13,291	-	-	(3,833)	815	10,273
₩	213,408	13,291	70,000	(7,569)	(49,922)	712	239,920

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Notes to the Consolidated Financial Statements, Continued
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14. Investments in Joint Ventures, Continued

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

Joint ventures	2023			
	Ending net assets	Group's ownership	Group's share of net asset	Elimination of inter-segment transactions and unrealized profits and losses
Hyundai Cosmo Petrochemical Co., Ltd.	₩ 509,281	50.00%	254,641	(53,005)
Doosan Infracore Liaoning Machinery Sales Co., Ltd.	559	43.00%	241	4
Mirae asset-Hyundai Heavy Industries holdings Co., Ltd	12,077	29.85%	3,605	-
Growth Opportunity Securities Investment joint No. 1	18,031	30.00%	5,409	-
Saudi Engines Manufacturing Company	₩ 539,948		263,896	(53,001)
				210,895

Joint ventures	2022			
	Ending net assets	Group's ownership	Group's share of net asset	Elimination of inter-segment transactions and unrealized profits and losses
Hyundai Cosmo Petrochemical Co., Ltd.	₩ 561,133	50.00%	280,567	(52,997)
Doosan Infracore Liaoning Machinery Sales Co., Ltd.	806	43.00%	347	(51)
Mirae asset-Hyundai Heavy Industries holdings Co., Ltd	5,968	29.85%	1,781	-
Growth Opportunity Securities Investment joint No. 1	34,245	30.00%	10,273	-
Saudi Engines Manufacturing Company	₩ 602,152		292,968	(53,048)
				227,570
				296
				1,781
				10,273
				239,920

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

15. Joint Operation

The joint operations as of December 31, 2023 and 2022, are summarized as follows:

Joint operation	Location	Main business	2023	2022
			Ownership (%)	Ownership (%)
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 arrangement is construction of Clean Fuels Project MAB2 EPC PKG ordered by Kuwait National Petroleum Company. The Group recognizes the assets and liabilities relating to its interest in a joint operation and recognizes revenues and expenses relating to its interest in a 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 arrangement is construction of Al Zour Refinery Project Package 2 & 3 EPC PKG ordered by Kuwait Integrated Petroleum Industries Company. The Group recognizes the assets and liabilities relating to its interest in a joint operation and recognizes revenues and expenses relating to its interest in a joint operation.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
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16. Investment Property

(1) The investment property for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

		2023			
		Land	Building	Structures	Total
Acquisition costs	₩	114,736	257,130	2,661	374,527
Accumulated depreciation		-	(70,805)	(2)	(70,807)
Impairment loss		(17,043)	(733)	-	(17,776)
Ending balance	₩	<u>97,693</u>	<u>185,592</u>	<u>2,659</u>	<u>285,944</u>

(In millions of won)

		2022			
		Land	Building	Structures	Total
Acquisition costs	₩	116,253	258,957	2,659	377,869
Accumulated depreciation		-	(65,670)	-	(65,670)
Impairment loss		(17,820)	(1,119)	-	(18,939)
Ending balance	₩	<u>98,433</u>	<u>192,168</u>	<u>2,659</u>	<u>293,260</u>

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

(In millions of won)

		2023			
		Land	Building	Structures	Total
Beginning balance	₩	98,433	192,168	2,659	293,260
Acquisition		-	4,980	1	4,981
Replacement		-	(6,403)	-	(6,403)
Disposals		(1,176)	-	-	(1,176)
Depreciation		-	(5,149)	(1)	(5,150)
Impairment loss		(29)	-	-	(29)
Reversal of Impairment loss		423	-	-	423
Effect of movements in exchange rates		42	(4)	-	38
Ending balance	₩	<u>97,693</u>	<u>185,592</u>	<u>2,659</u>	<u>285,944</u>

(In millions of won)

		2022			
		Land	Building	Structures	Total
Beginning balance	₩	8,174	2,010	-	10,184
Acquisition		-	1,670	-	1,670
Replacement		(6)	31,459	2,659	34,112
Disposals		-	(96)	-	(96)
Depreciation		-	(5,532)	-	(5,532)
Effect of movements in exchange rates		44	(71)	-	(27)
Effects of changes in scope of consolidation		90,221	162,728	-	252,949
Ending balance	₩	<u>98,433</u>	<u>192,168</u>	<u>2,659</u>	<u>293,260</u>

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

16. Investment Property, Continued

- (3) Income (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	₩	13,105	9,355
Maintenance expense – income-generating property		(5,462)	(6,079)
Maintenance expense – vacant property		(1,077)	(128)

- (4) Fair value of investment property as of December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
Land	₩	109,602	105,273
Building		257,546	264,772

The Group determined the fair value of investment property on the basis of an assessment carried out by an independent valuation entity. The evaluation corporation has appropriate qualifications and experience in relation to the evaluation of real estate in Korea, and this assessment was conducted using comparison methods, which are methods of obtaining economic value based on the marketability of the target item. Meanwhile, the Group has determined taking into account changes in the benchmark market price, such as individual public land prices, for estimating the fair value of investment property at the year ended December 31, 2023.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

17. Property, Plant and Equipment

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

(In millions of won)

	2023						
	Land(*)	Buildings(*)	Structures	Machinery	Construction in-progress	Others	Total
Acquisition costs	₩ 7,955,860	5,581,508	5,464,853	15,785,375	870,856	5,027,500	40,685,952
Government grants	(1,403)	(9,500)	(2,525)	(5,780)	-	(2,062)	(21,270)
Accumulated depreciation	-	(1,945,664)	(1,991,683)	(7,616,530)	-	(3,449,267)	(15,003,144)
Impairment loss	-	(162,191)	(146,987)	(185,521)	-	(114,363)	(609,062)
Ending balance	₩ 7,954,457	3,464,153	3,323,658	7,977,544	870,856	1,461,808	25,052,476

(*) It includes land and buildings that continue to be recognized as assets of the Group which do not meet the conditions for sale.

As of December 31, 2023, construction-in-progress are related to regular maintenance costs, establishment of facilities and others.

(In millions of won)

	2022						
	Land(*)	Buildings(*)	Structures	Machinery	Construction in-progress	Others	Total
Acquisition costs	₩ 7,955,275	5,343,425	5,311,662	15,180,836	657,553	4,493,756	38,942,507
Government grants	(1,428)	(8,866)	(2,784)	(6,114)	(26)	(1,262)	(20,480)
Accumulated depreciation	-	(1,826,315)	(1,878,439)	(7,101,554)	-	(3,257,296)	(14,063,604)
Impairment loss	-	(184,710)	(145,968)	(185,279)	(1,274)	(121,293)	(638,524)
Ending balance	₩ 7,953,847	3,323,534	3,284,471	7,887,889	656,253	1,113,905	24,219,899

(*) It includes land and buildings that continue to be recognized as assets of the Group which do not meet the conditions for sale.

As of December 31, 2022, construction-in-progress are related to investment in Ehwa industrial park construction and others.

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17. Property, Plant and Equipment, Continued

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

(In millions of won)

	2023						
	Land	Buildings	Structures	Machinery	Construction in-progress	Others	Total
Beginning balance	₩ 7,953,847	3,323,534	3,284,471	7,887,889	656,253	1,113,905	24,219,899
Acquisitions	4,601	90,763	13,027	338,124	1,293,848	331,464	2,071,827
Classification	1,207	148,784	146,876	396,597	(1,072,302)	337,348	(41,490)
Disposals	(6,960)	(7,271)	(4,406)	(9,031)	(8,380)	(6,588)	(42,636)
Depreciation	-	(123,602)	(117,293)	(635,835)	-	(317,299)	(1,194,029)
Impairment loss	-	(6,673)	(1,966)	(21,205)	-	(1,382)	(31,226)
Reversal of Impairment loss	-	31,710	929	17,910	1,226	3,280	55,055
Effect of movements in exchange rates	1,762	6,908	2,020	3,095	211	1,080	15,076
Ending balance	₩ 7,954,457	3,464,153	3,323,658	7,977,544	870,856	1,461,808	25,052,476

(In millions of won)

	2022						
	Land	Buildings	Structures	Machinery	Construction in-progress	Others	Total
Beginning balance	₩ 2,747,873	943,534	1,380,823	4,096,400	3,627,728	472,556	13,268,914
Acquisitions	3,803	12,448	18,594	188,350	1,653,952	224,507	2,101,654
Classification	98,804	556,092	496,773	3,374,450	(4,850,346)	256,055	(68,172)
Disposals	(13,679)	(4,341)	(863)	(10,642)	(10,329)	(4,972)	(44,826)
Depreciation	-	(103,993)	(106,833)	(553,266)	-	(280,329)	(1,044,421)
Impairment loss	-	(1,576)	(2,933)	(828)	(47)	(2,907)	(8,291)
Effect of movements in exchange rates	1,202	8,991	4,553	1,575	1,129	2,886	20,336
Effects of changes in scope of consolidation	5,115,844	1,912,379	1,494,357	791,850	234,166	446,109	9,994,705
Ending balance	₩ 7,953,847	3,323,534	3,284,471	7,887,889	656,253	1,113,905	24,219,899

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Notes to the Consolidated Financial Statements, Continued
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17. Property, Plant and Equipment, Continued

(3) Impairment losses

The Group recognized impairment losses of ₩12,733 million on property, plant and equipment for the year ended December 31, 2023, resulting from impairment assessments performed on assets generating cash inflows, which indicated signs of impairment due to factors such as decrease of sale volume and deteriorating market conditions. The estimated recoverable amount determined from impairment assessment results is based on the calculation of the value in use, which includes the estimated sale agreement value with potential buyers, the expected sale agreement value or the appraised value of individual assets, and the discounted cash flows expected from the Continued use of the assets.

The appraised value is based on the fair value, evaluated using the methods such as the real estate appraisal act and comparable transaction method. The recoverable amount of cash-generating units was determined based on the calculation of the utility value. The utility value was estimated using cash flow projections based on a 5-year business plan approved by the sector management.

In addition, for the year ended December 31, 2023, the Group recognized an impairment loss of ₩18,493 million won for tangible assets without any alternative use.

The Group estimated the fair value of the recoverable amount of assets based on valuation methods including cost approach, and considered physical and technological obsolescence of the assets.

- Valuation method and input variables which were used for measuring fair value

Based on the input variables used in valuation methods, the fair value measurements of assets without plans for use are classified as Level 3 fair value. The valuation methods and input variables used in measuring fair values are as follows:

Valuation method	Significant but unobservable input variables	Correlation between the main unobservable variable and fair value
Publicly assessed land price	Time adjustment (Rate of changes in land value)	If flexibility of 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).
Cost method	Changes in prices of raw materials, other materials, wages, and others	If the prices of raw materials and others increases (decreases), then fair value increases (decreases).
	Status of maintenance, management and others	If the status of maintenance, management and others is good (bad), then fair value increases (decreases).
Sales comparison approach	Sales comparisons of the object same or similar value formation factors with the target object	The price of target object is calculated through the process of information normalization, time adjustment, and value formation factors comparison according to the status of the target object.

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17. Property, Plant and Equipment, Continued

(3) Impairment losses, Continued

On the other hand, the Group conducts impairment tests on CGUs every year. The Group defines a CGU as an independent business unit in principle and assesses impairment by evaluating the CGU's recoverable amount based on its value in use. The recoverable amount of each CGU is estimated by the Group reasonably. Future cash flows are estimated based on past experiences, industry outlooks from external evaluation agencies, actual operating results, and business plans, and are estimated using the discounted cash flow method based on the pre-tax cash flow estimates derived from the five-year business plans approved by the management, reflecting inflation rates and investment plans.

In conducting the impairment test for CGU, the discount rate used as a basic element was calculated by weighing the cost of equity and the cost of debt. The risk-free interest rate, which reflects the credit rating of the country as of the valuation date, and the cost of equity based on beta of peer companies in the same industry were estimated, considering the company's credit rating, the company's bond interest rate was applied. The terminal growth rate was determined based on the market environment, using the average value over a long-term observation period.

(In percent)

	2023	
	Discount rate	Terminal growth rate
HD Korea Shipbuilding & Offshore Engineering Co., Ltd. and subsidiaries	8.31~11.74	1.00
HD Hyundai Construction Equipment Co., Ltd. and subsidiaries	9.02~11.37	0.00~1.00
HD Hyundai Infracore Co., Ltd. and subsidiaries	9.94~10.29	1.00

(4) Reversal of Impairment loss

The management of the Group has determined indications of impairment reversal for the assets and conducted impairment reversal evaluations for the cash-generating units. As a result, an impairment reversal of ₩55,055 million was recognized for the property, plant and equipment. For further details regarding the impairment reversal, see *Note 19* (intangible assets).

(5) Revaluation of Land

As of December 31, 2023, the Group was applying the revaluation model on land. The revaluation amount was determined by the independent appraisers, having professional qualifications. The appraisal procedures included calculating the revaluation amount based on the publicly assessed land price and studying whether the amount is reasonable comparing with prices used in the recent arm's length transaction.

Carrying amounts of land under the revaluation model and the cost model as of December 31, 2023 were as follows:

(In millions of won)

		2023	
		Revaluation model	Cost model
Land	₩	7,903,077	4,861,661

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17. Property, Plant and Equipment, Continued

(6) Measurement of fair value

(i) Fair value hierarchy

Based on the input variables used in the valuation method, the fair value measurement of land is classified as level 3 fair value based on the input variables used in the valuation techniques.

(ii) The valuation method and input variables which were used for measuring fair value of land are as follows:

Valuation method	Significant but unobservable input variables	Correlation between the main unobservable variable and fair value
Publicly assessed land price method	Time adjustment (Rate of changes in land value)	If flexibility of 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).

(7) Temporarily unused assets

As of December 31, 2023 and 2022, the carrying amount of the assets not in use are ~~₩~~310 million and ~~₩~~107,103 million.

(8) The capitalized borrowing cost for the qualifying assets such of property, plant and equipment and investment property for the year ended December 31, 2023, amounted to ~~₩~~3,920 million. The capitalization rate used to calculate the capitalized borrowing cost ranged from 3.18% to 4.52%.

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18. Right-of-Use Assets and lease liabilities

(1) The Right-of-Use Assets for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

	2023						
	Land	Buildings	Structures	Machinery	Ships	Others	Total
Acquisition cost	₩ 312,511	187,561	269,193	2,254	1,281,251	494,821	2,547,591
Accumulated depreciation	(36,974)	(99,681)	(96,381)	(1,250)	(645,930)	(187,624)	(1,067,840)
Accumulated impairment loss	(60)	(589)	-	-	-	(302)	(951)
Ending balance	₩ 275,477	87,291	172,812	1,004	635,321	306,895	1,478,800

(In millions of won)

	2022						
	Land	Buildings	Structures	Machinery	Ships	Others	Total
Acquisition cost	₩ 310,706	200,494	232,828	2,112	1,251,024	506,503	2,503,667
Accumulated depreciation	(26,776)	(99,900)	(63,284)	(814)	(493,512)	(146,129)	(830,415)
Accumulated impairment loss	(60)	(1,424)	-	-	-	(304)	(1,788)
Ending balance	₩ 283,870	99,170	169,544	1,298	757,512	360,070	1,671,464

(2) 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	Machinery	Ships	Others	Total
Beginning balance	₩ 283,870	99,170	169,544	1,298	757,512	360,070	1,671,464
Additions	10,961	50,143	71,096	236	11,945	62,309	206,690
Depreciation	(19,245)	(46,156)	(33,895)	(623)	(176,354)	(59,412)	(335,685)
End/Transfer	(86)	(19,330)	(26,388)	(64)	(5,961)	(30,302)	(82,131)
Adjustment / Reclassification	35	3,232	(7,563)	138	48,179	(25,896)	18,125
Impairment loss/reversal	-	(589)	-	-	-	2	(587)
Effect of movements in exchange rates	(58)	821	18	19	-	124	924
Ending balance	₩ 275,477	87,291	172,812	1,004	635,321	306,895	1,478,800

(In millions of won)

	2022						
	Land	Buildings	Structures	Machinery	Ships	Others	Total
Beginning balance	₩ 163,364	56,132	183,281	974	659,720	394,564	1,458,035
Additions	100,443	69,471	5,723	582	228,581	55,467	460,267
Depreciation	(14,730)	(54,771)	(31,302)	(451)	(168,032)	(58,766)	(328,052)
End/Transfer	(5)	(3,131)	(44)	-	(80)	(31,529)	(34,789)
Adjustment / Reclassification	1,532	4,387	8,699	136	37,133	(957)	50,930
Effect of changes in scope of consolidation	32,996	27,174	3,321	-	191	1,282	64,964
Effect of movements in exchange rates	270	(92)	(134)	57	(1)	9	109
Ending balance	₩ 283,870	99,170	169,544	1,298	757,512	360,070	1,671,464

(3) The Group used incremental borrowing rate of interest to measure lease liability. The incremental borrowing rates applied are 1.00% ~ 11.45%.

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18. Right-of-Use Assets and lease liabilities, Continued

- (4) Gain and loss regarding lease for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

	2023	2022
Depreciation	₩ 335,685	328,052
Interest expense	59,539	51,067
Short-term lease payments(*)	69,672	48,529
Payments for leases of low-value assets not short-term lease(*)	3,764	2,711
Variable lease payments not included in the measurement of the lease liabilities(*)	42,014	39,487
	₩ 510,674	469,846

(*) Included in cost of sales and selling, general and administrative expenses.

The total cash outflow related to leases for the year ended December 31, 2023 is amounting to ₩480,368 million.

- (5) The Group has a sub-lease in relation to the operation of gas station and the revenue from the sub-lease amounts to ₩8,423 million for the year ended December 31, 2023.

- (6) Option to extend the lease

Some property leases contain extension options exercisable by the Group up to one year before the end of the non- cancellable contract period. Where practicable, the Group seeks to include extension options in new leases to provide operational flexibility. The extension options held are exercisable only by the Group and not by the lessors. The Group assesses at the lease commencement date whether it is reasonably certain to exercise the extension options. The Group reassesses whether it is reasonably certain to exercise the options if there is a significant event or significant changes in circumstances within its control.

19. Intangible Assets

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

(In millions of won)

	2023	2022
HD Hyundai Oilbank Co., Ltd.	₩ 1,087,419	1,087,419
HD Hyundai Infracore Co., Ltd.	309,387	309,516
HD Hyundai Electric Co., Ltd.	95,835	95,835
HHI China Investment Co., Ltd.	-	26,615
HD Hyundai Construction Equipment India Private Ltd.	18,908	20,396
HD Hyundai and Shell Base Oil Co., Ltd.	66,311	66,311
Medi Plus Solution Co., Ltd.	11,284	11,284
HD HYUNDAI PLASPO CO., LTD.	8,564	8,564
Others	5,470	6,527
	₩ 1,603,178	1,632,467

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19. Intangible Assets, Continued

(2) The Intangible assets for the years ended December 31, 2023 and 2022 are as follows :

(In millions of won)

		2023					
		Goodwill	Customer relationships	Brands	Technologies	Development costs	Others
Acquisition cost	₩	1,726,405	1,014,156	192,680	1,770,025	1,011,523	911,247
Accumulated amortization		-	(270,719)	-	(387,887)	(555,510)	(581,926)
Impairment loss		(123,227)	(93,346)	-	(90,271)	(208,424)	(36,994)
Government grants		-	-	-	-	(3,144)	(4)
Ending balance	₩	<u>1,603,178</u>	<u>650,091</u>	<u>192,680</u>	<u>1,291,867</u>	<u>244,445</u>	<u>292,323</u>

(In millions of won)

		2022					
		Goodwill	Customer relationships	Brands	Technologies	Development costs	Others
Acquisition cost	₩	1,726,212	1,014,156	192,680	1,770,024	907,199	858,868
Accumulated amortization		-	(231,097)	-	(267,715)	(544,899)	(528,994)
Impairment loss		(93,745)	(93,346)	-	(112,040)	(190,938)	(29,643)
Government grants		-	-	-	-	(2,509)	(6)
Ending balance	₩	<u>1,632,467</u>	<u>689,713</u>	<u>192,680</u>	<u>1,390,269</u>	<u>168,853</u>	<u>300,225</u>

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19. Intangible Assets, Continued

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

(In millions of won)

	2023						Total
	Goodwill	Customer relationships	Brands	Technologies	Development costs	Others	
Beginning balance	₩ 1,632,467	689,713	192,680	1,390,269	168,853	300,225	4,374,207
Acquisitions	-	-	-	-	122,477	13,798	136,275
Reclassification	-	-	-	-	3,880	30,911	34,791
Government grants	-	-	-	-	(834)	-	(834)
Amortization	-	(39,622)	-	(120,171)	(20,313)	(43,913)	(224,019)
Impairment loss(*1)	(29,483)	-	-	-	(29,908)	(6,192)	(65,583)
Reversal impairment loss(*2)	-	-	-	21,769	265	918	22,952
Disposals	-	-	-	-	-	(3,502)	(3,502)
Effect of movements in exchange rates	194	-	-	-	25	78	297
Ending balance	₩ 1,603,178	650,091	192,680	1,291,867	244,445	292,323	4,274,584

(*1) The Group recognized impairment losses of ₩65,583 million for development costs and others that are unlikely to generate future economic benefits for the year ended December 31, 2023.

(*2) Due to the deterioration of the business environment, such as the decline in technology capabilities in the electrical and electronic sector in 2018 and 2019, the Group recognized impairment losses of ₩96,836 million. However, as market prospects and performance are expected to recover in the current period, the Group recognized the reversal of previously recognized impairment losses of ₩22,591 million, including technology capabilities amounting to ₩21,769 million, development costs amounting to ₩265 million, and software amounting to ₩566 million for each asset. Furthermore, the reversal of impairment losses of ₩361 million were recognized for membership and other items.

(In millions of won)

	2022						Total
	Goodwill	Customer relationships	Brands	Technologies	Development costs	Others	
Beginning balance	₩ 1,635,400	515,551	192,220	376,554	86,972	257,600	3,064,297
Acquisitions	-	-	-	-	92,276	11,873	104,149
Reclassification	-	-	-	-	5,460	24,002	29,462
Government grants	-	-	-	-	(1,014)	-	(1,014)
Amortization	-	(38,047)	-	(113,293)	(14,058)	(38,302)	(203,700)
Impairment loss(*)	(2,676)	-	-	-	(12,833)	(891)	(16,400)
Disposals	-	-	-	-	-	(7,728)	(7,728)
Effect of movements in exchange rates	(1,365)	-	-	-	(325)	(262)	(1,952)
Effects of changes in scope of consolidation	₩ 1,108	212,209	460	1,127,008	12,375	53,933	1,407,093
Ending balance	1,632,467	689,713	192,680	1,390,269	168,853	300,225	4,374,207

(*) The Group recognized impairment losses of ₩16,401 million for development costs and others that are unlikely to generate future economic benefits for the year ended December 31, 2022.

The carrying amount of intangible assets with indefinite useful lives, excluding goodwill, are ₩246,201 million and ₩245,955 million, respectively, as of December 31, 2023 and 2022.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
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19. Intangible Assets, Continued

(4) Details of major project in development costs for the year ended December 31, 2023 is as follows:

(In millions of won)

Description	Project	2023	
		Carrying amount	Residual Amortization period
Development Costs and technology	Engine (construction equipment) development project and etc.	₩ 29,471	Development in progress
	Stage5 construction equipment development project and etc.	15,160	9~59 months
	Stage5 engine development project and etc.	14,351	8~52 months
	Small construction equipment and etc.	12,325	Development in progress
	High-powered HiMSEN engine (H54DFV) development project and etc.	42,133	Development in progress
	LNG transport ship utilizing Korean Cargo Hold (KC-2B) development project and etc.	16,660	Development in progress
	Development and testing of self-developed CO2 transport ships (CHS) and etc	12,553	Development in progress
	Development of Embedded Hollow-Type Robot for Application Lines	14,569	0.1~4.9 years
	Commercialization Development of Hi6 Controller	18,221	Development in progress

(5) Recognition of impairment losses of goodwill

The Group tests goodwill for impairment annually by comparing the recoverable amount of CGU with its carrying amount.

1) Oil Refinery sector : HD Hyundai Oilbank Co., Ltd.

The recoverable amount of cash generating unit (CGU) as of December 31, 2023, was measured based on the calculation of the value in use. The value in use is measured by applying discount rate to future cash flow to be derived from continuing use of the asset. The recoverable amount of cash generating unit (CGU) is measured by the calculation of the value in use, and the value in use is calculated by estimating future cash flow based on 5-year business plan approved by the segment management.

Assumptions used in calculating the value in use as of December 31, 2023, are as follows:

	HD Hyundai Oilbank Co., Ltd.
Discount rate	8.44%
Period covered by cash flow forecast	5 years
Terminal value growth rate	1.00%

The value in use as of December 31, 2023, was calculated by the following key assumptions.

- (i) Discount rate is the weighted average of equity and debt and it is estimated by applying cost of equity using risk-free interest rate reflecting the credit quality of country at the assessment date and the beta of the company in the same industry and corporate bond rate considering the credit quality of the segment.
- (ii) Future cash flow is estimated based on experience, oil price estimate of external appraisers, material operational consequence and business plan, and reflected inflation rate and investment plan.

As of December 31, 2023, the Group evaluated impairment loss of the goodwill, so that no impairment loss was recognized as the book value of CGU didn't exceed the recoverable amount.

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19. Intangible Assets, Continued

(5) Recognition of impairment losses of goodwill, Continued

2) Electric and electronic sector : HD Hyundai Electric Co., Ltd.

The recoverable amount of cash generating unit (CGU) as of December 31, 2023, was measured based on the calculation of the value in use. The value in use is measured by applying discount rate to future cash flow to be derived from continuing use of the asset. The recoverable amount of cash generating unit (CGU) is measured by the calculation of the value in use, and the value in use is calculated by estimating future cash flow based on 5-year business plan approved by the segment management.

Assumptions used in calculating the value in use as of December 31, 2023, are as follows:

	HD Hyundai Electric Co., Ltd.
Discount rate	13.16%
Period covered by cash flow forecast	5 years
Terminal value growth rate	1.00%

The value in use as of December 31, 2023, was calculated by the following key assumptions.

- (i) Discount rate is the weighted average of equity and debt and estimated by applying cost of equity using risk-free interest rate reflecting the credit quality of country at the assessment date and the beta of the company in the same industry and weighted average borrowing rate of the segment.
- (ii) Future cash flow is estimated based on experience, material operational consequence and business plan, and reflected inflation rate and investment plan.

As of December 31, 2023, the Group evaluated impairment loss of the goodwill, so that no impairment loss was recognized as the book value of CGU didn't exceed the recoverable amount.

Also, due to the deterioration of the business environment, such as the decline in technology capabilities in the electrical and electronic sector in 2018 and 2019, the Group recognized impairment losses of ~~₩~~78,924 million. However, as market prospects and performance are expected to recover in the current period, the Group recognized the reversal of previously recognized impairment losses of ~~₩~~21,769 million.

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19. Intangible Assets, Continued

(5) Recognition of impairment losses of goodwill, Continued

- 3) Construction Equipment sector : HD Hyundai Infracore Co., Ltd., HHI China Investment Co., Ltd., HD Hyundai Construction Equipment India Private Ltd.

The recoverable amount of cash generating unit (CGU) as of December 31, 2023, was measured based on the calculation of the value in use. The value in use is measured by applying discount rate to future cash flow to be derived from continuing use of the asset. The recoverable amount of cash generating unit (CGU) is measured by the calculation of the value in use, and the value in use is calculated by estimating future cash flow based on 5-year business plan approved by the segment management.

Assumptions used in calculating the value in use as of December 31, 2023, are as follows:

(In percent)

	HD Hyundai Infracore Co., Ltd.	HHI China Investment Co., Ltd.	HD Hyundai Construction Equipment India Private Ltd.
Discount rate	9.94~10.29	9.02~10.34	11.37
Period covered by cash flow forecast	5 years	5 years	5 years
Terminal value growth rate	1.00	0.00~1.00	1.00

The value in use as of December 31, 2023, was calculated by the following key assumptions.

- (i) Discount rate is the weighted average of equity and debt and estimated by applying cost of equity using risk-free interest rate reflecting the credit quality of country at the assessment date and the beta of the company in the same industry and corporate bond rate considering the credit quality of the segment.
- (ii) Future cash flow is estimated based on experience, forecast of external research institution, material operational consequence and business plan, and reflected inflation.

As of December 31, 2023, the Group evaluated impairment loss of the goodwill. The Group recognized impairment loss including goodwill amounting to to ₩29,410 million, property, plant and equipment amounting to to ₩2,649 million, other intangible asset amounting to to ₩1,951 million because the carrying amount of an asset or a CGU doesn't exceeds its recoverable amount. The impairment loss was classified as other non-operating expenses.

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19. Intangible Assets, Continued

(6) Impairment test for other assets except goodwill

1) Assessment of reversal of impairment loss for CGU

As business performance continues to improve due to favorable market conditions such as increased demand for power equipment, the group management determined that there were indications of reversal of assets previously recognized impairment losses and conducted assessment of reversal of impairment loss.

The Group identified CGU by product group of the Controlling Company. The recoverable amount for each CGU was calculated and the amount of reversal of impairment loss was distributed. The reversal of impairment loss was recognized by comparing it with the reversal threshold amount of each individual assets.

The carrying amount, recoverable amount, and reversal threshold amount for comparison as of December 31, 2023 are as follows:

(In millions of won)

	CGU subject to reversal of impairment loss	CGU not subject to reversal of impairment loss	Total
Carrying amount to be compared	₩ 713,974	502,242	1,216,216
Recoverable amount	2,112,370	1,088,243	3,200,613
Reversal threshold amount	77,656	15,030	92,686
Reversal of impairment loss(*)	77,656	-	77,656

(*) The reversal of impairment loss of ₩77,656 million for the year ended December 31, 2023 was fully recognized in profit or loss.

The recoverable amount of the CGU was estimated based on the value in use estimated by applying the discounted cash flow method. The reversal threshold amount was calculated as the carrying amount that would have been recognized had no impairment losses been recognized previously.

The key assumptions used to estimate the recoverable amount are as follows. The key assumptions reflect management's assessment of future trends in the industry and are based on internal and external historical data.

	Percentage (%)
Pre-tax discount rate	13.16
Period covered by cash flow forecast	5 years
Terminal growth rate	1.00

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19. Intangible Assets, Continued

(6) Impairment test for other assets except goodwill, Continued

2) Impairment losses were caused by other assets and details are follow:

(In millions of won)

	Individual assets	Acquisition cost	Impairment losses		Book value	Method
			2023	Accumulated		
Others	Customer relationships ₩	15,169	(1,951)	(1,951)	7,151	Value in sue
	Small development of 252kv 50kA 4000A GIS and 4 projects	5,284	(4,241)	(4,163)	411	Net fair value
Development costs	China CS-4 MCU development and 6 projects	2,181	(1,550)	(1,550)	-	Value in use
	HL975-9SA and 9 projects	7,807	(2,978)	(3,220)	1,824	Value in use
	1 st generation serving robot SW internalization development and 4 projects	2,301	(1,966)	(2,097)	-	Value in use
	Foreign GIS development	1,945	(490)	(490)	93	Value in use
	Integrated ERP Implementations and 4 projects	22,973	(22,923)	(22,973)	-	Value in use
	Power equipment expertise	40,000	14,333	-	14,333	Value in use
	Rotating Machinery expertise	22,000	7,436	-	7,883	Value in use

Impairment losses are classified as other non-operating expenses.

(7) Borrowing costs capitalized

As of the year ended December 31, 2023, included in development costs is amount of ₩1,813 million that represents borrowing costs capitalized using a capitalization rate of 4.29%.

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20. Greenhouse Gas Emission Rights and Emission Liabilities

- (1) The estimate of the number of free allocation allowances for each implementation year for the 3rd planning periods (2021~2025) as of December 31, 2023 is as follows:

(In thousand tCO2-eq)

	2021	2022	2023	2024	2025	Total
Emission allowances allocated free of charge	8,285	10,582	9,609	9,467	9,898	47,841

- (2) Changes in the amount of emission right are as follows:

(In thousand tCO2-eq, and in millions of won)

	Quantity	Book Value	Quantity	Book Value	Quantity	Book Value
Beginning balance and free of charge(*1)	8,539 ₩	-	10,583 ₩	1,792	9,609 ₩	98
Carry-over from prior year	61	-	254	-	424	-
Purchases(Sales)(*2)	120	1,815	(316)	(1,676)	-	(89)
Government submission(*2)	(8,466)	(18)	(10,095)	(18)	(8,108)	-
Borrowing(Carry-over)(*2)	(254)	-	(424)	-	-	-
Others	-	-	(3)	-	-	-
	- ₩	1,797	(1) ₩	98	1,925 ₩	9

(In thousand tCO2-eq, and in millions of won)

	2024		2025	
	Quantity	Book Value	Quantity	Book Value
Beginning balance and free of charge(*1)	9,467 ₩	-	9,898 ₩	-
Carry-over from prior year	-	-	-	-
Purchases(Sales)(*2)	-	-	-	-
Government submission(*2)	-	-	-	-
Borrowing(Carry-over)(*2)	-	-	-	-
Others	-	-	-	-
	9,467 ₩	-	9,898 ₩	-

(*1) Amount considering additions and cancellations from the initial free allocation.

(*2) Emission right is estimate as of December 31, 2023 and is subject to change depending on the government's accreditation results.

- (3) The book value of emission allowances allocated free of charge is "0" won.
- (4) As of December 31, 2023, there are no emission allowances provided as guarantees.
- (5) The consolidated entity's estimated greenhouse gas emission for the years ended December 31, 2023 are 9,352 thousand ton.

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20. Greenhouse Gas Emission Rights and Emission Liabilities, Continued

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

(In millions of won)

		2023	2022
Beginning balance	₩	6,061	9,933
Transfer		2,356	4,312
Reversal		(6,666)	(1,625)
Offset		(885)	(38,265)
Change in scope of consolidation		-	31,706
Ending balance	₩	<u>866</u>	<u>6,061</u>

21. Pledged Assets

Assets pledged as collateral for the Group's borrowings as of December 31, 2023 is summarized as follows:

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

Asset	Carrying amount	Collateralized amount	Type of borrowings	Borrowings amount	Secured creditor
Property, plant and equipment and others(*)	₩ 6,177,424	₩ 3,755,775	Long-term	₩ 2,785,173	Korea Development Bank and others
		USD 95,025			
		DEM 84,000		-	
	USD 5,858	USD 8,000		-	Bank of Hope
	EUR 14,578	EUR 7,125		EUR 7,125	BNP Paribas Fortis Bank,
	NOK 384,236	NOK 473,022	Long/short term	NOK 7,582	Belgium Innovation Norge and other
Inventory and trade receivables	USD 176,600	USD 24,000	Short-term	USD 24,000	Wells Fargo
	INR 9,870,815	INR 755,000	Short-term	INR 593,956	Shinhan bank
		INR 1,200,000	Short-term	USD 3,757	ICICI Bank
				INR 5,054	ICICI Bank
Stocks(*)					KB Securities Co., Ltd
	-	₩ 676,937	Acquisition financing	₩ 250,000	Korea Investment& Securities Co, Ltd.
Ship	USD 14,617	USD 7,536	Long-term	USD 7,536	HIHD Co., Ltd.
	₩ 6,177,424	₩ 4,432,712		₩ 3,035,173	
	USD 197,075	USD 134,561		USD 35,293	
	EUR 14,578	EUR 7,125		EUR 7,125	
	NOK 384,236	NOK 473,022		NOK 7,582	
	-	DEM 84,000		-	
	INR 9,870,815	INR 1,955,000		INR 599,010	

(*) The Group has investment plans for the establishment of new process and the amounts agreed or to be agreed are ₩315,617 million as of December 31, 2023. HD Hyundai Chemical Co., Ltd., a subsidiary, takes out comprehensive property insurance (insured amount of ₩5,976 billion) related to the HPC and MX processes, and the right to receive the insurance proceeds are provided to main creditors, Korea Development Bank, as collateral (pledged amount of ₩2,844 billion). In addition, the right to receive insurance proceeds for the comprehensive property insurance on the tangible assets of the subsidiary, HD Hyundai Infracore Co., Ltd., are provided to the Korea Development Bank as collateral.

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21. Pledged Assets, Continued

Meanwhile, HD Hyundai Infracore Co., Ltd., a subsidiary, provides subordinated bonds (carrying amount: ₩15,255 million) as collaterals to Kodit 2020 the 18th Securitization specialty Co., Ltd. for issuing debentures.

In addition, in relation to the ₩250,000 million borrowings of HD Hyundai XiteSolution Co. Ltd., a subsidiary, the entire stock of HD Hyundai construction equipment Co., Ltd and a part of the stock of HD Hyundai Infracore Co., Ltd. (41,824,369 shares) are provided as collateral to KB securities Co., Ltd. The Group provides collateral in the form of vessels under construction, construction materials, and export receivables related to a VND 2,600,000 million borrowing agreement.

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	₩	4,013,779	7,445,890	4,289,053	6,415,062
Debentures		2,152,372	4,514,146	1,996,409	5,022,218
Financial liabilities measured at FVTPL		5,837	2,540	62,699	5,293
Convertible preference shares(*)		-	197,484	260,243	-
Long-term financial guarantee liabilities		-	1,086	-	2,455
	₩	<u>6,171,988</u>	<u>12,161,146</u>	<u>6,608,404</u>	<u>11,445,028</u>

(*) For the year ended December 31, 2023, some of the convertible bonds of HD Hyundai XiteSolution Co., Ltd. were exercised by exercising the conversion right, but the Group determined that it did not have an unconditional right to avoid the delivery of cash or other financial assets for the new shares that were granted the right to purchase, and therefore the redemption amount was recorded as a liability rather than a non-controlling interest.

23. Trade and Other Payables

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

(In millions of won)

		2023		2022	
		Current	Non-current	Current	Non-current
Trade payables	₩	4,751,151	-	4,305,459	-
Other accounts payable		2,337,827	844,761	2,458,311	754,996
Accrued expense		1,234,415	8,702	1,090,773	7,981
Deposits received		2,176	42,863	10,006	36,576
	₩	<u>8,325,569</u>	<u>896,326</u>	<u>7,864,549</u>	<u>799,553</u>

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24. Other Liabilities

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

(In millions of won)

		2023		2022	
		Current	Non-current	Current	Non-current
Unearned revenues	₩	13,931	-	11,622	-
Deferred revenues		27,138	-	28,291	-
Others		2,668	2,982	8,783	2,690
	₩	43,737	2,982	48,696	2,690

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
Domestic consolidated subsidiaries:				
General loan	The Korea Development Bank and others	4.73~6.66	₩ 753,600	536,000
General loan in foreign currency	Korea Eximbank and others	5.00~6.83	39,538	26,220
Commercial paper (CP)	Shinhan Bank	4.97	70,000	50,000
Invoice loan	UOB and others	5.13~6.64	96,606	175,888
Usance L/C	Nonghyup Bank and others	0.22~6.38	537,748	468,835
Production finance	Korea Eximbank	5.10~5.42	130,000	-
Transferred receivables	Korea Eximbank	-	3,821	6,872
Import loan	-	-	-	1,395
			1,631,313	1,265,210
Overseas consolidated subsidiaries:				
Foreign currency loan	KEB Hana Bank and others	2.00~9.80	626,355	812,157
			2,257,668	2,077,367
Current portion of long-term borrowings			1,756,373	2,211,741
Current portion of discount in long-term borrowings			(262)	(55)
			₩ 4,013,779	4,289,053

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
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For the years ended December 31, 2023 and 2022

25. Borrowings and Debentures, Continued

(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
Domestic consolidated subsidiaries:					
General loan(*1)	KEB Hana Bank and others	2.40~6.36	₩	4,844,000	4,478,762
Sale-leaseback(*2)	Korea Asset Management Corporation	7.10		30,440	30,440
General loan in foreign currency	ICBC	1.70~7.53		536,894	644,136
General fund for equipment(*3)	The Korea Development Bank and others	2.13~6.31		3,505,073	3,162,355
Commercial paper (CP)	Korea Investment & Securities Co, Ltd. and others	5.55		50,000	150,000
Loan for petroleum development project(*4)	Korea Energy Agency	0.75~3.75		10,361	10,184
Production finance	Korea Eximbank	5.16~5.18		100,000	-
				<u>9,076,768</u>	<u>8,475,877</u>
Overseas consolidated subsidiaries:					
Foreign currency loan	The Korea Development Bank and others	2.20~8.75		139,222	171,130
				<u>9,215,990</u>	<u>8,647,007</u>
Discount in long-term borrowings				(13,989)	(20,259)
Current portion of long-term borrowings				(1,756,373)	(2,211,741)
Current portion of discount in long-term borrowings				262	55
			₩	<u>7,445,890</u>	<u>6,415,062</u>

(*1) The entire stock of Hyundai construction equipment Co., Ltd and a part of the stock of HD Hyundai Infracore Co., Ltd. are provided as collateral to KB securities Co., Ltd (See Note 21).

(*2) The asset was transferred by the sale-leaseback but since the conditions for the sale of the asset were not, the transfer price was recognized as borrowings.

(*3) The property, plant and equipment and others are collateralized (See Note 21).

(*4) The consortium in which the Group participated decided to withdraw from the Yemen Block 4 development project. The amount borrowed from the Korea Energy Agency was presented by liquidity classification according to the original repayment plan. However, the repayment plan for the borrowed amount cannot be determined by year based on the results of the supervisory authority's reduction review in the future (See Note 46).

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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	Guarantee
Debentures(*1)	2024-01-25~2031-01-28	1.21~5.73	₩	5,667,000	5,824,000	Debenture
Foreign Currency(*5)	2024-03-28~2028-07-20	3.18~6.57		812,322	798,399	Secured
Convertible bonds(*2,3,4)	2024-06-28~2028-08-19	1.00~4.35		200,500	412,026	Debenture
				<u>6,679,822</u>	<u>7,034,425</u>	
Discount on bonds				(10,310)	(9,096)	
Redemption premium on bonds				55	886	
Adjustment on bonds				(3,048)	(7,588)	
Current portion of bonds				(2,153,380)	(1,997,006)	
Current portion of discount on bonds				1,044	1,103	
Current portion of redemption premium on bonds				(55)	(886)	
Current portion of adjustment on bonds				18	380	
			₩	<u>4,514,146</u>	<u>5,022,218</u>	

(*1) According to the agreement, there are restrictions such as maintaining a debt ratio of 500% or less and limitations on the establishment of collateral rights until the obligation to pay the principal and interest of the bonds is fulfilled (based on the consolidated financial statements of HD Hyundai Construction Equipment Co., Ltd.). If the Group violates the obligation to submit a report on the management of the bonds, the Group may lose their right to the interest on the bonds until the obligation is fulfilled. In such a case, the Group must notify the "bondholders" and "bond management company" who are aware of the relevant facts that a bondholders' meeting is necessary, and the interest on the bonds will be forfeited according to the resolution of the bondholders' meeting.

(*2) As of December 31, 2023, the convertible bonds of HD Hyundai Infracore Co.,Ltd., a subsidiary, were converted into 1,840,042 shares (65th 134,608 shares and 69th 1,705,434 shares).

(*3) Details of change and issuance conditions of convertible bonds as of December 31, 2023, are as follow:

Type	Date of issue	Maturity date	Coupon Rate(%)	YTM(%)	Exercisable period	Exercise price	Issuing price
The 1 st Private convertible bonds	2021-08-19	2028-08-19	4.35	4.35	From one year after date of issue to one month before maturity	₩498,850 per share	₩400,000 million

1) Early redemption clause

The early redemption right is exercisable as a whole or in part against the par value of convertible bond on five of six years after the date of issuance of bonds. In addition, from the date of one year after the date of issuance of bond to before the maturity date, bonds can be converted into 801,844 convertible preferred stock. If the holder of convertible preference shares does not exercise their conversion rights until the expiration date of the conversion period, the convertible preference shares are automatically converted into ordinary shares.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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25. Borrowings and Debentures, Continued

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

(*3) Details of change and issuance conditions of convertible bonds as of December 31, 2023, are as follow, Continued:

- 2) Maturity redemption
Principal amount will be paid on August 19, 2028, at maturity date.
- 3) Calculation of the exercise price
The exercise price will be adjusted when there is an increase in paid- in capital, issuance of shares without consideration through issuance of shares at a price lower than the market price, stock dividends, or capitalization of reserves, before exercising the stock warrants or convertible bonds.
- 4) The exercise of convertible bond
For the year ended December 31, 2023, 200,000 million of the convertible bonds issued by HD Hyundai XiteSolution Co., Ltd., a subsidiary, were exercised by exercising the conversion right, and the number of shared was 400,922 shares. The Group determined that it did not have an unconditional right to avoid the delivery of cash or other financial assets for the new shares that were granted the right to purchase, and therefore the redemption amount was recorded as a liability rather than a non-controlling interest.

(*4) The details of conditions of issuing unsecured convertible bonds are as follow:

Type	1 st unsecured convertible bond
Par value	₩500 million
Issue price	₩500 million
Payment date	2019-06-28
Maturity date	2024-06-28
Coupon rate	1.00%
YTM	Annual Compound 3%
Exercise price (In won)	₩10,500 (par ₩500)
Type and numbers of shares to be issued upon conversion	Ordinary shares of HD Hyundai plaspo Co., Ltd
Right to claim early repayment by bondholders	Possible
exercise price control conditions	If the corresponding amount of 70% of the unit price of the public offering falls below the conversion price of the convertible bond, the conversion price is adjusted to the amount corresponding to 70% of the unit price of the public offering.

(*5) It contains the bond that the Group entered into a contract to pay a fixed interest rate (3.63%) in Korean won on future interest and principal payment dates to avoid the risk of cash flow fluctuations due to exchange rate fluctuations. The bond is also guaranteed by the issuing financial institution.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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25. Borrowings and Debentures, Continued

(4) Convertible preferred stock

(In millions of won)

Type	Issue date	Interest rate(%)	2023	2022
Hyundai Samho Heavy Industries Co., Ltd.(*)	2017-07-27	-	₩ -	260,243
HD Hyundai XiteSolution Co., Ltd.	2023-08-18	4.35	197,484	-

(*) It was redeemed for the year ended December 31, 2023.

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

(In millions of won)

		2023			
		Convertible preferred stock			Total
Periods		Borrowings	Debentures		
Less than 1 year	₩	4,014,040	2,153,380	-	6,167,420
1 ~ 5 years		6,948,107	3,966,442	197,484	11,112,033
More than 5 years		511,511	560,000	-	1,071,511
	₩	11,473,658	6,679,822	197,484	18,350,964

(In millions of won)

		2022			
		Convertible preferred stock			Total
Periods		Borrowings	Debentures		
Less than 1 year	₩	4,289,108	1,997,006	260,243	6,546,357
1 ~ 5 years		5,515,051	3,987,419	-	9,502,470
More than 5 years		920,215	1,050,000	-	1,970,215
	₩	10,724,374	7,034,425	260,243	18,019,042

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
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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)

(In millions of won)		2023				
		Borrowings	Debentures	Convertible preferred stock	Lease liabilities	Total
Beginning balance	₩	10,704,115	7,018,627	260,243	1,807,754	19,790,739
Cash flows from Borrowing financing activities(*1)		21,973,289	1,830,430	-	-	23,803,719
	Repayment	(21,248,444)	(1,994,776)	(409,683)	(305,149)	(23,958,052)
Non-cash flows	Effects of changes in foreign exchange rates	21,278	14,099	-	11,105	46,482
	Amortization of discounts on Long-term borrowings	6,017	-	-	-	6,017
	Amortization of discounts on debentures	-	5,960	-	-	5,960
	Conversion(*2)	-	(197,484)	197,484	-	-
Others		3,414	(10,338)	149,440	93,285	235,801
Ending balance	₩	11,459,669	6,666,518	197,484	1,606,995	19,930,666

(*1) In addition to the cash flows from financing activities above, there is (-) ₩45,005 million cash flows from the exercise of the right of purchase, which the Group granted the right for the shares of the Group (1,260,558 shares) to the financial investor of Hyundai Samho Heavy Industries Co., Ltd., a subsidiary.

(*2) For the year ended December 31, 2023, some of the convertible bonds of HD Hyundai XiteSolution Co., Ltd., a subsidiary, were exercised by exercising the conversion right, but the Group determined that it did not have an unconditional right to avoid the delivery of cash or other financial assets for the new shares that were granted the right to purchase, and therefore the redemption amount was recorded as a liability rather than a non-controlling interest.

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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, Continued:

(In millions of won)

		2022				
		Borrowings	Debentures	Convertible preferred stock	Lease liabilities	Total
Beginning balance		₩ 7,238,356	6,426,417	-	1,515,627	15,180,400
Cash flows from Borrowing financing activities		22,708,783	977,027	-	-	23,685,810
	Repayment	(22,675,283)	(1,861,262)	-	(283,239)	(24,819,784)
Non-cash flows	Effects of changes in foreign exchange rates	55,539	34,084	-	139	89,762
	Amortization of discounts on Long-term borrowings	7,309	-	-	-	7,309
	Amortization of discounts on debentures	-	10,199	-	-	10,199
	Effects of changes in scope of consolidation	3,411,962	1,430,579	260,243	58,796	5,161,580
Others		(42,551)	1,583	-	516,431	475,463
Ending balance		₩ 10,704,115	7,018,627	260,243	1,807,754	19,790,739

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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:

(In millions of won)

	2023	2022
Present value of defined benefit obligations	₩ 2,253,416	1,836,146
Fair value of plan assets(*)	(2,165,237)	(1,763,905)
	<u>₩ 88,179</u>	<u>72,241</u>

(*) As of December 31, 2023 and 2022, the excess payments of retirement pension of ₩499,534 million and ₩605,134 million are recognized as plan assets in other non-current assets. The fair value of plan assets including excess payments are ₩2,664,771 million and ₩2,369,039 million, respectively.

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

(In millions of won)

	2023	2022
Retirement pension	₩ 2,663,419	2,367,577
Transfer to National Pension Fund	1,352	1,462
	<u>₩ 2,664,771</u>	<u>2,369,039</u>

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

(In millions of won)

	2023	2022
Current service costs	₩ 205,440	190,951
Past service costs	4,306	(8,042)
Interest expenses on obligations	90,039	49,913
Expected return on plan assets	(123,589)	(53,242)
Contribution	13,938	4,138
	<u>₩ 190,134</u>	<u>183,718</u>

For the years ended December 31, 2023 and 2022, the Group executed the voluntary retirement program. As a result, the retirement bonus was incurred amounting to ₩7,933 million and ₩12,137 million recognized in selling, general and administrative expenses.

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26. Employee Benefits, Continued

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

(In millions of won)

		2023	2022
Beginning balance	₩	1,836,146	749,737
Current service costs		205,440	190,951
Past service cost and gains or losses on settlements		4,306	(8,042)
Interest expenses on obligations		90,039	49,913
Benefits paid		(249,574)	(331,502)
Transfers from related parties		34,286	22,152
Effect of movements in exchange rates		283	252
Actuarial gains and losses in other comprehensive income			
Demographic assumptions		15	4,519
Financial assumptions		204,863	(275,811)
Experience adjustments		119,566	140,607
Effects of changes in scope of consolidation		-	1,294,401
Others		8,046	(1,031)
Ending balance	₩	<u>2,253,416</u>	<u>1,836,146</u>

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

(In millions of won)

		2023	2022
Beginning balance	₩	2,369,039	713,540
Benefits paid		(158,360)	(256,564)
Contributions paid into the plan		328,840	552,713
Expected return on plan assets		123,589	53,242
Actuarial losses in other comprehensive income		1,168	(18,829)
Effects of changes in scope of consolidation		-	1,320,554
Other		495	4,383
Ending balance	₩	<u>2,664,771</u>	<u>2,369,039</u>

The Group are reviewing the level of the fund each year and taking the policy to preserve fund in the event of a loss to the fund. The estimated amount of contributions paid into the plan in next year as of December 31, 2023, is ₩190,255 million.

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

(In millions of won)

		Within 1 year	1 ~ 2 years	2 ~ 5 years	5 ~ 10 years	More than 10 years	Total
Expected payment	₩	99,146	260,820	485,429	1,031,826	5,376,901	7,254,122

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26. Employee Benefits, Continued

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

<i>(In percent)</i>	2023	2022
Discount rate	4.02~5.00	4.20~5.41
Future salary growth rate	1.68~4.94	1.20~4.62
Future mortality (Males, at age 45)	0.18	0.18

(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	9.70	9.92

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

<i>(In millions of won)</i>		2023	
		Increase	Decrease
Discount rate (1% movement)	₩	(182,255)	211,973
Future salary growth (1% movement)		198,610	(174,410)

<i>(In millions of won)</i>		2022	
		Increase	Decrease
Discount rate (1% movement)	₩	(143,038)	165,739
Future salary growth (1% movement)		152,417	(134,319)

Through the operation of the defined benefit pension plan, the Group is exposed to actuarial risks such as longevity risk, currency risk, interest rate risk, and market (investment) risk.

27. Provisions

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

		2023				
		Provision for construction loss	Provision for product warranty	Provision for construction warranty	Provision for emissions	Other provision(*1,2)
Current	₩	250,476	306,566	140,570	866	176,328
Non-current		-	178,617	55,676	-	25,084
Ending Balance		250,476	485,183	196,246	866	201,412
						Total
						1,134,183

(*1) Consists of provisions for litigation-related liabilities, and the provision related to ordinary wages (See Note 47).

(*2) Includes provisions calculated based on a prior notification of fines by the Ministry of Environment, and whether fines will be imposed and the amount at the end of the current period wasn't determined as of December 31, 2023.

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27. Provisions, Continued

(1) Provisions for the years ended December 31, 2023 and 2022 are as follows, Continued:

(In millions of won)

		2022				
		Provision for construction loss	Provision for product warranty	Provision for construction warranty	Provision for emissions	Other provision(*1,2) Total
Current	₩	399,545	287,031	181,696	6,061	1,045,617 1,919,950
Non-current		44	176,950	301,928	-	20,484 499,406
Ending Balance		399,589	463,981	483,624	6,061	1,066,101 2,419,356

(*1) Consists of provisions for litigation-related liabilities, and the provision for litigation-related liabilities was recognized by estimating the expected payment amount based on a Supreme Court ruling related to ordinary wages for the year ended December 31, 2022 (See Note 47).

(*2) Includes provisions calculated based on a prior notification of fines by the Ministry of Environment, and whether fines will be imposed and the amount at the end of the current period wasn't determined as of December 31, 2022. Meanwhile, the increase in related provisions was recognized as other non-operating expenses.

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

(In millions of won)

		2023				
		Provision for construction loss	Provision for product warranty	Provision for construction warranty	Provision for emissions	Other provision Total
Beginning balance	₩	399,589	463,981	483,624	6,061	1,066,101 2,419,356
Additions		66,843	226,361	81,106	2,356	33,188 409,854
Reversals		(256,709)	(18,938)	(260,421)	(6,666)	(6,238) (548,972)
Utilization		-	(189,807)	(108,168)	(885)	(892,448) (1,191,308)
Others(*)		40,778	-	-	-	- 40,778
Effect of movements in exchange rates		(25)	3,586	105	-	809 4,475
Ending balance	₩	250,476	485,183	196,246	866	201,412 1,134,183

(*) Refers to fluctuations in the amount recognized before recognition of impairment losses on assets on related assets (See Note 12).

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27. Provisions, Continued

(2) Provisions for the years ended December 31, 2023 and 2022 are as follows, Continued:

(In millions of won)

(In millions of won)

		2022					
		Provision for construction loss	Provision for product warranty	Provision for construction warranty	Provision for emissions	Other provision(*)	Total
Beginning balance	₩	28,753	384,803	8,967	9,933	221,091	653,547
Additions		44,942	228,915	39,806	4,312	179,261	497,236
Reversals		(613,737)	(44,887)	(37,067)	(1,625)	(8,987)	(706,303)
Utilization		-	(188,772)	(66,860)	(38,265)	(20,162)	(314,059)
Others(*)		64,541	-	-	-	-	64,541
Changes in scope of consolidation		874,566	84,854	538,379	31,706	694,335	2,223,840
Effect of movements in exchange rates		524	(932)	399	-	563	554
Ending balance	₩	399,589	463,981	483,624	6,061	1,066,101	2,419,356

(*) Refers to fluctuations in the amount recognized before recognition of impairment losses on assets on related assets (See Note 12).

28. Derivative Financial Instruments

The Group has entered into derivative instrument contracts with various banks to hedge the risk related to changes in foreign exchange rates, interest rate risk, crude oil prices and others. Derivatives are measured at fair value by using the forward exchange rate presented by contract counterparty and others. The evaluation details as of December 31, 2023, are as follows:

(1) The description of derivative instrument and hedge accounting

Hedge accounting	Type	Description
Fair value hedge	Foreign currency forward	1. Hedges exchange rate risk for contracts that meet the requirements of a firm contract in foreign currency supply contracts 2. Hedges exchange rate risk for foreign currency purchases
Cash flow hedge	Foreign currency forward	Hedges the variability in cash flows attributable to foreign currency exposure in respect of forecasted sales and purchases
	Currency swap	Hedges cash flow risk on exchange rate fluctuation of borrowings in foreign currency and interest rate fluctuation
	Interest rate swap	Hedges cash flow risk on interest rate fluctuation
	Product forward	Hedges cash flow risk on refinery margin fluctuation
	Commodity futures	Hedges cash flow risk on raw materials price fluctuation

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28. Derivative Financial Instruments, Continued

(2) Details of the derivatives entered into by the Group as of December 31, 2023 is as follows:

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

Description	Type	Currency		Contract amount	Weighted average exchange rate (won)	Average maturities	Number of contracts
		Sell	Buy				
Fair value hedge	Foreign currency forward	USD	KRW	21,095,881	1,243.40	2025-05-21	7,377
For trading	Foreign currency forward	USD	KRW	565,389	1,287.73	2024-04-05	66
	Call option(*)	KRW	KRW	36,000	-	-	1
	Interest rate swap	KRW	KRW	100,000	-	2024-03-08	1
	Crude oil forward	USD	USD	127,397	-	2024-02-18	3
Cash flow hedge	Foreign currency forward	USD	GBP	20,600	1.24	2025-11-14	2
		KRW	JPY	69,504	9.61	2024-10-27	11
		EUR	KRW	315,669	1,425.84	2025-02-16	162
		USD	KRW	1,151,745	1,311.93	2024-05-19	257
	Currency swap	USD	KRW	23,750	1,285.11	2024-03-08	2
		KRW	EUR	69,810	1,342.62	2025-03-01	2
		KRW	USD	1,063,630	1,209.68	2025-11-20	10
		CNY	USD	345,500	6.91	2024-05-08	1
	Interest rate swap	KRW	KRW	40,000	-	2024-06-11	1
	Commodity futures	KRW	USD	7,848	1,289.40	2024-05-29	9
	Product forward	USD	USD	615,146	-	2024-04-06	40

(*) The Group granted investors with a put option for the non-voting convertible shares of Hyundai Heavy Industries Power Systems Co., Ltd. that the Group holds *(See Note 46)*.

- ※ Terms of settlement: Settlement or collecting total
- ※ The contract amount: Denominated in the selling currency

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28. Derivative Financial Instruments, Continued

(3) Carrying amount related to derivatives as of December 31, 2023 is as follows:

(In millions of won)

Description	Category		Derivatives			
			Assets		Liabilities	
			Current	Non-current	Current	Non-current
Fair value hedge	Foreign currency forward	₩	87,939	239,855	460,128	181,328
Cash flow hedge	Foreign currency forward		38,664	751	2,436	1,511
	Foreign currency swap		60,746	13,000	1,203	3,194
	Interest rate swap		379	-	-	-
	Commodity futures		169	-	50	-
	Product forward		29,489	-	29,321	-
		₩	217,386	253,606	493,138	186,033

(In millions of won)

Description	Category		Financial instruments measured at FVTPL			
			Assets		Liabilities	
			Current	Non-current	Current	Non-current
For trading	Foreign currency forward	₩	4,821	446	2,354	-
	Interest rate swap		-	-	446	-
	Crude oil forward		3,417	-	3,037	-
	Others		-	-	-	2,540
		₩	8,238	446	5,837	2,540

(In millions of won)

Description	Category		Firm Commitment			
			Assets		Liabilities	
			Current	Non-current	Current	Non-current
Fair value hedge	Foreign currency forward	₩	286,128	178,403	78,350	239,250

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28. Derivative Financial Instruments, Continued

(4) Gain and loss on valuation and transaction of derivatives for the year ended December 31, 2023 is as follows:

(In millions of won)

Description	Category	Revenue	Cost of sales	Finance income	Finance costs	Other non-operating income	Other non-operating expenses	Accumulated other comprehensive income (loss)
Fair value hedge	Foreign currency forward	₩ (784,721)	-	243,695	1,040,545	869,888	200,111	-
For trading	Foreign currency forward	-	-	124,192	133,781	-	-	-
	Interest rate swap	-	-	1,920	-	-	-	-
	Crude oil forward	-	-	20,316	7,978	-	-	-
	Others	-	-	34	747	-	-	-
				146,462	142,506	-	-	-
Cash flow hedge	Foreign currency forward	(588)	2,182	-	-	-	-	(27,275)
	Foreign currency swap	-	-	25,356	3,840	-	-	(19,875)
	Interest rate swap	-	-	-	-	-	-	(851)
	Commodity futures	-	-	-	-	-	-	508
	Product forward	-	-	-	-	-	-	3,411
		(588)	2,182	25,356	3,840	-	-	(44,082)
	₩ (785,309)	2,182	1,186,891	415,513	869,888	200,111		(44,082)

For the year ended December 31, 2023, the Group applies cash flow hedge accounting, for which the Group accounted the effective portion of the hedge amounting to ₩33,699 million, after netting off deferred tax effect of ₩10,383 million as gain (loss) on valuation of derivatives in accumulated other comprehensive income (loss). It consists of non-controlling interest portion of ₩19,061 million and controlling interest portion of ₩14,638 million.

The expected period of exposure to cash flow risk, where cash flow hedge accounting is applied, is approximately 52 months.

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29. Capital and Capital Surplus

(1) Capital

The number of shares that the controlling company is authorized to issue, the number of shares that the Group issued, and the par value as of December 31, 2023 is 800,000,000 shares, 78,993,085 shares, and 1,000.

(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 the controlling company.

(i) Capital surplus as of December 31, 2023 and 2022 are as follows:

(In millions of won)

	2023	2022
Paid-in-capital in excess of par value	₩ 3,090,454	3,090,454
Other capital surplus	2,161,795	2,162,868
	₩ <u>5,252,249</u>	<u>5,253,322</u>

(ii) Changes in capital surplus for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

	2023	2022
Beginning balance	₩ 5,253,322	5,233,238
Capital transactions in the Group	(1,088)	19,880
Others	15	204
Ending balance	₩ <u>5,252,249</u>	<u>5,253,322</u>

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30. Hybrid Bonds

(1) Hybrid bonds classified as non-controlling interests as of December 31, 2023 and 2022 issued by Hyundai Oilbank Co., Ltd., a subsidiary, are as follows:

(In millions of won)

Description	Issue	Maturity	Annual interest rate(%)		2023	2022
2 nd Hybrid bond	2020-03-30	2050-03-30	3.50	₩	280,000	280,000
3 rd Hybrid bond	2020-09-24	2050-09-24	3.65		130,000	130,000
4 th Hybrid bond	2020-10-26	2050-10-26	3.65		20,000	20,000
					430,000	430,000
	Issuance costs				(1,076)	(1,076)
				₩	428,924	428,924

(2) Terms and conditions of the hybrid bonds issued by Hyundai Oilbank Co., Ltd. as of December 31, 2023 are as follows:

(In millions of won)

	2 nd Hybrid bond	3 rd Hybrid bond	4 th Hybrid bond
Amount issued ₩	280,000	130,000	20,000
Maturity	30 years (At maturity, it can be extended in accordance with the Group's decision)		
Interest rate	Issue date ~ 2025-03-30: Fixed rate, 3.50% Re-calculated and applied every 5 years, 5-year treasury bond yield + annual 2.215% + annual 2.00% (Step-up clauses)	Issue date ~ 2025-09-24: Fixed rate, 3.65% Re-calculated and applied every 5 years, 5-year treasury bond yield + annual 2.473% + annual 2.00% (Step-up clauses)	Issue date ~ 2025-10-26: Fixed rate, 3.65% Re-calculated and applied every 5 years, 5-year treasury bond yield + annual 2.441% + annual 2.00% (Step-up clauses)
Interest payment condition	3 months deferred payment, selective payment postpone is possible		
Other	Depending on the Group's choice, the Group can redeem at the date of 5th anniversary after issuance and every interest payment thereafter.		

The Group has an unconditional option to extend the maturity of hybrid bonds at maturity. Also, payment of interest on the bonds can be postponed at the discretion of the Group. If the payment of interest is postponed, the Group cannot pay any dividend on common stock until the deferred interest is paid in full. The Group classifies hybrid bonds as equity because the Group holds unconditional rights to avoid the contractual obligation to deliver cash or other financial assets to the holder. In case of liquidation, the hybrid bonds are subordinated bonds which have priority over common stocks.

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31. Capital Adjustment

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

<i>(In millions of won)</i>		2023	2022
Treasury stock	₩	489,547	489,547
Others		364,574	410,733
	₩	<u>854,121</u>	<u>900,280</u>

(2) The Group's treasury stock as of December 31, 2023 and 2022 are summarized as follows:

<i>(In millions of won)</i>		2023			2022		
		Number of shares	Carrying amount	Fair Value	Number of shares	Carrying amount	Fair Value
Treasury stock(*)		8,324,655	₩ 489,547	526,951	8,324,655	₩ 489,547	475,338

(*) These are the proportional shares of treasury stock that the controlling company acquired from HD Korea Shipbuilding & Offshore Engineering Co., Ltd. before the split, and the additional proportional shares acquired during 2017.

32. Accumulated Other Comprehensive Income

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

<i>(In millions of won)</i>		2023	2022
Changes in fair value of financial Instruments measured at FVOCI	₩	12,466	(1,463)
Effective portion of changes in fair value of cash flow hedges		9,050	23,687
Exchange differences on translating foreign operations		43,163	34,384
Changes in equity of equity method investments		9,872	9,394
Revaluation of property, plant and equipment		334,247	330,070
	₩	<u>408,798</u>	<u>396,072</u>

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32. Accumulated Other Comprehensive Income, Continued

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

(In millions of won)

		2023		
		Other comprehensive income (loss)	Owners of the Company	Non-controlling interests
Changes in fair value of financial instruments measured at FVOCI	₩	18,022	7,006	11,016
Effective portion of changes in fair value of cash flows hedges		(33,699)	(14,638)	(19,061)
Exchange differences on translating foreign operations		24,576	8,780	15,796
Change in equity of equity method investments		974	478	496
Actuarial gains and losses		(243,770)	(86,327)	(157,443)
Revaluation of property, plant and equipment		13,839	6,156	7,683
Retained earnings of equity method investments		(251)	(88)	(163)
	₩	<u>(220,309)</u>	<u>(78,633)</u>	<u>(141,676)</u>

(In millions of won)

		2022		
		Other comprehensive income (loss)	Owners of the Company	Non-controlling interests
Changes in fair value of financial instruments measured at FVOCI	₩	(42,547)	(14,830)	(27,717)
Effective portion of changes in fair value of cash flows hedges		56,417	25,764	30,653
Exchange differences on translating foreign operations		(18,937)	(8,504)	(10,433)
Change in equity of equity method investments		6,551	4,766	1,785
Actuarial gains and losses		82,434	33,647	48,787
Revaluation of property, plant and equipment		13,828	6,628	7,200
Retained earnings of equity method investments		10,000	9,964	36
	₩	<u>107,746</u>	<u>57,435</u>	<u>50,311</u>

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33. Retained Earnings

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

<i>(In millions of won)</i>		2023	2022
Voluntary reserves	₩	641,625	641,625
Unappropriated retained earnings		1,797,587	2,013,074
	₩	<u>2,439,212</u>	<u>2,654,699</u>

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

<i>(In millions of won)</i>		2023	2022
Beginning balance	₩	2,654,699	1,686,527
Profit for the year		785,832	2,234,955
Less: non-controlling interests		(521,352)	(826,332)
Retained earnings of equity method investments		(88)	9,964
Actuarial gains and losses		(86,327)	33,647
Reclassification of revaluation surplus		2,333	2,127
Reclassification of gain/loss on valuation of financial instruments at FVOCI		(6,924)	(1)
Dividend		(388,676)	(325,075)
Capital transactions in the Group		69	(16)
Changes in scope of consolidation		-	(168,254)
Others		(354)	7,157
Ending balance	₩	<u>2,439,212</u>	<u>2,654,699</u>

34. Change in shares of subsidiaries

(1) Acquisition of subsidiaries

During March 2023, the Group obtained controls by acquiring a 95% share in Hyundai Heavy Argentina S.R.L.

- Consideration Transferred and Identifiable assets acquired and liabilities assumed

1) The fair value of consideration transferred at the date of acquisition is as follows :

<i>(In millions of won)</i>		Amount
Cash and Cash equivalents	₩	1

2) Identifiable assets and liabilities assumed at the date of acquisition is as follows :

<i>(In millions of won)</i>		Amount
Assets		
Cash and Cash equivalents	₩	837
Others		78
Liabilities		
Others		45
Identifiable assets		<u>870</u>

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34. Change in shares of subsidiaries, Continued

(2) Change in shares of subsidiaries

For the year ended December 31, 2023, the effect of change in shares of subsidiaries on the equity attributable to owners of the controlling company are as follows:

1) Share increases

(In millions of won)

Subsidiary	Ownership before transaction (%)	Ownership after transaction (%)	Reason		Change of non- controlling interest	Change of controlling interest
Hyundai Samho Heavy Industries Co., Ltd.	80.54	96.65	Capital transactions in the Group	₩	(5,075)	5,075
PT Hyundai Constructions Equipment Asia	69.44	69.93	Increase in paid-in capital		124	69
Hyundai Heavy Industries Argentina S.R.L.	95.00	99.98	Capital transactions in the Group		19	(19)

2) Share decreases

(In millions of won)

Subsidiary	Ownership before transaction (%)	Ownership after transaction (%)	Reason		Change of non- controlling interest	Change of controlling interest
HD Hyundai Infracore Co., Ltd.	33.29	32.99	The exercise of conversion option	₩	11,093	-

(3) Liquidation

For the year ended December 31, 2023, liquidation procedures of subsidiaries such as Hyundai Transformers and Engineering India-Private Limited, Hyundai Global Service Colombia S.A.S., Hdene Power Solution India Private Ltd., completed and they are excluded from subsidiaries.

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35. Revenue

(1) Revenue streams

Details of revenue for the years ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
Revenue from contracts with customers	₩	62,164,297	61,790,323
Equity Income on Investments		(47,685)	(107,373)
Gain (loss) on valuation of hedging accounting		(785,309)	(833,282)
	₩	<u>61,331,303</u>	<u>60,849,668</u>

(2) Disaggregation of revenue

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

<i>(In millions of won)</i>		2023	2022
Main products:			
Oil refining	₩	39,257,078	49,155,655
Shipbuilding and offshore		24,598,331	17,643,093
Electrical electronics		3,371,264	2,540,746
Construction machinery		12,748,630	12,633,853
Ship service		1,805,781	1,596,008
Others		304,117	214,819
Consolidation adjustments(*)		(19,920,904)	(21,993,851)
		<u>62,164,297</u>	<u>61,790,323</u>
Region:			
Republic of Korea		25,098,099	25,826,963
North America		4,206,168	2,690,970
Asia		19,314,789	19,957,938
Europe		11,466,784	9,011,898
Others		2,078,457	4,302,554
		<u>62,164,297</u>	<u>61,790,323</u>
Revenue recognition period:			
Recognized when the goods are delivered		41,273,863	47,171,678
Recognized over time as services are provided		20,890,434	14,618,645
		<u>62,164,297</u>	<u>61,790,323</u>
Contract period:			
Short-term contract (within one year)		39,238,498	46,937,563
Long-term contract (more than one year)		22,925,799	14,852,760
	₩	<u>62,164,297</u>	<u>61,790,323</u>

(*) The consolidation adjustments are the amount of intra-group transactions and unrealized gains and losses for each reporting segment, and equity method valuation amounts for investments in associates and joint ventures and others.

There is no single external customer whose revenue amounts more than 10% of the Group for the years ended December 31, 2023 and 2022.

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35. Revenue, Continued

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

(In millions of won)

	Contract	Contract date	Contract due	Progress	Contract asset		Trade receivable	
					Total	Allowance for doubtful accounts	Total	Allowance for doubtful accounts
Shipbuilding and offshore	NASR 2	2014.07.08				(*)		

(*) As there are contractual confidentiality obligations and the clients disagree with disclosing this information, the Group omits the related disclosures after reporting it to audit committee. 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.

- (4) Contract balances

Receivables, contract assets and contract liabilities from contracts with customers as of December 31, 2023 and 2022 are as follows:

(In millions of won)

		2023		2022	
		Current	Non-current	Current	Non-current
Trade receivables	₩	4,487,471	205,185	3,778,605	225,465
Contract assets		7,423,296	203	6,647,001	-
Contract liabilities(*)		12,031,175	120,124	8,211,693	108,862

(*) Of the contract liability recognized as of December 31, 2022, ₩4,766,966 million was recognized as revenue in 2023.

- (5) Performance obligations and revenue recognition policies

The Group's performance obligations and revenue recognition policies are the same as for the year ending December 31, 2022 (see Note 4(22)).

- (6) Construction contracts

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

(In millions of won)

		2023
Beginning balance(*1)	₩	56,437,215
New contracts(*2)		32,533,770
Recognized as revenue(*3)		(21,501,682)
Ending balance(*4)	₩	67,469,303

(*1) The beginning balance includes the impact from translation of the contract balance denominated in foreign currency to Korean Won using on the appropriate exchange rate.

(*2) Includes new contracts, additions, changes in contracts, and foreign currency translation.

(*3) Revenue from equity in earnings of associates and joint ventures is not included.

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

In connection with the construction contract, the Group has provided certain amounts of deposits or letters to financial institutions for various guarantees (e.g. bid bond, performance bond, refund guarantee, maintenance bond, etc).

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35. Revenue, Continued

(6) Construction contracts, Continued

1) Changes in outstanding contracts for the year ended December 31, 2023 is as follows, Continued

Periods when the ending balance is expected to be recognized as revenues are as follows:

(In millions of won)		2024	2025	After 2026	Total
Expected amount	₩	22,439,999	21,694,047	23,335,257	67,469,303

2) Accumulated profit and loss of construction in progress as of December 31, 2023 is as follows:

(In millions of won)

		2023						
		Accumulated revenue of construction	Accumulated cost of construction	Accumulated profit (loss) of construction	Receivables on construction contracts(*1)		Provisions for construction loss	
					Billed receivables	Contracts assets	Contract liabilities	
Shipbuilding and offshore(*2)	₩	20,840,353	20,212,548	627,805	508,115	7,155,844	10,259,827	183,967
Electrical electronics		282,361	317,880	(35,519)	7,619	5,952	5,710	7,765
Ship service		197,438	168,764	28,674	-	12,324	24,919	5,516
Construction Equipment		29,274	25,793	3,481	-	2,118	2,568	-
Others		-	-	-	-	35,232	9,923	-
	₩	21,349,426	20,724,985	624,441	515,734	7,211,470	10,302,947	197,248

(*1) As of December 31, 2023, allowance for receivables on billed receivables and contract assets amounted to ₩13,635 million and ₩10,702 million, respectively. The balances of receivables on construction contracts are net of allowance for receivables. Among the receivables on construction contracts, the amount of retentions according to the contract terms is ₩31,599 million.

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

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

35. Revenue, Continued

(6) Construction contracts, Continued

3) The effect of changes in estimated total contract costs

(i) Effect of changes in estimated total contract costs

For the year ended December 31, 2023, due to the factors causing the change in estimated total contract costs, the estimated total contract costs for contracts in progress have changed. Details of change in profits or loss for the current year and the future period and the impact on contract assets and contract liabilities are as follows:

(In millions of won)

		Changes in total contract revenue(*1)	Changes in total estimated contract costs(*1)	Effect on profit (loss) of contract(*1)			Changes in contract assets	Changes in contract liabilities
				Current year	Future period	Total		
Shipbuilding and offshore(*2)	₩	872,515	1,585,081	(143,167)	(569,399)	(712,566)	(50,467)	(6,657)
Ship service		(3,310)	(10,971)	8,015	(354)	7,661	(568)	(208)
Electrical electronics		1,505	745	11,036	(10,276)	760	(1,179)	(3,173)
Construction Equipment		-	(803)	587	216	803	587	(587)
	₩	<u>870,710</u>	<u>1,574,052</u>	<u>(123,529)</u>	<u>(579,813)</u>	<u>(703,342)</u>	<u>(51,627)</u>	<u>(10,625)</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 contract related to joint operation (FDH JV) is not included.

Effect on profit or loss for the current period and future period is calculated based on the total contract costs and total contract revenue estimated on the basis of situations generated in the current period. These estimations could be changed by variation of actual situations in the future.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
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35. Revenue, Continued

(6) Construction contracts, Continued

3) The effect of changes in estimated total contract costs, Continued

(ii) Sensitivity analysis based on changes in the estimated total contract costs

The amount of contract assets and contract liabilities affected by the rate of progress which is determined by accumulated cost incurred divided by estimated total contract costs. Estimated total contract costs are calculated based on estimation on the materials cost, labour cost and construction period, and has a variance risk related to the fluctuation of exchange rate, changes in steel price, changes in production hours, changes in field installation cost, etc.

The Group has entered into foreign currency forward contracts to hedge the risk related to exchange rate fluctuation for reducing the short-term price risk and hedged the risk related to changes in steel price in short period of time by entering steel purchase agreement by periods.

The risk and uncertainty related to production hours have been managed by a department which is responsible for managing production hours. The impacts on profit or loss of current period and future periods, contract assets and contract liabilities in case production hour changes 10% are as follows:

The impacts on profit or loss of current period and future periods, contract assets and contract liabilities in case field installation cost of the electrical sector changes 10% are as follows:

(In millions of won)

	Effect on profit or loss this year		Effect on profit or loss in the future		Changes in contract assets		Changes in contract liabilities	
	10%	10%	10%	10%	10%	10%	10%	10%
	increase	decrease	increase	decrease	increase	decrease	increase	decrease
Shipbuilding and offshore(*) ₩	(142,354)	125,233	(964,936)	982,146	(70,494)	71,995	31,191	(29,439)
Electrical electronics	(1,793)	1,953	(243)	83	(406)	547	619	(570)
Construction Equipment	(2,663)	3,250	(4,396)	4,396	(626)	1,250	2,037	(2,001)

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

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

The Group pays commission fees on the contract, which is the incremental costs of obtaining a contract that it would not have incurred if the contract had not been entered into in accordance with K-IFRS No. 1115. 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.

(In millions of won)

	2023	2022
Beginning balance	₩ 258,978	-
Change in scope of consolidation	-	162,247
Increase	161,776	145,375
Amortization(*)	(150,615)	(104,946)
Reversal (impairment loss)	41,749	56,302
Ending balance	₩ 311,888	258,978

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

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36. Selling, General and Administrative Expenses

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

(In millions of won)

		<u>2023</u>	<u>2022</u>
Salaries	₩	632,423	518,509
Bonus		174,104	146,694
Post-employment benefit costs		49,503	50,739
Employee welfare		209,280	151,803
Depreciation		146,403	123,794
Right-of-use assets depreciation		89,385	113,017
Bad debt expenses		(22,636)	(87,603)
Ordinary development costs		379,328	309,940
Advertising		108,177	67,358
Printing		5,332	5,160
Power cost		1,820	1,441
Warranty expenses		167,379	154,563
Insurance		23,862	21,937
Office supplies expenses		5,413	4,181
Supply expenses		9,959	7,398
Utility expenses		9,369	7,599
Repairs		18,666	16,444
Travel		50,404	34,586
Research		31,329	31,901
Training		11,263	9,925
Service charges		198,820	195,918
Transportation		191,560	209,279
Rent		38,975	34,902
IT service fee		25,926	15,504
Entertainment		14,191	11,083
Taxes and dues		37,253	37,102
Service contract expenses		166,532	239,106
Automobile maintenance		12,961	10,659
Sales commissions		85,652	81,388
Others		61,064	55,235
	₩	<u>2,933,697</u>	<u>2,579,562</u>

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
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37. Operating Segments

The Group has six reporting segments, which are strategic operating units, as set out below, and the reporting segment classification and measurement basis is the same as in the annual consolidated financial statements for the year ended December 31, 2022.

- (i) Shipbuilding and offshore: Shipbuilding, Industrial Plant, Engine, Solar power and others
- (ii) Oil refining: Oil refining business
- (iii) Electrical electronics: Manufacturing and sale of transformers, low and medium voltage circuit breakers, switchgears, power electronics and control systems and wind turbine systems
- (iv) Construction equipment: Manufacturing and sale of construction equipment and wheel loaders
- (v) Ship maintenance service: Engineering service and engine A/S
- (vi) Others: Manufacturing of industrial and LCD robots, investment and others

Information about these reportable segments are as follows:

(1) The financial performance of each segment

(In millions of won)

		2023			
	Revenue	Inter-segment revenue	Operating profit (loss)	Profit (loss)	Depreciation (*2)
Shipbuilding and offshore	₩ 23,818,128	(2,651,064)	332,186	387,767	475,060
Oil refining	39,257,078	(11,813,381)	611,770	341,406	868,471
Electrical electronics	3,371,264	(899,942)	362,165	295,549	50,640
Construction equipment	12,750,465	(4,019,432)	806,635	436,528	247,039
Ship maintenance service	1,805,781	(465,025)	205,219	154,743	10,034
Others	780,372	(602,941)	460,527	741,927	27,867
Consolidation adjustments(*1)	(20,451,785)	20,451,785	(746,938)	(1,572,088)	79,775
	₩ 61,331,303	-	2,031,564	785,832	1,758,886

(*1) Consolidation adjustments are made by eliminating intra-group transactions and unrealized profits and losses, and valuations of joint venture and investments in associates using the equity method.

(*2) Depreciation consists of depreciation of property, plant and equipment and right-of-use asset, and amortization.

(In millions of won)

		2022			
	Revenue	Inter-segment revenue	Operating profit (loss)	Profit (loss)	Depreciation (*2)
Shipbuilding and offshore	16,945,467	(2,191,303)	118,963	307,701	357,476
Oil refining	₩ 49,155,655	(14,857,885)	2,784,579	1,578,055	791,612
Electrical electronics	2,540,746	(590,850)	144,702	170,622	44,835
Construction equipment	12,508,919	(4,018,798)	536,536	323,064	235,727
Ship maintenance service	1,596,008	(344,233)	161,066	119,290	7,392
Others	548,213	(442,271)	313,500	206,964	11,906
Consolidation adjustments(*1)	(22,445,340)	22,445,340	(672,338)	(470,741)	132,760
	₩ 60,849,668	-	3,387,008	2,234,955	1,581,708

(*1) Consolidation adjustments are made by eliminating intra-group transactions and unrealized profits and losses, and valuations of joint venture and investments in associates using the equity method.

(*2) Depreciation consists of depreciation of property, plant and equipment and right-of-use asset, and amortization.

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37. Operating Segments, Continued

(2) The assets (liabilities) of each segment

(In millions of won)

		2023	
		Assets	Liabilities
Shipbuilding and offshore	₩	42,693,714	21,799,124
Oil refining		22,407,360	14,692,079
Electrical electronics		3,567,253	2,314,317
Construction equipment		9,754,014	5,006,599
Ship maintenance service		880,139	536,677
Others		9,616,938	3,338,250
Consolidation adjustments(*)		(20,936,597)	(2,936,062)
	₩	<u>67,982,821</u>	<u>44,750,984</u>

(*) Consolidation adjustments are made by eliminating intra-group transactions and unrealized profits and losses, and valuations of joint venture and investments in associates using the equity method.

(In millions of won)

		2022	
		Assets	Liabilities
Shipbuilding and offshore	₩	39,554,055	19,023,016
Oil refining		22,387,360	14,198,908
Electrical electronics		2,834,953	1,843,685
Construction equipment		10,133,250	5,946,551
Ship maintenance service		692,186	450,726
Others		9,177,808	3,265,074
Consolidation adjustments(*)		(19,208,751)	(2,420,763)
	₩	<u>65,570,861</u>	<u>42,307,197</u>

(*) Consolidation adjustments are made by eliminating intra-group transactions and unrealized profits and losses, and valuations of joint venture and investments in associates using the equity method.

(3) Geographical information

(In millions of won)

		2023	
		Revenue	Inter-segment revenue
Korea	₩	68,793,045	(15,552,595)
North America		2,668,522	(799,362)
Asia		8,430,685	(3,543,519)
Europe		1,629,488	(514,730)
Others		261,348	(41,579)
Consolidation adjustments(*)		(20,451,785)	20,451,785
	₩	<u>61,331,303</u>	<u>-</u>

(*) Consolidation adjustments are made by eliminating intra-group transactions and unrealized profits and losses.

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37. Operating Segments, Continued

(3) Geographical information, Continued

(In millions of won)

		2022	
		Revenue	Inter-segment revenue
Korea	₩	69,587,915	(16,864,329)
North America		1,859,253	(657,987)
Asia		9,979,990	(4,300,872)
Europe		1,516,816	(517,428)
Others		351,034	(104,724)
Consolidation adjustments(*)		(22,445,340)	22,445,340
	₩	60,849,668	-

(*) Consolidation adjustments are made by eliminating intra-group transactions and unrealized profits and losses, and valuations of joint venture and investments in associates using the equity method.

(4) Non-current assets

(In millions of won)

		2023	2022
Korea	₩	26,713,932	26,183,866
North America		156,041	160,748
Asia		530,042	543,912
Europe		75,840	70,620
Others		102,481	129,590
		27,578,336	27,088,736
Consolidation adjustments(*1)		3,513,468	3,470,095
(*2)	₩	31,091,804	30,558,831

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

(*2) Total non-current assets consist of investment property, property, plant and equipment, intangible assets and right-of-use assets.

38. Nature of Expenses

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

(In millions of won)

		2023	2022
Changes in inventories	₩	179,416	(1,767,228)
Purchase of inventories		43,911,027	46,842,828
Depreciation		1,199,179	1,049,957
Right-of-use depreciation		335,685	328,052
Amortization		224,019	203,699
Labor cost		3,644,379	3,028,239
Other expenses		9,806,034	7,777,113
	₩	59,299,739	57,462,660

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

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39. Finance Income and Finance Costs

Finance income and finance costs for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

		2023	2022
Finance income:			
Interest income	₩	274,412	171,947
Dividend income		8,559	5,072
Gain on valuation of financial instruments measured at FVTPL		12,781	21,396
Gain on disposal of financial instruments assets measured at FVTPL		137,836	157,543
Gain on foreign currency translation		136,110	163,783
Gain on foreign currency transactions		1,620,927	2,557,364
Gain on valuation of derivatives		139,313	573,743
Gain on transaction of derivatives		129,772	102,094
Others		2,038	52,939
	₩	<u>2,461,748</u>	<u>3,805,881</u>
Finance costs:			
Interest expense	₩	911,711	640,541
Loss on valuation of financial instruments measured at FVTPL		15,033	73,892
Loss on disposal of financial instruments measured at FVTPL		139,144	314,268
Loss on foreign currency translation		288,639	627,957
Loss on foreign currency transactions		1,387,259	2,066,872
Loss on valuation of derivatives		481,888	664,701
Loss on transaction of derivatives		562,497	663,824
Loss on disposal of account receivable		29,974	22,262
Loss on redemption of debenture		150,280	-
Others		114,842	39,345
	₩	<u>4,081,267</u>	<u>5,113,662</u>

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40. 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 non-current assets held for sale	₩ 24	14,488
Gain on disposal of investments in associates	148	3,043
Gain on disposal of investment property	-	14
Gain on disposal of property, plant and equipment	20,088	18,535
Gain on disposal of right-of-use assets	9,792	7,937
Gain on disposal of intangible assets	152	269
Gain on evaluation of firm commitment	869,888	1,163,190
Gain on disposal of other investment assets	212	6,769
Reversal of other allowance doubtful accounts	5,396	4,466
Bargain purchase gain	-	1,500,486
Reversal of impairment losses on property, plant and equipment	55,055	-
Reversal of intangible asset impairment losses	22,952	-
Others	101,104	287,975
	₩ <u>1,084,811</u>	<u>3,007,172</u>
Other non-operating expenses:		
Service charges	₩ 15,236	18,183
Loss on disposal of investments in associates	-	1,117,922
Loss on disposal of property, plant and equipment	24,555	25,421
Loss on disposal of right-of-use assets	6,684	6,762
Loss on disposal of investment property	551	-
Loss on disposal of other investments	201	-
Impairment loss on property, plant and equipment	31,226	8,287
Impairment loss on right-of-use assets	589	-
Loss on disposal of intangible assets	264	856
Impairment loss on intangible assets	65,583	16,401
Other bad debt expenses	4,874	5,242
Donation	53,453	29,042
Loss on evaluation of firm commitment	200,111	595,730
Impairment loss on other assets	29	23,540
Others	139,414	279,235
	₩ <u>542,770</u>	<u>2,126,621</u>

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
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41. Income Tax Expense

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

<i>(In millions of won)</i>		2023	2022
Current tax expense	₩	291,764	727,953
Adjustment for prior periods		18,203	(60,333)
Origination and reversal of temporary differences		(252,036)	31,058
Income tax recognized in other comprehensive income		102,258	(24,213)
Others		12,227	(13,016)
	₩	<u>172,416</u>	<u>661,449</u>

(2) Income tax recognized directly in other comprehensive income for the years ended December 31, 2023 and 2022 are as follows:

<i>(In millions of won)</i>		2023	2022
Gains on valuation of derivatives	₩	10,383	(16,059)
Exchange differences on translating foreign operations		79	35
Change in equity of equity method investments		(197)	(15,678)
Actuarial gains and losses		79,506	(26,562)
Revaluation of property, plant and equipment		20,426	14,616
Income (loss) on valuation of financial instruments measured at FVOCI		(6,071)	12,278
Others		(1,868)	7,157
Income tax recognized directly in other comprehensive loss	₩	<u>102,258</u>	<u>(24,213)</u>

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41. Income Tax Expense, Continued

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

<i>(In millions of won)</i>		2023	2022
Profit before income tax	₩	958,248	2,896,405
Income tax using each component's statutory tax rate		282,614	846,892
Adjustment for:			
- Tax effect of non-deductible expenses		13,443	69,572
- Tax effect of non-taxable income		(116,496)	(39,431)
- Tax credits		(20,837)	(23,501)
- Temporary differences of deferred tax not recognized		(41,252)	14,872
- Tax effect of tax rate change		6,477	(28,707)
- Others		48,467	(178,248)
Income tax expense	₩	<u>172,416</u>	<u>661,449</u>
Effective tax rate		17.99%	22.84%

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

<i>(In millions of won)</i>		2023	2022
Deferred tax assets (liabilities) at the end of the period	₩	1,153,922	901,886
Deferred tax assets (liabilities) at the beginning of the period		901,886	(146,634)
Others		-	1,079,578
Deferred tax effects by origination and reversal of temporary differences	₩	<u>(252,036)</u>	<u>31,058</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) The Group sets off a deferred tax asset against a deferred tax liability only if it relates to income taxes levied by the same taxation authority and has a legally enforceable right to set off current tax assets against current tax liabilities.

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41. Income Tax Expense (Benefit), Continued

(7) Deferred tax assets (liabilities) recovery and payment periods are as follows:

(In millions of won)

		2023	2022
Deferred tax assets (liabilities) payment due in 12 months	₩	401,218	450,369
Deferred tax assets (liabilities) payment due after 12 months		752,704	451,517
	₩	<u>1,153,922</u>	<u>901,886</u>

(8) 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
Trade and other receivables	₩	393,500	29,534	423,034
Asset revaluation		(1,018,083)	374,323	(643,760)
Property, plant and equipment		19,732	(84,812)	(65,080)
Derivatives		(8,685)	13,287	4,602
Accrued expenses		47,099	1,560	48,659
Provisions		293,790	(109,794)	183,996
Financial assets measured at FVOCI		1,010	68	1,078
Others		(99,873)	(505,790)	(605,663)
		<u>(371,510)</u>	<u>(281,624)</u>	<u>(653,134)</u>
Tax losses carried forward		1,231,273	529,733	1,761,006
Tax incentives carried forward		42,123	3,927	46,050
	₩	<u>901,886</u>	<u>252,036</u>	<u>1,153,922</u>

(In millions of won)

		2022		
		Beginning balance	Change	Ending balance(*)
Trade and other receivables	₩	110,421	283,079	393,500
Asset revaluation		(476,616)	(541,467)	(1,018,083)
Property, plant and equipment		70,828	(51,096)	19,732
Derivatives		4,128	(12,813)	(8,685)
Accrued expenses		14,230	32,869	47,099
Provisions		115,394	178,396	293,790
Financial assets measured at FVOCI		878	132	1,010
Others		(237,263)	137,390	(99,873)
		<u>(398,000)</u>	<u>26,490</u>	<u>(371,510)</u>
Tax losses carried forward		25,103	17,020	42,123
Tax incentives carried forward		226,263	1,005,010	1,231,273
	₩	<u>(146,634)</u>	<u>1,048,520</u>	<u>901,886</u>

(9) Since it is probable that future taxable profit will be available against which the unused tax losses can be utilized, the Group recognized the related deferred tax assets.

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41. Income Tax Expense , Continued

(10) Expiration date of unrecognized tax loss as of December 31, 2023 is as follows:

(In millions of won)

		2023
2029	₩	382,826
After 2030		1,015,462
Extinction period inexistent		190,513
	₩	<u>1,588,801</u>

42. Earnings per Share

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

(In won, except share data)

		2023	2022
Income for the year, attributable to the owner of the Company	₩	264,480,508,489	1,408,623,309,943
Weighted average number of ordinary shares outstanding (In shares)(*)		70,668,430	70,668,430
Earnings per share	₩	<u>3,743</u>	<u>19,933</u>

(*) Weighted average number of ordinary shares

(In shares)

		2023	
	Number of shares outstanding	Weighted average	Weighted average number of shares outstanding
Beginning balance	70,668,430	365/365	70,668,430
Weighted average number of ordinary shares outstanding			<u>70,668,430</u>

(In shares)

		2022	
	Number of shares outstanding	Weighted average	Weighted average number of shares outstanding
Beginning balance	70,668,430	365/365	70,668,430
Weighted average number of ordinary shares outstanding			<u>70,668,430</u>

(2) As the Group has no dilutive securities for the years ended December 31, 2023 and 2022, diluted earnings per share have not been calculated.

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43. Cash Generated from Operations

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

(In millions of won)

	2023	2022
Profit for the year	₩ 785,832	2,234,955
Adjustments for:		
Post-employment benefit costs	176,196	179,581
Depreciation	1,194,029	1,044,425
Investment property depreciation	5,150	5,532
Right-of-use assets depreciation	335,685	328,052
Amortization	224,019	203,699
Bad debt expenses	(22,636)	(87,603)
Finance income	(706,878)	(989,462)
Finance costs	2,089,827	2,072,493
Share of profit of equity accounted investees (revenue)	47,685	107,373
Other non-operating income	(1,015,499)	(2,830,526)
Other non-operating expenses	385,524	1,955,390
Share of profit of equity accounted investees	(4,162)	63,374
Income tax expense	172,416	661,449
Finance income (revenue)	(47,038)	(53,852)
Finance costs (cost of sale)	21,800	27,580
Changes in assets and liabilities:		
Trade receivables	(329,082)	(79,937)
Other receivables	187,343	(516,388)
Contract assets	(842,987)	(646,480)
Inventories	108,356	(1,767,228)
Firm Commitment assets	742,915	799,026
Derivatives	(382,052)	(360,644)
Other current assets	(480,767)	(480,495)
Long-term trade receivables	822	12,511
Long-term other receivables	1,155	(3,810)
Other non-current assets	(22,700)	(161,473)
Trade payables	472,029	(406,348)
Other payables	62,542	(235,358)
Long-term other payables	5,940	(6,381)
Contract liabilities	3,802,542	3,254,739
Other current liabilities	(2,990)	48,969
Other non-current liabilities	(7,082)	(5,104)
Benefits paid	(249,574)	(328,867)
Succession of benefits	34,286	22,152
Plan assets	(170,445)	(296,149)
Provisions	(1,299,556)	(680,804)
	₩ <u>4,486,813</u>	<u>849,436</u>

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
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43. Cash Generated from Operations, Continued

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

<i>(In millions of won)</i>		2023	2022
Reclassification of construction-in-progress	₩	1,092,899	5,051,852
Trade payable of plant, property and equipment acquisition		(60,882)	59,182
Reclassification of current portion of bond and borrowings		3,914,656	3,592,558
Recognition of right-of-use assets and lease liabilities		141,071	468,648
Reclassification of an associate to subsidiary		-	3,713,038
Reclassification of Other Capital Adjustments to Accounts Payable		139,757	-
Reclassification of convertible debt to convertible preferred stock		197,484	-

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

44. 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)

	Carrying amounts					Fair values
	Fair value – hedging instruments	Financial instruments measured at FVTPL	Financial instruments measured at FVOCI	Financial instruments measured at amortized cost	Others	
Assets carried at fair value:						
Financial instruments(*) ₩	-	105,510	273,694	-	-	379,204
Derivative assets	470,992	-	-	-	-	470,992
Trade and other receivables	-	-	8,154	-	-	8,154
	470,992	105,510	281,848	-	-	858,350
Assets carried at amortized cost:						
Cash and cash equivalents	-	-	-	4,400,503	-	4,400,503
Financial instruments	-	-	-	1,830,180	-	1,830,180
Trade and other receivables	-	-	-	6,709,802	-	6,709,802
Contract assets	-	-	-	7,423,499	-	7,423,499
	-	-	-	20,363,984	-	20,363,984
Financial assets total	470,992	105,510	281,848	20,363,984	-	858,350
Liabilities carried at fair value:						
Financial liabilities	-	8,377	-	-	-	8,377
Trade and other payables	-	391,901	-	-	-	391,901
Derivative liabilities	679,170	-	-	-	-	679,170
	679,170	400,278	-	-	-	1,079,448
Liabilities carried at amortized cost:						
Borrowings	-	-	-	11,459,669	-	11,459,669
Debentures	-	-	-	6,666,518	-	6,666,518
Trade and other payables	-	-	-	8,829,994	-	8,829,994
Lease liabilities	-	-	-	-	1,606,995	1,606,995
Convertible preferred stock	-	-	-	197,484	-	197,484
Financial Guarantee Liabilities	-	-	-	-	1,086	1,086
	-	-	-	27,153,665	1,608,081	28,761,746
Financial liabilities total ₩	679,170	400,278	-	27,153,665	1,608,081	29,841,194

(*) The financial instruments measured at acquisition price as they are not reliably measured at fair value amount to ₩116,729 million.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

44. 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)

	Carrying amounts				
	Fair value –hedging instruments	Financial instruments measured at FVTPL	Financial instruments measured at FVOCI	Financial instruments measured at amortized cost	Fair values
Assets carried at fair value:					
Financial instruments(*)	₩ -	292,183	241,690	-	533,873
Derivative assets	680,160	-	-	-	680,160
Trade and other receivables	-	-	25,949	-	25,949
	680,160	292,183	267,639	-	1,239,982
Assets carried at amortized cost:					
Cash and cash equivalents	-	-	-	3,994,768	-
Financial instruments	-	-	-	1,368,382	-
Trade and other receivables	-	-	-	6,571,901	-
Contract assets	-	-	-	6,647,001	-
	-	-	-	18,582,052	-
	680,160	292,183	267,639	18,582,052	1,239,982
Financial assets total					
Liabilities carried at fair value:					
Financial liabilities	-	67,991	-	-	67,991
Trade and other payables	-	198,260	-	-	198,260
Derivative liabilities	897,192	-	-	-	897,192
	897,192	266,251	-	-	1,163,443
Liabilities carried at amortized cost:					
Borrowings	-	-	-	10,704,115	-
Debentures	-	-	-	7,018,627	-
Trade and other payables	-	-	-	8,465,842	-
Lease liabilities	-	-	-	1,807,754	-
Convertible preferred stock	-	-	-	260,243	-
	-	-	-	28,256,581	-
	897,192	266,251	-	28,256,581	1,163,443
Financial liabilities total					

(*) The financial instruments measured at acquisition price as they are not reliably measured at fair value amount to ₩95,127 million. The Group did not present fair value for financial assets and financial liabilities whose carrying amount is deemed to be a reasonable approximation of fair value.

For the years ended December 31, 2023 and 2022

44. 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	Financial instruments measured at FVOCI	Financial assets at amortized cost	Others	Total
Selling, general and administrative expenses							
Reversal of allowance doubtful accounts	₩	-	-	-	22,636	-	22,636
Finance income							
Interest income		-	692	-	273,720	-	274,412
Dividend income		-	65	8,494	-	-	8,559
Gain on valuation of financial instruments measured at FVTPL		-	12,781	-	-	-	12,781
Gain on disposal of financial instruments measured at FVTPL		-	137,836	-	-	-	137,836
Gain on foreign currency translation		-	-	-	121,592	14,518	136,110
Gain on foreign currency transactions		-	-	-	1,620,927	-	1,620,927
Gain on valuation of derivatives		139,313	-	-	-	-	139,313
Gain on transaction of derivatives		129,772	-	-	-	-	129,772
Gain on redemption of debentures		-	-	-	80	-	80
Others		-	-	-	390	1,567	1,957
Finance cost							
Interest expense		-	(4,894)	-	(853,891)	(52,926)	(911,711)
Loss on valuation of financial instruments		-	(15,033)	-	-	-	(15,033)
Loss on disposal of financial instruments		-	(139,144)	-	-	-	(139,144)
Loss on foreign currency translation		-	-	-	(263,890)	(24,749)	(288,639)
Loss on foreign currency transaction		-	-	-	(1,387,259)	-	(1,387,259)
Loss on valuation of derivatives		(481,888)	-	-	-	-	(481,888)
Loss on transaction of derivatives		(562,497)	-	-	-	-	(562,497)
Loss on disposal of accounts receivables		-	-	-	(29,974)	-	(29,974)
Loss on redemption of debentures		-	-	-	(150,280)	-	(150,280)
Others		-	(92,333)	-	(22,037)	(472)	(114,842)
Other non- operating income (loss)							
Reversal of other allowance doubtful accounts		-	-	-	5,396	-	5,396
Other bad debt expenses		-	-	-	(4,874)	-	(4,874)
Other comprehensive income (loss)							
Gain(loss) on valuation of derivative		(33,699)	-	-	-	-	(33,699)
Losses on valuation of financial instruments measured at FVOCI		-	-	18,022	-	-	18,022
	₩	(808,999)	(100,030)	26,516	(667,464)	(62,062)	(1,612,039)

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44. 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)

		2022			
		Fair value – hedging instruments	Financial instruments measured at FVTPL	Financial instruments measured at FVOCI	Financial assets at amortized cost
					Total
Selling, general and administrative expenses					
Reversal of allowance doubtful accounts	₩	-	-	-	87,603
Finance income					
Interest income		-	2,351	-	169,596
Dividend income		-	1,415	3,657	-
Gain on valuation of financial instruments measured at FVTPL		-	21,396	-	-
Gain on disposal of financial instruments measured at FVTPL		-	157,543	-	-
Gain on foreign currency translation		-	-	-	163,783
Gain on foreign currency transactions		-	-	-	2,557,364
Gain on valuation of derivatives	573,743	-	-	-	-
Gain on transaction of derivatives	102,094	-	-	-	-
Gain on redemption of debentures	-	-	-	-	27
Others	-	-	51,333	-	1,580
Finance cost					
Interest expense	-	-	-	-	(640,541)
Loss on valuation of financial instruments	-	-	(73,892)	-	-
Loss on disposal of financial instruments	-	-	(314,268)	-	-
Loss on foreign currency translation	-	-	-	-	(627,957)
Loss on foreign currency transaction	-	-	-	-	(2,066,872)
Loss on valuation of derivatives	(664,701)	-	-	-	-
Loss on transaction of derivatives	(663,824)	-	-	-	-
Loss on disposal of accounts receivables	-	-	-	-	(22,262)
Others	-	-	(38,247)	-	(1,098)
Other non- operating income (loss)					
Reversal of other allowance doubtful accounts	-	-	-	-	4,466
Other bad debt expenses	-	-	-	-	(5,242)
Other comprehensive income (loss)					
Gain(loss) on valuation of derivative	56,417	-	-	-	-
Losses on valuation of financial instruments measured at FVOCI	-	-	(42,547)	-	(42,547)
₩	(596,271)	(192,369)	(38,890)	(379,553)	(1,207,083)

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
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44. Categories of Financial Instruments and Income and Costs by Categories, Continued

(3) Fair values

(i) 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.

- Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: Inputs other than quoted prices included in 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:

<i>(In millions of won)</i>	Level 1	Level 2	Level 3	Total
2023				
Financial assets measured at FVOCI ₩	96,915	-	135,561	232,476
Financial assets measured at FVTPL	-	10,773	92,731	103,504
Financial liabilities measured at FVTPL	-	5,837	2,540	8,377
Derivative assets	-	470,992	-	470,992
Derivative liabilities	-	679,170	-	679,170
Trade and other receivables	-	8,154	-	8,154
Trade and other payables	172,678	-	219,223	391,901
2022				
Financial assets measured at FVOCI ₩	96,606	177	123,354	220,137
Financial assets measured at FVTPL	-	198,824	92,361	291,185
Financial liabilities measured at FVTPL	-	66,199	1,793	67,992
Derivative assets	-	680,160	-	680,160
Derivative liabilities	-	897,192	-	897,192
Trade and other receivables	-	25,949	-	25,949
Trade and other payables	215,558	-	198,260	413,818

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. The quoted market price used for financial assets held by the Group is the current bid price. These 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.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

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

(3) Fair values, Continued

(i) Fair value hierarchy, Continued

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 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.

(ii) The valuation of the fair value hierarchy Level 2 and inputs description

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

(In millions of won)

	2023	2022	Valuation techniques	Input variables
Financial assets measured at FVOCI:				
Equity securities				Recent transactions and similar transactions and others
	₩ -	177	Market approach	
Derivatives assets:				
Derivatives	470,992	680,160	Cash flow discount model and others	Currency forward price, discount rate and others
Financial assets measured at FVTPL:				
Short-term financial assets and others	10,773	198,824	Market approach, Net asset value, cash flow discount model and others	CFR Future price, Currency forward price, discount rate and other
Trade and other receivables:				
Trade receivable	8,154	25,949	Cash flow discount model and others	Currency forward price, discount rate and others
Derivatives liabilities:				
Derivatives	679,170	897,036	Cash flow discount model and others	Currency forward price, discount rate and others
Financial liabilities measured at FVTPL:				
Derivatives for trading and others	5,819	66,199	Cash flow discount model and others	Currency forward price, discount rate and others
Early redemption right of convertible bonds	18	156	LSMC (Least Square Monte-Carlo)	Stock price, discount rate and others

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Notes to the Consolidated Financial Statements, Continued
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44. Categories of Financial Instruments and Income and Costs by Categories, Continued

(3) Fair values, Continued

(iii) Valuation techniques and significant unobservable inputs at fair value hierarchy Level 3

(a) Changes in financial asset classified as Level 3 in the fair value hierarchy of assets and liabilities measured at fair value for the years ended December 31, 2023 and 2022 are as follows:

(In millions of won)

		2023	2022
Financial assets at FVTPL:			
Beginning balance	₩	92,361	75,017
Acquisition		6,001	551
Disposal		(5,498)	(289)
Profit or loss included in net income		419	2,417
Reclassification		(552)	-
Changes in scope of consolidation		-	14,665
Ending balance	₩	<u>92,731</u>	<u>92,361</u>
Financial assets at FVOCI:			
Beginning balance	₩	123,354	57,650
Acquisition		135	2,646
Disposal		(56)	-
Profit or loss included in comprehensive income		11,951	(8,819)
Reclassification		177	-
Changes in scope of consolidation		-	71,877
Ending balance	₩	<u>135,561</u>	<u>123,354</u>
Financial liability at FVTPL:			
Beginning balance	₩	1,793	-
Profit or loss included in net income		747	(3,141)
Changes in scope of consolidation		-	4,934
Ending balance	₩	<u>2,540</u>	<u>1,793</u>
Trade and other payables			
Beginning balance	₩	198,260	249,592
Profit or loss included in net income		20,963	(51,332)
Ending balance	₩	<u>219,223</u>	<u>198,260</u>

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Notes to the Consolidated Financial Statements, Continued
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44. Categories of Financial Instruments and Income and Costs by Categories, Continued

(3) Fair values, Continued

(iii) Valuation techniques and significant unobservable inputs at fair value hierarchy Level 3, Continued

(b) The valuation technique and inputs 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 is as follows:

(In millions of won)

	Amount	Valuation technique	Input valuables	Significant unobservable inputs	Range of significant unobservable inputs
Financial assets measured at FVTPL:					
	₩	Net assets value model	-	-	-
Equity securities	15,609	Market comparison on technique	PBR	PBR	0.52
Construction Guarantee Cooperation	413	Market comparison on technique	PBR	PBR	0.52
Machinery Financial Cooperation	3,235	Net asset value method	-	-	-
Long-term financial assets	1,303	Net asset value method	-	-	-
Others(*)	72,171	-	-	-	-
	₩ 92,731				
Financial assets measured at FVOCI:					
		Net assets value model			
Equity instrument	134,230	Cash flow discount model, Guideline public company method	Discount rate, PBR	Discount rate, PBR	12.40% 0.39~1.45
Equity instrument(*)	1,331	-	-	-	-
	₩ 135,561				
Financial liabilities measured at FVTPL:					
Put option for share	₩ 2,540	Binominal model	Volatility	Volatility	23.32%
Trade and other payables					
Other accounts payable	₩ 219,224	Cash flow discount model	Discount rate	Discount rate	8.70%

(*) The carrying amount was used as there would be no significant difference between the carrying amount and the fair value.

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Notes to the Consolidated Financial Statements, Continued
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44. Categories of Financial Instruments and Income and Costs by Categories, Continued

(3) Fair values, Continued

(iii) Valuation techniques and significant unobservable inputs at fair value hierarchy Level 3, Continued

(c) The effect of changes in unobservable inputs as of December 31, 2023 on the fair value measurement of financial assets and financial liabilities is as follows:

(In millions of won)

Effects of unobservable inputs on the measurement of fair value			Variation effects of fair value			
Unobservable inputs		Calculating the effects of variation	Profit (loss) for the year		Comprehensive income (loss)	
	value		Favorable change	Unfavorable change	Favorable change	Unfavorable change
Financial assets measured at FVTPL:						
Equity securities	Discount rate	Fair value change as increase (decrease) of discount rate	₩	-	4,801	(3,873)
	Share price multiple	Fair value increase by share price multiple increase		-	-	(408)
Financial assets measured at FVTPL:						
Equity securities and others	Share price multiple	Fair value increase by share price multiple increase		69	(69)	-
Construction Guarantee Cooperation	PBR	Fair value change as increase (decrease) of price-to-book ratio		7	(7)	-
Financial liabilities measured at FVTPL:						
Put option for share	Stock price	Fair value increase by stock price increase		895	(1,115)	-
Trade and other payables						
Other accounts payable	Discount rate	Fair value change as increase (decrease) of discount rate		12,383	(14,008)	-

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

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

(3) Fair values, Continued

(iv) Offsetting of financial assets and financial liabilities

The details of financial assets or financial liabilities netting arrangements as of December 31, 2023 and 2022 are as follows:

(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	₩	155,791	(35,885)	119,906	-	-	119,906
Financial liabilities							
Financial liabilities measured at amortized cost		57,650	(35,885)	21,765	-	-	21,765

(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	₩	27,214	(20,422)	6,792	-	-	6,792
Financial liabilities							
Financial liabilities measured at amortized cost		111,495	(20,422)	91,073	-	-	91,073

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 HYUNDAI CO., LTD. AND SUBSIDIARIES
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45. Financial Risk Management

- (1) Credit risk
(ii) Exposure to credit risk

The carrying amount of financial assets and contract 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(*)	₩	4,398,732	3,988,532
Fair value –hedging instruments		470,992	680,160
Financial instruments measured at FVTPL		105,510	292,183
Financial instruments measured at FVOCI		273,694	241,690
Financial instruments		1,830,180	1,368,382
Trade receivables and other receivables		6,717,956	6,597,850
Contract asset		7,423,499	6,647,001
	₩	<u>21,220,563</u>	<u>19,815,798</u>

(*) Cash in hand were excluded.

The maximum exposure to credit risk for financial guarantees contracts is ₩111,967 million as of December 31, 2023 (See Note 46).

The maximum exposure to credit risk for financial assets at amortized cost (including contract asset) at the reporting date by geographic region are as follows:

<i>(In millions of won)</i>		2023	2022
Korea	₩	6,809,662	4,854,113
North America		424,186	832,582
Asia		4,300,961	3,942,165
Europe		4,061,431	4,316,856
Others		367,240	641,568
	₩	<u>15,963,480</u>	<u>14,587,284</u>

- (ii) Impairment loss

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	₩	14,982,651	(205,043)	13,910,087	(241,918)
Past due up to 6 months		817,306	(20,365)	599,246	(15,355)
Past due 6~12 months		229,422	(20,235)	201,783	(21,057)
Past due 1~3 years		411,217	(268,893)	376,208	(269,181)
More than 3 years		1,220,518	(1,183,098)	1,310,696	(1,263,225)
	₩	17,661,114	(1,697,634)	16,398,020	(1,810,736)

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

45. Financial Risk Management, Continued

(1) Credit Risk, Continued

(ii) Impairment loss, Continued

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:

<i>(In millions of won)</i>		2023	2022
Beginning balance	₩	1,810,736	555,450
Bad debt expenses		53,204	20,558
Reversal of allowance accounts		(75,830)	(108,161)
Write-offs		(97,292)	(9,453)
Effects of changes in scope of consolidation and other		6,816	1,352,342
Ending balance	₩	<u>1,697,634</u>	<u>1,810,736</u>

The allowance accounts in respect of financial assets at amortized cost (including contract asset) are used to record impairment losses unless 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.

For the years ended December 31, 2023 and 2022 impairment losses and impairment reversals that occur in financial assets at amortized cost (including contract asset) recorded as other non-operating income are as follows:

<i>(In millions of won)</i>		2023	2022
Other bad debt expense	₩	4,874	5,242
Reversal of other allowance doubtful accounts		(5,396)	(4,466)
	₩	<u>(522)</u>	<u>776</u>

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

45. Financial Risk Management, 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)

	Carrying amount	Contractual cash flow	1 year or less	1~3 years	More than 3 years
Non-derivative financial liabilities:					
Borrowings	₩ 11,459,669	12,496,603	4,474,371	5,933,742	2,088,490
Debentures	6,666,518	7,187,711	2,356,019	2,866,743	1,964,949
Convertible preferred stock	197,484	197,484	-	197,484	-
Trade and other payables	9,221,895	9,390,082	8,491,229	868,373	30,480
Lease liabilities	1,606,995	1,956,581	358,950	387,756	1,209,875
Derivative financial liabilities:					
Derivative contracts used for hedging	679,170	695,912	500,135	191,086	4,691
Others	5,837	5,837	5,837	-	-
	₩ 29,837,568	31,930,210	16,186,541	10,445,184	5,298,485

As of December 31, 2023, the Group did not include payment amounting ₩2,540 million, which are recognized as financial liabilities measured at FVTPL due to uncertainty of estimated payment time. The maximum amount for financial guarantees contracts is ₩111,967 million as of December 31, 2023 (See Note 46).

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)

	Carrying amount	Contractual cash flow	1 year or less	1~3 years	More than 3 years
Non-derivative financial liabilities:					
Borrowings	₩ 10,704,115	11,644,218	4,648,451	4,108,557	2,887,210
Debentures	7,018,627	7,517,045	2,156,070	3,012,906	2,348,069
Convertible preferred stock	260,243	260,243	260,243	-	-
Trade and other payables	8,664,102	8,981,347	7,864,780	15,081	1,101,486
Lease liabilities	1,807,754	2,322,446	367,314	509,145	1,445,987
Derivative financial liabilities:					
Derivative contracts used for hedging	897,192	926,715	610,084	315,029	1,602
Others	62,698	62,698	62,698	-	-
	₩ 29,414,731	31,714,712	15,969,640	7,960,718	7,784,354

As of December 31, 2022, the Group did not include payment amounting ₩5,293 million, which are recognized as financial liabilities measured at FVTPL due to uncertainty of estimated payment time. The maximum amount for financial guarantees contracts is ₩215,229 million as of December 31, 2022 (See Note 46).

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

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

45. Financial Risk Management, Continued

(2) Liquidity risk, Continued

- (ii) 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			
		Carrying amount	Contractual cash flow	1 year or less	More than 3 years
Currency forward					
Assets	₩	39,415	40,012	39,175	837
Liabilities		(3,947)	(4,132)	(2,495)	(270)
Currency swaps					
Assets		73,746	96,149	66,334	29,815
Liabilities		(4,397)	(5,771)	(2,577)	-
Interest rate swaps					
Assets		379	382	382	-
Liabilities		-	-	-	-
Product forward					
Assets		29,489	29,489	29,489	-
Liabilities		(29,321)	(29,321)	(29,321)	-
Commodity futures					
Assets		169	169	169	-
Liabilities		(50)	(50)	(50)	-
	₩	105,483	126,927	101,106	30,382
					(4,561)

(In millions of won)

		2022			
		Carrying amount	Contractual cash flow	1 year or less	More than 3 years
Currency forward					
Assets	₩	66,117	66,117	66,117	-
Liabilities		(3,896)	(3,896)	(3,896)	-
Currency swaps					
Assets		116,459	138,386	69,303	69,083
Liabilities		(2,469)	(2,470)	-	(2,470)
Interest rate swaps					
Assets		1,231	1,265	872	393
Liabilities		-	-	-	-
Product forward					
Assets		42,629	42,629	42,629	-
Liabilities		(46,116)	(46,116)	(46,116)	-
Commodity futures					
Assets		232	232	232	-
Liabilities		(621)	(621)	(621)	-
	₩	173,566	195,526	128,520	67,006
					-

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

45. Financial Risk Management, Continued

(3) Currency risk

(i) Exposure to currency risk:

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

(In millions of won)

		2023					
		USD	EUR	CNY	JPY	Others	Total
Cash and cash equivalents	₩	1,828,098	309,568	226,196	31,191	91,132	2,486,185
Trade and other receivables		4,031,633	127,686	347,717	33,204	331,036	4,871,276
Contract assets		7,102,344	12,956	104	-	99,896	7,215,300
		12,962,075	450,210	574,017	64,395	522,064	14,572,761
Trade and other payables		(4,803,599)	(443,829)	(287,014)	(1,258,587)	(243,818)	(7,036,847)
Borrowings and debentures		(1,524,035)	(263,719)	(5,812)	(35,153)	(67,467)	(1,896,186)
		(6,327,634)	(707,548)	(292,826)	(1,293,740)	(311,285)	(8,933,033)
Gross statement of financial position exposure		6,634,441	(257,338)	281,191	(1,229,345)	210,779	5,639,728
Derivative contracts		(1,627,745)	(487,262)	-	13,718	747	(2,100,542)
Net exposure	₩	<u>5,006,696</u>	<u>(744,600)</u>	<u>281,191</u>	<u>(1,215,627)</u>	<u>211,526</u>	<u>3,539,186</u>

(In millions of won)

		2022					
		USD	EUR	CNY	JPY	Others	Total
Cash and cash equivalents	₩	1,017,151	7,767	1,767	880	36,146	1,063,711
Trade and other receivables		3,907,875	435,351	32,897	696	301,053	4,677,872
Contract assets		6,386,433	13,469	-	-	113,854	6,513,756
Exposure to assets		11,311,459	456,587	34,664	1,576	451,053	12,255,339
Trade and other payables		(3,577,969)	(249,937)	(243,887)	(13,392)	(258,351)	(4,343,536)
Borrowings and debentures		(1,807,626)	(399,399)	-	(31,299)	(18,286)	(2,256,610)
Exposure to Liabilities		(5,385,595)	(649,336)	(243,887)	(44,691)	(276,637)	(6,600,146)
Gross statement of financial position exposure		5,925,864	(192,749)	(209,223)	(43,115)	174,416	5,655,193
Derivative contracts		(1,676,525)	(218,873)	-	33,552	(118)	(1,861,964)
Net exposure	₩	<u>4,249,339</u>	<u>(411,622)</u>	<u>(209,223)</u>	<u>(9,563)</u>	<u>174,298</u>	<u>3,793,229</u>

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

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

45. Financial Risk Management, Continued

(3) Currency risk, Continued

(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)	₩	150,562	127,480
EUR (3 percent strengthening)		(22,344)	(12,349)
CNY (3 percent strengthening)		8,436	(6,277)
JPY (3 percent strengthening)		(36,472)	(287)
Others (3 percent strengthening)		36,961	5,229

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.

(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:

(In millions of won)

		2023	2022
Fixed rate instruments:			
Financial assets	₩	4,681,045	4,282,352
Financial liabilities		(11,369,383)	(11,482,089)
	₩	(6,688,338)	(7,199,737)
Variable rate instruments:			
Financial assets	₩	1,460,088	1,196,967
Financial liabilities		(6,764,626)	(6,510,876)
	₩	(5,304,538)	(5,313,909)

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

45. Financial Risk Management, Continued

(4) Interest rate risk, Continued

- (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:

(In millions of won, thousands of foreign currencies)

Counterparties	Currency	Amount	Interest rate		Expiration date
Woori Bank	KRW	40,000	Receives floating interest rate	CD(3M) + 1.45%	2024.06.11
			Pays fixed interest rate	3.28%	
Shinhan Bank	EUR	26,000	Receives floating interest rate	EuLibor(3M) +1.22%	2024.12.03
			Pays fixed interest rate	2.89%	
Kookmin Bank	KRW	100,000	Receives fixed interest rate	3.61%	2024.03.08
			Pays floating interest rate	CD(3M) + 1.57%	
KEB Hana Bank	EUR	26,000	Receives fixed interest rate	1.73%	2025.05.27
			Pays fixed interest rate	3.45%	
Shinhan Bank	USD	50,000	Receives floating interest rate	SOFR + 1.15%	2028.07.20
			Pays fixed interest rate	3.73%	
CA-CIB	USD	50,000	Receives floating interest rate	SOFR + 1.15%	2028.07.20
			Pays fixed interest rate	3.73%	
The Korea Development Bank and others	USD	750,000	Receives floating interest rate	US LIBOR(3M)+1.21%~3.18%	2025.07.11
			Pays fixed interest rate	1.47%~4.55%	
Woori Bank	USD	30,000	Receives floating interest rate and USD	3M Compounded SOFR + 0.95%	2025.04.03
			Pays fixed interest rate and KRW	3.63%	
Standard Chartered Bank (China)	CNY	345,500	Receives floating interest rate and CNY	3M Compounded SOFR + 1.18%	2024.05.08
			Pays fixed interest rate and KRW	3.60%	
Shinhan Bank	USD	3,750	Receives fixed interest rate	1.75%	2024.05.20
			Pays fixed interest rate	2.58%	
Suhyup Bank	USD	20,000	Receives floating interest rate	3M SOFR + 1.5%	2024.02.23
			Pays fixed interest rate	5.50%	

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

45. Financial Risk Management, Continued

(4) Interest rate risk, Continued

(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:

(In millions of won)

		Profit or loss	
		100 bp increase	100 bp decrease
2023			
Variable rate instruments	₩	(53,045)	53,045
Interest rate swaps		14,419	(14,419)
Net cash flow sensitivity	₩	<u>(38,626)</u>	<u>38,626</u>
2022			
Variable rate instruments	₩	(53,139)	53,139
Interest rate swaps		15,789	(15,789)
Net cash flow sensitivity	₩	<u>(37,350)</u>	<u>37,350</u>

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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46. Commitments and Contingencies

- (1) As of December 31, 2023, the Group has entered into overdraft agreements with KEB Hana Bank and other financial institutions amounting to ₩50,000 million and general loan agreements with Korea Development Bank and others amounting to ₩10,874,800 million, USD 973,816 thousand, EUR 234,625 thousand, CNY 3,933,240 thousand, INR 2,104,000 thousand, VND 2,600,000 million and NOK 53,655 thousand.
- (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 ₩454,650 million and USD 8,575,105 thousand.
- (3) As of December 31, 2023, the Group has entered into credit facilities agreements such as secured receivables loan with KEB Hana Bank and others totaling ₩862,609 million and USD 1,018,183 thousand and EUR 5,600 thousand. Meanwhile, the Group provides a letter of credit amounting to USD 2,700 thousand, issued by KEB Hana Bank, as a collateral for Atlantic Specialty Insurance Company.
- (4) In relation to the Group's contract performance guarantees of export and domestic construction, as of December 31, 2023, the Group has been provided with maximum guarantees amounting to ₩3,846,758 million, USD 28,977,273 thousand and CNY 213,800 thousand by various financial institutions. Among these guarantees, Export-Import Bank of Korea and others provide payment guarantees within the limit of USD 25,867,816 thousand to the Group for advances from customers for vessel building. For this payment guarantee, the Group pledges its ships under construction and materials for shipbuilding as collaterals.
- (5) As of December 31, 2023, three blank notes have been provided to relevant counterparty as collaterals for the Group's borrowings.
- (6) The Group invested in a resource development project with a consortium including Korea National Oil Corporation and others. During 2013, the consortium in which the Group participated decided to withdraw from the project. As of December 31, 2023, the Group is borrowing from the Korea Energy Corporation in connection with this project.
- (7) During 2023, a subsidiary, HD Korea shipbuilding and offshore engineering Co., Ltd. purchased 4,647,201 convertible preferred shares for ₩409,683 million from a financial investor who participated in the issuance of convertible preferred shares of a subsidiary, Hyundai Samho Heavy Industries & Construction Co., Ltd. In addition, the purchase warrants for HD Korea shipbuilding and offshore engineering Co., Ltd. common shares (1,260,558 shares) allocated to the financial investor were exercised and the difference between the sale price and the purchase price of the warrants was paid in cash in the amount of ₩45,005 million.
- (8) At the time of the capital increase in 2018, HD Korea shipbuilding and offshore engineering Co., Ltd., a subsidiary, provided a joint guarantee with HD Hyundai Heavy Industries Co., Ltd., a subsidiary, for employee stock ownership association to employee stock ownership association members for the allotted shares. However, the Group's obligation to provide a joint guarantee was terminated in March 2022, and other receivables (₩4,100 million) equal to 10% of the employee stock ownership association loan balance pledged to Korea Securities & Finance, a subsidiary, were recovered as of December 31, 2023.
- (9) As of December 31, 2023, HD Hyundai Electric Co., Ltd., a subsidiary, has granted a debt guarantee amounting to ₩44,973 million for the loan for treasury stock of employee stock ownership association based on the board of directors' decision on 2017. The amount of debt is ₩37,477 million at the time of guarantee and the amount of debt guarantee is based on 120% of the debt. Due to the repayment of debt from certain employees' stock ownership association, the remaining balance of debt is ₩2,905 million and debt guarantee is ₩32,683 million as of December 31, 2023.
- (10) As of December 31, 2023, the Group has provided joint and several guarantees for the interest payment of USD 1,876 thousand and CNY 367,768 thousand for other than related parties for the loan amount of ₩2,558 million borrowed from the project implementation fund management agent.

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Notes to the Consolidated Financial Statements, Continued
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46. Commitments and Contingencies, Continued

- (11) As of December 31, 2023, HD Hyundai Construction Equipment Co., Ltd., a subsidiary, provided a debt guarantee amounting to ₩70,250 million for the borrowing of treasury stock of the employee 'shareholders' equity in the amount of the amount allocated for treasury stock issuance on October 31, 2017 by resolution of the board of directors. Debt guarantees amounted to ₩58,542 million at the time of guarantee, and the guaranteed amount is based on 120% of the debt amount. As a result of repayment of loans to certain employees of the Group's employees, the Group's outstanding loan balance amounted to ₩5,839 million as of December 31, 2023, and the amount of the guaranteed guarantee amounted to ₩7,007 million.
- (12) 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 billion 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.
- (13) HD Korea shipbuilding and offshore engineering Co., Ltd. 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 Parent Company before the spin-off in accordance with Article 530, paragraph 9.1 of the Commercial law.
- (14) In accordance with Article 530, paragraph 9.1 of the Commercial law, an existing entity, HD Hyundai Co., Ltd. and newly established entity, HD Hyundai Robotics Co., Ltd. are jointly liable for the liability of HD Hyundai Co., Ltd. prior to split-off.
- (15) For the year ended December 31, 2019, HD Korea shipbuilding and offshore engineering Co., Ltd., a subsidiary 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. In addition, in order to secure the obligation to sell shares in accordance with Hercules Holdings' request for a joint sale, Hyundai Hymys Co., Ltd.'s equity securities held by Korea shipbuilding and offshore engineering Co., Ltd., a subsidiary are provided as collateral to Hercules Holdings.
- (16) As of December 31, 2023, HD Korea shipbuilding and offshore engineering Co., Ltd., a subsidiary 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.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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46. Commitments and Contingencies, Continued

- (17) HD Korea shipbuilding and offshore engineering Co., Ltd., a subsidiary was spun-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, HD Korea Shipbuilding & Offshore Engineering Co., Ltd. and HD Hyundai Heavy Industries Co., Ltd. are responsible for jointly repaying the debts of HD Hyundai Heavy Industries Co. prior to the split. In addition, HD Korea shipbuilding and offshore engineering Co., Ltd., a subsidiary split and merged the investment business of Hyundai Samho Heavy Industries Co., Ltd., a subsidiary, on December 1, 2018. In this regard, HD Korea shipbuilding and offshore engineering Co., Ltd., a subsidiary 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.
- (18) In July 2021, HD Korea shipbuilding and offshore engineering Co., Ltd., a subsidiary 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.

	Details
Buying company	Korea shipbuilding and offshore engineering Co., Ltd
Issue date	July 30, 2021
Type of shares to buy(*)	Ordinary shares of Hyundai Heavy Industries Power systems Co., Ltd
Number of shares	200,000 shares
When to exercise	One event can be held until July 31, 2024.
Exercise Price	Adding 5% of annual compound interest based on IRR from the closing date of the transaction to the payment date of the exercise of option

(*) In January 2022, the common stocks of Hyundai Heavy Industries Power System Co., Ltd. have been changed to non-voting stocks. The stocks can be converted into common stocks from just before the completion of the exercise of the largest shareholders' claim rights, the approval of preliminary listing investigation of Hyundai Heavy Industries Power System Co., Ltd. and the sale of shares accompanying the control change to the third party.

- (19) As of December 31, 2023, the Group has entered into a share option agreement with the Shell Petroleum Company Limited ("Shell"), a shareholder of HD Hyundai Shell Base Oil Co., Ltd. According to the agreement, Shell holds a put option to sell its 40% of shares to HD Hyundai Oilbank Co., Ltd. That evaluated by the external evaluation institution at that time (From August 2014 to August 2021: If the supply of raw materials from HD Hyundai Oilbank Co., Ltd. To HD Hyundai Shell Base Oil Co., Ltd. falls below a certain level, After August 2021: no condition). Also, HD Hyundai Oilbank Co., Ltd. holds a call option to purchase its 40% of shares from Shell that evaluated by the external evaluation institution at that time (From August 2021 to August 2029: If the volume of products purchased from HD Hyundai Shell Base Oil Co., Ltd. falls below a certain level, After August 2029: no condition).
- (20) For the year ended December 31, 2021, the Group disposed of 90% shares of Hyundai Oil Terminal Co., Ltd. which runs terminal business and storage business to Orion Terminal Limited and has entered into trading option agreement on the terminal business. According to the agreement, the Group holds a call option to purchase the terminal business from August 2026 to August 2031 if the operating profit of terminal business in each fiscal year since the transaction date exceeds 3 times of those in 2020. Also, Orion Terminal Limited holds a put option to sell the terminal business from August 2026 to August 2031 if the Group sells more than 3 oil storage places to 3rd party since the transaction date.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
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46. Commitments and Contingencies, Continued

- (21) As of December 31, 2023, the Group has been provided guarantees of ₩948,000 million for the borrowings from Lotte Chemical Co., Ltd.
- (22) The Group has entered into consignment operation agreement of logistics centers with HD Hyundai Oil Terminal Co., Ltd. on August 11, 2021 and consigned operation of oil storage locations that HD Hyundai Oilbank Co., Ltd. holds from August 20, 2021 to December 31, 2030.
- (23) The Group has entered into arrangement agreement with respect to use of the trademark on August 11, 2021 that Hyundai Oil Terminal Co., Ltd. provides its trademark for 10 years since August 11, 2021 (Both parties hold rights to terminate at will).
- (24) As of December 31, 2023, the Group has entered into a contract with shareholders that grants call options to Aramco Overseas Company B.V., 2.9% of the interest in HD Hyundai Oilbank Co., Ltd.

	Details
Date of issue	December 17, 2019
Quantity	7,107,390 shares (2.9%)
Exercise period	Within 5 years from the date of issue (or before IPO)
Exercise price (In won)	₩33,000 per share

- (25) HD Hyundai Oilbank Co., Ltd., a subsidiary, has entered into LNG supply agreement that Hyundai Oilbank Co., Ltd. shall purchase fixed amount of LNG from KOGAS on October 31, 2021. According to the agreement, it comes into force in October 2025 and supply period is from March 2026 to December 31, 2034.
- (26) As of December 31, 2023, HD Hyundai Oilbank Co., Ltd., a subsidiary, has signed a long-term crude oil purchase contract and refinery product supply contract with Saudi Aramco and others, and the details of the

	Contract for the sale of crude oil equipment		Refinery product supply contract
The counterparty to the contract	Saudi Arabian Oil Company	Aramco Trading Co(*)	Aramco Trading Singapore Pte Ltd.
Contract period	2020.01.01 ~ 2039.12.31		2020.02.01 ~ 2039.12.31
Contracted product	Saudi crude oil	Saudi and others' crude oil	Gasoline, diesel, aviation oil

contract are as follows:

(*)Crude oil purchase agreements are with subsidiaries of Aramco Trading Company under which Aramco Trading Company's right to sell crude oil is assignable to the subsidiaries.

- (27) As of December 31, 2023, the Group has entered into a lease contract with Koramco Life Infra Reit Co., Ltd, and the contract period is 10 years from the commencement date of the contract, June 1, 2020. The Group has an option to extend the contract period by 5 years if requested by the Group before two and a half years from the closing date of the contract.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

46. Commitments and Contingencies, Continued

(28) As of December 31, 2023, the Company has entered into the contract with shareholders that compensates for the difference and grants put options to 38% of HD Hyundai Marine Solution Co., Ltd. shares that Global Vessel Solutions, L.P. holds.

1) Make-whole payment

	Details
Authorizer	HD Hyundai Co., Ltd.
Requirements	Offering price is less than entry price
Underlying asset	HD Hyundai Marine Solution Co., Ltd. stock
Exercise price	Offering price – entry price

2) Put option

	Details
Authorizer	HD Hyundai Co., Ltd.
Requirements	Failure of IPO of HD Hyundai Marine Solution Co., Ltd.
Maturity date	Within 5 years from the date of issue (eligible for a 1-year extension)
Exercise price	Max (entry price, price at exercise date)

(29) As of December 31, 2023, a portion of the convertible bonds of HD Hyundai XiteSolution.,Ltd. held by KDB Investment No.2 Limited were converted into convertible preferred shares (19.78% interest), which included a purchase right agreement.

	Details
Companies for the exercise of purchase rights	The Group or a third party designated by the Group
Type of targeted shares	The preferred shares of HD Hyundai Xitesolution Co., Ltd. with voting rights attached, and convertible into common shares
Number of targeted shares / Investment amount	400,922 shares / ₩200,000 million
Purchase right amount	Investment and unpaid dividends
Conditions for exercising purchase rights	Either shareholders exercise an option for the postponement of IPO or withdraw the existing share sales

(30) As of December 31, 2023, HD Hyundai Chemical Co., Ltd., a subsidiary has a long-term raw material supply contract with Lotte Chemical Co., Ltd. for 20 years from 2016 to 2036.

(31) As of December 31, 2023, the Group has entered into a business consignment agreement with HD Hyundai Cosmo Petrochemical Co., Ltd., a joint venture. Under the agreement, the Group has agreed to provide services such as dispatching personnel to provide services related to HD Hyundai Cosmo Petrochemical Co., Ltd.'s business operations and receive compensation.

(32) As of December 31, 2023, the Group has entered into a trade receivables discounting agreement with Woori Bank for a credit limit of ₩30,000 million related to the payment of purchase funds to its subsidiaries and joint ventures.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

46. Commitments and Contingencies, Continued

- (33) As of December 31, 2023, HD Hyundai Oilbank Co., Ltd., a subsidiary, is providing a blank promissory note to Korea Petroleum Corporation as collateral for the lease of petroleum reserves.
- (34) As of December 31, 2023, HD Hyundai OCI Co., Ltd., a subsidiary, has entered into a carbon black production technology design contract with OCI Co., Ltd. Under the contract, HD Hyundai OCI Co., Ltd is obligated to pay a certain percentage of the annual revenue of the carbon black product for five years, including the year in which the third anniversary of commercial operation falls. In addition, As of December 31, 2023, Hyundai OCI is receiving the raw material, coal tar, from Hyundai Steel Co., Ltd. under a supply contract that is valid until December 31, 2036. The contract will be automatically renewed on an annual basis under the same conditions unless of its intention not to extend the contract.
- (35) The Group has issued ~~₩~~25,000 million of unsecured corporate bonds with warrants in May 4, 2023. The Group has granted a security interest in its construction payment collection account and reserve account to the bondholders and pledged its payment rights in connection with the Taeon 5-8 Low-Carbon Indoor Emissions Reduction Project.
- (36) As of December 31, 2023, the Group has pledged the building of the HD Hyundai Group Global R&D Center as collateral to the Korea Development Bank and others for facility borrowings of ~~₩~~30,000 million.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

47. Litigations

(1) Claim for Ordinary wage (Busan High Court 2022na29)

Date of filing	December 28, 2012.
Litigant	Plaintiff: Kyung-Hwan Jeong and nine others, Defendant: HD Hyundai Co., Ltd. Took over the lawsuit
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) and the third trial remanded on December 16, 2022. Remand after reversal filed (Busan High Court 2022 na 29) on January 3, 2022. First adjustment on July 20, 2022. Second adjustment on August 17, 2022. Third adjustment on September 21, 2022. Fourth adjustment on December 3, 2022. Decision Superseding Adjustment (Compulsory Adjustment) on December 28, 2022. Termination of Compulsory Adjustment on January 12, 2023.
Future litigation schedule and countermeasures	The case was closed with the finalization of the compulsory conciliation decision, and as of December 31, 2023, the Group is in the process of paying the outstanding statutory benefits.
The effect on the Group as a result of litigation	As of December 31, 2023, the process for payment of unpaid statutory benefits is ongoing in accordance with the above court ruling.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

47. Litigations, Continued

(2) Claim for Ordinary wage (Busan High Court 2022na12)

Date of filing	December 12, 2012. (Remand after reversal filed to Supreme court : on January 3, 2022).
Litigant	Plaintiff: Jang and four others, Defendant: Hyundai Mipo Dockyard Co., Ltd.
Litigation content	Plaintiff filed a suit claiming that total bonuses, summer vacation subsidy, Holiday travel subsidy, birthday bonus, Individual pension subsidy should be included in the ordinary wage category and in recent 3 years (December 28, 2009 ~ December 27, 2012, now changed to May 31, 2014), wages based on ordinary wage such as various legal allowance, incentive, retirement pay have not been paid in full.
Litigation value	₩270 million
The progress of litigation	Plaintiff partially won (appeal from both parties) on February 12, 2015. Plaintiff lost appellate court(Defendant totally won) on January 13, 2016. Plaintiff filled appeals and the third trial(appellate court)is in progress on January 28, 2016. In discussion regarding the point of contention on October 18, 2016. Submission of an appeal statement of reasons on December 4, 2018. Submission of a defendant's response statement and submission of an opinion statement on May 14, 2019 ~ January 6, 2020. Submission of a labor union petition (requesting expedited verdict) on November 16, 2020. Judgment ruling (defendant's appeal rejected and decision returned for annulment) on December 16, 2021. Remand after reversal filed (Busan High Court 2022 na 29) on January 3, 2022. First adjustment on July 20, 2022. Second adjustment on August 17, 2022. Third adjustment on September 21, 2022. Fourth adjustment on December 3, 2022. Decision Superseding Adjustment (Compulsory Adjustment) on December 28, 2022. Termination of Compulsory Adjustment on January 12, 2023.
Future litigation schedule and countermeasures	The case was closed with the finalization of the compulsory conciliation decision, and as of December 31, 2023, the Group is in the process of paying the outstanding statutory benefits.
The effect on the Group as a result of litigation	As of December 31, 2023, the process for payment of unpaid statutory benefits is ongoing in accordance with the above court ruling.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

47. Litigations, Continued

(3) Arbitration for a claim related to KOC

Date of filing	February 17, 2020
Litigant	Plaintiff: Kuwait Oil Company, Defendant: HD Korea Shipbuilding & offshore Engineering Co., Ltd. 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	<p>The KOC filed a request for arbitration with the London Court of International Arbitration (LCIA) on February 17, 2020.</p> <p>The KOC submitted a statement of claiming compensation for a defect to the part of construction on January 30, 2021.</p> <p>The Group submitted refutation document for the plaintiff's statement on May 7, 2021.</p> <p>The KOC submitted response and the Group submitted refutation document on June 25, 2021.</p> <p>Completion of 'Document Production' procedure on November 16, 2021.</p> <p>Submission of witness statement on March 21, 2022.</p> <p>Submission of witness response statement on May 16, 2022.</p> <p>Submission of first expert opinion statement on July 9, 2022.</p> <p>Submission of second expert opinion statement on September 30, 2022.</p> <p>International arbitration proceedings (1st) on October 25, 2022.</p> <p>International arbitration proceedings (2nd) on January 26, 2023.</p> <p>Arbitration Award on April 27, 2023. (HD Hyundai Heavy Industries Co., Ltd. awarded damages and related interest to KOC)</p> <p>Arbitration cost-sharing award on June 2, 2023 (finalized)</p>
Future litigation schedule and countermeasures	The arbitration has been finalized and the Group has paid the judgment, interest and costs in accordance with the award.
The effect on the Group as a result of litigation	As a result of the arbitration award, a net income-based charge of ₩71 billion was recognized in the 2023 consolidated financial statements.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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47. Litigations, Continued

(4) The transformer's second annual antidumping appeal (US Court of Appeals for the Federal Circuit)

Date of filing	March 31, 2016.
Litigant	Plaintiff: ABB, INC., Defendant: United States Government
Litigation content	In March 2016, ABB, INC., appealed the US Department of Commerce's antidumping duties determination rate of 4.07% in the second annual review to the United States Court of International Trade (CIT).
The progress of litigation	The International Trade Court upheld a 16.13% tariff rate at the U.S. Department of Commerce on May 26, 2021 (U.S time). Appeals to Court of Appeals for the Federal Circuit (CAFC) on July 24, 2020. Following Court of Appeals for the Federal Circuit (CAFC)'s remand decision. The United States Department of Commerce (DOC) will reassess the tariff rates on May 24, 2022. The United States Department of Commerce (DOC) determination of duty rate redetermination-4.69% on July 25, 2023. The United States Court of International Trade (CIT) affirmed the United States Department of Commerce (DOC) duty rate redetermination decision On September 19, 2023. The United States Department of Commerce (DOC) of Commerce liquidation instruction issued to U.S. Customs and Border Protection (CBP) on December 9, 2023.
Future litigation schedule and countermeasures	-
The effect on the Group as a result of litigation	U.S. Customs and Border Protection (CBP) calculated duties on the product and will refund some of the duties, as determined by the U.S. Court of International Trade (CIT), because the complainant did not appeal.

(5) Counterindemnity charged sue related to LPG price-fixing (Seoul Central District Court 2012 gahap 85828 and three cases)

Date of filing	April 2, 2010 etc.
Litigant	Plaintiff: Taxi operator, the disabled and others, Defendant: HD Hyundai Oilbank Co., Ltd. and six others
Litigation content	The Fair Trade Commission imposed fines on two LPG importers and four domestic oil refinery companies including subsidiaries for alleged collusive price-fixing on LPG prices from January 1, 2003 to December 31, 2008. 1,751 private taxi drivers, corporate taxi drivers and others jointly filed a lawsuit against four domestic oil refinery companies including Hyundai Oilbank Co., Ltd. and two LPG importers claiming damages. On the other hand, Hyundai Oilbank Co., Ltd., has filed a lawsuit against Fair Trade Commission Hyundai Oilbank and filed a lawsuit against Hyundai Oilbank and won on revocation lawsuit and corrective order.
Litigation value	₩28,450 million
The progress of litigation	The first trial suit is currently pending (Seoul Central District Court)
Future litigation schedule and countermeasures	The Group plans to appeal against the decision, in case it loses the first trial (entirely or partly).
The effect on the Group as a result of litigation	If HD Hyundai Oilbank Co., Ltd., a subsidiary, loses the case, it is expected to make an additional loss from compensation. Currently, the impact on the Group's financial statement, if any, cannot be reliably estimated.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

47. Litigations, Continued

- (6) Counterindemnity charged sue related to land contamination for Hankook Shell Oil Co., Ltd. (Seoul High District Court 2018 na 2052465)

Date of filing	February 21, 2012
Litigant	Plaintiff: Hankook Shell Oil Co., Ltd., Defendant: HD Hyundai Oilbank Co., Ltd.
Litigation content	Hankook Shell Oil Co., Ltd. filed litigation for damages of contamination clean-up costs and others including already accrued costs and costs likely to accrue in the future due to fuel spills at Busan refinery in the past and current Busan oil reservoir of HD Hyundai Oilbank Co., Ltd. on the site of the Hankook Shell Oil Co., Ltd.
Litigation value	₩ 14,244 million (Decreased the purpose of the plaintiff's claim from ₩ 14,775 million)
The progress of litigation	The first trial suit is partially won on August 20, 2022. The second trial suit and appeal on September 10, 2022. According to the first sentence, the quotation amount was ₩ 7,970 million. If the Group misses the payment, it incurs arrear interest, and therefore the Group paid Hankook Shell Oil Co., Ltd. ₩ 11,030 million (quotation amount ₩ 7,970 million and arrear interest as of August 20, 2022 ₩ 3,060 million).
Future litigation schedule and countermeasures	Currently pending in the appeals court (Seoul High Court) and will be appealed even if a part of it is lost.
The effect on the Group as a result of litigation	If HD Hyundai Oilbank Co., Ltd. loses the case, it is expected to make an additional loss from compensation. Currently, the impact on the Group's financial statement, if any, cannot be reliably estimated.

- (7) Agent fee payment arbitration (ICC CASE 26781/XZG)

Date of filing	December 28, 2021
Litigant	Applicant: Display Technology Service Co., Ltd. Respondent: HD Hyundai robotics Co., Ltd
Litigation content	Regarding the 'Sales Agent Agreement' signed with the Company, the applicant claims that Hyundai Robotics' termination of the contract is illegal, and claims agent fee and compensation for damages.
Litigation value	₩ 3,600 million and USD 1.26 million
The progress of litigation	Submission of Request for Arbitration by Applicant on December 28, 2021. Submission of Respondent filing counterclaim on May 20, 2022. Conduct of the proceedings of arbitration on February 20, 2023. Arbitration proceedings concluded on May 29, 2023. Draft Award sent to the ICC on May 30, 2023. Award received (awarding approximately USD 2.02 million of DTS's claim and dismissing all HRC counterclaims) on August 9, 2023.
The effect on the Group as a result of litigation	As a result of the arbitration award, an expense of ₩ 1,900 million based on net income was recognized in the consolidated financial statements in 2023, and ₩ 800 million will be recognized in the consolidated financial statements for the satisfaction of contractual conditions.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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47. Litigations, Continued

(8) Lawsuit to revoke the invalidation of a trademark registration

Date of filing	November 16, 2022
Litigant	Plaintiff: Hyundai Technology (Puerto Rico) Defendant: The Parent Company
Litigation content	The Plaintiff claimed that the parent company trademark (Hyundai Connect), which was registered in May 2020, was similar to their pre-registered trademark (Hyundai) and filed a petition for invalidation with the Patent Trial and Appeal Board. In September 2022, the plaintiff lost the case at the Patent Trial and Appeal Board. Therefore, the plaintiff filed a lawsuit to cancel the decision of invalidation on November 16, 2022, with the Patent Court in appeal of the previous decision.
Litigation value	₩ 100 million
The progress of litigation	Hyundai Technology files a lawsuit on November 17, 2022. The parent company submits a preparation document on January 30, 2023. The parent company won at the 1 st trial on July 14, 2023. Plaintiffs filed an appellate brief on July 28, 2023. Supreme Court accepted the case on August 4, 2023. Start of legal review including reasons for appeal on September 21, 2023. Dismissal of the appeal (finalized) on November 16, 2023.
Future litigation schedule and countermeasures	-

(9) U.S. Product Liability Claims

Date of filing	March 29, 2023
Litigant	Plaintiff: Roseann M. Wendeln Defendant: HD Hyundai Construction Equipment Co.,Ltd. and 7 other companies
Litigation content	The plaintiff filed a lawsuit against us in Lucas County Court, claiming USD 50 million in damages under the Product Liability Act.
Litigation value	USD 50 million
The progress of litigation	Roseann M. Wendeln filed a lawsuit on March 29, 2023.
Future litigation schedule and countermeasures	The Group has product liability insurance and will actively respond to the legal proceedings in consultation with the Group's U.S. legal counsel and the insurer's legal counsel.
The effect on the Group as a result of litigation	As of December 31, 2023, the outlook for litigation cannot be predicted.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
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47. Litigations, Continued

(10) UAE Dealer Damages Lawsuit

Date of filing	June 28, 2022
Litigant	Plaintiff: AL WASIT MACHINERY TRAD. EST. Defendant : HD Hyundai Construction Equipment Co.,Ltd
Litigation content	The plaintiff filed a lawsuit in the UAE court against HD Hyundai Construction Equipment, a subsidiary, alleging that the termination of the dealer agreement was improper and claiming USD 100 million in damages.
Litigation value	USD 100 million
The progress of litigation	Plaintiff Al Wasit's claim dismissed for lack of jurisdiction by the first instance court on September 28, 2022. Plaintiff filed an appeal against the first instance dismissal on October 28, 2022. Court of Appeals dismissed plaintiff's appeal, also for lack of jurisdiction on December 14, 2022. Plaintiff appealed the Court of Appeal's dismissal of the case on January 24, 2023.
Future litigation schedule and countermeasures	The plaintiff filed an appeal after the first trial was dismissed for lack of jurisdiction on September 28, 2022, and the second trial was dismissed for the same reason on December 14, 2022, and the Group plans to actively respond according to legal procedures.
The effect on the Group as a result of litigation	As of December 31, 2023, the outlook for litigation cannot be predicted.

(11) Belgian Dealer Damages Lawsuit

Date of filing	June 30, 2022
Litigant	Plaintiff: Raepers NV Defendant : HD Hyundai Construction Equipment Europe N.V.
Litigation content	Claim against HD Hyundai Construction Equipment Europe N.V., a subsidiary, alleging that the termination of the dealer agreement was unlawful and claiming damages of €10 million.
Litigation value	€10 million
The progress of litigation	Raepers NV filed a lawsuit on June 30, 2022. Declaration of judgment of the first instance (dismissal of the plaintiff's claim) on November 29, 2023.
Future litigation schedule and countermeasures	The Group vigorously defends that the plaintiff's claims are unfounded and that it lawfully terminated the contract based on the plaintiff's breach of key obligations under the dealer agreement
The effect on the Group as a result of litigation	As of December 31, 2023, the outlook for litigation cannot be predicted.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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47. Litigations, Continued

(12) Belgian Dealer Damages Lawsuit

Date of filing	November 7, 2019
Litigant	Plaintiff: Pole Mat Defendant: HD Hyundai Construction Equipment Europe N.V.
Litigation content	The plaintiff filed a lawsuit against HD Hyundai construction Equipment Europe N.V., a subsidiary of Pole Mat, in a Belgian court, alleging that the termination of the dealer agreement was unlawful and claiming EUR 15 million in damages.
Litigation value	EUR 15 million
The progress of litigation	Pole Mat filed a lawsuit on November 7, 2019. First instance judgment handed down (dismissal of plaintiff's claim) on October 9, 2021. Plaintiff appealed on January 12, 2022. Plaintiff's appeal dismissed on November 8, 2023.
Future litigation schedule and countermeasures	The Group will continue to respond aggressively to win the appeal as it did in the first trial.
The effect on the Group as a result of litigation	As of December 31, 2023, the outlook for litigation cannot be predicted.

(13) U.S. Attorney Damages Lawsuit

Date of filing	September 29, 2023
Litigant	Plaintiff: John Y. Lee Defendant: HD Hyundai Construction Equipment Co.,Ltd. and HD Hyundai Construction Equipment North Americas, Inc.
Litigation content	Plaintiff John Y. Lee, formerly counsel to HD Hyundai Construction Equipment North Americas, Inc, filed a lawsuit in Cook County Court against the controlling company alleging that he suffered substantial damages as a result of HD Hyundai Construction Equipment North Americas, Inc's involvement in emissions violations.
Litigation value	USD 48.9 million
The progress of litigation	John Y. Lee filed a lawsuit on September 29, 2023.
Future litigation schedule and countermeasures	The Group plans to respond vigorously to the legal proceedings.
The effect on the Group as a result of litigation	As of December 31, 2023, the outlook for litigation cannot be predicted.

(14) Claim for additional construction costs (Korean Commercial Arbitration Center Arbitration No. 23111-0224)

Date of filing	October 27, 2023
Litigant	Plaintiff: DL E&C Co.,Ltd. Defendant: HD Hyundai Construction Equipment Co.,Ltd. and HD Hyundai Construction Equipment North Americas, Inc.
Litigation content	DL E&C Co.,Ltd. performed the HPC Project Package 3 construction ordered by HD Hyundai Chemical Co.,Ltd. and applied for arbitration to the Korea Commercial Arbitration Institute, claiming that it should be paid an additional construction price of approximately ₩ 38,400 million in addition to the settlement amount already paid.
Litigation value	₩ 38,400 million
The progress of litigation	Application for arbitration (date of service of arbitration application on November 13, 2023) on October 27, 2023. Notification of the formation of the arbitral tribunal on January 19, 2024.
Future litigation schedule and countermeasures	Arbitration proceedings are currently underway, and an arbitration date will be set in the future.
The effect on the Group as a result of litigation	As of December 31, 2023, the outlook for litigation cannot be predicted.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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47. Litigations, Continued

(15) Claim for additional construction costs (Korean Commercial Arbitration Center Arbitration No. 23111-0224)

Date of filing	December 23, 2023
Litigant	Plaintiff: LOTTE Engineering & Construction Co.,Ltd. Defendant: HD Hyundai Chemical Co., Ltd.
Litigation content	LOTTE Engineering & Construction Co.,Ltd. applied to the Korea Court of International Arbitration for Commercial Arbitration, claiming that it should be paid approximately ₩65,200 million in addition to the settlement amount already paid for the HPC Project Package 2, which was ordered by HD Hyundai Chemical Co.,Ltd.
Litigation value	₩65,200 million
The progress of litigation	Application for arbitration (date of service of arbitration application on December 29, 2023) on December 13, 2023.
Future litigation schedule and countermeasures	Arbitration proceedings are currently underway, and an arbitration date will be set in the future.
The effect on the Group as a result of litigation	As of December 31, 2023, the outlook for litigation cannot be predicted.

(16) In addition to the cases mentioned above, the Group is facing 184 lawsuits left (amounting to ₩238 billion). Currently, the impact on the Group's consolidated financial statement, if any, cannot be reliably estimated. However, the management of the Group believes that the ultimate outcomes will not have a significant impact on the Group's consolidated financial statement.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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48. Related Parties

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

Description	Company	Main business
Joint ventures(*1)	HD Hyundai Cosmo Petrochemical Co., Ltd.	Manufacture of basic chemicals for petrochemical industry
	Saudi Engines Manufacturing Company	Manufacture, assemble and test of marine engines and parts
	Doosan Infracore Liaoning Machinery Sales Co., Ltd	Sale of excavator
	Mirae asset-Hyundai Heavy Industries holdings Co., Ltd Growth Opportunity Securities Investment joint No. 1	New technology business investment service
Associates(*1)	KC LNG tech Co., Ltd.	Other engineering service
	ZVEZDA-HYUNDAI LLC	Shipbuilding
	International Maritime Industries Company	Shipbuilding
	Hyundai Green Industries Co. W.L.L.	Education
	New Korea Country Club	Country club
	Hyundai Hymys Co., Ltd.	Sale and manufacture of machinery equipment for shipbuilding
	Potenit Co., Ltd	Manufacturing of robot
	Koramco Life Infra Reit Co.,Ltd and others(*2)	Real estate investing company and others
	Daehoji Solar park Co., Ltd.	Solar power generation business
	Palantir Technologies Korea LLC	Other Investment
	REL KUMBHARI SOLAR PROJECT 4 Pvt Ltd	Solar power generation business
Others	Elcogen Group PLC	Fuel cell component manufacturing
	Aramco Overseas Company B.V and subsidiaries and others	Oil refinery and others

(*1) Including associates and joint ventures` subsidiaries.

(*2) During the year, Koramco Energy Plus Reit Co.,Ltd changed its name to Koramco Life Infra Reit Co.,Ltd.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

48. Related Parties, Continued

(2) Transactions with related parties

- 1) Significant transactions for the years ended December 31, 2023 and 2022 with related parties are as follows:
(In millions of won)

Description	2023		
	Revenue and other	Purchases and other	
	Revenue(*1)	Purchase of raw materials	Others purchase(*2)
Associates:			
Hyundai Hymys Co., Ltd.	₩ 7,669	178,250	1,695
International Maritime Industries Company	15,717	-	-
Palantir Technologies Korea LLC	-	-	17,045
Koramco Life Infra Reit Co., Ltd and 3 companies	1,146	21	11,516
Other	544	75	766
	25,076	178,346	31,022
Joint ventures:			
HD Hyundai Cosmo Petrochemical Co., Ltd.	1,615,280	1,024,390	2,541
Saudi Engines Manufacturing Company	6,738	-	-
Doosan Infracore Liaoning Machinery Sales Co., Ltd	2,074	-	-
Mirae asset-Hyundai Heavy Industries holdings Co., Ltd Growth Opportunity Securities Investment joint No. 1	201	-	-
	1,624,293	1,024,390	2,541
Other related parties (large-scale corporate conglomerate):			
S-Oil Co., Ltd.(*3)	701,829	15,261	681,062
Saudi Arabian Oil Company(*4)	-	5,297,341	-
Aramco Trading Limited(*4)	-	3,436	-
Aramco Trading Company(*4)	-	1,547	-
Aramco Trading Singapore Pte Ltd.(*4)	4,508,254	5,449,329	6,243
Aramco Trading Fujairah FZE(*4)	-	78,111	-
	5,210,083	10,845,025	687,305
	₩ 6,859,452	12,047,761	720,868

(*1) Including sales of property, plant and equipment, interest income and others.

(*2) Including acquisition of property, plant and equipment, interest expense and others.

(*3) Amounts resulting from inventory exchange between S-Oil Co., Ltd and HD Hyundai Oilbank Co., Ltd are included.

(*4) Aramco Overseas Company B.V and HD Hyundai Oilbank Co., Ltd. have signed long-term crude oil purchase and refinery supply contracts.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
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48. Related Parties, Continued

(2) Transactions with related parties, Continued

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

(In millions of won)

(In millions of won)

Description	2022		
	Revenue and other	Purchases and other	
	Revenue(*1)	Purchase of raw materials	Others purchase(*2)
Associates:			
Korea Shipbuilding & Offshore Engineering Co., Ltd.(*5)	₩ 58	101	5,142
International Maritime Industries Company	11,756	-	-
Hyundai Hymys Co., Ltd.(*6)	6,462	116,166	80
Koramco Energy Plus Reit and 3 companies	391	525	9,958
Other(*5)	4,467	171	584
	23,134	116,963	15,764
Joint ventures:			
HD Hyundai Cosmo Petrochemical Co., Ltd.	2,312,245	1,425,179	3,348
Saudi Engines Manufacturing Company(*6)	4,250	-	-
Doosan Infracore Liaoning Machinery Sales Co., Ltd	8,605	-	-
Mirae asset-Hyundai Heavy Industries holdings Co., Ltd Growth Opportunity Securities Investment joint No. 1	201	-	-
Haining Hagong Hyundai Robotics. Co., Ltd.(*7)	7,658	19	-
Tianjin Hyundai Doosan Engine Company LTD.(*8)	4,718	22,032	269
	2,337,677	1,447,230	3,617
Other related parties (large-scale corporate conglomerate):			
Hyundai Heavy Industries Co., Ltd.(*5)	29,032	2,884	6,069
Hyundai Samho Heavy Industries Co., Ltd.(*5)	8,607	9	1
Hyundai Mipo Dockyard Co., Ltd.(*5)	7,238	37	20
Ulsan Hyundai Football Club Co., Ltd.(*5)	6	-	5,596
S-Oil Co., Ltd.(*3)	781,867	26,499	652,905
Saudi Arabian Oil Company(*4)	-	5,590,594	-
Aramco Trading Limited(*4)	-	1,539,982	-
Aramco Trading Company(*4)	2,794	1,163,907	-
Aramco Trading Singapore Pte Ltd.(*4)	5,814,289	3,017,625	5,269
Aramco Trading Fujairah FZE(*4)	-	455,742	3,836
Others	1,139	1,953	2,247
	6,644,972	11,799,232	675,943
	₩ 9,005,783	13,363,425	695,324

(*1) Including sales of property, plant and equipment, interest income and others.

(*2) Including acquisition of property, plant and equipment, interest expense and others.

(*3) Amounts resulting from inventory exchange between S-Oil Co., Ltd and Hyundai Oilbank Co., Ltd are included.

(*4) Aramco Overseas Company B.V and Hyundai Oilbank Co., Ltd. have signed long-term crude oil purchase and refinery supply contracts.

(*5) The transaction amount before the reclassification when acquiring controlling in Korea Shipbuilding & Offshore Engineering Co., Ltd., which were previously classified as associates, is the amount of the transaction before the reclassification.

(*6) The transaction amount after the reclassification when acquiring controlling in Korea Shipbuilding & Offshore Engineering Co., Ltd., which were previously classified as associates, is the amount of the transaction after the reclassification.

(*7) Excluded from related parties and the transaction amount is before the reclassification.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

48. Related Parties, Continued

(2) Transactions with related parties, Continued

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

(*8) The transaction amount before the reclassification when acquiring controlling in Tianjin Hyundai Doosan Engine Company LTD., which was previously a joint venture, is the amount of the transaction before the reclassification.

- 2) Outstanding balances as of December 31, 2023 and 2022 between the Group and associates or joint ventures 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)
Associates:				
International Maritime Industries Company	6,830	-	-	-
Hyundai Hymys Co., Ltd.	660	3,677	13,605	1,603
Koramco Energy Plus Reit and 3 companies	-	77,154	-	179,170
Other	409	-	746	-
	<u>7,899</u>	<u>80,831</u>	<u>14,351</u>	<u>180,773</u>
Joint ventures:				
Hyundai Cosmo Petrochemical Co., Ltd.(*1)	160,430	1,161	11,715	14,278
Saudi Engines Manufacturing Company	1,275	-	-	-
Doosan Infracore Liaoning Machinery Sales Co., Ltd	130	-	-	47
Mirae asset-Hyundai Heavy Industries holdings Co., Ltd	-	-	-	-
Growth Opportunity Securities Investment joint No. 1	-	51	-	-
	<u>161,835</u>	<u>1,212</u>	<u>11,715</u>	<u>14,325</u>
Other related parties (large-scale corporate conglomerate):				
S-Oil Co., Ltd.	-	22,046	641	2
Saudi Arabian Oil Company	-	-	324,391	-
Aramco Trading Limited	-	-	261	-
Aramco Trading Company	-	-	-	-
Aramco Trading Singapore Pte Ltd.	122,216	-	84	-
	<u>122,216</u>	<u>22,046</u>	<u>325,377</u>	<u>2</u>
₩	<u>291,950</u>	<u>104,089</u>	<u>351,443</u>	<u>195,100</u>

(*1) The amount of receivables and payables that were eliminated from the balance sheet due to the offsetting agreement with Hyundai Cosmo Petrochemical Co., Ltd. is ₩32,102 million.

(*2) The other payables include lease liability.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

48. Related Parties, Continued

(2) Transactions with related parties, Continued

2) Outstanding balances as of December 31, 2023 and 2022 between the Group and associates or joint ventures 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)
Associates:				
KC LNG tech Co., Ltd.	₩ -	-	368	-
ZVEZDA-HYUNDAI LLC	-	39	-	-
International Maritime Industries Company	6,290	-	-	-
Hyundai Hymys Co., Ltd.	663	5,017	5,505	-
Koramco Energy Plus Reit	-	82,132	-	227,910
Koramco dongjak PFV Co., Ltd	-	392	-	4,055
	<u>6,953</u>	<u>87,580</u>	<u>5,873</u>	<u>231,965</u>
Joint ventures:				
Hyundai Cosmo Petrochemical Co., Ltd.(*1)	44,468	824	10,547	19,079
Saudi Engines Manufacturing Company	905	-	-	-
Doosan Infracore Liaoning Machinery Sales Co., Ltd	700	-	-	10
Mirae asset-Hyundai Heavy Industries holdings Co., Ltd	-	-	-	-
Growth Opportunity Securities Investment joint No. 1	-	51	-	-
	<u>46,073</u>	<u>875</u>	<u>10,547</u>	<u>19,089</u>
Other related parties (large-scale corporate conglomerate):				
S-Oil Co., Ltd.	202	9,576	1,035	2
Saudi Arabian Oil Company	-	-	439,488	-
Aramco Trading Limited	-	-	256	-
Aramco Trading Company	-	-	68	-
Aramco Trading Singapore Pte Ltd.	134,272	-	193	-
	<u>134,474</u>	<u>9,576</u>	<u>441,040</u>	<u>2</u>
₩	<u>187,500</u>	<u>98,031</u>	<u>457,460</u>	<u>251,056</u>

(*1) The amount of receivables and payables that were eliminated from the balance sheet due to the offsetting agreement with Hyundai Cosmo Petrochemical Co., Ltd. is ₩11,124 million.

(*2) The other payables include lease liability.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

48. Related Parties, Continued

(3) Fund transactions with related parties

1) For the years ended December 31, 2023 and 2022, HD Hyundai Oilbank Co., Ltd., a subsidiary, received dividends of respectively ₩3,009 million and ₩4,002 million from Koramco Life Infra Reit Co., Ltd and subsidiary.

2) For the years ended December 31, 2023 and 2022, HD Hyundai Oilbank Co., Ltd., a subsidiary, paid dividends of ₩95,244 million and ₩65,329 million to Aramco Overseas Company B.V which has significant influence over the Group.

3) For the year ended December 31, 2022, HD Hyundai Oilbank Co., Ltd., a subsidiary, participated in capital increases of the joint venture HD Hyundai Cosmo Co., Ltd. and the associate Eugene Special Growth Opportunity Securities Investment trust No. 1 with paid-in amounts of ₩70,000 million and ₩47,500 million, respectively.

4) For the years ended December 31, 2023 and 2022, HD Korea Shipbuilding & Offshore Engineering Co., Ltd., a subsidiary, received dividends of respectively ₩145 million and ₩3,327 million from New Korea Country Club and others.

5) For the years ended December 31, 2023 and 2022, the subsidiary, HD Korea Shipbuilding and Offshore Engineering Co., Ltd., participated in a capital increase of the associate, International Maritime Industries Company, and paid SAR 68,100 thousand and SAR 75,000 thousand respectively.

6) For the year ended December 31, 2022, HD Hyundai Infracore Co., Ltd., a subsidiary, acquired a 50% share in Tianjin Hyundai Doosan Engine Company Ltd. for ₩5,017 million, and included it as a subsidiary. In addition, ₩2,730 million was contributed as additional investment, and the name was changed to Tianjin Hyundai Doosan Engine Co., Ltd.

7) In order to secure debt amounting to ₩90,000 million of Koramco Banpo PFV Co., Ltd., an associate, 189,000 shares of the common stocks that the Group owns have been pledged.

(4) 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	₩ 23,086	28,937
Post-employment benefits	4,051	7,815
Other long-term employee benefits	1,723	5
	<u>₩ 28,860</u>	<u>36,757</u>

Key management is defined as directors and internal auditors who have important roles and responsibilities involving the planning, operation and control of the Group.

HD HYUNDAI CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Financial Statements, Continued
For the years ended December 31, 2023 and 2022

49. Disposal group held for sale

Assets held for sale and liabilities held for sale for the years 2023 and 2022 are as follows:

<i>(In millions of won)</i>	<u>2023</u>	<u>2022</u>
Hyundai Robotics Investment (Shanghai) Co., Ltd.		
Investments in associates and joint ventures(*)	₩ 2,882	2,952
	<u>₩ 2,882</u>	<u>2,952</u>

(*) For the year ended December 31, 2022, it entered into a stock sale agreement of Haining Hagong Hyundai Robotics Co., Ltd., and 6% out of 30% of shares was sold.

50. Subsequent Events

- (1) The Parent company issued corporate bonds amounting to ₩200,000 million on February 28, 2024.
- (2) HD Hyundai Oilbank Co., Ltd., a subsidiary, issued corporate bonds amounting to ₩300,000 million on January 24, 2024.
- (3) HD Hyundai Chemical Co., Ltd., a subsidiary, issued corporate bonds amounting to ₩200,000 million on February 7, 2024.
- (4) HD Hyundai Infracore Co., Ltd., a subsidiary, resolved to acquire treasury shares of ₩56 billion through a trust agreement at the Board of Directors meeting held on February 2, 2024, and plans to retire the acquired treasury shares on August 6, 2024.
- (5) HD Hyundai Construction Equipment Co., Ltd., a subsidiary, resolved to acquire treasury shares of ₩30,300 million through a trust agreement at the Board of Directors meeting held on February 2, 2024, and plans to retire the acquired treasury shares on August 20, 2024.
- (6) On January 12, 2024, one arbitration case (requested amount: ₩170,100 million) was filed with the Korean Arbitral Institute for Commercial Arbitration with HD Hyundai Chemical Co., Ltd., a subsidiary, as the respondent, in connection with a claim for additional construction costs by a contractor for the HPC plant.

Notice to Readers

This report is annexed in relation to the audit of the separate financial statements as of December 31, 2023 and the audit of internal control over financial reporting pursuant to Article 8-7 of the Act on External Audit for Stock Companies of the Republic of Korea.

Independent Auditors' Report on Internal Control over Financial Reporting For Consolidation Purposes

Based on a report originally issued in Korean

To the Shareholders and Board of Directors of
HD Hyundai Co., Ltd.

Opinion on Internal Control over Financial Reporting

We have audited HD Hyundai Co., Ltd. and its subsidiaries ("the Group")' internal control over financial reporting ("ICFR") for consolidation purposes 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 for consolidation purposes 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 comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising material accounting policy information and other explanatory information, and our report dated March 18, 2024 expressed an unmodified opinion on those consolidated financial statements.

Basis for Opinion on Internal Control over Financial Reporting for Consolidation Purposes

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 for Consolidation Purposes 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 for Consolidation Purposes

The Group's management is responsible for designing, operating and maintaining effective internal control over financial reporting for consolidation purposes and for its assessment of the effectiveness of internal control over financial reporting for consolidation purposes, included in the accompanying Report on the Operation of Internal Control Over Financial Reporting for Consolidation Purposes.

Those charged with governance are responsible for overseeing the Group's internal control over financial reporting for consolidation purposes.

Auditors' Responsibilities for the Audit of the Internal Control over Financial Reporting for Consolidation Purposes

Our responsibility is to express an opinion on the Group's internal control over financial reporting for consolidation purposes 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 for consolidation purposes was maintained in all material respects.

Our audit of internal control over financial reporting for consolidation purposes included obtaining an understanding of internal control over financial reporting for consolidation purposes, 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 for Consolidation Purposes

A company's internal control over financial reporting for consolidation purposes is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with Korean International Financial Reporting Standards ("K-IFRS"). A company's internal control over financial reporting for consolidation purposes 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 consolidated 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 consolidated 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 Yong-Jae Cha.

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 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.

Report on the Operations of Internal Control Over Financial Reporting for Consolidation Purposes

Based on a report originally Issued in Korean

To the Board of Directors and Audit Committee of
HD Hyundai Co., Ltd.:

We, as the Chief Executive Officer and the Internal Accounting Manager of HD Hyundai Co., Ltd. ("the Company"), assessed operating status of the Company's Internal Control over Financial Reporting ("ICFR") for the year ended December 31, 2023.

Design and operation of ICFR is the responsibility of the Company's management, including the Chief Executive Officer and the Internal Accounting Manager.

We evaluated whether the Company 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 Company'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 Company'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 reviewed and verified this report with sufficient care.

Jo, Jin Ho
Internal Accounting Control Officer

Chung, Ki sun
Chief Executive Officer

February 6, 2024